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EMERGING TRENDS IN COMMERC

**Dr. ANU ANTONY** 



Dr. Anu Antony

# A STUDY ON THE IMPACT AND GROWING POPULARITY OF PAYMENT APPLICATIONS IN THE STATE OF KERALA

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#### INTRODUCTION

Digital payment refers to paying for goods and services online with the help of electronic mediums. This is called as cashless economy which avoids use of money in physical form. These digital transactions help to reduce the cost of making transactions and also speedup the process involving one transaction cycle. It reduces the risk of handling cash. Digital transaction also help government as transactions can be easily tracked easily which will help to reduce black money and thus help in growth of economy. The different apps are available that allow users to make payments online. Some of these apps used for online payments are: Phonepe, Google Pay and Paytm (Gupta et al., 2020)

PhonePe is a digital wallet company headquartered in Bengaluru based on the Unified Payments Interface (UPI). It is a UPI based app that allows users to make transactions using Phonepe wallet credit/debit card or UPI. This app allows to pay utility bills, do recharges and transfer money.

Google Pay is a digital wallet platform and online payment system developed by Google enabling users to make payments with Android phones, tablets, or watches. Google Pay allows transactions using UPI only. There is no wallet facility and the app is directly linked to the bank account.

Paytm has its headquarters in Noida. It is available in 11 languages. Paytm provides banking facility in the form of Paytm payment bank in which an account can be opened without any charges. It also provides the facility to scan QR code using Paytm app for making payments. The consumer adoption and learning of technology used in Digital payment system helps consumers to use e-commerce transactions in their day-to-day life (Dahlberg et al., 2015). Nowadays "in case of banks, the online system has been preferred by the educated and young people as it is beneficial to them in many ways" (Jauhari

et al., 2018). The customers can perform various banking services with the help of internet at any time at any place (Hawaldar et al., 2017). Digital banking not only facilitates the consumers but also benefited a lot to the businesses in many ways.

#### **OBJECTIVES**

- 1. To understand the primary reasons for using mobile wallets.
- 2. To analyze the customer preferences towards Phonepe, PayTm and Google Pay Wallets.
- 3. To suggest suitable solutions to the shortcomings identified for better service to the Phonepe, PayTm and Google Pay customers.

#### METHODOLOGY OF THE STUDY

This descriptive study will discuss the customer usage on mobile wallets on Google Pay, Phonepe, & PayTm. This research will be carried out with a systematic process like determining the sampling method, collecting data, analyzing the data, identifying the major findings and given the conclusions. Among 14 districts in kerala, 3 districts will be taken like Pathanamthitta, Kottayam, Ernakulam. The researcher will sent the google form and it will reach a heterogeneous group of 200 respondents who will give their opinion by filling the questionnaires. Primary data will be collected with the help of a questionnaire in the form of a google form sent to the users, and the same will be forwarded to their contacts. Secondary data will be gathered from different sources such as articles published in different journals & newspapers, published books, periodicals, conference papers, working papers and websites, etc.

# DATA ANALYSIS AND INTERPRETATION

#### **Reliability Statistics**

The study examines the impact and growing popularity of payment applications in the state of kerala. The aspects considered include the current levels of public understanding about the payment application, the awareness about the payment application, public usage of the payment application, consequences of payment applications in ones everyday life and the ramifications of payment applications like Google pay, Phonepe, etc. To identify these aspects, the research conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for Measurement Scales used in the Study

	Cronbach's Alpha if Item Deleted
Involving payment application	.842
Awareness about payment application	.787
Opinion about payment application	.778
Probable consequences of payment application	.785
Ramifications of payment application	.793
Total	0.832

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than 0.7 is widely considered a good score (*Nunnally*, 1978) of the five constructs measures, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

# **DESCRIPTIVE STATISTICS**

Table 2: Ramifications of payment applications

	Mean	Std. Deviation
Discouraging payments over 1 lakh	2.41	.948
Efforts to tax money transferred	2.40	.991
Increase the purchasing power	2.27	.950
Bad impact on physical banking	2.39	1.025
Total	2.37	0.98

Table 2 shows the descriptive statistics of the four variables which indicate the ramifications of payment applications. The variable with the high mean score is discouraging payments over 1 lakh (mean=2.41) and the variable with the high standard deviation score is bad impact on physical banking (SD=1.025). The average total score computed was 3 with a Standard Deviation of 0.98.

#### **CORRELATION**

## **Hypothesis**

H0: There is no significant difference between gender and opinion of growing popularity of payment applications in the state of kerala

H1: There is significant difference between gender and opinion of growing popularity of payment applications in the state of kerala.

#### INDEPENDENT SAMPLE T-TEST

Table 3: Concern level in the gender and opinion.

	Mean	Std. Deviation	F	P Value	t	Df
male	6.6264	2.22934	5.268	.023	.403	163
female	6.4730	2.65981			.396	142.507

An independent sample t-test was conducted to compare concern level in the gender and opinion of the project in the Male and Female groups. There was a significant difference in the Male group (M=6.6264, SD=2.22934) and Female group (M=6.4730, SD=2.65934), F=5.268, P=0.023.As P-value is less than 0.05, we accept that it is null hypothesis.

# FINDINGS, SUGGESTION AND CONCLUSIONS

#### **Findings**

- Table 1 shows that the coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than 0.7 is widely considered a good score (*Nunnally*, 1978) of the five constructs measures, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.
- Table 2 shows the descriptive statistics of the four variables which indicate the ramifications of payment applications. The variable with the high mean score is discouraging payments over 1 lakh (mean=2.41) and the variable with the high standard deviation score is bad impact on physical banking (SD=1.025). The average total score computed was 3 with a Standard Deviation of 0.98.
- Table 3 shows that an independent sample t-test was conducted to compare concern level in the gender and opinion of the project in the Male and Female groups. There was a significant difference in the Male group (M=6.6264, SD=2.22934) and Female group (M=6.4730, SD=2.65934), F=5.268, P=0.023.As P-value is less than 0.05, we accept that it is null hypothesis.

# **Suggestions**

1. Focuses on improving the security payment platforms then it will help in gaining the trust of customers which will attract more customers and help in increasing the number of people in the country using digital platforms.

2. Government can ensure to the public that the operation of digital payment is free from transactions cost which helps the customer to purchase via. online mode.

#### **CONCLUSIONS**

- 1. Expand market beyond traditional geographic market.
- 2. Override traditional marketing system into digital marketing system.
- 3. Made human life convenient as a person can pay his payments online.

#### REFERENCES

- Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. Electronic Commerce Research and Applications. .2015.07.00610.1016/j.elerap
- Hawaldar, I. T., Lokesha, Kumar, K. A., Pinto, P., & Sison, S. M. (2017). Performance analysis of commercial banks in the kingdom of Bahrain (2001–2015). International Journal of Economics and Financial Issues, 7(3), 729–737.
- *Jauhari, S., Indapurkar, K., Maheswari, D., & Raj, M. (2018).* A study of the impact of youth towards digital financial instruments in the wake of demonetization of 2016 in India. Shodhaytan AISECT University Journal, 5(9), 83–100.
- Satinder Bal Gupta, (2020) Associate Professor, Indira Gandhi University, Meerpur, Rewari, India, Ref. Article Info Volume 82 Page Number: 16110 16119 Publication Issue: January-February 2020
- Nunnally, J.C. (1978), Psychometric theory (2<sup>nd</sup> ed.). New York: McGraw-Hill

# RELATIONSHIP BETWEEN SOCIAL MEDIA MARKETING AND BRAND BUILDING: A STUDY ON APPLE PRODUCT CONSUMERS

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#### INTRODUCTON

Social media marketing strategy is a very important and crucial component for the world market. Marketing methods will vary from country to country, brand to brand and organization to organization. So as to realize a satisfactory and brand marketing strategy that features a positive outcome on international and overall firm success, the marketing department among a corporation ought to bear in mind all the various marketing combine methods which will influence the excellent result and therefore the additive firm success (Wien,2018). Once launching a product into foreign markets firms will use a standard marketing mix or adapt the present marketing mix, to satisfy the country they're including their business activities in the link between standardization and company performance is difficult and probably influenced by alternative factors. Markets have various segments of products and services. Apple is one among the various brands who have established themselves well and are in the top position the market Usually the social media marketing strategy focuses on the customer needs and wants in the market (Spil,2016).

Apple is one of the brands who focus and give their full effort in the marketing strategy for the better sales of their products. Existing marketing strategies of internationalization process in firms fail to come up in the market if they don't come up with new ideas (Arild 2006). Moreover the competitors who fail to understand thoroughly the true marketing strategy may fail to identify the alternate strategy. This shows that product differentiation already exists in the market (Dickson,1987). The political environment of international marketing includes any national or international political factors can affect the products operation or it's decision making in the marketing strategy and the cultures are often diverse and multicultural since the markets are either widespread or fragmented (Isabel, 2008). The marketing strategy involves deciding on the details of how intended decisions of the marketing strategy on goal selection, choice of market and customer target (Nashwan,2016). Strong marketing strategies are clearly important to the effectiveness of an organisation and so the

effectiveness of the marketing strategy creating processes is a crucial thought for each academics and practitioners. Varied approaches are created towards understanding and rising such processes (Brian, 2003).

Marketing strategy has been defined as the match, an organisation makes between it's internal resources and skills (Grant,1991). By the time most companies which are started by individuals visualise an opportunity to knock at each and every doorstep to gain attention of the consumer, this is also adopted as one of the marketing strategy (Kotler,1994). Apple does not behave like a mass of other companies, with their unique recipe for success they were able to step out of the crowd (Schneiders,2011) Moreover a brand is something that links a product or service to the customers. Apple strives for details which are not considered by the competition in the computing industry Apple has the best brand equity in the world as of 2021 and it's the top graded brand in the world.

The brand price of Apple is 118.9 billion dollars. The brand has done a great deal to succeed in this brand equity, however a significant contributory factor was its ability to allow hit merchandise back to back, and to succeed in across the world with these wonderful merchandise. The mixture of both with the wonderful marketing communications of the brand facilitate Apple reach the highest brand equity potential (Woellner,2013). Apple's marketing strategy involves the rethinking the need for advertising, avoid the price wars by emphasising unique value and by knowing the need of audience and talk to them in their language But premium pricing is also a part of the marketing strategy of Apple. This high value point or premium pricing strategy has helped the corporate promote and maintain a favourable perception among its loyal consumers. After all, there are customers who believe that costly products relish an exceptional reputation or represent exceptional quality and distinction. Thereby, Apple merchandise are positioned as superior over their competitors through this pricing strategy (Niel,2012).

Social media is also defined as the best method for marketing the products in the present global market. Apple insists on using each and every social media in an effective way to sell or promote their products (Zarrella,2009). The main aim of this research paper is to analyse the product development of Apple products and to know about the customers perception about the Apple products. Customers are increasingly empowered by social media and taking control of the marketing communication process, and they are becoming creators, collaborators, and commentators of messages (Hamilton,2016). As the role of social media has gradually evolved from a single marketing tool to that of a marketing intelligence source (in which firms can observe, analyze, and

predict customer behaviors), it has become increasingly imperative for marketers to strategically use and leverage social media to achieve competitive advantage and superior performance (Lamberton, 2016).

#### **OBJECTIVES**

- To study the relationship between brand building and social media marketing of Apple
- To understand the effectiveness of apple products in social media marketing
- To examine how social media marketing helps in brand building of Apple
- To understanding the factors influencing social media marketing.

#### **METHODOLOGY**

Three districts from kerala will be selecting based on the maximum number of Apple product usage rate and popularity. Ernakulam, Kottayam, Thiruvananthapuram, these districts have the highest number of product user rate. Primary as well as secondary data will be used. Primary data will be collecting using a sample survey. 228 questionnaires will be given across these three districts and data will be directly collecting from the Apple product consumers. Secondary data will be collecting from various publications of the international, national, state websites.

# **QUESTIONNAIRE**

#### Title:

Relationship between social media marketing and brand building: a study on apple product consumers

#### **Purpose:**

To study the relationship between brand building and social media marketing

#### **Researcher:**

# Research guide:

#### **Contact no:**

- 1. Gender?
  - Male
  - Female
- 2. Age?
- 3. Monthly Income?

# To study the relationship between brand building and social media marketing of Apple:

4. How will you explain the relationship between social media marketing and brand building?

Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Social media increases					
brand awareness of the Apple products					
It enlarge brand image held by the company					
They capture customer honest perception through social media					
Enables rethinking process and retention rate of					
customers through social media					

# To understand the effectiveness of apple products in social media marketing:

5. Which feature of the Apple's brand product draws your attention the most when you see it on social media?

Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I select the Cost effectiveness of the product					
I prefer Variety of colours and style of products					
I prefer Easily accessible products by use					

# To examine how social media marketing helps in brand building of Apple:

6. Which components of Apple product that will be inspired from social media?

Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I get inspiration about the new products line introduced in the market					

I am influenced through social media for offers that providing by the Apple brand			
I will attract Apple brand specific stores through social media			

# To understanding the factors influencing social media marketing:

**7**. Factors that the influencing the customer for buying the Apple brand product through social media platforms?

Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Social media post based on the Apple brand influencing my purchase behavior					
Comments or Experience shared by the existing user will help me to buy the product					
Referal coupon by a friend or others will enhance to buy the product					
More Discounts and offers available for the Apple brand will be affected my purchasing decision					

# DATA ANALYSIS AND INTERPRETATION

# **Reliability Statistics**

The study examine relationship between social media marketing and brand building concept of Apple products. The aspects considered includes the relationship between social media marketing and brand building, the feature of the Apple's brand product draws your attention the most when you see it on social media, the components of Apple product that will be inspired from social media, the Factors that the influencing the customer for buying the Apple brand product through social media platforms. To identify these aspects, the researcher conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha(Cronbach) values relating to these aspects are presented in Table 1.

Aspects	Cronbach's Alpha if Item Deleted
relationship between	.840
Effectiveness 23.1579	.796
Social media marketing	.819
factors influencing	.843
Total	0.8245

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score Of the 4 constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales for the study.

Table 2: relationship between social media marketing and brand building: Descriptive statistics

	Mean	Std. Deviation	
Brand awareness	1.72	.876	
brand image	2.15	.765	
customer honest	2.21	.829	
rethinking process	2.03	.922	
TOTAL	2.027	0.848	

Source: Primary Data, N=228

Table 2 shows the descriptive statistics of the 4 variables which indicate the relationship between social media marketing and brand building. The variable with the highest mean score is customer level (mean=2.21,SD=8.29)'. Others are brand image with 2.15 mean and SD 0.765, rethinking process (2.03 mean and SD 0.922), and brand awareness(Mean=1.72,SD=8.76). The average total score computed was 2.027.

Table 3: the features of the Apple's brand product draws your attention the most when you see it on social media: Descriptive statistics

	Mean	Std. Deviation
cost effectiveness	1.91	.927
variety of colour	2.14	.887
easily accessible	2.01	.917
TOTAL	2.02	0.910

Source: Primary Data, No=228

Table 3 shows the descriptive statistics of the 3 variables which indicate the features of the Apple's brand product draws your attention the most when you see it on social media. The variable with the highest mean score is variety of colour(mean=2.14,SD=0.887)'. Others are easily accessible with 2.01 mean and SD 0.917, cost effectiveness (1.91 mean and SD 0.927). The average total score computed was 2.46 with a standard deviation of 1.10

Table 4: the components of Apple product that will be inspired from social media: Descriptive statistics

	Mean	Std. Deviation	
new product line	2.05	.986	
social media offers	2.26	.896	
attraction towards stores	2.19	.941	
TOTAL	2.166	0.941	

Source: Primary Data, N=228

Table 4 shows the descriptive statistics of the 3 variables which indicates the the components of Apple product that will be inspired from social media. The variable with the highest mean score is social media offers(mean=2.26,SD=0.896)'. Others are attraction towards stores with 2.19mean and SD 0.941 , new product line(2.05 mean and SD 0.986), The average total score computed was with a standard deviation of (MEAN=2.166, SD=0.941)

Table 5: the Factors that the influencing the customer for buying the Apple brand product through social media platforms: Descriptive statistics

	Mean	Std. Deviation
social media post	2.05	.879
comments or experience	2.10	.804
referal coupon	2.23	.910
more discounts	2.17	.904
TOTAL	2.1375	0.873

Source: Primary Data, N=228

Table 5 shows the descriptive statistics of the 4 variables which the Factors that the influencing the customer for buying the Apple brand product through social media platforms. The variable with the highest mean score is referral coupon (mean=2.23,SD=0.910)'. Others are more discounts with 2.17 mean and SD 0.904, comments or experience(2.10 mean and SD 0.804), and social media

post(Mean=2.05,SD=0.879). The average total score computed was with a standard deviation of 3.49.

# **Correlations**

# **HYPOTHESIS No:1**

H0 there is no significant relationship between social media marketing& brand building of Apple and income groups

H1 there is significant relationship between social media marketing& brand building of Apple and income groups

Table 6: Relationship between SSM &brand building of Apple co. and income

	Mean	SD	1	2	
Social marketing	8.1096	2.58789	-0.303		
Income	2.4084	1.55284	303	1	

A pearson correlation was run to determine the relationship between social media marketing& brand building of Apple co. and income groups. From table 6, it is clear that there is no significant relationship between income and the SSM & brand building of Apple co. (r= -0.303, N= 191, P= 0.05) and which is statistically measured.

# **Independent Samples t-Test**

Hypothesis No:2

- H0 There is no significant difference between factors influencing social media marketing and gender
- H1 There is a significant difference between factors influencing social media marketing and gender

Table 7: Concern level in the factors influencing and gender:

concern level in the factors influencing	Mean	SD		Indepe	ndent sample	e t-test
			F	P value	t	Df
Male	8.8600	3.09454	7.351	.007	1.54	226
Female	8.3047	.233615				

An independent sample t-test was conducted to compare the factors influencing social media marketing of the project in male and female groups. There was a significant difference in male group (M=8.8600, SD=3.09454) and female (M=8.3047, SD=2.33615), f=7.351, p=0.007. As p- value is less than 0.05, it

states that the male and female groups have significant differences in the factors influencing social media marketing. In other words, it means factors influencing will change with the gender

# Hypothesis No:3

H0 There is no significant difference between social media marketing and gender

H1 There is a significant difference between social media marketing and gender

Table 8: Concern level in the social media marketing and gender

concern level in the social media marketing	Mean	SD		Indepe	endent sample	e t-test
marketing			F	P value	t	Df
Male	6.6200	2.2287	0.375	0.541	0.674	226
Female	6.4063	2.5496				

An independent sample t-test was conducted to compare the social media marketing of the project in male and female groups. There was a significant difference in male group (M=6.6200, SD=2.2287) and female (M=6.4063, SD=2.5496), f=0.375, p=0.541. As p- value is greater than 0.05, it states that the male and female groups have no significant differences in the social media marketing. In other words, it means social media marketing will not change with the gender

# **ANOVA TEST**

# **Hypothesis No:3**

H0 there is no significant relationship between effectiveness of apple products in social media marketing

H1 there is a significant relationship between effectiveness of apple products in social media marketing

Table 9 Age and effectiveness of social media marketing of Apple co.

Age group	N		Df	ANOVA	F	Sig
12-22	62	Between groups	3		5.733	0.001
22-32	122	Within groups	224			
32-42	25	Total	227			
42-56	19					
Total	228					

A one way subjects Anova was conducted to compare the effectiveness of social media marketing of Apple company, taking 4 age groups 12, 22-32, 32-42 and above 42. Since, p>0.05, the alternative hypothesis was accepted. There is significant difference between Age and effectiveness of social media marketing

# FINDINGS, SUGGESTIONS, AND CONCLUSION Findings:

# To study the relationship between brand building and social media marketing of Apple

Table 2 shows the descriptive statistics of the 4 variables which indicate the relationship between social media marketing and brand building. The variable with the highest mean score is customer level (mean=2.21,SD=8.29)'. Others are brand image with 2.15 mean and SD 0.765 , rethinking process (2.03 mean and SD 0.922), and brand awareness(Mean=1.72,SD=8.76). The average total score computed was 2.027.

A pearson correlation was run to determine the relationship between social media marketing& brand building of Apple co. and income groups. From table:, it is clear that there is no significant relationship between income and the SSM & brand building of Apple co. (r= -0.303, N= 191, P= 0.05) and which is statistically measured.

# To understand the effectiveness of apple products in social media marketing

- Table 3 shows the descriptive statistics of the 3 variables which indicate the features of the Apple's brand product draws your attention the most when you see it on social media. The variable with the highest mean score is variety of colour(mean=2.14,SD=0.887)'. Others are easily accessible with 2.01 mean and SD 0.917, cost effectiveness (1.91 mean and SD 0.927). The average total score computed was 2.46 with a standard deviation of 1.10.
- A one way subjects Anova was conducted to compare the effectiveness of social media marketing of Apple company, taking 4 age groups 12, 22-32, 32-42 and above 42. Since, p>0.05, the alternative hypothesis was accepted. There is significant difference between Age and effectiveness of social media marketing.

# To examine how social media marketing helps in brand building of Apple

Table 4 shows the descriptive statistics of the 3 variables which indicates the the components of Apple product that will be inspired from social media. The variable with the highest mean score is social media offers (mean=2.26,SD=0.896)'. Others are attraction towards stores with 2.19mean

and SD 0.941, new product line(2.05 mean and SD 0.986), The average total score computed was with a standard deviation of (MEAN=2.166, SD=0.941)

An independent sample t-test was conducted to compare the social media marketing of the project in male and female groups. There was a significant difference in male group (M=6.6200, SD=2.2287) and female (M=6.4063, SD=2.5496), f=0.375, p=0.541. As p- value is greater than 0.05, it states that the male and female groups have no significant differences in the social media marketing. In other words, it means social media marketing will not change with the gender.

# To understanding the factors influencing social media marketing

- Table 5 shows the descriptive statistics of the 4 variables which the Factors that the influencing the customer for buying the Apple brand product through social media platforms. The variable with the highest mean score is referral coupon (mean=2.23,SD=0.910)'. Others are more discounts with 2.17 mean and SD 0.904, comments or experience(2.10 mean and SD 0.804), and social media post(Mean=2.05,SD=0.879). The average total score computed was with a standard deviation of 3.493
- An independent sample t-test was conducted to compare the factors influencing social media marketing of the project in male and female groups. There was a significant difference in male group (M=8.8600, SD=3.09454) and female (M=8.3047, SD=2.33615), f=7.351, p=0.007. As p- value is less than 0.05, it states that the male and female groups have significant differences in the factors influencing social media marketing. In other words, it means factors influencing will change with the gender

# **SUGGESTIONS**

- 1. Instead of not charging premium price, price reduction etc. will be offer from time to time through social media platforms.
- 2. Conduct more aggressive social media marketing to attract potential customers.
- 3. Open more Apple outlets in different areas to expand its direct reach through its own stores.
- 4. Apple should also start creating TV commercials, in such a way that they can educate customers about latest technology.

# **CONCLUSION**

The main aim of the project was to conduct a study on the relationship of social media marketing and brand building of Apple product company. The study helped to find out more about the social media marketing, factors influencing SSM, effectiveness of SSM etc. The analysis helped to identify the strength and

weakness along with opportunities and threats that the company may be facing through social media marketing of Apple products. Survey findings were made to find if the SSM for brand building are proving effective or if any changes are needed to be made in the future. So the study proved that the SSM of Apple company helps to brand building process.

#### REFERENCE

- 1. Donner, M., & Fort, F. (2018). Stakeholder value-based place brand building. *Journal of Product and Brand Management*, 27(7), 807–818.
- 2. Kim, R. B., & Chao, Y. (2019). Effects of brand experience, brand image and brand trust on brand building process: The case of chinese millennial generation consumers. *Journal of International Studies*, *12*(3), 9–21
- Osakwe, C. N., Palamidovska-Sterjadovska, N., Mihajlov, M., & Ciunova-Shuleska, A. (2020). Brand orientation, brand-building behavior and brand identity in SMEs: an empirical evaluation. *Marketing Intelligence and Planning*, *38*(7), 813–828
- De Vries, L., Gensler, S., & Leeflang, P. S. H. (2017). Effects of traditional advertising and social messages on brand-building metrics and customer acquisition. *Journal of Marketing*, 81(5), 1–15
- 5. Li, F., Larimo, J., & Leonidou, L. C. (2021). Social media marketing strategy: definition, conceptualization, taxonomy, validation, and future agenda. *Journal of the Academy of Marketing Science*, 49(1), 51–70.
- 6. Wibowo, A., Chen, S. C., Wiangin, U., Ma, Y., & Ruangkanjanases, A. (2021). Customer behavior as an outcome of social media marketing: The role of social media marketing activity and customer experience. *Sustainability (Switzerland)*, *13*(1), 1–18.
- 7. Chen, J., Ching, R. K. H., Luo, M. M., & Liu, C. (2008). Virtual experiential marketing on online customer intentions and loyalty. Paper presented at the 41st Hawaii International Conference on System Sciences. Hawaii, 7-10 January, 2008.
- 8. Acommerce (2019). How L'Oréal uses e-commerce's social commerce to simplify transaction and increase customer engagement. Available at https://www.acommerce.asia/case-study-loreal-social-commerce

# HOME DELIVERY OF MEDICATIONS AT THE TIME OF COVID 19 WITH SPECIAL REFERENCE TO GLOBAL GOAL OF GOOD HEALTH AND WELLBEING

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#### INTRODUCTION

The newly emerged coronavirus pandemic (COVID-19) has collapsed the entire global health care system (Research in social and administrative pharmacy 2021). Special populations such as patients with chronic diseases are being affected due to social distancing and lockdowns to limit and contain the spread of the disease. They are unable to access healthcare facilities for routine care and medication management (Habeer.S. Nemr,2020). The Medication Home Delivery Service was introduced and implemented for all residents to prevent unnecessary visits to health centres, minimize the spread of COVID-19 to vulnerable populations, especially those with multiple comorbidities, and protect health care workers from exposure to the virus (Pharmacy Department, Primary Health Care Corporation, Doha, Qatar).

As a consequence, to this serious outstanding situation, the World Health Organization (WHO) declared this viral outbreak to be a Public Health Emergency of International Concern on the 30th January 2020 (Mukattash.TL,2020). This requires a collaborative teamwork by all healthcare professionals to support in controlling this scenario. 2 Pharmacists worldwide are integral part within the healthcare system, and since the emergence of this viral outbreak they have experienced a challenging situation and hard time like never before. They are currently working in the frontline with other healthcare providers in fighting the battle of COVID-19 outbreak, and they are undertaking everything they can do to support their patients in all possible areas. This role of pharmacists was supported by the declaration of the updated International Pharmaceutical Federation (FIP) guideline for pharmacists all around the world on the 19th of March 2020.

This situation forced the rapid launch of organizational innovations that might otherwise have taken years to become a reality. The health system initiated alternative delivery systems for people with stable chronic conditions. Many

provinces introduced Centralised Chronic Medicine Dispensing and Distribution (CCMDD) to automate dispensing and packaging with delivery via alternative pick-up points such as fast lanes at the pharmacy, churches, community halls, or private pharmacies (Robert ,2022). Home delivery of medication by community health workers is feasible at scale and affordable. It should continue, but as one of options for alternative delivery of medication (Darcelle Schouw,2022).

#### **OBJECTIVES**

- To analyse the implementation of home delivery system of medicines during the pandemic
- To analyse the role of pharmacy outlets in the supply of medicines during pandemic
- To analyse the perception of public in relation to home delivery system

#### **METHODOLOGY**

Three districts were selected for the study as they have the maximum number of people and popularity. The study circulates among three districts of Kerala covering Ernakulam, Kottayam and Trivandrum. Primary as well as secondary data were used. Primary data was collected using sample survey. 150 questionnaires were given across these three districts and data will be collected. Secondary data was collected from various publications of the international, national and state websites.

#### **HYPOTHESIS**

- H<sub>0</sub> There is no significant relationship between age and implementation of home delivery system.
- H<sub>1</sub> There is significant relationship between age and implementation home delivery system.
- H<sub>0</sub> There is no significant relation between pharmacy outlets in the supply of medicines and income groups.
- H<sub>1</sub> There is significant relation between pharmacy outlets in the supply of medicines and income groups.
- $H_0$  There is no significant difference between the perceptions of the public about home delivery system and gender.
- H<sub>1</sub> There is significant difference between the perceptions of the public about home delivery system and gender.

#### DATA ANALYSIS AND INTERPRETATION

The study examines the home delivery system of medications at the time of covid 19 with special reference to the global goal of good health and wellbeing. The aspects considered include the implementation of home delivery system of medicines during the pandemic, the role of pharmacy outlets in the supply of medicines during the pandemic and the various perceptions of public in relation to the home delivery system. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for measurement scales used in the study

Aspects	Cronbach's Alpha
Implementation of home delivery system	0.81
Role of pharmacy outlets	0.76
Perceptions of the public	0.73
Total	0.746

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. Of the 3 constructs measured, all aspects have got a value beyond the threshold limit indicating higher reliability of the measurement scales for the study.

<u>Table:2 The implementation of home delivery system of medicines during</u> the pandemic: Descriptive statistics

	Mean	Standard deviation
Ngo's	1.72	1.075
Self-help groups	2.30	1.134
Govt organizations	2.17	1.255
Private firms	2.59	1.264
TOTAL	2.195	1.182

Source: Primary data N=150

Table 2 shows the descriptive statistics of the 4 variables which indicate relationship with the implementation of home delivery system of medications. The variable with the highest mean score is private firms (mean=2.59, SD=1.264). Others are self-help groups (Mean=2.30, SD=1.134), Govt. organizations (mean=2.17, SD=1.255) and NGOs (mean=1.72, SD=1.075). the average total score computed was 2.195 with SD 1.182.

<u>Table:3 The role of pharmacy outlets in the supply of medicines during the</u> pandemic

	Mean	Standard deviation
Safe and effective medicines	1.83	1.015
Easy availability of all types of medicines	2.63	1.083
Cost effective	2.43	1.217
Lesser time	2.86	1.321
Total	2.437	1.159

Source: Primary data N=150

Table 3 shows the descriptive statistics of the 4 variables which indicate the role of pharmacy outlets in the supply of medicines. The variable with the highest mean score is Lesser time (mean=2.86, SD=1.321). Others are Easy availability of all types of medicines (Mean=2.63, SD=1.083), Cost effective (mean=2.43, SD=1.217) and safe and effective medicines (mean=1.83, SD=1.015). The average total score computed was 2.437 with SD 1.159.

Table: 4 The perception of public in relation to home delivery system

	Mean	Standard deviation
Affordable and convenient	1.89	1.094
Faster collaboration	2.78	1.134
Stronger cost control	2.49	1.330
Simplifies lives of patients	2.81	1.266
Total	2.49	1.206

Source: Primary data N=150

Table 4 shows the descriptive statistics of the 4 variables which indicate the perceptions of the public in relation to home delivery system. The variable with the highest mean score is Simplifies lives of patients (mean=2.81, SD=1.266). Others are Faster collaboration (Mean=2.78, SD=1.134), Stronger Cost control (mean=2.49, SD=1.330) and affordable and convenient (mean=1.89, SD=1.094). The average total score computed was 2.49 with SD 1.206.

# Anova test

Hypothesis No:1

- H0 There is no significant relationship between age and implementation of home delivery system.
- H1 There is significant relationship between age and implementation of home delivery system

Table: 5 Age and implementation of home delivery system

Age group	<u>N</u>		<u>D f</u>	<u>F</u>	<u>sig</u>
21-31	34	Between groups	4	0.987	0.417
31-41	30	Within groups	145		
41-51	35	Total	150		
51-61	37				
61-71	14				

One-way Anova was conducted to compare the age and implementation of home delivery system of medications, taking 5 age groups 21-31,31-41,41-51,51-61 and 61-71. Since p >0.05, the alternative hypothesis was accepted. There is significant relationship between age and implementation of home delivery system.

#### Correlation

# Hypothesis no:2

- H0 there is no significant relation between pharmacy outlets in the supply of medicines and income groups.
- H1 there is significant relation between pharmacy outlets in the supply of medicines and income groups.

#### Table:6 Role of pharmacy outlets in the supply of medicines

	<u>Mean</u>	<u>SD</u>	<u>1</u>	<u>2</u>
Role of pharmacy outlets	9.7533	3.41913	0.175	
Income	2.7067	0.94512	0.175	<u>1</u>

Pearson correlation was run to determine the relationship between pharmacy outlets and various income groups. From the table it is clear that there is no significant relationship between income and pharmacy outlets in the supply of medicines. (r=0.175, N=150, p=0.05) and which is statistically measured.

# **Independent samples t-test**

# Hypothesis no:3

- H0 There is no significant difference between the perceptions of the public about home delivery system and gender
- H1 There is significant difference between the perceptions of the public about home delivery system and gender

# Table: 7 perceptions of the public and gender

Perceptions of the public	Mean	SD	Independent sample t test			
Male	9.9429	3.714	F 0.003	P 0.94	T 0.94	DF 148
Female	10.000	3.714	0.003	0.94	0.94	146

An independent sample t test was conducted to analyze the significant difference in male and female groups. There is no significant difference in male groups (M=9.9429, SD= 3.714) and female (M=10.00, SD=3.72). As p value is greater than 0.05 it states that the male and female groups don't have significant

differences in the perceptions of adopting home delivery system. In other words, perceptions of the public don't change with gender.

#### **FINDINGS**

- 1. The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. Of the 3 constructs measured, all aspects have got a value beyond the threshold limit indicating higher reliability of the measurement scales for the study.
- 2. Table 2 shows the descriptive statistics of the 4 variables which indicate relationship with the implementation of home delivery system of medications. The variable with the highest mean score is private firms (mean=2.59, SD=1.264). Others are self-help groups (Mean=2.30, SD=1.134), Govt. organizations (mean=2.17, SD=1.255) and NGOs (mean=1.72, SD=1.075). the average total score computed was 2.195 with SD 1.182.
- 3. Table 3 shows the descriptive statistics of the 4 variables which indicate the role of pharmacy outlets in the supply of medicines. The variable with the highest mean score is Lesser time (mean=2.86, SD=1.321). Others are Easy availability of all types of medicines (Mean=2.63, SD=1.083), Cost effective (mean=2.43, SD=1.217) and safe and effective medicines (mean=1.83, SD=1.015). The average total score computed was 2.437 with SD 1.159.
- 4. Table 4 shows the descriptive statistics of the 4 variables which indicate the perceptions of the public in relation to home delivery system. The variable with the highest mean score is Simplifies lives of patients (mean=2.81, SD=1.266). Others are Faster collaboration (Mean=2.78, SD=1.134), Stronger Cost control (mean=2.49, SD=1.330) and affordable and convenient (mean=1.89, SD=1.094). The average total score computed was 2.49 with SD 1.206.
- 5. One-way Anova was conducted to compare the age and implementation of home delivery system of medications, taking 5 age groups 21-31,31-41,41-51,51-61 and 61-71. Since p >0.05, the alternative hypothesis was accepted. There is significant relationship between age and implementation of home delivery system.
- 6. Pearson correlation was run to determine the relationship between pharmacy outlets and various income groups. From the table its is clear that there is no significant relationship between income and pharmacy outlets in the supply of medicines. (r=0.175, N=150, p=0.05) and which is statistically measured.
- 7. An independent sample t test was conducted to analyze the significant difference in male and female groups. There is no significant difference in male groups (M=9.9429, SD= 3.714) and female (M=10.00, SD=3.72). As p value is greater than 0.05 it states that the male and female groups don't have significant differences in the perceptions of adopting home delivery system. In other words, perceptions of the public don't change with gender.

#### **SUGGESTIONS**

- Government should involve more in the activities of home delivery system of medication.
- More safety must be ensured while supplying the medicines through various pharmacy outlets.
- Quality medicines should be made available to the customers
- More consideration should be given to the old people by the timely and systematic supply of medicines.

#### **CONCLUSION**

Medication delivery services have provided multiple benefits during covid 19. The delivery service enabled us to provide drugs to patients in their immediate environment through a service for both the patient and the hospital pharmacy service. This medication delivery service has provided multiple benefits to patients during home quarantine. Although the users of this service seem to be satisfied with the current model, in the future, we should consider which patients would benefit most from this service and shape it to individual needs.

#### REFERENCES

- Thorakattil.A. Shabeer (2021): Research in social and administrative pharmacy: sstructural and operational redesigning of patient-centred ambulatory care pharmacy services and its effectiveness during the COVID-19 pandemic, 17(1), 1833-1844.
- N. Zozaya (2021): Continuity of care between hospital pharmacies and community pharmacies: A pilot experience at the time of covid 19.
- Mash. J. Robert (2022): Pharmacists' perception of their role during COVID-19.

# A STUDY ON STUDENT MIGRATION ABROAD IN RELATION WITH QUALITY EDUCATION, SPECIAL REFERENCE TO KERALA.

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#### **INTRODUCTION**

Over the past two decades, student migration to abroad for the purpose of pursuing higher education has increased significantly and become an important political, social, cultural and economic agenda(Consterdine and Everton 2012). Student migration seek growing attention in both origin and destination countries. Due to the increasing trend of student migrations, the destination countries gain income on the one hand, and on the other hand, leaving countries losses their intellectual wealth (Jong and Fonseca, 2020; World Bank, 2006). It is a benefit for the developed countries and a suffocation for the developing countries.

In the backdrop of developing countries, there has been an increase in the number of students who leave the country to pursue their higher education abroad (Ghimire, 2019; Sokout et al., 2020). The trend of migrating from the home country is widely crossed towards all over the world, mostly in Australia, the UK, the United States of America, and Canada. It is indeed true that international student mobility is an important channel through which high skilled immigrants arrive (Suter and Jandl, 2006). Thus, the flow of student migration to abroad is still unexplored as both the quality of higher education and the earning levels are considered as the key issues (Brezis and Soueri, 2011).

The possibilities of getting enhanced qualities of life and education may encourage them to motivate international students to fly abroad (United Nations Development Programs [UNDP], 2009). In the same way, the increasing demand for the quality higher education of the international degree has become the central point in attracting international students abroad (Chacko, 2020). However, Costello (2015) duly noted that student migration is an academic

experience where students physically leave their home countries to engage and explore in college study, cultural interaction, and move in the host country.

They even move out of their country to study and most of them settle down in the host countries after completing their study (Tu and Nehring, 2020). Student migration is defined as a life period filled with fantasy, excitement, romanticism, and a different mixture of cultures of human (Tjaden, 2018). The students leave their home countries with the hope of acquiring knowledge, skills, and other valuable resources that can be employed in their home country after their return. The students can garner international work experiences as well as earn money during their stay at abroad (Tran et al., 2020). Thus, it can be said that student migration has attained the primary interest of both economic and social development because of its quality education and recognized degree.

Finally, it can be observed that student migration turns up when the person moves between the countries either temporarily or permanently, for education and employment (Goldin and Reinert, 2007) or it can be referred as an escape from the adverse political environment of their countries. It is vital to explore the reasons for motivation, and excitement among prospective students to fly abroad for higher education, even though there are several colleges and universities in their home country itself.

#### **OBJECTIVES**

- To assess reasons for student migration abroad for higher education.
- To analyze push and pull factors leading to student migration abroad.

#### **METHODOLOGY**

Four districts in Kerala were selected which has the largest number of student emigrants. Malappuram district stood first; Kannur district came second; Trivandrum district and Thrissur district came third and fourth respectively. Primary as well as secondary data was used. Primary data was collected using a sample survey.200 questionnaires were given among the students who have migrated abroad. Secondary data was collected from various publications of the central, state and local governments and also by referring to the websites.

#### **HYPOTHESIS**

- H0: There is no significant relation between age group and reasons for student migration abroad.
- H1: There is significant relation between age group and reasons for student migration abroad.

#### DATA ANALYSIS AND INTERPRETATION

#### **Reliability Statistics**

The study examines Student migration to abroad for higher education in relation to quality education. The aspects considered include: To assess reasons for student migration abroad for higher education, to analyze push and pull factors leading to student migration abroad. To identify these aspects, the researchers conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for Measurement Scales used in the Study

Aspects	Cronbach's Alpha
reasons	.785
Top quality education	.762
independent	.754
Push and pull	.837
Pull	.840
Total	0.795

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score (Nunnally, 1978). Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

#### **Reference:**

Nunnally, J. C. (1978). *Psychometric theory* (2 nd ed.). New York: McGraw-Hill.

Table 2: Student migration to abroad for higher education in relation to quality education reasons: Descriptive Statistics

Student migration to abroad for higher education in	Mean	Std. Deviation
relation to quality education	Wiedii	Std. Deviation
dedicated services	1.44	.607
work experience	1.65	.667
career	1.45	.701
Studying abroad	1.42	.582
Total	1.49	0.639

Source: Primary Data, N=150

Table 2 shows the descriptive statistics of the four variables which indicate the student migration to abroad for higher education in relation to quality education.

The variable with the high mean score is work experience (mean=1.65, SD=.667)'. Others are career with 1.45mean and SD of .701, studying abroad (Mean=1.42, SD=.582) and dedicated services with mean=1.44 and SD=.607. The average total score computed was 1.49with a Standard Deviation of .639.

Table 3: Student migration to abroad for higher education in relation to quality education: top quality education: Descriptive Statistics

	Mean	Std. Deviation
quest of learning	1.53	.833
innovative	1.53	.652
unforgettable experience	1.73	.750
post study	1.39	.600
world rank university	1.72	.891
Total	1.58	0.7452

Table 3 shows the descriptive statistics of the five variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is unforgettable experience (mean=1.73, SD=.750). Others are quest of learning (Mean =1.53 and SD=.833), innovative (Mean= 1.53, SD=.652) and post study with (mean= 1.39 and SD=.600), world rank university (Mean 1.72, SD=.891). The average total score computed was 1.58 with a Standard Deviation of .7452.

Table 4: Student migration to abroad for higher education in relation to quality education: to become independent: Descriptive Statistics

	Mean	Std. Deviation
unfamiliar	1.40	.705
financial problem	1.81	.841
overcome	1.47	.702
balance	1.47	.711
Total	1.5375	0.73975

Table 4 shows the descriptive statistics of the four variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is financial problem (mean=1.81, SD=.841). Others are unfamiliar (Mean =1.40 and SD=.705), overcome (Mean= 1.47, SD= .702) and balance with (mean= 1.47 and SD=.711). The average total score computed was 1.5375 with a Standard Deviation of .73975.

Table 5: Student migration to abroad for higher education in relation to quality education: push factors: Descriptive Statistics

	Mean	Std. Deviation
economic	1.39	.600
demographic	1.67	.711
socio culture	2.19	.974
Total	1.75	0.761

Table 5 shows the descriptive statistics of the four variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is socio culture (mean=2.19, SD=.974). Others are economic (Mean =1.39 and SD= .600), demographic (Mean= 1.67, SD= .711). The average total score computed was 1.75 with a Standard Deviation of .761.

Table 6: Student migration to abroad for higher education in relation to quality education: pull factors: Descriptive Statistics

Student migration to abroad for higher education	Mean	Std. Deviation
in relation to quality education: pull factors:		
employment oppo	1.39	.528
higher income	1.33	.525
living standard	1.25	.477
Total	1.32	.51

Table 6 shows the descriptive statistics of the three variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is employment opportunities (mean=1.39, SD=.528). Others are higher income (Mean =1.33 and SD=.525), living standard (Mean=1.25, SD=.477). The average total score computed was 1.32 with a Standard Deviation of .51

#### INDEPENDENT SAMPLE T-TEST

H0: There is no significant relation between age group and reasons for student migration abroad.

H1: There is significant relation between age group and reasons for student migration abroad

Table 7: age group and reasons for student migration abroad

age group and reasons for student migration abroad		Mean	Std. Deviation	F	P value	t D	f P value
	18-20	7.1000	3.63471	1 890	173	1.38975	5 169
reasons	20-22	6.0746	1.89348	1.070	.173	1.5077.	.107

Table 7 shows comparison age group and reasons for student migration abroad. There was a significant difference in the age group 18-20 (M=7,1000, SD=3.63471) and age group 20-22(M6.0746, SD=1.89348), f=1.890, P=.169. As P-value is greater than 0.05, it states that the there is no significant relation between age group and reasons for student migration abroad.

#### **FINDINGS**

# To assess reasons for student migration abroad for higher education

- Table 2 shows the descriptive statistics of the four variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is work experience (mean=1.65, SD=.667)'. Others are career with 1.45mean and SD of .701, studying abroad (Mean= 1.42, SD= .582) and dedicated services with mean= 1.44 and SD=.607. The average total score computed was 1.49with a Standard Deviation of .639.
- Table 3 shows the descriptive statistics of the five variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is unforgettable experience (mean=1.73, SD=.750). Others are quest of learning (Mean =1.53 and SD=.833), innovative (Mean=1.53, SD=.652) and post study with (mean=1.39 and SD=.600), world rank university (Mean 1.72, SD=.891). The average total score computed was 1.58 with a Standard Deviation of .7452.
- Table 4 shows the descriptive statistics of the four variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is financial problem (mean=1.81, SD=.841). Others are unfamiliar (Mean =1.40 and SD=.705), overcome (Mean= 1.47, SD= .702) and balance with (mean= 1.47 and SD=.711). The average total score computed was 1.5375 with a Standard Deviation of .73975.
- Table 5 shows the descriptive statistics of the four variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is socio culture (mean=2.19, SD=.974). Others are economic (Mean =1.39 and SD=.600), demographic (Mean= 1.67, SD=.711). The average total score computed was 1.75 with a Standard Deviation of .761.
- Table 6 shows the descriptive statistics of the three variables which indicate the student migration to abroad for higher education in relation to quality education. The variable with the high mean score is employment opportunities (mean=1.39, SD=.528). Others are higher income (Mean=1.33 and SD=.525), living standard (Mean=1.25, SD=.477). The average total score computed was 1.32 with a Standard Deviation of .51

• Table 7 shows comparison age group and reasons for student migration abroad. There was a significant difference in the age group 18-20 (M=7,1000, SD=3.63471) and age group 20-22(M6.0746, SD=1.89348), f=1.890, P=.169. As P-value is greater than 0.05, it states that the there is no significant relation between age group and reasons for student migration abroad.

#### **SUGGESTIONS**

- If provided with better salary, students will stay at their home count and will not migrate in this number.
- Quality education that the students seek outside must be provided in their home country.

#### **CONCLUSION**

The aim of this study was to analyze the reasons that urge students to migrate abroad. Domestic conditions include factors such as widening gap in the demand for and supply of higher education; regulatory framework of the country; rising income levels; availability of education loans, the desire of the Indian middle class to migrate to developed countries and the urge for quality education leads to students migrate abroad.

#### REFERENCES

- 1. Brezis Elise S, Soueri Ariel. Alma Laurea WP, "Why do Students Migrate? Where do they Migrate to?" (2011)
- 2. Richard Justice, Kyei Kwabena Owusu "I have to further my studies abroad": Student migration in Ghana (2021)
- 3. Gunjan Russell King, Sondhi, "International student migration: a comparison of UK and Indian students' motivations for studying abroad" Globalisation, Societies and Education (2018)
- 4. Tamang Min Kumar, Shrestha Milan, Research in Educational Policy and Management, "let me Fly Abroad: Student Migrations in the Context of Nepal" (2021)
- 5. Simon Franck Dago, Barussaud, "Push/pull factors, networks and student migration from côte d'ivoire to France and Switzerland" (2021)

# RELATIONSHIP BETWEEN E-BANKING AND CUSTOMER LOYALTY: A STUDY ON FEDERAL BANK CUSTOMERS.

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#### **CHAPTER 1**

# INTRODUCTION

The rapid growth and development of information and communication technology in banking sector enabled the bank to perform a wide range of banking transactions electronically. Various electronic banking platforms are used by the banks to provide high quality banking services in order to attract more and more customers and retain the existing customer which is considered as their basic strategy. It also helps to increase the customer loyalty towards the bank (Shankar & Jebarajakirthy, 2019).

Compared to traditional banking services, electronic banking services facilitates delivery of banking services through various e-channels. The main aim behind the implementation of e-banking services is that to improve the satisfaction level of customer and to expand the market (Mousa et al., 2021). E-banking provides banking services to customers using electronic means such as ATMs, internet, websites, cards, phones, computers etc. without time, space and geographical bounds. Digitalisation has contributed to a significant change in social, environmental and economic landscape (Nso, 2018).

In both developed and developing countries, electronic banking has experienced tremendous growth and reshaped banking activities. It offers wide range of services to their customers to meet customer's expectation, endure the competitive environment, reduce cost and increase customer convenience (Singh, 2019). Electronic banking enable anywhere, anytime and anyway banking services (Jan et al., 2020).

#### **OBJECTIVES**

- To analyse customer preference towards e-banking.
- To study the e-banking facilities offered by federal bank to their customers.
- To examine the impacts of e-banking services on customer satisfaction and customer loyalty.

#### RESARCH METHODOLOGY

Three districts are selected for the study based on the maximum number of branches of federal bank in the state of Kerala. It covers Ernakulam, Alappuzha, Kottayam. These districts have the highest number of federal bank branches. Primary as well as secondary data are used. Primary data were collected using sample survey. 150 questionnaires will be distributed among the people of the three respective districts. Secondary data were collected from various publications, journals and articles of the central, state and local government and various websites are also referred for the data collection purpose.

#### DATA ANALYSIS AND INTERPRETATION

# **Reliability statistics**

The study examines the impacts of electronic banking service on customer satisfaction and customer loyalty. The aspects considered include the awareness about the e-banking services, customers preference towards e-banking, quality and satisfaction of services provided. To identify these aspects, the researchers conducted a thorough review of the literature and developed measurements scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table.1.

Table 1: Cronbach's Alpha for Measurement used in the study

Aspects	Cronbach's Alpha
Preference	.864
Various facilities	.829
Satisfaction	.838
Total	.891

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater that .7 is widely considered a good score. Of the three constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

# A. Customer preference towards E-banking

Customers includes the federal bank users which shows their preference towards e-banking service.

The preference level of customers was measured using a five-point scale with 6 variables. Table 2 shows the mean score of all the variables indicating the customer's preference towards e-banking.

Table 2 : Customers preference towards e-banking services : Descriptive statistics

Customer's preference towards e- banking	Mean	Std. Deviation
Security and convenience	1.51	.576
Accurate records and financial security	1.76	.620
Quick transactions	1.59	.637
Banking cost	1.92	.832
Multi-level security control	1.84	.705
Problem solving and privacy	1.97	.831
Total	.77	.70

Source: primary data, N=150

Table 2 shows the descriptive statistics of the six variables which indicate the customers preference towards e-banking services. The variable with the high mean score is problem solving and privacy (mean=1.97, SD=.831)'. Others are security and convenience with 1.51 mean and SD of .576, accurate records and financial security(1.76 mean and SD .620), quick transactions (mean=1.59 and SD=.637), banking cost (mean=1.92, SD=.832), and multi-level security control(Mean= 1.84, SD=.831). The average total score computed was .77 with a Standard Deviation of .70.

# B. Various e-banking facilities offered by bank

Various facilities offered by bank shows different facilities which are used by the customers and awareness about various e-banking services.

Various facilities offered by bank was measured using a five-point scale with 5 variables. Table 3 shows the mean score of all the variables indicating the various facilities offered by the bank.

Table 3: various facilities offered by the bank: Descriptive statistics

various facilities offered by bank	Mean	Std. Deviation
Efficient and quality banking service	1.43	.595
Time and cost	1.63	.765
Transaction cost and speedy transfer	1.77	.781
Transaction data	1.77	.736
24x7 hours services	1.61	.767
Total	1.64	0.73

Source: Primary data, N=150

Table 3 shows the descriptive statistics of the five variables which indicate various facilities offered by the bank. The variables with the high mean score is the transaction cost and speedy transfer (mean=1.77 SD=.781) and transaction

data(Mean = 1.77, SD= .767). Others are efficient and quality banking service (Mean=1.43, SD=.595), time and cost (Mean=1.63, SD=.765) and 24x7 hours services (Mean=1.61, SD=.767). The average total score computed was 1.64 with a Standard Deviation of 0.73.

# C. Customer satisfaction and customer loyalty

E-banking is a huge impact on customer satisfaction and customer loyalty. Satisfaction level of customers may vary according different reasons.

Customer satisfaction and customer loyalty was measured using a five-point scale with 5 variables. Table 4 shows the mean score of all the variables indicating the satisfaction level of customers those who are using e-banking services.

Table 4: customer satisfaction and customer loyalty: Descriptive statistics

customer satisfaction and customer loyalty	Mean	Std. Deviation
Accessibility	1.49	.663
Anytime and anywhere banking services	1.72	.770
Safety, privacy and user friendly	1.71	.736
Trust worthy and minimize risk	1.86	.780
Transaction cost and free from cash carry transaction	1.71	.805
Total	1.70	0.75

Source: Primary data, N=150

Table 4 shows the descriptive statistics of five variables which indicates the satisfaction level and customer loyalty. The variable with the high mean score is trust worthy and minimize risk (mean=1.86, SD=.780)'. other scores are accessibility (Mean=1.49, SD=.663), anytime and anywhere banking services (Mean = 1.72, SD=.770), safety privacy and user friendly (Mean=1.71, SD=.736) and transaction cost and free from cash carry transaction (Mean=1.71, SD=.805). The average total score computed was 1.70 with a Standard Deviation of .75

# **Independent sample t-test**

- H<sub>0:</sub> There is no significant difference between customer preference towards ebanking and Gender
- H<sub>1:</sub> There is a significant difference between customer preference towards e-banking and Gender.

Table 5: Customer preference towards e-banking and Gender

		Independent sample t-test						
customers perception towards e- banking	Mean	Std. Deviation	F	P value	Т	Df		
Male	10.8553	3.25660	1.025	.313	1.052	147		
Female	10.3425	2.64690						

An independent sample t-test was conducted to compare the preference of customers towards e-banking in Male and Female groups. There was a significant difference in the Male group (M= 10.8553, SD= 3.25660) and Female (M= 10.3425, SD= 2.64690), f= 1.025, P= .313. As P-value is greater than 0.05, it states that the Male and female group does not have any significant difference in the customers preference towards e-banking. In other words, it means the preference will not change with the Gender.

#### **Independent sample t-test**

H<sub>0</sub>: There is no significant difference between customer satisfaction and Gender

H<sub>1:</sub> There is a significant difference between customer satisfaction and Gender.

Table 6: Customer satisfaction and customer loyalty

				Independent	sample t-test	
Customer satisfaction	Mean	Std. Deviation	F	P Value	T	Df
Male	8.9079	3.26671	9.668	.002	1.908	146
Female	8.0139	2.32859				

An independent sample t-test was conducted to compare the customers satisfaction towards e-banking services in Male and Female groups. There was a significant difference in the Male group (M= 8.9079, SD= 3.26671) and Female (M= 8.0139, SD= 2.32859), f= 9.668, P= .002. As P-value is less than 0.05, it states that the Male and female group have significant difference in the customers satisfaction towards e-banking. In other words, it means that the customer satisfaction will change with the Gender.

## 4.FINDINGS, SUGGESTIONS, AND CONCLUSION

#### **Findings**

#### To analyse customer preference towards e-banking.

• Table 2 shows the descriptive statistics of the six variables which indicate the customers preference towards e-banking services. The variable with the high mean score is problem solving and privacy (mean=1.97, SD=.831)'.

- Others are security and convenience with 1.51 mean and SD of .576, accurate records and financial security (1.76 mean and SD .620), quick transactions (mean=1.59 and SD=.637), banking cost (mean=1.92, SD=.832), and multi-level security control (Mean= 1.84, SD=.831). The average total score computed was .77 with a Standard Deviation of .70.
- An independent sample t-test was conducted to compare the preference of customers towards e-banking in Male and Female groups. There was a significant difference in the Male group (M= 10.8553, SD= 3.25660) and Female (M= 10.3425, SD= 2.64690), f= 1.025, P= .313. As P-value is greater than 0.05, it states that the Male and female group does not have any significant difference in the customers preference towards e-banking. In other words, it means the preference will not change with the Gender.

### To study the e-banking facilities offered by federal bank to their customers.

• Table 3 shows the descriptive statistics of the five variables which indicate various facilities offered by the bank. The variables with the high mean score is the transaction cost and speedy transfer (mean=1.77 SD=.781) and transaction data(Mean = 1.77, SD=.767). Others are efficient and quality banking service (Mean= 1.43, SD = .595), time and cost (Mean = 1.63, SD=.765) and 24x7 hours services (Mean= 1.61, SD=.767). The average total score computed was 1.64 with a Standard Deviation of 0.73.

# To examine the impacts of e-banking services on customer satisfaction and customer loyalty.

- Table 4 shows the descriptive statistics of five variables which indicates the satisfaction level and customer loyalty. The variable with the high mean score is trust worthy and minimize risk (mean=1.86, SD=.780)'. other scores are accessibility (Mean= 1.49, SD= .663), anytime and anywhere banking services (Mean = 1.72, SD= .770), safety privacy and user friendly (Mean=1.71, SD=.736) and transaction cost and free from cash carry transaction (Mean=1.71, SD=.805). The average total score computed was 1.70 with a Standard Deviation of .75
- An independent sample t-test was conducted to compare the customers satisfaction towards e-banking services in Male and Female groups. There was a significant difference in the Male group (M= 8.9079, SD= 3.26671) and Female (M= 8.0139, SD= 2.32859), f= 9.668, P= .002. As P-value is less than 0.05, it states that the Male and female group have significant difference in the customers satisfaction towards e-banking. In other words, it means that the customer satisfaction will change with the Gender.

#### **SUGGESTIONS**

- 1. Banks should be more concerned about conducting the e-banking transaction more securely and conveniently.
- 2. Bank should give more attention to protect customer's data and should enable multi-level security control.
- 3. Customers should provide efficient and quality e-banking services.
- 4. Bank should take proper precautions to minimize the risk while conducting the e-banking transactions.

#### Conclusion

The rapid development of information technology provides a plat form to use innovative technologies/electronic banking service to enhance operational efficiency and quality of service to attract and to retain(maintain) existing and potential customers. Connecting a customer anytime and anywhere to their money and needs is a must have service that has become an unstoppable necessity. This worldwide communication is leading a new generation of strong banking relationships.

Conveniences of services plus outside locations like ATMS are crucial to every banks success. Meeting all challenges including safety and security are perfect examples of good banking strategies. In order for the financial institutions to effectively grow they must embrace the new technologies and customize them to suit their economic success and the public's success.

#### REFERENCES

- 1. Jan, N. A., subramani, A. K., Chebolu, R. M., & Sasikala, M. S. (2020). Examining the Factors influencing Adoption of E-Banking services in Chennai city. *Serbian Journal of Management*, *15*(2), 181–192
- 2. Mousa, A. H., Mousa, S. H., Aljshamee, M., & Nasir, I. S. (2021). Determinants of customer acceptance of e-banking in Iraq using technology acceptance model. *Telkomnika* (*Telecommunication Computing Electronics and Control*), 19(2), 421–431.
- 3. Nso, M. A. (2018). The Role of e-banking as a marketing tool. Innovative Marketing. LLC CPC Business Perspectives.
- 4. Shankar, A., & Jebarajakirthy, C. (2019). The influence of e-banking service quality on customer loyalty: A moderated mediation approach. *International Journal of Bank Marketing*, *37*(5), 1119–11.
- 5. Singh, S. (2019). Measuring E-Service Quality and Customer Satisfaction with Internet Banking in India. *Theoretical Economics Letters*, 09(02), 308–326.

## CONSUMER PERCEPTION AND FUTURE PROSPECTS OF EV IN RELATION WITH GOAL 11 SUSTAINABLE TRANSPORTATION

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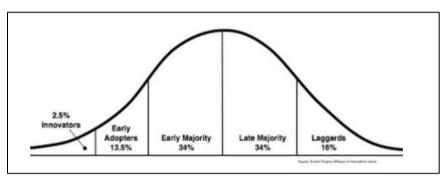
#### Introduction

From the adoption of Sustainable Development Goals (SDGs) and the following Paris Agreement in 2015, it has forced member countries to declare their participation in reducing greenhouse gas (GHG) emissions and make new alternating efforts towards a cleaner and greener world(Chaturvedi et al. ,2022). Other transportation sectors like aviation, shipping, rail etc contribute 11.6%,10.6%,1.0% and 2.2% respectively to the total GHG emission (Ritchie, 2020).

Over the past few years, research is being conducted to study the various perceptions to get more insight of the new and sophisticated developments of sustainable low-carbon transportation alternatives to reduce the carbon footprint. As an end result the study has put forward many alternatives to the normal ICE (Internal Combustion Engine) vehicles. (Schulte et al .2004). One among that idea was electric vehicles. To support the idea of electric vehicles adoption ,there is a necessity to scrutinise the factors that influence the consumer acceptance of these vehicles because acceptance was a very look out indicator for its commercial success (or failure) of full EVs(Egbue & Long., 2012). In this manner the increasing EV market has proved to be a decarbonisation efficient transport sector in many countries giving support to security of supply by new fuel alternatives. But this fact is being backlashed by slow growth in sales due to the high pricing compared to conventional vehicles Previous studies have shown that people are aware of the benefits of owning. EVs. But the final purchasing decision seems to be strongly affected by the price. (Aravena, & Denny., 2021).

From a energy perspective, the higher the energy sources, more is the reliability and balance of energy consumption. Along with better technological developments traffic status and road usage can also improve. According to IEA(2017a) it was indicated that based on vehicle fuel cycle calculations, electric passenger vehicles in Europe during 2015 emitted 50% less CO2 than conventional vehicles and 40% less CO2 than diesel vehicles. This data shows

a complete reduction which contribute to the UN SDGs. However studies have shown that EVs can reduce greenhouse gas emissions only by 30% compared to ICE vehicles. For countries with carbon intensive power production structure (like India and China), and the lifecycle of vehicles considered, the reductions can be a greater contribution by each parties to the SDG goal of sustainable transportation. (Tu et al., 2019)



Barkenbus, 2020

From the above figure we can observe that with sales of 2-3 percent for EVs in the begging stage it is attracting only the innovators and early adopters segments that too in a given population . These individuals differ from the general public. General public is open to many different technologies and are ready to overlook imperfections for the societal or personal goals and are not convinced by mass marketing. But studies have started to show a change in the trend from 10 to 70 percent increase in the total market share for EVs from now (2040), this makes the picture more clear that the future prospects for EV is quiet certain and there will be a unprecedented rise in the numbers which will dominate the passenger car market. (Barkenbus, 2020).

Based on the above mentioned aspects and emerging importance of EVs in the Indian economy, this paper will present a holistic overview of research papers interlinked with EVs current trends and consumer behaviour patterns in the present period. In relation to the reviewed papers some aspects like sustainable transportation, consideration of EV as a alternative, switching behaviour to EV, etc are not discussed so to cover that gap our paper will prove to be a better source of data by also combing the UN SDGs. (Omahne et al, 2021).

#### **Objectives of the study**

- To analyse the vehicle purchase decision of consumers towards electric vehicles.
- To assess the customer's future perception in using EV with regards to the sustainable development goal 11 of Sustainable Transportation.

- To study the preference of vehicle owners to buy EV as solution to increasing fuels rates.
- To have a comparative analysis of consumers perspective on the ROI from EV and ICE vehicles.

#### Methodology

The study was conducted in the state of Kerala and mainly two districts were selected based on the district having the highest number of EV users and charging infrastructure. Kottayam based on the highest number of users and Ernakulam based on the EV charging infrastructure. These districts were having highest number of electric vehicle users aswell. Primary and secondary data are the sources for the research work. Primary data was collected using a sample survey. 150 questionnaires was distributed and the data have been collected from electric vehicle users who are currently using EV and those who might prospectively purchase EV. Secondary data has been collected from various international and national journals and also by referring to various websites for numerical data based on surveys.

#### **Hypothesis**

- I)H<sub>0</sub>: There is no significant difference between age and vehicle purchase decision of consumers towards electric vehicles.
- H<sub>1</sub>: There is significant difference between age and vehicle purchase decision of consumers towards electric vehicles.
- $II)H_0$ : There is no significant difference between Income level and comparative analysis of consumers perspective on the ROI from EV and ICE vehicles.
- H<sub>1</sub>: There is significant difference between Income level and comparative analysis of consumers perspective on the ROI from EV and ICE vehicles.
- III)H<sub>0</sub>: There is no significant difference between gender and customer's future perception in using EV with regards to the sustainable development goal 11 of Sustainable Transportation.
- H<sub>1</sub>: There is significant difference between gender and customer's future perception in using EV with regards to the sustainable development goal 11 of Sustainable Transportation.
- H<sub>0</sub>: There is no significant relationship between reasons for reconsidering the purchase of EV and the preference of vehicle owners to buy EV as solution to increasing fuels rates.
- H<sub>1</sub>: There is significant relationship between reasons for reconsidering the purchase of EV and the preference of vehicle owners to buy EV as solution to increasing fuels rates.

#### **Data Analysis and Interpretation**

The study examines the consumer perception and future prospects of EV in relation with goal 11 sustainable transportation. The aspects considered includes the vehicle purchase decision of consumers towards electric vehicles, assess the customer's future perception in using EV with regards to the sustainable development goal 11 of Sustainable Transportation, the preference of new vehicles owners to buy EV as solution to increasing fuels rates, a comparative analysis of consumers perspective on the ROI from EV and ICE vehicles .To identify these aspects, the researcher conducted a thorough review of the literature and developed measurement scales that are appropriate for the study . The Alpha(Cronbach) values relating to these aspects are presented in Table 1.

Table 1:Cronbach's Alpha for Measurement Scales used in the Study

=	
Aspects	Cronbach's Alpha
Factors influencing buying decision	0.819
Reasons for reconsidering	0.829
SDG 11.2	0.818
Buying Preference	0.805
ROI from EV	0.821
Total	0.857

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales for the study.

Table 2: Factors influencing the buying decision of EV: Descriptive statistics

Factors influencing buying decision	Mean	Std. Deviation
Purchase price	1.89	1.272
Low cost	2.27	.962
Low maintenance cost	2.21	1.090
More power	2.41	1.118
Driving comfort	2.49	1.169
Government subsidies	2.61	1.163
Low pollution	2.44	1.132
Total	2.33	1.13

Source: Primary Data, N=150

Table 2 shows the descriptive statistics of the 7 variables which indicate the factors influencing the buying decision of EV among consumers. The variable with the highest mean score is Government Subsidies (mean=2.61, SD=1.163)'. Others are Driving comfort with 2.49 mean and SD 1.169, Low pollution (2.44)

mean and SD 1.132), and More power (Mean=2.41,SD=1.118). The average total score computed was 2.33 with a standard deviation of 1.13.

<u>Table 3: Factors influencing the reconsideration of buying decision of EV:</u>
Descriptive statistics

Factors effecting reconsideration of buying decision	Mean	Std. Deviation
Developing EV charging infrastructure	2.06	1.057
High price of EV	2.68	1.032
No clear Idea of battery life	2.42	1.160
New tariff rates for charging	2.47	1.109
Uncertainty of the future of EV	2.53	1.115
Limitation in the distance	2.63	1.132
Total	2.46	1.10

Source: Primary Data,N=150

Table 3 shows the descriptive statistics of the 6 variables which indicate Factors influencing the reconsideration of buying decision of EV. The variable with the highest mean score is high price of EV (mean=2.681, SD=1.032)'. Others are limitation in the distance with 2.63 mean and SD 1.132, uncertainty in the future of EV (2.53 mean and SD 1.115), and new tariff rates for charging (Mean=2.47, SD=1.109). The average total score computed was 2.46 with a standard deviation of 1.10.

<u>Table 4: Sustainable Development Goal 11.2 met by Ev purchase: Descriptive statistics</u>

Sustainable Development Goals 11.2	Mean	Std. Deviation
Safe Transportation	2.01	.93
Affordable transportation	2.57	1.06
Accessibility to better transportation	2.38	1.00
Sustainable transport system for all	2.49	1.11
Improving Road safety	2.45	1.14
Vulnerable group	2.63	1.14
Total	2.42	1.06

Source : Primary Data, N=150

Table 4 shows the descriptive statistics of the 6 variables which indicates the sustainable development goal 11.2 achieved through the EV purchase. The variable with the highest mean score is vulnerable group (mean=2.63, SD=1.14)'. Others are affordable transportation with 2.57 mean and SD 1.06, sustainable transport system for all (2.49 mean and SD 1.11), and improving road safety (Mean=2.45, SD=1.14). The average total score computed was 2.42 with a standard deviation of 1.06.

Table 5: Factors influencing the preference of consumer to choose EV

Factors influencing preference to EV	Mean	Std.
ractors influencing preference to EV	Mean	Deviation
Increasing fuel prices	2.02	1.01
To Avail tax reduction	2.73	1.01
Good ROI	2.54	1.03
Increasing number	2.51	1.11
Better Charging Infrastructure	2.59	1.12
Less Govt Control	2.55	1.18
Warranty and service cost	2.63	1.17
No emmissions	2.45	1.17
Total	2.50	1.10

Source: Primary Data, N=150

Table 5 shows the descriptive statistics of the 8 variables which indicates the preference of customers to choose EV over ICE vehicles. The variable with the highest mean score is to avail tax reduction (mean=2.73, SD=1.01)'. Others are warranty and service cost with 2.63 mean and SD 1.17, better charging infrastructure (2.59 mean and SD 1.12), and less government control (Mean=2.55, SD=1.18). The average total score computed was 2.50 with a standard deviation of 1.10.

<u>Table 6: Various avenues that helped in faster return on investment by buying EV</u>

Reasons for Faster ROI from Buying EV	Mean	Std. Deviation
Duration of service	2.01	0.90
Fewer mechanical parts	2.69	1.12
Warranty period is longer	2.44	1.01
Electricity price is lower	2.45	1.17
Service charges are less	2.68	1.27
Charging through renewable energy like solar and wind power	2.65	1.14
Tax savings	2.36	1.23
Total	2.47	1.12

Source: Primary Data, N=150

Table 6 shows the descriptive statistics of the 8 variables which indicates the various avenues that helped customers for faster ROI from buying EV. The variable with the highest mean score is fewer mechanical parts (mean=2.69,SD=1.12)'. Others are less service charges with 2.68 mean and SD 1.27, charging through renewable energy sources(2.65 mean and SD 1.14), and low electricity prices(Mean=2.45,SD=1.17). The average total score computed was 2.47 with a standard deviation of 1.12.

#### One way ANOVA

I) H<sub>0</sub>: There is no significant difference between age and vehicle purchase decision of consumers towards electric vehicles.

H<sub>1</sub>: There is significant difference between age and vehicle purchase decision of consumers towards electric vehicles.

Table 7: Vehicle purchase decision of consumers towards electric vehicles and Age

			ANOVA	4	
Age Groups	N		Df	F	Sig.
24-34	32	Between Groups	3	.323	.809
34-46	84	Within Groups	146		
46-53	24	Total	149		
53-65	10				
Total	150				_

A one way subject's ANOVA was conducted to compare the effect of purchasing decision of EV, taking 4 age groups 24-34, 34-46, 46-53, 53-65. Since, P>0.05, the null hypothesis was accepted. There is no significant difference between age and vehicle purchasing decision of consumers towards electric vehicles.

2) H<sub>0</sub>: There is no significant difference between Income level and comparative analysis of consumers perspective on the ROI from EV and ICE vehicles.

H<sub>1</sub>: There is significant difference between Income level and comparative analysis of consumers perspective on the ROI from EV and ICE vehicles.

<u>Table 8: Analysis of return on investment from ICE vehicles and EV in relation with Income level</u>

		ANOVA			
Income Groups	N		Df	F	Sig.
28000- 63000	42	Between Groups	3	.357	.784
63000- 80000	45	Within Groups	146		
80000- 92300	41	Total	149		
92300- 150000	22				
Total	150				

A one way subject's ANOVA was conducted to compare the return on investment from ICE and EV vehicles, taking 4 income groups 28,000-63,000, 63,000-80,000, 80,000-92,300, 92300-1,50,000. Since, P>0.05, the null

hypothesis was accepted. There is no significant difference between Income level and comparative analysis of consumers perspective on the ROI from EV and ICE vehicles.

#### **Independent Sample t-test**

- II) H<sub>0</sub>: There is no significant difference between gender and customer's future perception in using EV with regards to the sustainable development goal 11 of Sustainable Transportation.
  - $H_1$ : There is significant difference between gender and customer's future perception in using EV with regards to the sustainable development goal 11 of Sustainable Transportation.

<u>Table 9: Customer's future perception in using EV with regards to the</u> sustainable development goal 11 of Sustainable Transportation and Gender

Significance between gender and			Inde	pendent sa	mple t-1	test
customer's future perception in regards with SDG 11.2	Mean	SD	F	P Value	t	Df
Male	14.6707	3.67190	3.158	.078	.568	148
Female	14 3676	2.66489				

An independent sample t-test was to compare the customer's future perception in using EV with regards to SDG 11.2 with Male and Female gender groups. There was a significant difference Male group (M=14.6707, SD=3.67190) and Female group (M=14.3676, SD=2.664689), f=3.158. As P value is greater than 0.05, it states that the male and female group does not have any significant difference with the customer perception in using EV with relation to SDG 11.2. In other words, it means the customer's future perception in using EV with relation to SDG11.2 will not change with the gender.

#### Correlation

- I) H<sub>0</sub>: There is no significant relationship between reasons for reconsidering the purchase of EV and the preference of vehicle owners to buy EV as solution to increasing fuels rates.
  - H<sub>1</sub>:There is significant relationship between reasons for reconsidering the purchase of EV and the preference of vehicle owners to buy EV as solution to increasing fuels rates.

<u>Table 10: Relationship between Reasons for reconsidering EV purchasing decision and Preference of vehicle owners to buy EV as a solution to increasing fuel rates</u>

	Mean	Std. Deviation	1	2
Buying Preference	20.0200	4.35731	0.000	
Reasons for reconsidering	14.7867	2.88385	0.000	1

A Pearson correlation was run to determine the relationship between reasons for reconsidering EV purchasing decision and preference of vehicles owners to buy EV to combat increasing fuel prices. From table 10, it is clear that there is significant relationship between reasons to reconsider EV purchasing and preference towards buying EV as a solution to increasing fuel rates (r=0.000, N=150, p=0.05) and which is statistically measured.

#### **Findings**

- 1) The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales for the study.
- 2) Table 2 shows the descriptive statistics of the 7 variables which indicate the factors influencing the buying decision of EV among consumers. The variable with the highest mean score is Government Subsidies (mean=2.61, SD=1.163)'. Others are Driving comfort with 2.49 mean and SD 1.169, Low pollution (2.44 mean and SD 1.132), and More power (Mean=2.41, SD=1.118). The average total score computed was 2.33 with a standard deviation of 1.13.
- 3) Table 3 shows the descriptive statistics of the 6 variables which indicate Factors influencing the reconsideration of buying decision of EV. The variable with the highest mean score is high price of EV (mean=2.681, SD=1.032)'. Others are limitation in the distance with 2.63 mean and SD 1.132, uncertainty in the future of EV (2.53 mean and SD 1.115), and new tariff rates for charging (Mean=2.47, SD=1.109). The average total score computed was 2.46 with a standard deviation of 1.10.
- 4) Table 4 shows the descriptive statistics of the 6 variables which indicates the sustainable development goal 11.2 achieved through the EV purchase. The variable with the highest mean score is vulnerable group (mean=2.63, SD=1.14)'. Others are affordable transportation with 2.57 mean and SD 1.06, sustainable transport system for all (2.49 mean and SD 1.11), and improving road safety (Mean=2.45, SD=1.14). The average total score computed was 2.42 with a standard deviation of 1.06.
- 5) Table 5 shows the descriptive statistics of the 8 variables which indicates the preference of customers to choose EV over ICE vehicles. The variable with the highest mean score is to avail tax reduction (mean=2.73, SD=1.01)'. Others are warranty and service cost with 2.63 mean and SD 1.17, better charging infrastructure (2.59 mean and SD 1.12), and less government control (Mean=2.55, SD=1.18). The average total score computed was 2.50 with a standard deviation of 1.10.
- 6) Table 6 shows the descriptive statistics of the 8 variables which indicates the various avenues that helped customers for faster ROI from buying EV. The variable

- with the highest mean score is fewer mechanical parts (mean=2.69, SD=1.12)'. Others are less service charges with 2.68 mean and SD 1.27, charging through renewable energy sources (2.65 mean and SD 1.14), and low electricity prices (Mean=2.45,SD=1.17). The average total score computed was 2.47 with a standard deviation of 1.12.
- 7) A one way subject's ANOVA was conducted to compare the effect of purchasing decision of EV, taking 4 age groups 24-34, 34-46, 46-53, 53-65. Since, P>0.05, the null hypothesis was accepted. There is no significant difference between age and vehicle purchasing decision of consumers towards electric vehicles.
- 8) A one way subject's ANOVA was conducted to compare the return on investment from ICE and EV vehicles, taking 4 income groups 28,000-63,000, 63,000-80,000, 80,000-92,300, 92300-1,50,000. Since, P>0.05, the null hypothesis was accepted. There is no significant difference between Income level and comparative analysis of consumers perspective on the ROI from EV and ICE vehicles.
- 9) An independent sample t-test was to compare the customer's future perception in using EV with regards to SDG 11.2 with Male and Female gender groups. There was a significant difference Male group (M=14.6707, SD=3.67190) and Female group (M=14.3676, SD=2.664689),f=3.158. As P value is greater than 0.05, it states that the male and female group does not have any significant difference with the customer perception in using EV with relation to SDG 11.2. In other words, it means the customer's future perception in using EV with relation to SDG11.2 will not change with the gender.
- 10) A Pearson correlation was run to determine the relationship between reasons for reconsidering EV purchasing decision and preference of vehicles owners to buy EV to combat increasing fuel prices. From table 10, it is clear that there is significant relationship between reasons to reconsider EV purchasing and preference towards buying EV as a solution to increasing fuel rates (r=0.000, N=150,p=0.05) and which is statistically measured.

#### **Suggestions**

- 1. Government should increase the amount of subsidies for electric vehicles as the price of EV is comparatively higher than conventional vehicles so increasing subsidies will reduce the price and therefore increasing the sales of EV.
- 2. EV users should set up their own sustainable ways to recharge vehicles without depending on KSEB sources of electricity since they are also generated from coal and fossil fuels.
- 3. Government should try to boost the purchase of EV to reduce the carbon footprint of the nation.
- 4. Government should take initiative to setup more research and development centres for the setting up of the charging infrastructure of EV in the country and for the development of eco friendly batteries.

#### Conclusion

The emerging trend of increasing number of EV in the vehicle industry of the country is a positive note for the sustainability of the future generations of the country. The increasing prices of fossil fuels and the climate change issues all around the world has made us to think about more alternative to reduce the impact on the environment.

From the study we have observed that the hypothesis studies proved that there is not much difference between the various objectives. Since it is the initial stages of adoption of EV these various factors does not have much influence on the purchasing patterns but the variables of the have strong relation with each other thus more concentration should be given to the small factors that are influencing the purchasing scales.

Every citizen should try to adopt the reduction of carbon footprint of the nation as their own responsibility rather than thinking its all the responsibility of the government or of someone else. Let the EV trend be one among the alternatives of switching to sustainable resources and boost our transformation to the path of a greener nation.

#### **References**

- Aravena, C., & Denny, E. (2021). The impact of learning and short-term experience on preferences for electric vehicles. Renewable and Sustainable Energy Reviews, 152.
- B. K. Chaturvedi, Atri Nautiyal, T. C. Kandpal ,Mohammed Yaqoot, *Energy for Sustainable Development* (2022),10.1016/j.esd.2021.12.006
- Barkenbus, J. N. (2020, July 2). Prospects for electric vehicles. Sustainability (Switzerland). MDPI.
- Egbue, O.; Long, S. Barriers to widespread adoption of electric vehicles: An analysis of consumer attitudes and perceptions. *Energy Policy* **2012**, *48*, 717–729.
- H. Ritchie Cars, planes, trains: Where do CO2 emissions from transport come from?Our World in Data (2020, October)
- Omahne, V., Knez, M., & Obrecht, M. (2021, January 1). Social aspects of electric vehicles research—trends and relations to sustainable development goals. *World Electric Vehicle Journal*. MDPI AG.
- Schulte, I.; Hart, D.; van der Vorst, R. Issues affecting the acceptance of hydrogen fuel. *Int. J. Hydrog. Energy* **2004**, *29*, 677–685.
- Tu, J. C., & Yang, C. (2019). Key factors influencing consumers' purchase of electric vehicles. Sustainability (Switzerland), 11(14).

# AN ANALYSIS ON THE CUSTOMER REDRESSAL MECHANISM IN THE STATE OF KERALA WITH REFERENCE TO LPG SUPPLY

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#### INTRODUCTION

In the present scenario LPG contributes more in improving the living standard. (Maheshkumar .M & Vishwajeet,2016) The oil and gas sector plays a vital role in the country's rapid economic growth h by contributing over a high per cent of the GDP. (D.Amutha, 2019) Liquefied Petroleum Gas (LPG) is a co-product of natural gas extraction (60%) and crude oil refining (40%) which is extremely versatile and portable. LP Gas is five times more efficient than traditional fuels, resulting in less energy wastage and better use of our planet's resources. Indian households are now fully dependent on LPG cylinders. Therefore keen attention is to be diverted towards the supply of LPG gases.(Satapathy et al,2018)

LPG"s domestic uses can never be ignored. It has played a revolutionary role when it comes to changing the face of domestic fuels used for heating and cooking. The main benefits of LPG is in helping people to switch from unsustainable biomass use to a clean and safe cooking fuel. This provides enormous health benefits helping to avoid the 1.6 million deaths per year from respiratory problems caused by smoke and other pollutants released by inefficient biomass burning in enclosed spaces. It also releases women and children from the drudgery of collecting firewood and health problems associated with carrying heavy bundles long distances. The main domestic uses of LPG are with respect to lighting, refrigeration, cooking and most of all heating. It is as good for powering standalone stoves and huge cooking stoves. It has been found to be cost effective and hence is used in large scale cooking also. The main reason behind this is easy accessibility, low cost per unit and the environment friendly properties of LPG. (Dhanabhakyam & Sumathi, 2014)

Across the world, LPG industry is continuously facing strong competition all over the world. LPG sector is constantly facing challenges from the market. The systematic delivering and high service quality is to be systemize for maintaining customer allegiance. All over the world, gas prices are one of the major issues. The reduced prices in global market can binds the customers. In India, for establishing service quality standard of LPG several surveys have to be

organised to obtain the problems associated with the service quality evaluation and customer satisfaction of LPG industries for getting cost effective solutions. In some parts of India, performance standard is up to the mark of customer satisfactory level but on other hand there are some places where customers are not satisfied with the LPG industry. Pricing and distribution is the basic problems faced by Indian customers. The gas distribution problem occurs due to the lack of interest among the consumers. In today's LPG market, complains registration is done through computerised process by the customers and the customers are becoming more sensitive to LPG gas problems. Customers also have the right to select their suppliers of LPG as well as good service quality. (Satapathy et al,2018)

#### **OBJECTIVES**

Given the gaps identified in the existing literature mentioned above, this research aims on an analyse on the customer redressal mechanism in the state of Kerala with special reference to LPG supply .the main objectives of the study are:

- 1. To analyse the awareness level among the consumers regarding the redressal system.
- 2. To measure how much extend the complaints are resolved.
- 3. To understand the problems affecting the consumer regarding the LPG supply.

#### **METHODOLOGY**

Respondents from 3 districts was selected on the basis of the level of demand and consumption from the state of Kerala covering Ernakulum, Thiruvananthapuram and Kottayam. These districts was having the highest consumption. Primary as well as secondary data are collected using sample survey. 200 questionnaires was given across the district and the data was collected from the respondents directly. Secondary data was also been collected from the various publications of central, state and local government and also by freeing to the website.

#### DATA ANALYSIS AND INTERPRETATION

The study analyses the customer redressal mechanism and customer opinion. The aspects considered are to analyse the awareness level among the consumers regarding the redressal system, to measure how much extend the complaints are resolve and to understand the problems affecting the consumer regarding the LPG supply. To identify these aspects, the researchers conducted a thorough review of the developed measurement scales that are appropriate for the study.

Table 1: Cronbach's Alpha for Measurement Scales used in the Study

Aspects	Cronbach's Alpha
Awarness level	.712
Extend problem solved	.743
Problem faced now	.721
Total	.856

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than 0.7 is widely considered a good score of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

#### Awareness level among the consumers regarding the redressal system.

The awareness level among the consumers regarding the redressal system was measured using five-point scale with 7 variables. Table 2 shows the mean score of all the variables indicating the involvement in the public consultation of projects.

Table 3: To analyse the awareness level among the consumers regarding the redressal system: Descriptive statistics

awareness level among the consumers	Mean	Std. Deviation
Checking at time of installation	2.00	.855
usage and safety measures	2.23	.808
gas subsidy	2.33	.812
complaint cell and number	2.45	.873
price rise and weight change	2.37	.922
special subsidy to senior citizens	2.46	.971
manuals	2.39	.925
total	2.32	0.88

Source: Primary data, N=150

Descriptive statistics of analysing the awareness level among the consumers regarding the redressal system indicates that the variable with high mean score is special subsidy to senior citizens (mean=2.46, SD=.922) others are awareness regarding complaint cell (mean=2.45, SD= .873), awareness during installation(mean=2, SD=.855), usage and safety measures(mean=2.23, SD= .808), gas subsidy(mean=2.45, SD= .873), price rise and weight change(mean=2.37, SD= .922), Awareness from manuals(mean = 2.39, SD = .925). The average total score computed was 2.32 with standard deviations 0.88

#### A. Extend the complaints are resolved

The extend the complaints are resolved regarding the redressal system was measured using five-point scale with 5 variables. Table 3 shows the mean score

of all the variables indicating the involvement in the public consultation of projects.

Table 3: Extend the complaints are resolved

Complaints made	Mean	Std. Deviation
Gas leaking	1.90	.714
credit of subsidy	2.00	.707
Late delivery	1.94	.691
Extra charges	1.98	.711
Attitude of staff	1.93	.699
Total	1.95	0.70

Source: Primary data, N=150

Descriptive statistics of extend the complaints are resolved indicates that the variable with high mean score is credit of subsidy (mean=2., SD=.707), others are gas leaking(mean=1.90, SD=.714), late delivery(mean=1.94, SD=.691), extra charges(mean=1.98, SD=.711), attitude of staff(mean=1.93, SD=.699). The average total score computed was 1.95 with standard deviations .07044

B. Problems affecting the consumer regarding the LPG supply Table 4: problems faced by consumers

Problems faced	Mean	Std. Deviation
delivery at the door step	2.28	.926
extra charges	2.22	.894
Reduction in cylinder weight	2.26	.962
Low response to complaints	2.27	.957
Rough behaviour of delivery boy	2.36	1.019
total	2.28	0.95

Source: Primary data, N=150

Descriptive statistics of problems affecting the consumer regarding the LPG supply indicates that the variable with high mean score is rough behaviour of delivery boy (mean=2.36, SD= 1.019), others are delivery at the door step (mean=2.28, SD=.926), extra charges(mean=2.22, SD= .894), reduction in cylinder weight(mean=2.26, SD= .962), low response to complaints (mean=2.27, SD= .957). The average total score computed was 2.278 with standard deviations 0.9516

#### **ONE WAY ANOVA**

H<sub>0</sub>: There is no relationship between the awareness level among the consumers regarding the redressal system and age of the consumers.

H<sub>1</sub>: There is relationship between the awareness level among the consumers regarding the redressal system and age of the consumers.

Here it analyses the awareness level among the consumers regarding the redressal system with different age groups.

Table 5 :age and awareness level among the consumers regarding the redressal system.

•			
	df	F	Sig.
Between Groups	4	.720	.580
Within Groups	152		
Total	150		

One way subject's ANOVA was conducted to compare the awareness level of LPG supply, taking 4 age groups less than 38, 38 to 58, 58 to 78 and above 78. Since P>0.05, the null hypothesis was accepted. There is no significance difference between age and awareness level among customer regarding the redressal system.

H<sub>0</sub>: There is no relationship between the problems affecting the consumer regarding the LPG supply and income level of the consumer.

H<sub>1</sub>: There is relationship between the problems affecting the consumer regarding the LPG supply and income level of the consumer.

Here it analyses the problems affecting the consumer with income level of the consumers.

Table 6: Income and problems affecting the consumers

	df	F	Sig.
Between Groups	3	2.565	.037
Within Groups	153		
Total	150		

One way subject's ANOVA was conducted to compare the problem affecting the consumers, taking 5 age groups less than 30000, 30000 to 50000, 50000 to 70000, 70000 to 90000 and above 90000. Since P<0.05, the null hypothesis was rejected. There is significance difference between income level and problems affecting the customer regarding the redressal system.

#### **CONCLUSION**

The present scenario of fluctuation in the pricing of the LPG and the subsidy return gives much worries to manage the monthly budget of the middle class families. The company should invest in effective and fast supply chain management to reduce the hurdles of the consumers. Service quality is the only key to success. If the customers are satisfied with the company then only a company can survive. The study has adopted factor analysis to a survey questionnaire specifically designed to capture perception of the customers in

LPG gas delivery. A small sample may not be the representative of the whole population and hence, in future, the research can be conducted by taking a large sample to facilitate a robust examination of the service quality of the LPG gas supply.

#### **REFERENCES**

- D.Amutha, (December 12, 2018), Customer Satisfaction Towards LPG in Household in Thoothukudi City, SSRN, https://ssrn.com/absract=329960
- Dr. M. Dhanabhakyam & T. Sumathi. (2014). A Study on Customers Attitude and Satisfaction towards HP LPG in House Hold, Coimbatore, *The SIJ Transactions on Industrial, Financial & Business Management (IFBM)*. 2(2).1
- Maheshkumar .M & Vishwajeet. (2016). A Study on Consumer Attitude and Satisfaction towards Bharat Gas LPG Domestic Users Bidar-Karnataka, *International Journal of Engineering Science and Computing*, 6(5),1.
- Satapathy Suchismita, Mullick Susovan and Yadav Vikash (2018). Customer satisfaction on Indian domestic gas delivery, *International Journal of Services Sciences*, 3(2)1

## SOCIAL MEDIA AS A BUSINESS PLATFORM: A STUDY ON YOUNG WOMEN ENTREPRENEURS

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#### INTRODUCTION

Entrepreneurs identified social media as an emerging business platform. Development in social media technologies leads to enhanced entrepreneurial skills in youth especially women (Tripopsakul 2018). Due to the Global economic crisis2008-2009 the economy is at the slowest phase of growth. All scale business entities are facing serious burdens which hinder the business activities in the market. (BIAC, 2016).

Social media has enabled entrepreneurs to be more efficient and effective. Social media is a new tool of strategic marketing that offers lots of methods for women entrepreneurs globally to advertise, market and attract their clients. The use of this tactics allowed women entrepreneurs to survive in the modern business environment. The financial growth of business is the main aim of engaging social media platforms for their support. Social media has lots of tools for encouraging and assisting indirect sales while the most vital of all tool is enabling the brand awareness. The main requirement for the achievement of this is long term investment and understanding the importance of user feedback. (Saren, 2011).

Women entrepreneurs are widely using the social networks to advertise their goods and services and then make use of this mobile technology, which work for them in terms of electronic payment and banking. This is beneficial because it requires to have a mobile phone and basic literacy to operate the phone. Other benefit is that there is no need for any physical infrastructures such as phone wires and it is accessible to a large population. (Elder & Rashid, 2009).

Women entrepreneurs chase entrepreneurship in ventures they are passionate about. One of the most important aspect is to explore global market. The process of organising a business is similar to men and women. Both prefer to start the venture with someone they know well. Social networking and social capital are the important factors of women entrepreneurs. (Aldrich et al.,2002).

#### **OBJECTIVES**

- To analyse the impact of social media with emerging marketing opportunities for women entrepreneurs.
- To establish the benefits of social media usage in business by women entrepreneurs.
- To study and analyse the obstacles faced by women entrepreneurs.

#### **METHODOLOGY**

Four districts were selected based on the maximum number and popularity of women entrepreneurs in those districts. Thiruvananthapuram, Kollam, Alapuzha and Ernakulam were the districts selected for collecting samples.

Primary as well as secondary data has been used. Primary data has been collected using a sample survey. 200 questionnaires have been given across the districts. Secondary data has been collected from various publications like articles, journals, magazines and also by referring the websites.

#### **HYPOTHESIS 1**

- H0: There is no significant difference among educational qualification regarding the benefits from social media
- H1: There is a significant difference among educational qualification regarding the benefits from social media

#### **HYPOTHESIS 2**

- H0: There is no significant difference among influenced social media platform and the problems faced by the women entrepreneurs
- H1: There is significant difference among influenced social media platform and the problems faced by the women entrepreneurs.

#### **FINDINGS**

- The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score (Nunnally, 1978). Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.
- A one-way subject's ANOVA was conducted to analyze the effect of educational qualification regarding the benefits from social media Since, P>0.05, the null hypothesis was accepted. There is no significant difference between educational qualification regarding the benefits from social media.

 A one-way subject's ANOVA was conducted to analyze the effect of influenced social media platform and the drawbacks faced by the women entrepreneurs Since, P>0.05, the null hypothesis was accepted. There is no significant difference between influenced social media platform and the drawbacks faced by the women entrepreneurs

#### **SUGGESTIONS**

- The findings shows that people with any educational background can choose
  the social media for their business activities. So it is suggested to provide
  some benefits to the people who are using social media platform for
  business.
- The problems and challenges faced by the women entrepreneurs should be also assessed and the authorities are suggested to extent support for the women entrepreneurs.

#### **CONCLUSION**

Social media is considered as an effective platform for the people to conduct business activities. By providing more benefits and subsidies can help the business people especially women category to do their work more effectively and efficiently.

#### REFERENCES

- Aldrich, H., Carter, N., & Ruef, M. (2002). With very little help from their friends: Gender and relational composition of nascent entrepreneurs' start up teams. *Frontiers of Entrepreneurship, Babson: Babson College*.
- BIAC, B20 China. (2016). Financing growth; SMEs in Global Value Chains. Retrieved from http://biac.org/wp-content/uploads/2016/06/Financing-Growth-SMEs-in-Global-ValueChains.
- Elder, L., & Rashid, A. (2009). *Mobile Phones and Development: An analysis of IDRC-Supported Projects*. [Online] Available: http://www.ejisdc.org (Retrieved on 8 April 2011).
- Saren, M. (2011). Marketing empowerment and exclusion in the information age. *Emerald, Marketing empowerment and exclusion of the information age, market intelligence & planning.*
- Tripopsakul, S. (2018). Social media adoption as a business platform: An integrated tam-toe framework. *Polish Journal of Management Studies*.

## RELATIONSHIP BETWEEN GREEN PRODUCTS CONSUMPTION AND CUSTOMER SATISFACTION

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#### INTRODUCTION

Green products also known as environment friendly products or environmentally conscious products are the products designed to reduce the impact on environment during it's lifecycle. Due to the concern for environment, customers are ready to purchase green products even at higher prices. Before introducing the product idea and developing it, the firms should consider the environmental sustainability and its profitability (Tseng & Hung, 2013). Environmental concerns have forced the consumers, marketers etc.. to follow green methods and to reduce the environmental problems (Lavanya & Madhankumar, 2019). Green products are products which are designed in such a way to reduce environmental impacts during its production. (Supriadi et al., 2017) The dynamic climatic conditions severely affected the livelihood of keralites, this is because of the environmental exploitation, rough use of natural resources and so on. This has awakened the thought to protect environment in people of kerala. This in turn, paved a way to buy and use products which does not affect environment. (N, Kala. n.d).

Green marketing is a common idea in the present scenario where the different economies have been motivated to adopt environment friendly business. The major challenge faced by businesses is how to market environment friendly products to consumers (Panwar & Dhaka, 2020). Green marketing is a comprehensive term where all aspects relating the particular product does not affect environment. Green marketing is the efforts made by firm to mitigate processes which are harmful to environment and use environment friendly technologies, packaging, etc. to present the product. (T S, Sujith. ,2017).

The corporate image of green products depends on customer satisfaction of green products. Customer satisfaction of green products depends on the rebuying of green products by customers, ie, customer loyalty. Customer satisfaction of green products are influenced by the quality of green products. (Chang et al., 2010). The increased quality of green products and fair pricing of

green products lead to increased number of green product buyers. (Pillai & K, J, 2020).

#### **OBJECTIVES**

This research mainly aims to identify the relationship between green product consumption and satisfaction of customers on green products. By considering the relevance of green products in the present scenario, the main objectives of the study are:

- 1. To identify customer perception towards green products.
- 2. To identify the relationship between consumption and customer satisfaction of green products.
- 3. To analyse the factors which influence the buying behaviour of customers towards green products.
- 4. To identify the awareness of green products among customers.

#### METHODOLOGY

Green product consumption and customer satisfaction of green products will have to be studied. Green product consumption in the state of kerala covering Thiruvananthapuram, Idukki, Wayanad districts are to be analysed. These districts have the highest consumption of green products. Primary as well as secondary data will be used. Primary data will be collected using a sample survey. 200 questionnaires will be given across the districts. Secondary data will be collected from various publications, journals, articles and also by referring the websites.

#### **HYPOTHESIS**

- 1. H0: There is no significant difference between gender and factors influencing the buying behaviour of customers towards green products.
  - H1: There is significant difference between gender and factors influencing the buying behaviour of customers towards green products.
- 2. H0: There is no significant difference between usage and reasons for non-usage of green products.
  - H1: There is significant difference between usage and reasons for non-usage of green products.

#### DATA ANALYSIS AND INTERPRETATION

#### **Reliability Statistics**

The study examines the relationship between green product consumption and customer satisfaction. The aspects considered include customer perception towards green products, relationship between consumption and customer

satisfaction of green products, factors which influence the buying behaviour of customers towards green products, awareness of green products among customers. To identify these aspects the researcher conducted thorough review of literature and development measurement scales that are appropriate for the study. The Alpha Cronbach values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for measurement scales used in study.

Aspects	Cronbach's Alpha
Customer Perception	.881
Factors Influencing	.843
Consumption v/s Satisfaction	.852
Reasons for non-usage	.895
Awareness among customers	.845
Total	.863

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. Cronbach's Alpha value is more than 0.7, which is considered as a good score. Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

*Table 2: customer perception towards green products: Descriptive statistics.* 

		*
Customer perception towards green products	Mean	Std. Deviation
Product is fair priced	1.93	.900
Good quality	1.87	.833
Eco-friendly	1.72	.878
Recyclable	1.80	.874
Easily available	1.99	.962
Total	1.86	.889

Table 2 shows descriptive statistics of five variables which indicate the Customer perception towards green products. The variable with high mean score is easily available (mean = 1.99, sd=.962). Others are product is fair priced with mean 1.93 and sd 0.900. The product is of good quality with mean 1.87 and sd 0.833. The product is eco friendly with mean 1.72 and sd 0.878. The product is recyclable with mean 1.80 and sd 0.874.

Table 3: Relationship between consumption and customer satisfaction of green products: Descriptive statistics.

Relationship between consumption and customer satisfaction of green products	Mean	Std. Deviation
satisfied with the quality of green products	1.79	.797
visual appeal of the product impressed me so much	1.98	.801
decided to purchase this product regularly	1.98	.853
pricing of green products are appropriate	2.06	.894
more comfortable than the regularly using one	2.01	.906
overall performance of the product is satisfactory	1.94	.954
Total	1.96	.868

Table 3 shows descriptive statistics of six variables which indicate Relationship between consumption and customer satisfaction of green products. The variable with high mean score is pricing of green products are appropriate (mean = 2.06, sd=.894).

Table 4: Factors which influence the buying behaviour of customers towards green products: Descriptive statistics

Factors which influence the buying behaviour of customers towards	Mean	Std.
green products.	ivican	Deviation
They are harmless to environment	1.75	.994
Green products give a sense of satisfaction	1.97	.835
Because of its quality	1.83	.893
Products made or packaged in recyclable materials	2.02	.864
Green products is a status symbol	1.98	1.027
Because of the pressure of family members	2.38	1.150
Prefer green products when price discounts are offered	2.04	.990
Because they are easily available	2.26	1.069
Total	2.03	0.980

Table 4 shows descriptive statistics of eight variables which indicate the Factors which influence the buying behaviour of customers towards green products . The variable with high mean score is using green products because of pressure from family members (mean = 2.38, sd=1.150).

Table 5: Reasons for non-usage of green products: Descriptive statistics

Reasons for non-usage of green products	Mean	Std. Deviation
Lack of awareness	1.96	1.062
Very expensive	2.25	.863
Not promoted properly	1.96	.993
Lack of confidence in the performance	2.19	.900
Not available in full range of variety	1.94	1.002
Not easily available in shopping outlets.	2.27	.903
Labels are not informative	2.15	1.101
Total	2.10	0.974

Table 5 shows descriptive statistics of seven variables which indicate the reasons for non-usage of green products. The variable with high mean score is using green products are very expensive (mean = 2.25, sd=.863).

Table 6: Awareness of green products among customers: Descriptive statistics

Awareness of green products among customers	Mean	Std.
Awareness of green products among customers		Deviation
Health benefits	1.63	.860
Environmental benefits	1.95	.768
Aware of various brands	1.98	.965
Aware of various symbols / certifications / other identities	2.15	.976
Information on newly launched green products from social media	2.05	1.029
Information on newly launched green products from tv ads	2.10	.966
Total	1.98	0.927

Table 6 shows descriptive statistics of six variables which indicate the awareness of green products among customers. The variable with high mean score is Aware of various symbols / certifications / other identities (mean = 2.15, sd=.976).

#### Independent sample t- test

- 1. H0: There is no significant difference between gender and factors influencing the buying behaviour of customers towards green products.
  - H1: There is significant difference between gender and factors influencing the buying behaviour of customers towards green products.

Factors influencing buying behaviour	Mean		Std. Deviation	Independent sample t-test F	P value	t	Df
	Male	15.855	5.9093	0.018	.892	736	161
	Female	16.511	5.3936				

An independent sample t- test was conducted to compare factors influencing buying behavior in male and female groups. There was a significant difference in male group(m=15.855, sd = 5.909) and female (m=16.511, sd = 5.393), f=.018,p=.892. As the value is greater than 0.05 it states that the male and female group doesnot have any significant difference in factors influencing buying behaviour of green products.

- 2. H0: There is no significant difference between usage and reasons for non-usage of green products.
  - H1: There is significant difference between usage and reasons for non-usage of green products.

Regular customer of green products		Mean	Std. Deviation	Independent sample t- test F	P value	t	Df
	Yes	14.30	5.3536	0.773	.380	-2.019	161
	No	16.39	5.1837				

An independent sample t- test was conducted to compare reasons for non-usage of green products and regular buying of green products. There was a significant difference in group which purchase green products regularly (m=14.30 , sd = 5.353) and group which does not purchase green products regularly (m=16.39, sd = 5.183), f=.773,p=.380 . As the value is greater than 0.05 it states that the buying of green products regularly does not have any significant difference in reasons for non-usage of green products.

#### **FINDINGS**

1. The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. Cronbach's Alpha value is more than 0.7, which is considered as a good score. Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

- 2. An independent sample t- test was conducted to compare factors influencing buying behavior in male and female groups. There was a significant difference in male group(m=15.855, sd=5.909) and female (m=16.511, sd=5.393), f=.018,p=.892 . As the value is greater than 0.05 it states that the male and female group doesnot have any significant difference in factors influencing buying behaviour of green products
- 3. An independent sample t- test was conducted to compare reasons for non-usage of green products and regular buying of green products. There was a significant difference in group which purchase green products regularly (m=14.30, sd = 5.353) and group which does not purchase green products regularly (m=16.39, sd = 5.183), f=.773,p=.380. As the value is greater than 0.05 it states that the buying of green products regularly does not have any significant difference in reasons for non-usage of green products.

#### **SUGGESTIONS**

- 1. Reduce the price of green products, govt. should provide subsidies to green product manufacturers to reduce price of green products.
- 2. Govt should ban products which susbstances that are harmful for environment above a certain percentage, to boost the buying behaviour of customers towards green products.
- 3. Increase promotional activities of green products to improve the sales.

#### **CONCLUSION**

In a world where almost everything we do adds to pollution or negatively influences nature and human health, using eco-friendly products breaks this chain. These products ensure energy usage only from healthy, renewable sources that neither get exhausted nor have a negative influence on the environment.

Using green products can greatly reduce pollution, which can help slowly reverse the effect of the deterioration of the environment over the years. It can significantly reduce waste generation and promote the reuse and recycling of waste products. This will prevent the earth from becoming a large dump yard in the coming years.

## QUESTIONNAIRE

#### TITLE:

# RELATIONSHIP BETWEEN GREEN PRODUCT CONSUMPTION AND CUSTOMER SATISFACTION: A STUDY IN THE STATE OF KERALA.

Remarks:									
Instructions:									
Please answer the following questions by putting a tick mark $(\checkmark)$ for each appropriate answer to the best of your ability. For questions which ask for explanation please answer in the space provided.									
of green products are rela	Purpose: To identify how green product consumption and customer satisfaction of green products are related.								
Researcher: Gokul Raj									
Research Guide:									
Contact No:									
Email ID:									
1. Name:									
2. Age:									
3. Gender: □ Male □ I	Female	□ Not p	orefer to say						
4. Occupation:									
5. Are you a regular custo	omer of g	reen pro	oducts?						
$\square$ YES $\square$ NO									
6. Customer perception to	owards gr	een pro	ducts.						
A. What are the expec	tations of	custom	ners towards gre	en produc	ets?				
Statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree				
The product is fair priced.									
The product is of good									
quality.  The product is eco-									
friendly.									
The product is recyclable.									
The product is easily available.									

- 7. Relationship between consumption and customer satisfaction of green products.
  - A. what do you think about green product after using it?

Statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I am considerably satisfied with the quality of green products.					
The visual appeal of the product impressed me so much.					
I have decided to purchase this product regularly.					
I felt that the pricing of green products are appropriate.					
I felt more comfortable than the regularly using one.					
The overall performance of the product is satisfactory.					

- 8. Factors which influence the buying behaviour of customers towards green products.
  - A. Why do you prefer green product?

Statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I use green products, because they are harmless to environment.					
Using green products give a sense of satisfaction.					
I prefer green products because of its quality.					
I prefer to buy products made or packaged in recyclable materials.					
Using green products is a status symbol.					
I use green products because of the pressure of family members.					
I prefer green products when price discounts are offered.					
I prefer green products, because they are easily available.					

B. If you don't use green products, please rate your reasons for non-usage.

Statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Lack of awareness about green products.					
Green products are very expensive.					
Green products are not promoted properly.					
Lack of confidence in the performance of green products.					
Green products are not available in full range of variety.					
Green products are not easily available in shopping outlets.					
Labels of green products are not informative, they don't fully inform about their					
greenness.					

## 9. Awareness of green products among customers.

A. How would you describe your level of awareness about following dimensions of green products?

Statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I am aware of health benefits of green products.					
I am aware of benefits of green products for the environment.					
I am aware of various brands offering green products					
I am aware of various symbols / certifications / other identities which declare the product as green product.					
I receive information on newly launched green products from social media.					
I receive information on newly launched green products from tv ads.					

#### REFERENCES

- 1. Chang, N. J., & Fong, C. M. (2010). Green product quality, green corporate image, green customer satisfaction, and green customer loyalty. African. *Journal of Business Management*, *4*(13)(13), 2836-2844.
- 2. Lavanya, K., & Madhankumar, P. (2019). Consumer perception towards green products and strategies that impact the consumers perception. International **Journal** Scientific and **Technology** of Research, 8(11), 3543–3548.
- 3. N, Kala. (n.d). Consumer Demand for Green products- Kerala perspective. *International Journal of Creative Research Thoughts (IJCRT)*. https://www.ijcrt.org
- 4. Panwar, S., & Dhaka, S. (2020). Green product technologies in view of customer perception and preparedness. *International Journal of Advanced Science and Technology*, 29(3), 6085–6095.
- 5. Pillai, T& K, J. (2020). An Analytical Study of Green products and The Customer Behaviour Towards Them in Kerala. International Journal of Scientific & Technology Research. https://www.ijstr.org.
- 6. Supriadi, B., Astuti, W., & Firdiansyah, A. (2017). Green Product And Its Impact on Customer Satisfaction. *IOSR Journal of Business and Management (IOSR-JBM)*, 19(8), 1 9. https://doi.org/10.9790/487X-1908033542.
- 7. T S, Sujith. (2017). Awarness of Green Marketing and Its Influence on Buying Behaviour of Consumers in Kerala. *International Journal of Scientific Research and Management*. 5. 10.18535/ijsrm/v5i7.43.
- 8. Tseng, S. C., & Hung, S. W. (2013). A framework identifying the gaps between customers' expectations and their perceptions in green products. *Journal of Cleaner Production*, *59*, 174–184. https://doi.org/10.1016/j.jclepro.2013.06.050

# CHALLENGES IN EMERGENCY REMOTE TEACHING: A STUDY ON COLLEGE TEACHERS

Research Guide:

Milach Elizabeth Shibu (Assistant Professor, Kristu Jyoti College of Management and Technology)

Researcher:

Gowri R Nath (PG Student, Kristu Jyoti College of Management and Technology)

#### INTRODUCTION

The drastic change from classroom teaching to emergency remote teaching has made a great impact in educational sector all over the world. The efforts made to reduce the impact of covid-19 is highly admired but the challenges faced by teachers to fulfill their duties during emergency remote teaching still remain unknown. (Chuah & Mohamad ,2020) Emergency remote learning was essential to overcome the lockdown situation during covid-19, because, all educational institutions were closed, but it created problems among faculties, students, parents, government and so on. This change in educational sectors not only brought challenges but also some opportunities. (Lepp, et al.,2021.) To overcome the challenges brought by emergency remote teaching, teachers across the world were forced to adopt and learn sophisticated technologies to cope up with this pandemic situation. (Naqvi & Zehra, 2021).

Remote learning has merits as well as demerits. Some of its merits are students are able to access abundant e-leaning materials online, students can study anywhere anything and at any time according to their preferences, but from the part of teachers it's a challenge because they must cross their limitations in remote teaching to motivate and encourage students. (Klisowska, et al., 2021). Remote learning also helps students as well as teachers to get updated themselves in sophisticated technologies. (Shanthi & Jayapaul, 2020). The most important demerit of remote learning is that it's not possible to take practical sessions in virtual classes. Teachers are unable to monitor or assess student's understanding on topics, due to the lack of feedback from students and students are unable to attend screen-based classes for long time because of severe health issues. Teachers also reported unethical practices from students during online classes and they tried to access online resources during assessment. (Mukhtar et al., 2020).

Earlier, the teachers do not believe in online teaching because of some reasons such as students will not be able to grasp topics as if in face-to-face leaning,

students are less likely to be attentive in online classes etc. Latter, US Department of Education in their meta-analysis on online learning, found that the academic performance of students are more in online learning than in face-to-face learning. (Schlesselman, 2020).

#### **OBJECTIVES**

The study "Challenges in emergency remote teaching: A study on college teachers in the state of Kerala" mainly aims to identify the challenges and problems faced by teachers during the shift of face-to-face learning to virtual learning. The main objectives of the study are:

- 1. To identify the problems faced by teachers during the drastic shift to virtual classroom.
- 2. To analyse the effectiveness of remote learning during covid-19 outbreak.
- 3. To identify the attitude of students from the perspective of teachers towards remote teaching.

#### **METHODOLOGY**

Emergency remote teaching and the challenges faced in remote teaching will have to be studied. Emergency remote teaching in the state of Kerala covering Ernakulam, Kottayam, Thiruvananthapuram districts are to be analysed. These districts have the highest number of colleges involved in remote teaching. Primary as well as secondary data will have to be used. Primary data will be collected using a sample survey. 200 questionnaires will be given across the districts. Secondary data will be collected from various publications, journals and also by referring to the websites.

#### **HYPOTHESIS**

- 1. H0: there is no significant relationship between gender and problems faced by teachers during drastic shift to virtual classroom.
  - H1: there is significant relationship between gender and problems faced by teachers during drastic shift to virtual classroom.
- 2. H0: there is no significant relationship between gender and effectiveness of online classes.
  - H1: there is significant relationship between gender and effectiveness of online classes.

# DATA ANALYSIS AND INTERPRETATION Reliability Statistics

The study examines the challenges faced by college teachers during emergency remote learning. The aspects include the problems faced by teachers during the drastic shift from classroom learning to virtual learning, the effectiveness of online classes during covid 19 outbreak and the attitude of students towards virtual classes from the perspective of teachers. To identify these aspects the researcher conducted thorough review of literature and development measurement scales that are appropriate for the study. The Alpha Cronbach values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for measurement scales used in study.

Aspects	Cronbach's Alpha	
Problems faced	.913	
Effectiveness of remote learning	.807	
Attitude of students	.858	
Total	.859	

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. Cronbach's Alpha value is more than 0.7, which is considered as a good score. Of the three constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

Table 2: problems faced by teachers during the shift to virtual classes: Descriptive statistics.

Problems faced by teachers during shift to virtual classes	Mean	Std. Deviation
Similar to face-to-face classes	3.35	1.154
Similar discipline rules as one has in face-to-face classes.	3.34	1.084
Same skills in both online and face-to-face classes	3.02	1.333
Exam pattern is similar in online and face-to-face classes	3.38	1.200
Students are more attentive in online sessions	3.53	1.190
Easy to manage and control students in online classes	3.40	1.258

Teachers are able to deliver contents more effectively in online sessions	3.21	1.149
Easy to prepare content for online session	3.13	1.268
Relaxing to teach an online session	3.14	1.245
Total	3.28	1.209

Table 2 shows descriptive statistics of nine variables which indicate the Problems faced by teachers during shift to virtual classes. The variable with high mean score is Students are more attentive in online sessions (mean = 3.53, sd=1.190).

Table 3: Effectiveness of remote learning during covid-19 outbreak: Descriptive statistics

Effectiveness of remote learning during covid-19 outbreak	Mean	Std. Deviation
Academic performance of students have improved by attending online sessions	3.18	1.199
Online classes are more student friendly	3.16	1.055
queries get easily resolved in online sessions	3.26	1.223
easy to conduct presentation, case study, group discussion in online classes	2.93	1.223
Live sessions include more participation than in recorded sessions from the part of students	2.86	1.321
Students are able to understand topic delivered in online classes	3.09	1.133
Total	3.08	1.192

Table 3 shows descriptive statistics of six variables which indicate Effectiveness of remote learning during covid-19 outbreak. The variable with high mean score is queries get easily resolved in online sessions (mean = 3.26, sd=1.223).

Table 4: Attitude of students from the perspective of teachers towards remote teaching: Descriptive statistic.

Attitude of students from the perspective of teachers towards remote teaching	Mean	Std. Deviation
Students are present in virtual classes on time	3.11	1.241
Students are able to submit assignments, projects, seminar reports etc. on time during virtual classes	2.89	1.031
Students are able to clarify their doubts on topics more effectively in online sessions	3.14	1.245
There is more competitiveness among the students in online class	3.25	1.169

Teachers are satisfied with the academic performance of students participated in virtual sessions	3.44	1.261	
Total	3.166	1.189	_

Table 4 shows descriptive statistics of five variables which indicate Attitude of students from the perspective of teachers towards remote teaching. The variable with high mean score is Teachers are satisfied with the academic performance of students participated in virtual sessions (mean = 3.44, sd=1.261).

# Independent sample t- test

H1: there is no significant relationship between gender and problems faced by teachers during drastic shift to virtual classroom.

H2: there is significant relationship between gender and problems faced by teachers during drastic shift to virtual classroom.

•	problems faced by teachers during drastic shift to virtual classroom	Mean	Std. Deviation	F	P value	t	Df
	MALE	30.0625	8.17428	3.855	.051	0.795	157
	<b>FEMALE</b>	28.9494	9.43792				

An independent sample t- test was conducted to compare gender and problems faced by teachers during drastic shift to virtual classroom. There was a significant difference in male group(m=30.0625, sd = 8.174) and female group (m=28.9494, sd = 9.437), f=3.855,p=.051. As the value is greater than 0.05 it states that the male and female groups doesnot have any significant difference in problem faced by teachers during shift to vietual classrooms.

H1: there is no significant relationship between gender and effectiveness of online classes

H2: there is significant relationship between gender and effectiveness of online classes

Effectiveness of remote learning		Mean	Std. Deviation	F	P value	t	Df
	Male	18.8625	5.56604	1.57	.212	.842	157
	Female	18.0759	6.19506				

An independent sample t- test was conducted to compare relationship between gender and effectiveness of online classes. There was a significant difference in male groups (m=29.42, sd = 8.916) and female groups (m=30.700, sd = 7.409), f=.998,p=.319. As the value is greater than 0.05 it states that the male and female groups doesnot have any significant difference effectiveness of remote learning.

#### **FINDINGS**

- 1. The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. Cronbach's Alpha value is more than 0.7, which is considered as a good score. Of the three constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.
- 2. An independent sample t- test was conducted to compare gender and problems faced by teachers during drastic shift to virtual classroom. There was a significant difference in male group(m=30.0625, sd = 8.174) and female group (m= 28.9494, sd = 9.437), f=3.855,p=.051. As the value is greater than 0.05 it states that the male and female groups does not have any significant difference in problem faced by teachers during shift to virtual classrooms.
- 3. An independent sample t- test was conducted to compare relationship between gender and effectiveness of online classes. There was a significant difference in male groups (m=29.42, sd = 8.916) and female groups (m= 30.700, sd = 7.409), f=.998,p=.319. As the value is greater than 0.05 it states that the male and female groups does not have any significant difference in effectiveness of remote learning.

# **SUGGESTIONS**

- 1.Teachers must be provided with training programs on sophisticated technologies in e- learning area.
- 2. Teachers must include more live sessions than recorded sessions to increase the level of attentiveness of students

#### **CONCLUSION**

The unexpected closure of educational institutions as a result of the emergence of COVID-19 prompted the authorities to suggest adopting alternatives to traditional learning methods in emergencies to ensure that students are not left without studying and to prevent the epidemic from spreading. Remote teaching helped teachers and students to cover their portions.

# **QUESTIONNAIRE**

#### TITLE:

# CHALLENGES IN EMERGENCY REMOTE TEACHING: A STUDY ON COLLEGE TEACHERS IN THE STATE OF KERALA.

Remarks:

Instructions:

Please answer the following questions by putting a tick mark  $(\checkmark)$  for each appropriate answer to the best of your ability. For questions which ask for explanation please answer in the space provided.

Purpose: To identify the challenges faced by teachers in emergency remote teaching.

Researcher: Gowri R Nath

Research Guide:

Contact No:

Email ID:

1. Name:					
2. Age:					
3. Have you take	n any onli	ne classe	s?		
	NO				
4. In which educ	ational str	ucture yo	u are teacl	ning?	
□ Aided □	Unaided	□ Othe	ers		
5. What are the p	oroblems f	aced by to	eachers du	ring drastic	e shift from
face-to-face le					
Statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Teaching online is similar to face-to-					
face classes.					
Online lectures have					
similar discipline rules as one has in					
face-to-face classes.					
The teacher require					
the same skills in					
both online and face-					
to-face classes.					
Exam pattern is					
similar in online and					
face-to-face classes. Students are more					
attentive in online					
sessions when					
compared to offline					
sessions.					
It is easy to manage					
and control students					
in online classes.					
Teachers are able to deliver contents more					
effectively in online					
sessions.					
It is easy to prepare					
content for online					
sessions	I	l	ĺ		1

It is relaxing to teach an online session.

#### 6. Is remote learning more effective than face-to-face learning? Statements Strongly Neither Disagree Strongly Agree disagree agree agree nor disagree Academic performance of students have improved by attending online sessions. Online classes are more student friendly. The queries get easily resolved in online sessions. It is easy to conduct presentation, case study, group discussion in online classes. Live sessions include more participation than in recorded sessions from the part of students. Students are able to understand topic delivered in online classes. 7. What is the attitude of students towards virtual classes? Neither Strongly Strongly Disagree Statements Agree agree nor agree disagree disagree Students are present in virtual classes on time. Students are able to submit assignments, projects, seminar reports etc. on time during virtual classes.

Students are able to clarify their doubts on topics more effectively in online sessions.			
There is more competitiveness among the students in online class.			
Teachers are satisfied with the academic performance of students participated in virtual sessions.			

#### REFERENCES

- 1. Chuah, K. M., & Mohamad, F. S. (2020). Emergency Remote Teaching Scenarios, Struggles and Soundboxes: A Case Study on Malaysian Teachers. Interaction Design and Architecture(s), (46), 13–28. https://doi.org/10.55612/s-5002-046-001.
- 2. Klisowska, Iwona & Seń, Mariola & GRABOWSKA, BARBARA. (2021). Advantages and disadvantages of distance learning. E-methodology. 7. 27-32. 10.15503/emet2020.27.32.https://www.researchgate.net/publication/3574392 49\_Advantages\_and\_disadvantages\_of\_distance\_learning.
- 3. Lepp, Marina, and Piret Luik. (2021). Challenges and Positives Caused by Changing Roles during Emergency Remote Education in Estonia as Revealed by Facebook Messages. Social Sciences 10: 364. https://doi.org/10.3390/socsci10100364.
- 4. Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era. Pakistan journal of medical sciences, 36(COVID19-S4), S27–S31. https://doi.org/10.12669/pjms.36.COVID19-S4.2785
- 5. Naqvi, S., & Zehra, I. (2021). Online EFL Emergency Remote Teaching during COVID 19, Challenges and Innovative Practices: A Case of Oman. Arab World English Journal, (2), 17–35. https://doi.org/10.24093/awej/mec2.2.
- 6. Schlesselman, L. S. (2020). Perspective from a teaching and learning center during emergency remote teaching. American Journal of Pharmaceutical Education, 84(8), 1042–1044. https://doi.org/10.5688/ajpe8142.
- 7. Shanthi, P. F., & Jayapaul, A. (2020). Potential Benefits of Online Teaching and Learning. UGC CARE Journal, 31(24), 234–238.

# A STUDY ON THE AWARENESS OF ARTIFICIAL INTELLIGENCE IN ACCOUNTING AMONG THE ACCOUNTANTS IN THE STATE OF KERALA

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#### INTRODUCTION

Artificial Intelligence (AI) is an evolving technology in the world. The concept of artificial intelligence was first introduced in 1956 at a seminar in University of Dartmouth by John Mc Carthy and some experts (Luo et al., 2018). According to Britannica, Artificial Intelligence is "the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings such as the ability to reason, discover meaning, generalize, or learn from past experience". It provides results that are extremely accurate, replacing and in some cases supplement human efforts. Nowadays, artificial intelligence technology has a wider in the area like agriculture, commerce, education, and service industries.

Artificial Intelligence provide improvements in all fields of accounting. It provides a scope for continuous improvement. AI has transformed the traditional paper based accounting into paper-less computerized accounting (Mohammad et al., 2020). AI helps to improve work efficiency ,reduce the chance of errors and improve the overall competitiveness of the industry. In accounting, AI helps to avoid the chance of financial frauds, improve the overall quality of accounting data and reforming the traditional accounting methods and practices (Li & Zheng, 2018). Operations of the organization changed drastically due to the introduction of AI.

In future years, it is going to acquire even the core activities of the organisation (Dilek et al., 2018). The use of AI has shown ways to perform complex actions and perform activities like humans (Chukwudi & Odoh,2018). Even though the application is wider, still it can't be used in all activities (Baldwin et al.,2006). AI technology can be used to perform repetitive tasks but still the decision making is done by the humans (Stancu & Dutescu ,2021).

#### **OBJECTIVES OF THE STUDY**

This research work mainly aims at studying the awareness of using Artificial Intelligence technology in accounting among the accountants. The main objectives of the study are

- 1. To study the awareness about AI technology among the accountants.
- 2. To understand the importance of using AI in the field of accounting.
- 3. To analyze the attitude of accountants towards AI technology in accounting.

#### **METHODOLOGY**

The accountants for the study is mainly going to be selected from four districts Kottayam, Ernakulam, Thiruvananthapuram and Kozhikode. These four districts have the highest numbers of accountants using AI technology for accounting in Kerala. Both primary and secondary data is going to be used. Primary data will be collected using a sample survey. For this 100 questionnaires will be given to the accountants. Secondary data will be collected from various data published by government, commerce associations, research reports and websites.

#### **HYPOTHESIS**

# One Way ANOVA

H<sub>0</sub>: There is no significant difference among the different experience groups regarding the awareness source about AI Technology used in accounting.

H<sub>1</sub>: There is no significant difference among the different experience groups regarding the awareness source about AI Technology used in accounting.

Table 5: Experience in accounting and Source of awareness about AI Technology

	df	F	Sig.
Between Groups	2	.575	.564
Within Groups	152		
Total	154		

A one-way between subject's ANOVA was conducted to compare the Awareness sources on the experience in accounting, taking 3 experience groups less than 11, 11 to 21, and more than 21. Since, P>0.05, the null hypothesis was accepted. There is no significant difference among the different experience groups regarding the awareness source about AI Technology used in accounting.

- H<sub>0</sub>: There is no significant difference among the different experience groups towards the thoughts of Accountants about AI Technology used in accounting.
- H<sub>1</sub>: There is significant difference among the different experience groups towards the thoughts of Accountants about AI Technology used in accounting.

Table 6: Experience in accounting and Thoughts of Accountants towards AI
Technology

	df	F	Sig.
Between Groups	2	1.023	.362
Within Groups	152		
Total	154		

A one-way between subject's ANOVA was conducted to compare the thoughts of Accountants on the experience in accounting, taking 3 experience groups less than 11, 11 to 21, and more than 21. Since, P>0.05, the null hypothesis was accepted. There is no significant difference among the different experience groups towards the thoughts of Accountants about AI Technology used in accounting.

#### INDEPENDENT SAMPLE T-TEST

- H<sub>0</sub>: There is no significant difference between experience and awareness about AI technology used in accounting.
- H<sub>1:</sub> There is significant difference between experience and awareness about AI technology used in accounting.

Table 7: Experience in accounting and awareness about AI technology.

Awareness about AI technology	Mean	SD	Independent sample t-ter			t-test
			F	P value	t	Df
Yes	6.65	5.945	1.756	0.184	0.381	153
No	7.06	4.425				

An independent sample t-test was conducted to compare experience in accounting and awareness about AI technology. There was a significant difference in the Yes (with awareness) (M=6.65, SD=5.945) and No (without awareness) (M=7.06, SD=4.425), f=1.756, P=0.184. As P-value is greater

than 0.05, it states that experience in accounting does not have any significant difference in the groups with and without awareness about AI.

#### DATA ANALYSIS AND INTERPRETATION

The study examines the awareness of using AI technology in accounting. The aspects includes the importance of using AI and analyze the attitude of accountants towards AI technology in accounting. To identify these aspects a thorough review of literature and developed measurement scales that are appropriate for the study were conducted. The Alpha(Cronbach) values relating to these aspects are presented in Table 1.

Table: 1 Cronbach's Alpha for Measurement Scales used in the study

Aspects	Cronbach's Alpha
Awareness Source	0.867
Importance	0.804
Thoughts	0.878
Total	0.895

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than 0.7 is widely considered a good score (Nunnally 1978). Of the three constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

# **Reference:**

Nunnally, J. C. (1978). *Psychometric theory* (2 nd ed.). New York: McGraw-Hill

Table: 2 Various source of awareness about AI technology: Descriptive statistics

	Mean	Std. Deviation
Attending seminars	2.32	1.342
Training programs	2.62	1.124
Reading books	2.57	1.232
Reading journals	2.80	1.214
Surfing the internet	2.54	1.229
Other sources	2.77	1.242
Total	2.60	1.231

Source: Primary Data N=155

Table 2 shows the descriptive statistics of the four variables which indicate the source of awareness about the AI Technology being used in accounting. The

variable with the high mean score is the awareness by reading journals (mean=2.80, SD=1.214)'. awareness from other sources (Mean = 2.77, SD=1.242), and awareness from training programs (Mean= 2.62, SD = 1.124) The average total score computed was 2.60 with a Standard Deviation of 1.231.

Table: 3 Importance of using AI: Descriptive Statistics

	Mean	Std. Deviation
Improve efficiency	2.25	1.281
Detect and reduce errors	2.56	1.174
Reduce the time	2.43	1.184
Reconciliation easier	2.61	1.130
Categorize transactions	2.46	1.244
Work less complicated	2.63	1.218
Total	2.49	1.205

Source: Primary Data N=155

Table 3 shows the descriptive statistics of the six variables which indicate the various importance of using AI in the field of accounting. The variable with the high mean score is making the work less complicated (mean=2.63, SD=1.218). Reconciliation easier(mean=2.61, SD=1.130). Detecting and reducing errors (mean=2.56, SD=1.174). Categorizing transactions (mean=2.46, SD=1.174). Reducing the time (mean=2.43, SD=1.184) and Improving efficiency (mean=2.25, SD=1.281). The average total score computed was 2.49 with a Standard Deviation of 1.205.

Table: 4 Attitude of accountants towards AI technology: Descriptive Statistics

	Mean	Std. Deviation
Create unemployment	2.34	1.286
Increase the total time	2.68	1.167
Virus and hacking	2.68	1.211
Work more complicated during system failure	2.63	1.274
Additional training	2.56	1.244
Future of accounting	2.61	1.312
Total	2.58	1.249

Source: Primary Data N=155

Table 4 shows the descriptive statistics of the six variables which indicate the attitude of accountants towards using the AI Technology in accounting. The variable with the high mean score is Virus and hacking (mean=2.68, SD=1.211). Increase the total time (mean=2.68, SD=1.167). Work more complicated during system failure (mean=2.63, SD=1.274). Future of

accounting (mean=2.61, SD=1.312). Additional training (mean=2.56, SD=1.244) and Create unemployment (mean=2.34, SD=1.286). The average total score computed was 2.58 with a Standard Deviation of 1.249.

#### **FINDINGS**

- Table 2 shows the descriptive statistics of the four variables which indicate the source of awareness about the AI Technology being used in accounting. The variable with the high mean score is the awareness by reading journals (mean=2.80, SD=1.214)'. awareness from other sources (Mean = 2.77, SD=1.242), and awareness from training programs (Mean= 2.62, SD = 1.124) The average total score computed was 2.60 with a Standard Deviation of 1.231.
- Table 3 shows the descriptive statistics of the six variables which indicate the various importance of using AI in the field of accounting. The variable with the high mean score is making the work less complicated (mean=2.63, SD=1.218). Reconciliation easier(mean=2.61, SD=1.130). Detecting and reducing errors (mean=2.56, SD=1.174). Categorizing transactions (mean=2.46, SD=1.174). Reducing the time (mean=2.43, SD=1.184) and Improving efficiency (mean=2.25, SD=1.281). The average total score computed was 2.49 with a Standard Deviation of 1.205.
- Table 4 shows the descriptive statistics of the six variables which indicate the attitude of accountants towards using the AI Technology in accounting. The variable with the high mean score is Virus and hacking (mean=2.68, SD=1.211). Increase the total time (mean=2.68, SD=1.167). Work more complicated during system failure (mean=2.63, SD=1.274). Future of accounting (mean=2.61, SD=1.312). Additional training (mean=2.56, SD=1.244) and Create unemployment (mean=2.34, SD=1.286). The average total score computed was 2.58 with a Standard Deviation of 1.249.
- A one-way between subject's ANOVA was conducted to compare the Awareness sources on the experience in accounting, taking 3 experience groups less than 11, 11 to 21, and more than 21. Since, P>0.05, the null hypothesis was accepted. There is no significant difference among the different experience groups regarding the awareness source about AI Technology used in accounting.
- A one-way between subject's ANOVA was conducted to compare the thoughts of Accountants on the experience in accounting, taking 3 experience groups less than 11, 11 to 21, and more than 21. Since, P>0.05,

the null hypothesis was accepted. There is no significant difference among the different experience groups towards the thoughts of Accountants about AI Technology used in accounting.

• An independent sample t-test was conducted to compare experience in accounting and awareness about AI technology. There was a significant difference in the Yes (with awareness) (M= 6.65, SD= 5.945) and No (without awareness) (M= 7.06, SD= 4.425), f= 1.756, P= 0.184. As P-value is greater than 0.05, it states that the groups with and without awareness about AI does not have any significant difference in the experience in accounting.

#### **SUGGESTIONS**

- 1. The of usage AI technology should not affect the employment opportunities of accountants.
- 2. More Journals should be made available for providing knowledge about AI technology.
- 3. The AI system must be prevented from virus attacks and hacking using security systems.

#### **CONCLUSION**

In future years, AI is going to acquire even the core activities of the organisation. The use of AI has shown ways to perform complex actions and perform activities like humans .Even though the application is wider , still it can't be used in all activities .AI technology can be used to perform repetitive tasks but still the decision making is done by the humans . It is, therefore, a veritable time for accounting professional to be excited as the profession will become more interesting due to close extinction of tedious and repetitive task which will be shifted to machines for effective and efficient accounting and auditing operations.

#### REFERENCES

Baldwin, A., Brown, C. & Trinkle, B. (2006). Opportunities for Artificial Intelligence Development in the Accounting Domain: The Case for Auditing. Intelligent Systems in Accounting, Finance And Management 14, pp77–86.

Chukwudi, L., Echefu, S., Boniface, U., Chukwuani & Victoria, N. (2018). Effect of Artificial Intelligence on the Performance of Accounting Operations among Accounting Firms in South East Nigeria. *Asian Journal of Economics, Business and Accounting* 7(2), pp.1-11.

- Dilek, S., Cakır, H., & Aydin, M. (2015). Applications of Artificial Intelligence Techniques to Combating Cyber Crimes: A Review. *International Journal of Artificial Intelligence & Applications*, 6(1), 21–39.
- Luo, J., Meng, Q., & Cai, Y. (2018). Analysis of the Impact of Artificial Intelligence Application on the Development of Accounting Industry. *Open Journal of Business and Management*, 06(04), pp.850–856.
- Mohammad, S. J., Hamad, A. K., Borgi, H., Thu, P. A., Sial, M. S., & Alhadidi, A. A. (2020). How artificial intelligence changes the future of accounting industry. *International Journal of Economics and Business Administration*, 8(3), 478–488.
- Stancu, M. & Duțescu, A. (2021). The Impact Of The Artificial Intelligence On The Accounting Profession: A Literature's Assessment. Proceedings of the 15th International Conference on Business Excellence 2021 pp 750 758.
- Wu, Y. (2022). Application Exploration and Practice Research of Management Accounting Under the Background of Big Data Artificial Intelligence. In Lecture Notes in Electrical Engineering (Vol. 791, pp. 279–286). Springer Science and Business Media Deutschland GmbH.
- Zheng, L. & Li, Z. (2018). The Impact of Artificial Intelligence on Accounting. Advances in Social Science, Education and Humanities Research (ASSEHR), volume 181, 4th International Conference on Social Science and Higher Education (ICSSHE 2018) pp813-816.
- Nunnally, J.C. (1978). Psychometric theory (2 nd ed.). New York: McGraw Hill.

# A STUDY ON THE RELATIONSHIP BETWEEN ORGANIC FARMING AND SUSTAINABLE DEVELOPMENT IN THE STATE OF KERALA

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#### INTRODUCTION

Sustainability is the hall mark of Kerala's farming system because of the various practices done by the Kerala farmers in agriculture (Prabhu, 2021). Even though, traditional varieties has been replaced with high -yielding ones as a result of green revolution (Agriculture Department, 2010). The use of chemical fertilizers increased and this results in the hardening of soil, plant and health of human beings. (Ala ET EL, 2021) The soil fertility and vitality has been lost due to excess use of chemical manures. This affect the farmers in various ways (Prabhu, 2021).

At this point the Kerala farmers decided re- start eco- friendly traditional sustainable ways of cultivation. This thought results in the formulation of nationally and internationally accepted concept "Organic Farming "with a broad principle of "live and let live "come into existence (Prabhu,2021).Organic farming is a term consist of two words . "Organic" and "Farming "which means "origin from living thing " and " production system alive with long life." (Hammas & Ahlem, 2017) Micronutrients and Macronutrients to plants , Improvement of physical, chemical and biological characteristics of the soil can be met through Organic Farming (Santhoshkumar, 2017) The sustainable development and organic farming has a huge relationship . Organic farming helps the developing countries in achieving sustainable development goals (Setboonsarang ET EL ,2017).

When we consider Kerala farmers during the past 12 -15 years, other than farmers following traditional methods have converted to organic farming. The agencies which promotes organic farming are; government agencies, non-government organization's and farmers group (Karunakaran & Sadiq, 2019). For the promotion of organic farming in Kerala the government has started a programme called "Jaiva Keralam (Prabhu, 2021).

#### **OBJECTIVES**

This research aims at studying the relationship between organic farming and sustainable development in Kerala . The main objectives of the study are :

- I. To analyze the awareness of farmers about organic farming.
- II. To analyze the merits and demerits of organic farming in Kerala.
- III. To analyze the relationship between the organic farming and sustainable development in the state of kerala.

#### **METHODOLOGY**

Farmers from 3 districts was selected for the collection of data .The Farmers were from the state of Kerala covering Kannur, Alappuzha and Thrissur .These districts have the highest number of organic farmers in Kerala .Primary data was used for the study . Primary data was collected using sample survey. 160 questionnaires was distributed among farmers in the selected districts .

#### **HYPOTHESIS**

 $H_0$ : There is no significant relationship between Income and Problems Faced by Organic Farmers .

H<sub>1</sub>: There is a relationship between Income and Problems Faced by organic Farmers.

# DATA ANALYSIS AND INTERPRETATION

# **Reliability Statistics**

The study examines the relationship between organic farming and sustainable development in the state of Kerala .The aspects considered include the concern levels of individuals in information regarding organic farming ,Why they choose organic farming the problems faced in organic farming and sustainable development in the state of Kerala .

o identify these aspects ,the researcher conducted a thorough review of literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table .

Table: 1 Cronbach's Alpha for Measurement Scales used in the Study

Item-Total StatisticsAspectsCronbach's Alpha if Item DeletedInformation regarding organic farming.923Why organic farming.896Problems faced in organic farming.883Organic farming and sustainable development.895Total.925

The co-efficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than 0.7 is widely considered as a good score. Of the four constructs measured all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

Table 2: Source of Information regarding organic Farming : Descriptive Statistics

**Descriptive Statistics** Information regarding organic farming Mean Std. Deviation 1.79 Through awareness programmes .819 News papers 2.17 .913 .959 Through internet 2.07 Other source 2.03 .865

2.01

0.89

Table 2 shows the descriptive statistics of the 4 variables which indicate the concern level. The variable with high mean score is newspaper (mean=2.17 and SD .913). Others like through awareness (1.78 and SD .819), other source (2.03 mean and SD .865), through internet (2.17mean and SD .913).

Table 3: Merits and Demerits Of Organic Farming
Table 3.1 Problems Faced in organic Farming

Total

Descriptive Statistics		
Problems faced in organic farming	Mean	Std. Deviation
Change in climatic condition	1.60	.702
Small amount of land	2.14	.858
Cost of labour is high	1.84	.873
Total	1.86	.811

Table 3.1 shows the descriptive statistics of the 3 variables which indicate the concern level. The variable with high mean score is small amount of land (2.14 mean and SD .858). Others like change in climatic condition (1.60 mean and SD .702), Cost of labour is high (1.84 mean and SD .873)

**Table 3.2 Reason for Choosing Organic Farming** 

Why choosing organic farming	Mean	Std.
why choosing organic farming	Mican	Deviation
Increase Farm income	1.88	.852
Improve soil fertility and structure	1.69	.746
Organic products receives higher prices	2.03	.943
	1.86	.847

Table 3.2 shows the descriptive statistics of the 3 variables which indicate the concern level. The variable with high mean score is organic products receives higher prices (Mean 2.03 and SD .943), and others like increase farm income (Mean 1.88 and SD .852), Improve soil fertility and structure (Mean 1.69 and SD .746)

 Table 4
 Is Organic Farming and Sustainable Development Related

Descriptive Statistics		
Relation between organic farming and sustainable development	Mean	Std. Deviation
Soil fertility increases		.624
Restore the ecological balance		.692
Artificial variety of crops are not used		.698
Sustainable development of plant ,water and natural resources	2.11	.938
Total	1.72	.738

Table 4 shows the descriptive statistics of the 3 variables which indicate the concern level. The variable with high mean score is organic products receives higher prices ( Mean 2.03 and SD .943), and others like increase farm income ( Mean 1.88 and SD .852), Improve soil fertility and structure ( Mean 1.69 and SD .746).

#### CORRELATION

H<sub>0</sub>: There is no significant relationship between Income and Problems Faced by Organic Farmers .

H<sub>1</sub>: There is a relationship between Income and Problems Faced by organic Farmers.

Table 5 Relationship between Type Of Farming and Problems Faced by Organic Farmers

	Mean	SD	1	2	
Income And Problems Faced by Organic Farmers	11.2250	4.35233	.808	1	
	14.3812	4.95371	.808	1	

A Pearson correlation was run to determine the relationship between the Income and the problems faced by farmers in doing organic farming . From Table 5 it is clear that There is significant relationship between Income and the problems faced by the farmers in organic farming (r=0.808,N=160) and which is statistically measured.

# **ANOVA TEST**

 $\mathbf{H_0}$ : There is no significant relationship between Income and Problems in organic farming

**H1:** There is significant relationship between Income and Problems in organic farming.

**Table 6: Income groups** 

Income groups	N		df	F	Sig.
1000 - 5000	61	Between Groups	3	.047	.308
5000-10000	76	Within Groups	156		
10000-30000	17	Total	159		
30000-60000	6				
Total	160				

A one way ANOVA was conducted to compare the income of farmers from organic farming and the problems faced by them in organic farming. The income groups from 5000 - 60000 was analysed. Since P<0.05, the null hypothesis was rejected. There is significant relationship between Income and problems faced by organic farmers.

#### 6. FINDINGS

From the analysis and test conducted the following information were found.

- a. The income received from organic farming is less when compared with the problems faced by the organic farmers. The cost for doing organic farming is very high so that the income received from organic farming should increase.
- b. The knowledge about organic farming is received from the news paper is high.
- c. Small amount of land is a problem faced by farmers in doing organic farming.
- d. The price of organic product is high. So its a factor for choosing organic farming
- e. Organic farming and sustainable development has a significant relationship.

#### **SUGGESTIONS**

- 1. Labour cost is high when doing organic farming so government should formulate new policies in helping organic farmers.
- 2. Awareness regarding organic farming should be given to the public so that the new entry of organic farmers will increase.
- 3. Organic Farming and sustainable development has a significant relationship so that organic farming should be encouraged by giving rewards to the farmers who doing organic farming.

# **CONCLUSION**

This study concluded that the organic farming is a better way towards sustainable development. The need of our future should not be destroyed while meeting our needs, So that now a days sustainable development has a huge relevance. From this study it is clear that organic farming can undoubtedly lead to sustainable development. So it is the duty of our government to help the organic farmers in various ways.

#### REFERENCES

- Agriculture (P.B) Department. (2010). Kerala State Organic Farming Policy, Strategy And Action Plan. Thiruvananthapuram: Government Of Kerala.
- Ala, V., Usha, K. E., & Venkataramanaiah, P. (2021). Evaluation of Liquid Organic Manures on Growth, Yield and Quality in Oriental Pickling Melon under Organic Farming in Kerala. Current Journal of Applied Science and Technology, 55–62.
- Hammas, M. A., & Ahlem, Z. (2017). *Organic Farming: A Path of Sustainable Development*. International Journal of Economics & Management Sciences, 06(05).
- Karunakaran, N., & Sadiq, M. (2019). Socio economic aspect of organic farming practices for improving farmer's income in some locations of *Kerala, India*. Bangladesh Journal of Agricultural Research.
- Prabhu, B. (March 03th, 2021). Organic farming in Kerala.
- Santhoshkumar, M. (2017). A Review on Organic Farming Sustainable Agriculture Development. International Journal of Pure & Applied Bioscience, 5(4), 127Research.
- Setboonsarang, Sununtar, Gregorio, Elsbeth, (November 2017). Acheiving Sustainable Development Goals through organic Agriculture: Empowering poor women to build the future.

# A STUDY ON THEIR WORK RELATED CHALLENGES OF E-COMMERCE DELIVERY WORKERS IN THE STATE OF KERALA

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#### INTRODUCTION

Human society has evolved from a hunting and gathering society to agriculture, industry, and now a post-industrial or information society (Edgel, 2012). These transformations of society are shaped by the kind of work human does in the society. Work refers to activities that satisfy the human need for survival. It has been transformed into employment which is regarded as an economic activity. People are engaged in different economic activities based on their skills, level of education, family tradition, culture, and social conditions. In India, the economic activities are classified into three sectors i.e primary, secondary and tertiary sectors (National Institute of Open Schooling, 2014). The primary sector includes activities in agriculture and allied sector, mining, and quarry, etc. The primary sector has been the backbone of the Indian economy and is predominantly seen in rural India. The manufacturing, construction, gas, water, and electricity supply refers to the secondary sector. The tertiary sector which also known as service sector includes trades, hotels, transport, communication, public administration, and other services. The economy and economic activities are highly influenced by technology and have impacted every aspect of human life including social, educational, and business. People get connected through information or digital technology and form online or virtual communities.

The internet has become not only a technology but an engine of social change (Haraizah, 2016). Most importantly, the internet has revolutionized business via e-commerce. E-commerce is the "process of buying goods and services via the internet" (Moroz & Polkowski, 2016). Moreover, e-commerce is defined as "electronically communicating, collaborating, and discovering information" (Sardana, 2016). Customers buy a range of goods and services which includes books, lifestyle products like watches, apparel, perfumes, and beauty products,

decoration, foods, vegetables, grocery footwear, etc. Home delivery of services is one of the key features of the e-commerce business (Moroz & Polkowski, 2016). Online e-commerce sites like Amazon, Flipcart, Snapdeal, Alibaba, etc., and home delivery apps have made the delivery of goods easier and simpler. The home delivery apps for goods like Pyck, Pickrr, food ordering app like Fassos, Swiggy, Food panda and grocery apps like Grofers, Bigbasket, and apps for miscellaneous delivery like Zopper for electronic items, 1mg for medicine has become a part of city life (Bajaj, 2016). The "Delivery Boys" are the "last-minute connectivity guys" who are engaged in delivering the products at the doorsteps of the customer (Kumar, 2015; Maheswari and Mukerji, 2015). In the 21st century, the internet changed the concept of messaging and delivery into a more personal form. The Internet continues to dominate these services and couriers ensured safety and guaranteed delivery.

# **OBJECTIVES**

# **Objectives Of The Study**

- The objectives of the study are as follows;
- Effect on Socio-Economic life and personal health
- To explore the working conditions of delivery boys

#### **METHODOLOGY**

Three districts (Pathanamthitta, Kottayam and Ernakulam) were selected based on the maximum number and popularity of delivery boys districts selected as samples. Primary as well as secondary data has been used. Primary data has been collected using a sample survey. 200 questionnaires have been given across the districts. Secondary data has been collected from various publications like articles, journals, magazines and also by referring the websites.

#### **HYPOTHESIS**

# **Hypothesis 1**

H<sub>0</sub>: There is no significant difference between personal health and benefits received as delivery workers.

H<sub>1</sub>: There is a significant difference between personal health and benefits received as delivery workers.

# Hypothesis 2

H<sub>0</sub>: There is no significant difference among personal health and the challenges faced as delivery boys

H<sub>1</sub>: There is significant difference among personal health and the challenges faced as delivery boys

#### DATA ANALYSIS AND INTERPRETATION

The study examines the impact on awareness of delivery workers towards their personal health, challenges faced and benefits received. The aspects considered include the awareness and attitude of people towards them, and to find out the level of satisfaction of the respondents and also to improve their working conditions. To identify these aspects, the researchers conducted a thorough review of the literature and developed measurements scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table.1.

Table1: Cronbach's Alpha for measurements scales used in the study

	Cronbach's Alpha if Item Deleted
Personal Health	.589
Challenges Faced	.759
Benefits Received	.502
Total	.715

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

**Table 2: Descriptive Statistics** 

	Mean	Std. Deviation
Personal Health	11.6800	2.75467
Challenges Faced	10.6733	2.99103
Benefits Received	11.0533	3.09749
Total	11.1355556	2.94772946

#### **ANOVA** test

H<sub>0</sub>: There is no significant difference between personal health and benefits received as delivery workers.

H<sub>1</sub>: There is a significant difference between personal health and benefits received as delivery workers.

**Table 3: ANOVA** 

Challenges Faced	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	35.208	2	17.604	1.994	.140
Within Groups	1297.785	147	8.828		
Total	1332.993	149			

Table 4:

	AN	OVA				
Benefits Received						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	47.197	2	23.599	2.509	.085	
Within Groups	1382.376	147	9.404			
Total	1429.573	149				

A one way ANOVA was conducted to compare the awareness of consumers towards green products, taking age groups between 18 and 42. Since P>0.05, the null hypothesis was accepted. There is no significant relationship between age and personal health.

#### **FINDINGS**

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score (Nunnally, 1978). Of the constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

A one-way subject's ANOVA was conducted to analyse the effect of educational qualification regarding the benefits from social media Since, P>0.05, the null hypothesis was accepted. There is no significant difference among personal health regarding the benefits received as delivery boys.

A one-way subject's ANOVA was conducted to analyse the effect of personal health and the challenges faced by the delivery boys. Since, P>0.05, the null hypothesis was accepted. There is no significant difference among personal health and the challenges faced as delivery boys.

#### **SUGGESTIONS**

The findings shows that people of any age can work as delivery peoples to earn their living. So it is suggested to provide some benefits to the people who are working as delivery boys in e-commerce platform.

The drawbacks and the challenges faced by the delivery boys should be also assessed and the authorities are suggested to extent support for the delivery boys.

#### **CONCLUSION**

The e-commerce growth, its related employment opportunities, employment conditions, and various challenges faced by delivery workers were found out through a review of secondary literature. The literature was divided into various themes that included the growth of e-commerce and the role of delivery boys,

their demand for home delivery, working and employment conditions, social security, and legal provisions safeguarding their interest. By providing more benefits and subsidies can help the delivery boys to do their work more effectively.

Finally, E-commerce resting on a transformative business model is the rising hope of employment to the bulging youth population. While reaching the customers at their doorsteps through delivery workers has created a delightful shopping experience by the online companies, it has successfully fueled innovative ideas of contemporary business. Benevolence to this profit-making expansion will however be achieved if the delivery worker's needs are adequately met conjointly by the customers, companies, and government. Till then a bigger picture is awaited.

#### **REFERENCES**

- M S, D. P., & Ghandiyali, S. (2017). A study on customer's attitude and perception towards digital food app services.
- Hekimoglu, S. M. (2012). Analysis of Customer Attitudes in Online Food Ordering System. Istanbul: Volume 62,24 October 2012, Pages1138-1143.
- Hong Lan, et al. (2016, April 10). www.cscanada.net. Retrieved from www.cscanada.net
- HS Sethu and Bhavya Saini. (2016, June 6). http://www.globalbizresearch.org.
- Leong Wai Hong. (2016). Food Ordering System Using Mobile Phone. Malaysia: Information and Communication Technology (Perak Campus).

# RELATIONSHIP BETWEEN HYBRID WORK AND EMPLOYEE PERFORMANCE: A STUDY ON IT EMPLOYEES WITH REGARDS TO DECENT WORK

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# CHAPTER 1 INTRODUCTION

# 1.1 Introduction

The world had never thought that one day remote work would be new work norm, where everyone would be forced to work from home. COVID-19 pandemic significantly changed the usual working norm through worldwide. Remote work comes with challenges like decrease communication, employee mental health, job securities, stress, job satisfaction and wellbeing. It drastically affected organization performance and employee performance management. To restrain the remote work challenges the worldwide organization are welcoming a new concept in the form of hybrid work model (Lenka, 2021).

Hybrid work is a new norm developed by the combination of remote work and office work. It also known as hot desking which can be done from office, from home, or from any other place connected to the internet. Hybrid work norm is introduced to help people to manage their time better when they are not stuck in a single location. It Accelerate employee performance by increasing productivity and creativity because you have access to different environment that offer more opportunity (Pamela,2022). Employees view on environment they work has changed, some prefer work remotely and others might prefer work from office. The flexible set-up made from the hybrid work allow employees to make their choice on what environment they prefer. In this new era of workforce, organization are considering to change the way they manage employees. The concept of hybrid work is becoming a "new normal" might be the response to the COVID-19 pandemic (Srikant, 2021). Hybrid work provide more flexible and productive result which causes rapid increase in the employee performance.

According to report titled "Shaping the Future of Work in India's Tech Industry" by Nasscom in collaboration with Boston Consulting Group (BCG),

over 80% of the IT companies and global capability centers (GCCs) most likely to adopt hybrid work model compared to other industry (Ayushman, 2022).

The hybrid work approach promises to be most significant change to the worldwide thinking how organization work. The hybrid work model is faster and more adaptive in response to ever changing customer needs (Robert& Anita, 2016).

# 1.2 Objective of the Study

The hybrid work model is more flexible and productive in nature. This research aims at new norm hybrid working affect the employee performance and how this influence on IT employees with regards to decent work. The main objectives of the study are:

- 1. To identify the factors attract employees to the hybrid work (Tiffany, 2022).
- 2. To identify if the hybrid work model increases productivity of the employees.
- 3. To analyse the relationship between hybrid work and employee performance on IT sector.

# 1.3 Methodology of the study

The study focus on the IT industry employees, In Kerala state districts like Ernakulam and Thiruvananthapuram have fairly large number of industrial and commercial establishment. This Districts were highest IT employees were concentrated. In the study primary and secondary data were selected. Primary data was collected using sample survey. 200 questionnaire were prepared to collect the data from IT employees in two district and 150 samples were collected. The secondary data collecting from the journal, publication and websites etc.

#### 1.4 HYPOTHESIS

#### **HYPOTHESIS N0:1**

- Ho: There is no significant relationship between hybrid work and employee performance.
- H1: There is a significant relationship between hybrid work and employee performance.

# **HYPOTHESIS N0:2**

- Ho: There is no significant relationship between productivity of the employees and gender.
- H1: There is a significant relationship between productivity of the employees and gender.

#### 1.5 DATA ANALYSIS AND INTERPRETATION

#### **Reliability Statistics**

The study examines the relationship between hybrid work and employee performance on IT sector. The aspects considered include the factors attract hybrid work, increases productivity, employee performance. To identify these aspects the researchers conducted a thorough review of literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for Measurement scales used in the study

Item-Total Statistics	
Aspects	Cronbach's Alpha if Item Deleted
Factors attract hybrid work	.758
Increases productivity	.798
Employee performance	.797
Total	.817

The co-efficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than 0.7 is widely considered as a good score. Of the three constructs measured all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

# **Descriptive Statistics**

Table 2: The factors attract employees to the hybrid work: Descriptive statistics

Descriptive Statistics		
The factors attract employees to the hybrid work	Mean	Std. Deviation
Flexible work schedule	2.79	1.277
Recognition of your work	2.03	0.214
Maintain mental health	1.92	1.020
Work from anywhere	1.80	0.433
Operational cost is lower	1.35	0.602
Access to more talent	2.10	0.380
Increased trust between subordinates	2.36	0.788
Total	2.07	0.673

Source: Primary Data, N=150

Table 2 shows the descriptive statistics of the 7 variables which indicate the concern level. The variable with the high mean score is Flexible work schedule (mean=2.79and SD=1.277), Recognition of your work (2.03 mean and SD of 0.214), Maintain mental health(1.92 mean and SD 1.020), Work from anywhere (1.80 mean and SD 0.433), Operational cost is lower

(1.3 mean and SD 0.602), Access to more talent (2.10 mean and SD 0.380), Increased trust between subordinates (2.36 mean and SD 0.673)The average total score computed was 2.07 with a SD 0.673.

Table 3: The hybrid work model increases productivity of the employees: Descriptive statistics

Descriptive Statistics		
The hybrid work model increases productivity of the employees	Mean	Std. Deviation
Preferred working environment	1.24	0.473
Recognize personal ability	1.83	0.502
Uninterrupted access to all resources	2.27	0.566
Encourages open communication for employees		0.851
Training and development opportunities	2.27	0.451
Team bonding and communication	2.11	0.436
Workplace flexibility and boundaries	1.98	0.737
Total	1.95	0.574

Source: Primary Data, N=150

Table 3 shows the descriptive statistics of the 7 variables which indicate the concern level. The variable with the high mean score is Uninterrupted access to all resources (mean=2.27 and SD=0.566), Preferred working environment (1.24 mean and SD of 0.473), Recognize personal ability (1.83 mean and SD 0.502), Encourages open communication for employees (1.99 mean and SD 0.851), Training and development opportunities (2.27 mean and SD 0.459), Team bonding and communication (2.11 mean and SD 0.436), Workplace flexibility and boundaries (1.98 mean and SD 0.737) The average total score computed was 1.95 with a SD 0.574.

Table 4: The relationship between hybrid work and employee performance on IT sector: Descriptive statistics

Descriptive Statistics			
The relationship between hybrid work and employee	Mean	Std. Deviation	
performance on IT sector.	Mean	Sid. Deviation	
Reliance on technology	1.13	0.363	
Productivity of the workforce	1.83	0.488	
Collaboration and relationships	1.74	0.639	
Opportunities to continue learning	2.46	0.525	
Suitable for the IT industry	1.84	0.733	
Total	1.28	0.392	

Source: Primary Data, N=150

Table 4 shows the descriptive statistics of the 7 variables which indicate the concern level. The variable with the high mean score is Opportunities to continue learning (mean=2.46and SD=0.525), Reliance on technology (1.13mean and SD of 0.363), Productivity of the workforce (1.83 mean and SD 0.488), Collaboration and relationships (1.74 mean and SD 0.639), Suitable for

the IT industry (1.84 mean and SD 0.733). The average total score computed was 1.28 with a SD 0.392.

#### **CORRELATION**

# **Hypothesis No:1**

Ho: There is no significant relationship between hybrid work and employee performance.

H1: There is a significant relationship between hybrid work and employee performance.

Table 5: Relationship between hybrid work and employee performance.

	Mean	SD	1	2
Hybrid Work	12.250	4.5233	.808	1
Employee Performance.	13.312	4.5371	.808	1

A Pearson correlation was run to determine the relationship between hybrid work and employee performance. From Table 5 it is clear that There is significant relationship between Benefits earned from poverty alleviation program and Reasons to choose on government policies (r=0.808, N=151, p=0.05) and which is statistically measured.

#### INDEPENDENT SAMPLE T-TEST

# Hypothesis No: 2

Ho: There is no significant relationship between productivity of the employees and gender.

H1: There is a significant relationship between productivity of the employees and gender.

Table 6: Relationship between hybrid work and employee performance.

productivity of the employees	Mean	SD	Independent sample t- test				
- •			F	P value	t	Df	P value
Male	2.951	.6751	3.32	.070	1.17	148	0.244
Female	2.830	.5753					

An independent sample t-test was conducted to compare Concern levels in the public hearing of the project in Male and Female groups. The Male group (M= 2.9518, SD= 0.67451) and Female (M= 2.8309, SD= 0.57537), f= 3,320, P= 0.244. As P-value is greater than 0.05, it states that the Male and female group does not have any significant difference in the productivity of the employees in

hybrid work. In other words, it means the productivity of the employees will not change with the Gender.

# 1.6 FINDINGS, SUGGESTIONS, AND CONCLUSION

# 1. Findings

Table 2 shows the descriptive statistics of the 7 variables which indicate the concern level. The variable with the high mean score is Flexible work schedule (mean=2.79and SD=1.277), Recognition of your work (2.03 mean and SD of 0.214), Maintain mental health(1.92 mean and SD 1.020), Work from anywhere (1.80 mean and SD 0.433), Operational cost is lower (1.3 mean and SD 0.602), Access to more talent (2.10 mean and SD 0.380), Increased trust between subordinates (2.36 mean and SD 0.673)The average total score computed was 2.07 with a SD 0.673.

Table 3 shows the descriptive statistics of the 7 variables which indicate the concern level. The variable with the high mean score is Uninterrupted access to all resources (mean=2.27and SD=0.566), Preferred working environment (1.24 mean and SD of 0.473), Recognize personal ability (1.83 mean and SD 0.502), Encourages open communication for employees (1.99 mean and SD 0.851), Training and development opportunities (2.27 mean and SD 0.459), Team bonding and communication (2.11 mean and SD 0.436), Workplace flexibility and boundaries (1.98 mean and SD 0.737) The average total score computed was 1.95 with a SD 0.574.

Table 4 shows the descriptive statistics of the 7 variables which indicate the concern level. The variable with the high mean score is Opportunities to continue learning (mean=2.46 and SD=0.525), Reliance on technology (1.13mean and SD of 0.363), Productivity of the workforce (1.83 mean and SD 0.488), Collaboration and relationships (1.74 mean and SD 0.639), Suitable for the IT industry (1.84 mean and SD 0.733). The average total score computed was 1.28 with a SD 0.392.

A Pearson correlation was run to determine the relationship between hybrid work and employee performance. From Table 5 it is clear that There is significant relationship between Benefits earned from poverty alleviation program and Reasons to choose on government policies (r=0.808, N=151, p=0.05) and which is statistically measured.

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0.244. As P-value is greater than 0.05, it states that the Male and female group does not have any significant difference in the productivity of the employees in hybrid work. In other words, it means the productivity of the employees will not change with the Gender.

Study state that hybrid working increases productivity of workforce. According to report titled "Shaping the Future of Work in India's Tech Industry" by Nasscom in collaboration with Boston Consulting Group (BCG), over 80% of the IT companies and global capability centers (GCCs) most likely to adopt hybrid work model compared to other industry (Ayushman, 2022).

#### 2. SUGGESTIONS

Arrange schedules for employees to meet in person when possible – but if one employee is in the office and the other happens to be working remotely, that can work too. These sessions are intended to encourage colleagues to form relationships with each other. This helps everyone feel more invested in the team and their collective goals.

Time is not replaceable. Now is the only currency you have. Be intentional about how you manage your time and how your team spends their time.

Take time to acknowledge the contributions of all team members, near and far. Tell short success stories that demonstrate the connection and engagement of a broad array of team members.

Be less supervisor, more coach in the hybrid work environment.

One of the best things you can do before the start of any workday or week is to make a plan. Plan and structure your approach, and don't rush it. Take a holistic approach, ensuring you design and implement changes to technology, office space, people policies and behavior.

Measuring and celebrating these achievements will help everyone appreciate their contribution and fully embed the new ways of working.

#### 3. CONCLUSION

COVID-19 made working from home a necessity overnight, whether we preferred working that way or not. Companies have been tasked with providing flexible solutions for their employees to enable them to continue working safely and effectively while adhering to social distancing and lockdown restrictions.

While there are many working models available, with their relevance depending on the nature of work, we conclude that companies able to offer their employees hybrid models of working, combining working from home and working onsite, are providing the optimal work conditions for their employees in the current climate, and for the foreseeable future. The data from our survey supports this claim.

#### REFERENCE

- Ayushman Baruah. (June 7, 2022). 80% of IT companies, GCCs likely to adopt hybrid work model: report.
- Lenka, R. M. (2021). Unique Hybrid Work model- The future of remote work. *Pal Arch's Journal of Archaeology of Egypt / Egyptology* (*PJAEE*), 18(7), 2687–2697.
- Pamela Chelsea Ortiz. (May 13, 2022). ProsAnd Cons of Hybrid vs work-from-home setup on employees.
- Robert G. Copper, Anita F. Sommer. (February 25, 2016). *The Agile–Stage-Gate Hybrid Model: A Promising New Approach and a New Research Opportunity*.
- Srikant Chellappa. (December 23, 2021). *Employee performance in a hybrid workplace*.
- Tiffany Fowell. (MAY 11, 2022). What is hybrid work and why do employees want it?

# AWARENESS OF CUSTOMERS TOWARDS GREEN PRODUCTS: A STUDY IN THE STATE OF KERALA

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Research Guide:

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(Assistant Professor, Kristu Jyothi College of Management & Technology, Changanacherry)

#### INTRODUCTION

In 1970s the environment has first appeared on the concern, momentum has gained for the next two years. The main reasons for the new focus is the highest awareness of atmosphere issues related to things such as hazardous chemicals in food, lack of clean water, use and air quality etc.

Green consumer give importance to environment products to save the nature, the consumers then change their concern through buying action and purchasing the green products that do not harm the environment. Green consumer are ready to spend more money because they know that this extra payment will bring green benefits for society and themselves. (Siddique, Md. Z. R., & Hossain, A. (2018). Company try to manufacture and distribute natural products that do not harm consumers to satisfy and meet the needs of the people. This study aims to know the effect of consumers environment concern. (Manveer Kaur, Dr. Ambika Bhatia).

Environment friendly means earth friendly that do not harms the nature even if in their production, utilise or disposal. Green products also help to conserve resources like and energy and water. These products also stop contributions to land, water and air pollution. Compostable, refillable, recyclable and biodegradable can easily done by green products. Therefore, they do not harm the nature or disturb the ecological balance. Purchasing of green products is the nice direction for choosing environmentally better products which can save money, reduce environmental impact and build a healthy environment. (Shailendra Yadav, 2014)

#### **OBJECTIVES OF THE STUDY**

- To identify the consumers awareness and attitude towards green products.
- To find out the level of satisfaction of the respondents towards the green products.
- To find out the barriers that consumers perceive to come in the way of take on green lifestyle

## Methodology

This study is basically an exploratory research to give an insight in to the awareness level of green products and its impact on green buying behaviour in the state of Kerala covering Thiruvananthapuram, Idukki and Wayanad district will be selected on the bases of highest consumer awareness on green products. Both primary and secondary data will be used for this study. Survey

Method will be used to collect the primary data from respondents. Sample size of 150 respondents will be used for this research study.

## **HYPOTHESIS 1**

- H0: There is no significant difference between age and customer awareness and attitude towards the nature
- H1: There is significant difference between gender and customer awareness and attitude towards the nature

#### **HYPOTHESIS 2**

- H0: There is no significant difference between age and the level of satisfaction of the customers
- H1: There is a significant difference between age and the level of satisfaction of the customers

#### DATA ANALYSIS AND INTERPRETATION

## **Reliability statistics**

The study examines the impact on awareness of consumer towards green products. The aspects considered include the awareness and attitude of people towards nature, and to find out the level of satisfaction of the respondents and also to improve environmental quality and customer satisfaction. To identify these aspects, the researchers conducted a thorough review of the literature and developed measurements scales that are appropriate for the study. The Alpha (Cronbach) values relating

to these aspects are presented in Table.1.

Table 1:Cronchbach's Alpha for Measurement Scales and in the study

Cronbach's Alpha
.75
.74
.73
.82
.81
.77

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

Table 2:Identify the consumers awareness and attitude towards green products

Identify the consumers awareness and attitude towards green products	Mean Std. Deviation	
Manufactured without toxins	1.21	.651
Recyclable/refillable/re-use	1.17	.618
Biodegradable	1.17	.599
Not tested on animals	1.46	.902
Sustainable packaging	1.31	.785
Total	1.26	0.71

Table 3:Level of satisfaction of customer towards green products

Level of satisfaction of customer towards green products	Mean	Std. Deviation
Good quality	1.26	.690
Eco-friendly	1.22	.674
Recyclable	1.27	.732
Fair pricing	1.49	.925
Easily available	1.63	1.045
Green certification	1.31	.777
Total	1.36	0.81

Table 4: To find out the barriers that consumers perceives to come in the way of take on green life

•		
	Mean	Std. Deviation
Not much aware	2.06	1.270
Cannot afford the price	1.91	1.220
Not sure on performance	1.85	1.212
Not available in near shopping outlets	1.95	1.214
Not available in full range of variety	1.69	1.142
Total	1.89	1.21

## **ANOVA** test

H0: There is no significant relationship between Age and Level of awareness

H1: There Is no Significant relationship between Age and Level of satisfaction

			ANOVA		
Age groups	Frequency		Df	F	Sig.
15-25	84	Between Groups	3	1.774	.155
25-35	40	Within Groups	146		
35-45	10	Total	149		
45-56	15				
Total	150				

Table 6: Age and Level of satisfaction

			ANOVA		
Age groups	Frequency		Df	F	Sig.
15-25	84	Between Groups	3	0.924	.431
25-35	40	Within Groups	146		
35-45	10	Total	149		
45-56	15				
Total	150				

A one way ANOVA was conducted to compare the awareness of consumers towards green products, taking age groups between 15 and 56. Since P>0.05,the null hypothesis was accepted -There is no significant relationship between age and level of awareness and level of satisfaction.

## **FINDINGS**

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the five constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

A one-way subject's ANOVA was conducted to analyze the effect of age regarding the attitude of people towards green products, P>0.05, the null hypothesis was accepted. There is no significant difference between age and attitude of people.

A one-way subject's ANOVA was conducted to analyze the satisfaction level of consumers towards green products regarding age Since, P>0.05, the null hypothesis was accepted. There is no significant difference between age and satisfaction level of people

## **SUGGESTIONS**

Reduce the price of green products, govt. should provide subsidies to green product manufacturers to reduce price of green products.

Govt should ban products which susbstances that are harmful for environment above a certain percentage, to boost the buying behaviour of customers towards green products.

## **CONCLUSION**

Green products or eco-friendly products have a prominent role in conservation of environment. So there is a need for promoting the green products. Using green products can greatly reduce pollution, which can help slowly reverse the effect of the deterioration of the environment over the years.

In a world where almost everything we do adds to pollution or negatively influences nature and human health, using eco-friendly products breaks this chain. These products ensure energy usage only from healthy, renewable sources that neither get exhausted nor have a negative influence on the environment. And From this study, it is clear that most people are aware about green products

#### REFERENCES

- Manveer Kaur, Dr. Ambika Bhatia International Journal of Scientific Research and Management (2018)
- Shailendra Yadav. (2014). Consumers awareness towards green products a study with reference to Visakhapatnam city. *Department of commerce and management studies*, (pp1-4).
- Siddique, Md. Z. R., & Hossain, A. (2018). Sources of Consumers Awareness toward Green Products and Its Impact on Purchasing Decision in Bangladesh. *Journal of Sustainable Development*, 11(3), 9.

# A STUDY ON ANALYSING THE EFFECTIVENESS OF POVERTY ALLEVIATION PROGRAMS IN THE STATE OF KERALA

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## INTRODUCTION

Poverty is the state of being extremely poor. The poor are exposed to greater personal and environmental health risks, are less well nourished, have less information and are less able to access health care they thus have a higher risk of illness and disability. Conversely illness can reduce household savings, lower learning ability, reduce productivity and lead to a diminished quality of life, thereby perpetuating or even increasing poverty. Indian policy views poverty as an individual status not a rational condition. Kerala's Poverty policy aids the moderately poor at the expense of the poorest.

Poverty is caused by uncertain community work. Most villagers work as labourers and farmers with low income. Farming community are categorised as poor because the farming community has many limitations such as knowledge and technology (Yusini,2018).

Eradication of poverty remains a major challenge of planned economic development. The importance of defining and targeting the poor along with developing community based structures to reduce the levels of human insecurity thus became the twin pillars of poverty alleviation strategies of government of Kerala. Poverty, food prices and hunger are linked. Poverty causes hunger. Millions live with hunger and malnourishment because they simply cannot afford to buy enough food, cannot afford nutritious foods or cannot afford the farming supplies they need to grow enough good food of their own. Hunger can be viewed as dimension of extreme poverty. It is often called the most severe and critical manifestation of poverty. KUDUMBASREE project was started in Kerala in 1998.Women empowerment is one of the important objectives of KUDMBASREE (V.P, 2017) The KUDUMBASREE is considered as a joint programme of government of Kerala and NABARD (Venugopalan, 2014))

- National Food for Work Programme
- Pradhan Mantri Gramodaya Yogana (PMGY)
- Rural Employment Generation Programme(REGP)
- ANNAPURNA
- National Food Security Mission

## AIMS AND OBJECTIVES

To understand the perception of public in relation with poverty alleviation program.

To measure the effectiveness of poverty alleviation program.

#### **METHODOLOGY**

Ernakulam, Alappuzha, Pathanamthitta, Kottayam. Primary as well as secondary data will be used. Primary data will be collected using sample survey.200 questionnaires will be give. Secondary data will be collected from various publications of central, state and local government and also using several websites Four districts will be selected based on the maximum number of people and popularity. Among 14 districts in Kerala, 4 districts will be taken.

# DATA ANALYSIS AND INTERPRETATION Reliability Statistics

The study examines the effectiveness of poverty alleviation programs in the state of Kerala. The aspects considered include the perception of public in relation with poverty alleviation program, and the effectiveness of poverty alleviation program.

To identify these aspects the researchers conducted a thorough review of literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for Measurement scales used in the study

Item-Total Statistics	
Aspects	Cronbach's Alpha if Item Deleted
Source of knowledge about poverty alleviation program	.923
Benefits of poverty alleviation program	.896
Reasons for choosing government policies of poverty alleviation	.883
Experience received by depending on government poverty alleviation program	.895
Total	.925

The co-efficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score A value greater than 0.7 is widely considered as a good score. Of the five constructs measured all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

Table 2: Source of knowledge about poverty alleviation scheme: Descriptive statistics

Descriptive Statistics		
Source of knowledge about poverty alleviation scheme	Mean	Std. Deviation
EB	1.96	0.96
Govt body	2.29	0.97
Newspaper	2.13	1.01
AA	2.41	1.07
Policy	2.45	1.21
Total	2.25	1.04

Table 2 shows the descriptive statistics of the 5 variables which indicate the concern level. The variable with the high mean score is Policy (mean=2.45and SD=1.21). Others with EB (1.96 mean and SD of .96) ,Newspaper(2.13 mean and SD 1.01), Govt body (2.29 mean and SD .97), AA(2.41 mean and SD 1.07) The average total score computed was 2.25 with a SD 1.04.

Table 3: Benefits of poverty alleviation program: Descriptive Statistics

Descriptive Statistics

Benefits of poverty alleviation program	Mean	Std. Deviation
Standard of living	2.17	1.00
Job opportunity	2.34	1.03
Family welfare	2.11	0.97
Needs	2.32	1.01
Suitable people	2.29	1.14
Total	2.25	1.03

Table 3 shows the descriptive statistics of the 5 variables which indicate the concern level. The variable with high mean score is Job opportunity (mean=2.4 and SD 1.03). Others like Family welfare (2.11 and SD .97) ,Standard of living (2.17 mean and SD 1.00) , Suitable people (2.29 mean and SD 1.14) , Needs (2.32 mean and SD 1.01).

Table 4: Reasons to choose government policies of poverty alleviation

Descriptive Statistics

Reasons to choose government policies of poverty alleviation	Mean	Std. Deviation
Help from govt	2.28	0.96
Trust worthy	2.39	0.97
Faster response	2.39	1.11
Proper format	2.39	1.01
HELP	2.50	1.12
Frequent update	2.43	1.10
Total	2.40	1.05

Table 4 shows the descriptive statistics of the 6 variables which indicate the concern level. The variable with high mean score is from Help(2.50 mean and SD 1.12). Others like Help from govt(mean 2.28 and SD .96), Trust worthy (mean 2.39 and SD .97), Faster response(mean 2.39 and SD 1.11), Proper format (mean 2.39 and SD 1.01), Frequent update(mean 2.43 and SD 1.10).

Table 5: Experience received by depending on government poverty alleviation program

**Descriptive Statistics** 

Experience received by depending on government poverty alleviation program	Mea n	Std. Deviatio n
Sanctioned	2.34	0.99
Family welfare	2.41	1.03
Received benefits	2.31	1.16
Standard of living	2.36	1.06
Job opportunity	2.36	1.05
Basic needs	2.28	1.04
Total	2.34	1.05

Table 5 shows the descriptive statistics of the 6 variables which indicate the concern level. The variable with high mean score is Family welfare (mean 2.41 and SD 1.03),Others like Basic needs (mean 2.28 and SD 1.04), Received benefits (mean 2.31 and SD 1.16), Sanctioned(mean 2.34 and SD .99), Standard of living (mean 2.36 and SD 1.06), Job opportunity(mean 2.36 and SD 1.05).

## **CORRELATION**

# **Hypothesis N0:1**

H0: There is no significant relationship between Benefits earned from poverty alleviation program and Reasons to choose on government policies.

H1: There is significant relationship between Benefits earned from poverty alleviation program and Reasons to choose on Government policies.

Table 6: Relationship between Benefits earned and Reasons to choose on government policies

	Mean	SD	1	2	
Benefits earned from poverty alleviation program	11.2250	4.35233	.808	1	
Reasons to choose on government policies	14.3812	4.95371	.808	1	

A Pearson correlation was run to determine the relationship between Benefits earned from poverty alleviation program and Reasons to choose on government policies. From Table 6 it is clear that There is significant relationship between Benefits earned from poverty alleviation program and Reasons to choose on government policies (r=0.808, N=160, p=0.05) and which is statistically measured.

## Hypothesis No: 2

H0: There is no significant relationship between Reasons to choose on government policies and Experience received by depending on government poverty alleviation program.

H1: There is significant relationship between Reasons to choose on government policies and Experience received by depending on government poverty alleviation program.

Table 7: Relationship between Reasons to choose on government policies and Experienced received by depending on government poverty alleviation program

	Mean	SD	1	2
Reasons to choose on government policies	14.3812	4.95371	0.844	1
Experience received by depending on government poverty alleviation program	14.0562	5.06964	0.844	1

A Pearson correlation was run to determine the relationship between Reasons to choose on government policies and Experience received by depending on government poverty alleviation program. From the Table 7, it is clear that There is significant relationship between Reasons to choose on government policies and Experience received by depending on government poverty alleviation program(r=0.844,N=160,p=0.05) and which is statistically measured.

#### ANOVA TEST

H0: There is no significant relationship between Income and Source of knowledge

H1: There is significant relationship between Income and Source of knowledge

**Table 8: Income groups** 

Income groups	N		df	F	Sig.
40-1000	61	Between Groups	3	.781	.506
1000-10000	76	Within Groups	156		
10000-30000	17	Total	159		
30000-60000	6				
Total	160				

A one way ANOVA was conducted to compare the effect of involvement in the public hearing of public, taking income groups between 40 and 60000.Since P>0.05, the null hypothesis was accepted. There is no significant relationship between Income and Source of knowledge.

## FINDINGS, SUGGESTION AND CORRELATION

## **Findings**

Table 2 shows the descriptive statistics of the 5 variables which indicate the concern level. The variable with the high mean score is Policy (mean=2.45and SD=1.21).Others with EB (1.96 mean and SD of .96) ,Newspaper(2.13 mean and SD 1.01), Govt body (2.29 mean and SD .97), AA(2.41 mean and SD 1.07)The average total score computed was 2.25 with a SD 1.04.

Table 3 shows the descriptive statistics of the 5 variables which indicate the concern level. The variable with high mean score is Job opportunity (mean=2.4 and SD 1.03). Others like Family welfare (2.11 and SD .97) ,Standard of living (2.17 mean and SD 1.00) , Suitable people (2.29 mean and SD 1.14) , Needs (2.32 mean and SD 1.01).

Table 4 shows the descriptive statistics of the 6 variables which indicate the concern level. The variable with high mean score is from Help(2.50 mean and SD 1.12). Others like Help from govt(mean 2.28 and SD .96), Trust worthy (mean 2.39 and SD .97), Faster response(mean 2.39 and SD 1.11), Proper format(mean 2.39 and SD 1.01), Frequent update(mean 2.43 and SD 1.10).

Table 5 shows the descriptive statistics of the 6 variables which indicate the concern level. The variable with high mean score is Family welfare (mean 2.41 and SD 1.03), Others like Basic needs (mean 2.28 and SD 1.04), Received benefits (mean 2.31 and SD 1.16), Sanctioned (mean 2.34 and SD .99), Standard of living (mean 2.36 and SD 1.06), Job opportunity (mean 2.36 and SD 1.05).

A Pearson correlation was run to determine the relationship between Benefits earned from poverty alleviation program and Reasons to choose on government policies. From Table 6 it is clear that There is significant relationship between Benefits earned from poverty alleviation program and Reasons to choose on government policies (r=0.808, N=160, p=0.05) and which is statistically measured.

A Pearson correlation was run to determine the relationship between Reasons to choose on government policies and Experience received by depending on government poverty alleviation program. From the Table7, it is clear that There is significant relationship between Reasons to choose on government policies and Experience received by depending on government poverty alleviation program (r=0.844, N=160, p=0.05) and which is statistically measured.

A one way ANOVA was conducted to compare the effect of involvement in the public hearing of public, taking income groups between 40 and 60000.Since P>0.05, the null hypothesis was accepted. There is no significant relationship between Income and Source of knowledge.

#### SUGGESTIONS

Poverty alleviation program is very successful in giving government policies and Benefits earned from poverty alleviation program.

Income is not influencing by source of knowledge about Poverty alleviation program.

Poverty alleviation program is successful in giving Job opportunity to the unemployed.

## **CONCLUSION**

Poverty alleviation programs aims to eradicate the poverty in the country by providing proper shelter, food, clothing, employment to the households which have low income level. Those who are below poverty line or the poorest people need more and more help from the government. Such groups need government intervention to ensure that they are not left behind in the development process. The government needs to develop safety needs for such group. Especially to low level people who are below poverty line

## **REFERANCE**

Venugopalan, Dr. K. (2014). Influence of Kudumbasree on Women Empowerment – a Study. *IOSR Journal of Business and Management*, 16(10), 35–44.

V. P. (2017). ROLE OF KUDUMBASREE IN POVERTY ALLEVIATION IN KERALA. *International Journal of Advanced Research*, 5(2), 1096–1104.

Yustini, T. (2018). Effectiveness of Poverty Reduction Program with Value Added Creation in Agribusiness Sector and Formulation of Strategic Plan and Policies. *International Journal of Economics and Finance*, 10(4), 51

# A STUDY ON THE CUSTOMER SATISFACTION AND THEIR BUYING BEHAVIOUR TOWARDS GREEN COSMETICS

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## INTRODUCTION

In the present world the word "green" has become a phrase which will create a perception in the mind of the customers that the products are eco-friendly (Kleiner, 2018). The market has an average growth of 4.5% in the last 2 decades, the demand for these products the rising in the Asian and Latin American markets. This shows a positive interest of people towards green cosmetics Franca, C. C. V., & Ueno, H. M. (published on April 27, 2020).

A gradual shift to the green marketing has become the new mantra of marketing. The firms which follow green marketing has become an example for the upcoming firms to the industry and they shows the strategies to gain competitive advantage through this.

The research studies on green marketing has started in the late 1960s. in 1974 the created more awareness among the population and June 5 was marked as the World Environment Day. Tis initiative was an attempt to make people realise about the importance of environment and to give more emphasis to the sustainable development. All the global authorities like World Bank, SAARC, UNO Etc have started efforts to strengthen and to reiterate the importance of green marketing among the public. the concept of being green has gain an acceptance at the end of the 80s. In present "being green "concept has got more acceptance from the consumers (Kapoor & Rachita 2020).

## **OBJECTIVES**

- To identify the factors that motivate a customer to buy green cosmetics
- To study about the attitude and behaviour of customers towards green cosmetics
- To examine the satisfaction level that a person gets by using green products

## RESEARCH METHODOLOGY

Three districts will be selected for the study based on the their consumption level of green products. Ernakulam, Trivandrum, Kottayam. These districts will

be selected on the basis of their population, consumption rate of cosmetics and their perception toward green products. Primary as well as secondary data will be used. Primary data will be collected using sample survey. 200 questionnaires will be distributed among the people of the three respective districts. Secondary data will be collected from various publications, journals and articles of the central, state and local government and various websites will also be referred for the data collection purpose.

## DATA ANALYSIS AND INTERPRETATION

## **Reliability Statistics**

The study examines the customer satisfaction and buying behaviour towards green cosmetics. The aspects considered include the satisfaction levels of individuals in using green cosmetics, the factors that are concerned before buying green products and the factors that motivate the consumers to buy green cosmetics. To identify these aspects, the researcher conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for Measurement Scales used in the Study

aspects	Cronbach's Alpha
motivating element	.897
concerned before	.871
satisfaction factors	.829
Total	.867

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score (Nunnally, 1978). Of the three constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

## **DESCRIPTIVE STATISTICS**

Table 2: To identify the factors that motivate a customer to buy green cosmetics

**Descriptive Statistics** 

factors that motivate to buy green cosmetics	Mean	Std. Deviation
Past experience	1.99	1.079
Influence of family members and others	2.11	1.060
Advertisement and promotional activities	1.91	1.134
Environmental concerns of the buyer	2.08	1.083
Influence of celebrity members	2.31	1.289
Total	2.10	1.14

Table 2 shows the descriptive statistics of the five variables which studies the factors that motivate a buyer to buy green cosmetics. The variable with the high mean score is influence of celebrity members with (mean= 2.31, SD= 1.289). Others are influence of family members and others (mean= 2.11, SD= 1.060), environmental concerns of the buyer( mean= 2.08, SD= 1.083), Advertisement and promotional activities (mean = 1.91, SD= 1.134), and past experience (mean= 1.99, SD= 1.079). The average total score computed was 2.10 with a standard deviation of 1.14.

**Table 3:** To study about the attitude and behaviour of customers towards green cosmetics

Descriptive Statistics					
Concerned factors	Mean	Std. Deviation			
price of the product	2.00	1.166			
quality of the product	1.97	1.080			
healthy contribution of the product	1.89	1.092			
higher status level	2.20	1.148			
safety from harmful chemicals	1.95	1.148			
Total	2.00	1.127			

Table 3 shows the descriptive statistics of the five variables which shows the factors that study about the attitude and behaviour of consumers towards green cosmetics . The variable with the highest mean score is the higher status level offered by the product (mean = 2.20, SD= 1.148) and the others are price of the product (mean = 2.00, SD = 1.166),quality of the product (mean = 1.97,SD= 1.080), safety from harmful chemicals (mean = 1.95, SD= 1.148) and health contribution of the product (mean = 1.89, SD= 1.092), The total average score computed was 2.10 with a standard deviation of 1.127

Table 4: To examine the satisfaction level that a person gets by using green products

Descriptive Statistics

Descriptive Statistics					
Satisfactory factors	Mean	Std. Deviation			
It is composed of natural ingredients	1.94	1.147			
safety ensured by the brand	2.15	.942			
economically feasible	2.14	1.174			
they are made after conducting many researches	2.22	1.060			
they do not harm the environment	2.03	1.154			
Total	2.10	1.095			

Table 4 shows the descriptive statistics of five variables which shows the factors that study about the satisfaction level that a person gets by using green cosmetics. The variable with the highest mean score is that the products are made after conducting many researches (mean = 2.22, SD= 1.060). The other variables are the economic feasibility of the brand( mean = 2.14, SD= 1.060), safety ensured by the brand ( mean = 2.15, SD= .942), they do not harm the

environment( mean = 2.03, SD= 1.154), and it is composed of natural ingredients ( mean = 1.94. SD= 1.147). The total average score computed was 2.10 with a standard deviation of 1.095.

## INDEPENDENT SAMPLE T TEST

Ho: There is no significant relation between use of green cosmetics and the factors that motivate a person to buy green products.

H1: There is a significant relation between the use of green cosmetics and the factors that motivate a person to buy green products.

Independent Samples Test							
relationship between the use of green cosmetics and the motivating elements	Mean	Std. Deviation	F	Sig.	t	df	Sig. (2- tailed)
yes	9.57142857	3.22597	33.837	.000	-4.158	155	.000
No	12.9354839	6.38715			-2.845	33.852	.007

An independent sample t-test was conducted to compare the relationship between the use of green cosmetics and the motivating elements. There was a significant difference in the people who use green cosmetics (M= 9.57142857, SD=3.22597) and the people who do not use green cosmetics (M=12.9354839, SD= 6.38715), f= 33.837, P= 0.000 As P-value is less than 0.05, it states that there is no relationship between the use of green cosmetics and motivating elements.

## ONE WAY ANOVA

Ho: There is no significant relationship between the sources of information about green cosmetics and the factors that are concerned before purchasing green cosmetics.

H1: There is a significant relationship between the sources of information about green cosmetics and the factors that are concerned before purchasing green cosmetics.

			AN	OVA	
concerned factors	N		df	F	Sig.
social media	62	Between Groups	4	3.618	.008
friends	39	Within Groups	152		
family	32	Total	156		
advertisement	23				
others	1				
Total	157				

A ONEWAY subjects ANOVA was conducted to compare the sources of information of green cosmetics and the factors that are concerned before purchasing green cosmetics by taking five factors social media, friends, family, advertisement and others. Since P >0.05 we accept the null hypothesis was accepted. There is no significant relationship between the use of green cosmetics and the sources of information of green cosmetics.

#### **FINDINGS**

Table 2 shows the descriptive statistics of the five variables which studies the factors that motivate a buyer to buy green cosmetics. The variable with the high mean score is influence of celebrity members with (mean= 2.31, SD= 1.289). Others are influence of family members and others (mean= 2.11, SD= 1.060), environmental concerns of the buyer( mean= 2.08, SD= 1.083), Advertisement and promotional activities (mean = 1.91, SD= 1.134), and past experience (mean= 1.99, SD= 1.079). The average total score computed was 2.10 with a standard deviation of 1.14.

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Table 4 shows the descriptive statistics of five variables which shows the factors that study about the satisfaction level that a person gets by using green cosmetics. The variable with the highest mean score is that the products are made after conducting many researches (mean = 2.22, SD= 1.060). The other variables are the economic feasibility of the brand(mean = 2.14, SD= 1.060), safety ensured by the brand (mean = 2.15, SD= .942), they do not harm the environment(mean = 2.03, SD= 1.154), and it is composed of natural ingredients (mean = 1.94. SD= 1.147). The total average score computed was 2.10 with a standard deviation of 1.095.

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there is no relationship between the use of green cosmetics and motivating elements.

A ONEWAY subjects ANOVA was conducted to compare the sources of information of green cosmetics and the factors that are concerned before purchasing green cosmetics by taking five factors social media, friends, family, advertisement and others. Since P >0.05 we accept the null hypothesis was accepted. There is no significant relationship between the use of green cosmetics and the sources of information of green cosmetics.

## **SUGGESTIONS**

The government should promote green cosmetics by giving subsidies, it will help to decrease the cost of production.

The use of toxic chemicals in cosmetics should be restricted and the firms who violate this should be banned.

More promotional activities should be done to get a wide acceptance and to increase the knowledge of the people.

#### **CONCLUSION**

The demand for green products are increasing rapidly because they are non toxic and will not make any harm to the environment as well as to the users. The green cosmetic market has got a hike of 15% in the last few years. The growing customer needs has positive impact on the cosmetics market.

#### REFERENCES

- Kleiner, J. (2018, October 31). Green Cosmetics: The Push for Sustainable Beauty
- Franca, C.C.V, & Ueno, H.M.(2020). Green cosmetics: Perspectives and challenges in the context of green chemistry, Desenvolvimento e Meio
- kapoor, & rachitha. (2020). A Study of Buying Motive and their Effects on Consumer Behaviour Towards Green Cosmetics

# RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND EMPLOYEE PERFORMANCE: A STUDY ON IT EMPLOYEES

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## INTRODUCTION

The studies and researches related to Emotional Intelligence (EI) and employee performance have acquired a lot of attention in the recent years. Emotional Intelligence means a person's ability to perceive, evaluate and control the emotions. Emotional Intelligence means identifying a person's own feelings along with other's feelings and the ability to manage the occupational stress. Those employees with a good Emotional Intelligence will achieve success (Arief Tukiman Hendrawijaya et al., 2018).

Emotional Intelligence affects an employee's performance. Employees goes through stress, depression and anxiety which may affect their performance in the workplace. It is very important to study the emotional intelligence of employees and its effect on their performance.

The IT sector in India is growing and developing towards the global competencies. It is having huge demand not only in the domestic market but also in the international market. To attain success in the organization, an employee should have a good emotional intelligence.

The different dimensions of Emotional Intelligence are:

- Self awareness
- Self-regulation
- Motivation
- Empathy

#### **Social Skills**

Emotional Intelligence will affect and influence an employee's professional life. Emotional Intelligence is needed for the growth of both individuals as well as the organization (Lakshmi & Rao, 2018). The studies conducted previously suggested that emotional intelligence has a positive influence on employee's performance (Rahmawaty et al., 2021). An employee who is emotionally

intelligent and good, will choose cooperative conflict management style to deal and manage the problems and conflicts (Supriyanto, 2019).

#### **OBJECTIVES OF THE STUDY**

The main aim of the study is to find out the impact and relationship of Emotional Intelligence and employee performance in the IT sector. The objective of the study are:

- To analyse the emotional intelligence of the employees in the IT sector
- To identify the impact of emotional intelligence on the employee performance
- To identify the relationship between emotional intelligence and employee performance

## **METHODOLOGY**

Four districts will be selected based on the number of IT firms and popularity. Ernakulam, Thiruvananthapuram, Kozhikode and Thrissur will be selected to conduct the study. Primary data and Secondary data will be used. Primary data will be collected using sample survey. 200 questionnaire will be given. Secondary data will be collected from various publications of the central, state and local government and also by referring different websites.

## DATA ANALYSIS AND INTERPRETATION

## **Reliability Statistics**

The study examines the relationship between emotional intelligence and job performance of IT employees. To identify the aspects the researcher conducted a thorough literature review and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for measurement scales used in the study Item total statistics

Aspects		Cronbach's Alpha if
•	Items deleted	•
Elements of EI		.757
Impacts OF EI		.709
Relationship bety	veen EI and job performance	.718
Total		.737

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the 3 constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

**Table 2: Elements of Emotional Intelligence:** 

**Descriptive Statistics** 

	Mean	Std. Deviation
positive attitude	1.51	.572
criticism and challenges	1.83	.757
strength and weakness	1.61	.682
negative emotions	2.13	.966
opportunities	1.64	.696
Mistakes	1.83	.771
confidence	1.64	.740
complete the task	1.66	.672
difficult task	1.69	.744
group's mission	1.64	.649
help people	1.59	.712
respect others	1.69	.793
other's point of view	1.96	.941
friendly working environment	1.47	.582
friendly relationship	1.59	.788
diplomacy	2.03	.931
Total	1.71	0.75

Table 2 shows the descriptive statistics of the 16 variables which indicate the concern level. The variable with the high mean score is Negative emotions (Mean 2.13 and SD 0.966). Others with Positive Attitude (Mean 1.51 and SD .572), Criticism and challenges (Mean 1.83 and SD .757), strength and weakness (Mean 1.61 and SD .682), Opportunities (Mean 1.64 and SD .696), Mistakes (Mean 1.83 and SD .771), Confidence (Mean 1.64 and SD .740), Complete the task (Mean 1.66 and SD .672), difficult task (Mean 1.69 and SD .744), group's mission (Mean 1.64 and SD .649), help people (Mean 1.59 and SD .712), respect others (Mean 1.69 and SD .793), other's point of view (Mean 1.96 and SD .941), friendly working environment (Mean 1.47 and SD .582), friendly relationship (Mean 1.59 and SD .788), diplomacy (Mean 2.03 and SD .931). The average total score computed was 1.71 with SD 0.75

**Table 3: Impacts of Emotional Intelligence** 

**Descriptive Statistics** 

Impacts of Emotional Intelligence	Mean	Std. Deviation
identify my emotions	1.66	.635
positive attitude	2.19	1.029
use the time effectively	1.72	.745
Total	1.85	.803

Table 3 shows the descriptive statistics of the 3 variables which indicate the concern level. The variable with high mean score is Positive Attitude (Mean 2.19 an SD 1.029). Others with Identify my emotions (Mean 1.66 and SD .635), Use time effectively (Mean 1.72 and SD .745). The average mean score is 1.85 with SD 0.803

Table 4: Relationship between Emotional Intelligence and employee performance

**Descriptive Statistics** Relationship between emotional intelligence Mean Std. Deviation and employee performance 1.56 dedicate myself .601 .751 adaptable 1.86 good interpersonal skill 1.64 .730 punctual 1.68 .780 undeserved leave and breaks 1.95 1.069 1.73 .786

Table 4 shows the descriptive statistics of the 5 variables which indicate the concern level. The variable with high mean score is Undeserved leave and breaks (Mean 1.95 and SD 1.069). Others with Dedicate myself (Mean 1.56 and SD .601), Adaptable (Mean 1.86 and SD .751), Good interpersonal skill (Mean 1.64 and SD .730), Punctual (Mean 1.68 and SD .780). The average total mean score is 1.73 with SD .786

## **CORRELATION**

## **Hypothesis 1:**

H<sub>0</sub>: There is no significant relationship between Elements and Impacts of Emotional Intelligence

H<sub>1</sub>: There is significant relationship between Elements and Impacts of Emotional Intelligence

**Table 5: Relationship between Elements and Impacts of Emotional Intelligence** 

	Mean	SD	1	2
Elements	27.5063	5.79525	.405	1
Impacts	5.5625	1.43491	.405	1

A Pearson correlation was run to determine the relationship between Elements and Impacts of Emotional Intelligence. From table 5 it is clear that there is significant relationship between the Elements and Impacts of Emotional Intelligence (r = 0.405, N = 160, P = 0.05) and is statistically measured.

## **Hypothesis 2:**

H<sub>0</sub>: There is no significant relationship between Emotional Intelligence and employee performance in relation to its impact

H<sub>1</sub>: There is significant relationship between Emotional Intelligence and employee performance in relation to its impact

Table 6: Relationship between Emotional Intelligence and employee performance in relation to its Impact

	Mean	SD	1	2	
Relationship between	8.6875	2.56534	0.453	1	
Impacts	5.5625	1.43491	0.453	1	

A Pearson correlation was run to determine the relationship between Emotional Intelligence and employee performance in relation to its impacts. From table 6 it is clear that there is significant relationship between the (r= 0.453, N = 160, P= 0.05) and is statistically measured.

#### INDEPENDENT SAMPLE t-TEST

H<sub>0</sub>: There is no significant relationship between Elements or factors of emotional intelligence and Marital Status of an employee

H<sub>1</sub>: There is significant relationship between Elements or factors of Emotional Intelligence and Marital status of an employee

Marital Status	Mean	SD	F	P	t	df
MARRIED	26.7383	5.33118	3.516	.017	2.418	158
UNMARRIED	29.0566	6.41037		.025	2.272	88.629

An Independent sample t-test was conducted to compare Elements of emotional intelligence and marital status of the employees. There is no significant difference in Married status (M = 26.7383 and SD = 5.33118) and Unmarried status (M = 29.0566 and SD = 6.41037). As the P value is less than 0.05, it states that the Marital status of the employees have a significant difference in the Elements or factors of the emotional intelligence.

# FINDINGS, SUGGESTIONS AND CONCLUSIONS Findings

To analyse the emotional intelligence of the employees in the IT sector

Table 2 shows the descriptive statistics of the 16 variables which indicate the concern level. The variable with the high mean score is Negative emotions (Mean 2.13 and SD 0.966). Others with Positive Attitude (Mean 1.51 and SD .572), Criticism and challenges (Mean 1.83 and SD .757), strength and weakness (Mean 1.61 and SD .682), Opportunities (Mean 1.64 and SD .696), Mistakes (Mean 1.83 and SD .771), Confidence (Mean 1.64 and SD .740), Complete the task (Mean 1.66 and SD .672), difficult task (Mean 1.69 and SD .744), group's mission (Mean 1.64 and SD .649), help people (Mean 1.59 and SD .712), respect others (Mean 1.69 and SD .793), other's point of view (Mean 1.96 and SD .941), friendly working environment (Mean 1.47 and SD .582),

friendly relationship (Mean 1.59 and SD .788), diplomacy (Mean 2.03 and SD .931). The average total score computed was 1.71 with SD 0.75

A Pearson's correlation was run to determine the relationship between Elements or factors and Impacts of Emotional Intelligence. From table 5 it is clear that there is significant relationship between the Elements and Impacts of Emotional Intelligence (r = 0.405, N = 160, P = 0.05) and is statistically measured.

An Independent sample t-test was conducted to compare Elements of emotional intelligence and marital status of the employees. There is no significant difference in Married status (M = 26.7383 and SD = 5.33118) and Unmarried status (M = 29.0566 and SD = 6.41037). As the P value is less than 0.05, it states that the Marital status of the employees have a significant difference in the Elements or factors of the emotional intelligence.

## To identify the impact of emotional intelligence on the employee performance

Table 3 shows the descriptive statistics of the 3 variables which indicate the concern level. The variable with high mean score is Positive Attitude (Mean 2.19 an SD 1.029). Others with Identify my emotions (Mean 1.66 and SD .635), Use time effectively (Mean 1.72 and SD .745). The average mean score is 1.85 with SD 0.803

A Pearson's correlation was run to determine the relationship between Elements or factors and Impacts of Emotional Intelligence. From table 5 it is clear that there is significant relationship between the Elements and Impacts of Emotional Intelligence (r = 0.405, N = 160, P = 0.05) and is statistically measured.

# To identify the relationship between emotional intelligence and employee performance

Table 4 shows the descriptive statistics of the 5 variables which indicate the concern level. The variable with high mean score is Undeserved leave and breaks (Mean 1.95 and SD 1.069). Others with Dedicate myself (Mean 1.56 and SD .601), Adaptable (Mean 1.86 and SD .751), Good interpersonal skill (Mean 1.64 and SD .730), Punctual (Mean 1.68 and SD .780). The average total mean score is 1.73 with SD .786

A Pearson correlation was run to determine the relationship between Emotional Intelligence and employee performance in relation to its impacts. From table 6 it is clear that there is significant relationship between the (r= 0.453, N = 160, P= 0.05) and is statistically measured.

## **SUGGESTIONS**

Employees become more efficient and productive if they are having positive emotions and attitudes.

Proper counselling should be arranged by the organisations to make the employees feel relief from the stress

Long working hours and tight schedules will lead to stress and turnover among the employees. Organization should provide flexible work schedules and various activities that helps to reduce the stress of the employees.

#### **CONCLUSION**

The study focuses on the relationship between Emotional Intelligence and performance of the employees in the IT sector. EI plays an important role in determining the performance of the employees. The study examined the relationship between age, gender, income, marital status and the factors and impacts of emotional intelligence.

Employees are engaged in both positive and negative emotions, so they need to analyse their own emotions as well as others and use it effectively. The various elements or dimensions of EI such as Self Awareness, Self Regulation, Motivation, Empathy and Social Skills are positively correlated with each other.

#### REFERENCES

- Arief Tukiman Hendrawijaya, Tatang Ary Gumanti, Sasongko and Zarah Puspitaningtyas (2018). The mediating role of emotional intelligence in the employees performance. Problems and Perspectives in Management, 16(1), 145-154.
- Lakshmi, K. N., & Rao, K. S. S. (2018). A study on role of emotional intelligence on employee performance. International Journal of Civil Engineering and Technology, 9(3), 440–448.
- Rahmawaty, A., Rokhman, W., Bawono, A., & Irkhami, N. (2021). Emotional intelligence, spiritual intelligence and employee performance: The mediating role of communication competence. *International Journal of Business and Society*, 22(2), 734–752.
- Supriyanto, A. S., Ekowati, V. M., & Masyhuri, M. (2019). The Relationship among Spiritual Intelligence, Emotional Intelligence, Organizational Citizenship Behaviour, and Employee Performance. *ETIKONOMI*, *18*(2), 249–258.

# IMPACT OF CELEBRITY ENDORSEMENT ON BRAND LOYALTY: AS STUDY IN RELATION WITH RAYMOND PRODUCTS.

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## Chapter 1

#### 1.1Introduction

In today's world the celebrities are being treated as a role model. People are changing their life style in respect of favourite celebrity. This will create an impact on the buying behaviour of the person. Marketers endorsed celebrities with their products and brand in the advertisement to increase their sales and spending huge amount of money annually on celebrity endorsement contract based on the beliefs that celebrities are good spokesman for their product and brand. Celebrity is an individual who is well known to the public (actor, sports, figure, entertainer, etc..) advantages in areas other than the product class endorsed(Shoeb&Khalid,2014).

Endorsement is a channel of communication in which a celebrity act as a spokesman for the brand and attest to the brand's claim and position by extending him or herself personality, popularity, stature in society or skill field to brand. In a very high market with a very high proliferation of local, regional and international brands, celebrity endorsement was though to provide a distinction difference. Definition of celebrity endorse, any person who enjoy public recognition and this recognition is used for a consumer object, and also useful to appear in an advertisement, because when celebrities are portrayed in marketing communication, they bring their own culturally related meanings, regardless of promotional role required(Shoeb&Khalid,2014).

Celebrities are chosen by companies to increase their competitive advantage for three main reasons; launch, reinforcement and repositioning (Pringle, 2004). Celebrities endorsement is a promotion And strategies which attract the customers by analysing the current market. Now it's become the necessity of the marketers to use different celebrities associate with their brands to create a unique identity of the brand and to do famous his companies brand or product, company incurs higher costs to use that strategy, however nowadays it is used as powerful strategic tool for maximising profits(Katri, 2006). Factors that affect

the buying behaviour of people are vary from person to person, area to area, age to age( Brewster, Sparrow and Vernon, 2007).

## 1.2 Objectives

The primary objective of this work is to study the impact of celebrity endorsement on consumer buying behaviour with reference to Raymond products. The other supporting objectives are:

To explore and examine customers perception towards effectiveness of celebrity endorsement.

To determine importance of celebrity endorsement towards brand awareness.

## 1.3 Methodology

Customers from Ernakulam district will be selected for the collection of data. This district have the highest number of Raymond product users in Kerala. Primary data will be used for the study. Primary data will be collected using sample survey. 200 questionnaires will be given across the Raymond product users in selected district.

Customers perception towards effectiveness of celebrity endorsement

Statements	Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
I pay more attention to the					
advertisement using celebrity icon					
Celebrity presence in the media					
affects the image of brand					
I prefer celebrity who has good					
appearance					
Celebrity advertisement improves					
product's image					
Celebrity appearance in ads create					
more interest to view					
Celebrity advertisement are					
remembered for a long time					
Favorite celebrity's presence in the					
advertisement makes me very					
supportive feeling					

Importance of celebrity endorsement towards brand awareness.

Statements	Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
I will purchase a brand because I like the celebrity endorsing the brand					
If my favoritecelebrity endorsed a product, irrespective of whether I had					

Statements	Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
a need for it or not;I will purchase it no matter what.					
I think that celebrities represent the quality of a brand.					
I think using superstars in marketing is good, as it assists me to get to recognize a brand better.					
It is easier to recall the brand when I see or hear about the celebrity on television or in the news.					
Celebrity endorsement are an effective marketing tool for Raymond products.					
I think celebrities represent the credibility of abrand					
Celebrity endorsement have a positive impact on your perception of Raymond products.					
I will purchase Raymond products because of the celebrity endorsement.					
Ipurchase Raymond Products regardless of a celebrity's behaviour.					
Are you identify the product because of the celebrity associated with it.					

## 1.5 DATA ANALYSIS AND INTERPRETATION

## **Reliability Statistics**

The study examines the effectiveness of celebrity endorsements in the state of Kerala. The aspects considered include the Customers perception towards effectiveness of celebrity endorsement in reference with Raymond Products. To identify these aspects the researchers conducted a thorough review of literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for Measurement scales used in the study Item-Total Statistics

Aspects	Cronbach's Alpha if Item Deleted
Celebrity endorsement	.758
Endorsement	.798
Brand Awareness	.797
Total	.817

The co-efficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than 0.7 is widely considered as a good score. Of the five constructs measured all aspects have got

a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

## **Descriptive Statistics**

**Descriptive Statistics** 

2 05011101110 5 000150105		
Customers perception towards effectiveness of celebrity endorsement	Mean	Std. Deviation
Advertisement using celebrity icon Celebrity presence in media	2.79 2.03	1.277 0.214
Celebrity who has good appearance	1.92	1.020
Improve products image	1.80	0.433
Ads create more interest to view Remember for long time	1.35 2.10	0.602 0.380
Supportive feeling	2.36	0.380
Total	2.07	0.673

Table 2 shows the descriptive statistics of the 7 variables which indicate the concern level. The variable with the high mean score is Advertising using icon (mean=2.79and SD=1.277), Celebrity presence in media(2.03 mean and SD of 0.214), Celebrity who has good appearance (1.92 mean and SD 1.020), Improve product image (1.80 mean and SD 0.43,Ads create more interests to view.

(1.3 mean and SD 0.602), Remember for long time (2.10 mean and SD 0.380), Supportive feeling 2.36 mean and SD 0.673) The average total score computed was 2.07 with a SD 0.673.

#### **CORRELATION**

#### **Hypothesis No:1**

Ho: There is no significant relationship between in the perception of consumers towards brand and celebrity endorsement

H1: There is a relationship between in the perception of consumers towards brand and celebrity endorsement

Table 3: Relationship between celebrity endorsement and consumer perception

	Mean	SD	1	2
Celebrity endorsement	12.250	4.5233	.808	1
Consumer perception	13.312	4.5371	.808	1

#### INDEPENDENT SAMPLE T-TEST

## **Hypothesis No:2**

Ho: There is no significant relationship between impact of celebrity endorsement on consumer perception of Raymond brands between gender.

H1: There is a significant relationship between impact of celebrity endorsement on consumer perception of Raymond brands between gender.

Table4: Relationship between impact of celebrity endorsement on consumer perception of Raymond brands between gender.

Consumer perception	Mean	SD	Independent sample t-test				
			F	P value	t	Df	P value
Male	2.951	.6751	3.32	.070	1.17	148	0.244
Female	2.830	.5753					

An independent sample t-test was conducted to compare Concern levels in the public hearing of the project in Male and Female groups. The Male group (M= 2.9518, SD= 0.67451) and Female (M= 2.8309, SD= 0.57537), f= 3,320, P= 0.244. As P-value is greater than 0.05, it states that the Male and female group does not have any significant difference in the impact of celebrity endorsement on consumer perception of Raymond brands between gender.

## 1.6 FINDINGS, SUGGESTIONS, AND CONCLUSION

## 1. Findings

- Table 2 shows the descriptive statistics of the 7 variables which indicate the concern level. The variable with the high mean score is Advertising using icon (mean=2.79and SD=1.277), Celebrity presence in media(2.03 mean and SD of 0.214), Celebrity who has good appearance(1.92 mean and SD 1.020), Improve product image(1.80 mean and SD 0.43,Ads create more interests to view
- (1.3 mean and SD 0.602), Remember for long time(2.10 mean and SD 0.380), Supportive feeling(2.36 mean and SD 0.673)The average total score computed was 2.07 with a SD 0.673.
- Pearson correlation was run to determine the relationship between perception of consumers towards brand and celebrity endorsement From Table 4 it is clear that There is significant relationship impact of celebrity endorsement on consumer perception of Raymond brands between age groups (r=0.808,N=151,p=0.05) and which is statistically measured.
- An independent sample t-test was conducted to compare Concern levels in the public hearing of the project in Male and Female groups. The Male group (M= 2.9518, SD= 0.67451) and Female (M= 2.8309, SD= 0.57537), f= 3,320, P= 0.244. As P-value is greater than 0.05, it states that the Male and female group does not have any significant difference in the impact of celebrity endorsement on consumer perception of Raymond brands between gender.

- The findings of this study illustrated that there is a positive relationship between celebrity endorsements and consumers perceptions of Raymond brands.
- There is also a positive relationship amongst the relationship between celebrity behavior and consumers purchase of Raymond brands.
- It can be inferred that celebrity endorsements has a greater influence as a marketing tool to improve brand recall, to improve credibility as well as to increase brand recognition.

## 2. Suggestions

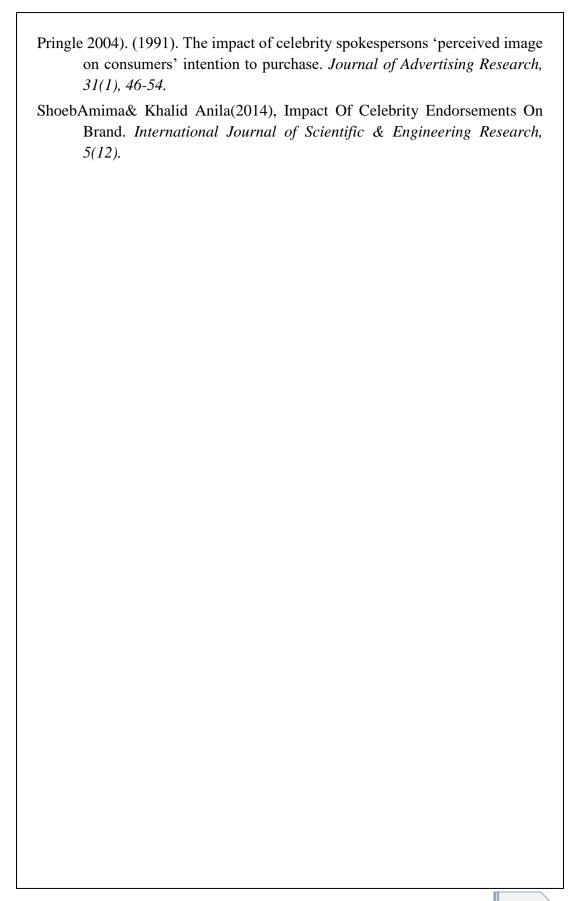
- Carefully select an advertising spokesperson. Companies should properly evaluate and select spokesperson to promote their product.
- Majority of the companies are using film celebrities to endorse their brands. The study found that film star and famous personalities endorsements persuades consumers personally to purchase the products.
- The marketers should concentrate on quality assurance, as they can identify that the consumers do not compromise on quality and that if the quality is good, celebrity advertisement will attract brand switching.

#### 3. Conclusion

Celebrity endorsement has become one of the most important tool of advertising. Such endorsements can help the marketer to better understand consumer reactions towards a particular celebrity. The study find that the most of the respondents agree that celebrity endorsement motivate them to purchase. From the study it can be concluded that celebrity endorsement helps in brand promotion. The findings of the study consequently specify that celebrity endorsements do impact on consumers perceptions of the Raymond brand.

#### References

- Brewster, C., Sparrow, P. and Vernon (2007), *International human resource* management. In 3rd edition. London: charted institute of personnel and development.
- Friedman, Hershey H. and Linda Friedman (1979), "Endorser Effectiveness by Product Type," *Journal of Advertising Research*, 19 (5), 63-71.
- Khatri, P. (2006), Celebrity Endorsement: A Strategic Promotion Perspective, Indian Media Studies Journal, 1 (1), 25-37
- McCracken, Grant (1989), "Who Is the Celebrity Endorser? Cultural Foundations of the Endorsement Process," *Journal of Consumer Research*, 16 (3), 310-321. Research, 19 (5), 63-71.



# A STUDY ON THE IMPACT OF FINANCIAL LITERACY IN THE INVESTMENT PROCESS OF MIDDLE INCOME HOUSEHOLDS

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## INTRODUCTION

Financial literacy leads to ensuring financial stability for individuals and institutions. Financial literacy is the possession of the knowledge, behaviour and attitude required to manage and utilise financial resources. Facilitating better investment decision is the main role of financial literacy. Low level of financial literacy is one of the reason for unwilling to invest in stocks by middle income households (Rahim Khan et al.,2020). Financial literacy is spreading the awareness of money management practises. The process of making sense of financial issues and situations is termed as financial literacy (Murugesan & Manohar, 2022).

The process of analysis of several factor relating to investment is called investment decision making. It aims at identifying the various factors that influence investment decision making among potential individual investors. Financial literacy, financial experience, locus of control and experience regret are the four behavioural factors that can influence investment decision making. Financial literacy, locus of control and financial experience have a positive relationship with investment decision were as regret experience have a negative relationship (Nuryasman&N.S,2020).

Enriching the financial well being of individual is considered as a significant skill of financial literacy. Poor financial decisions are harmful to both individuals and society, this is due to shortage of financial literacy (Tustin, 2010). Investment decision have a positive influence relating to demographic factors and financial literacy. Planning financial literacy support provided to individual investor will create and opportunity for market momentum (Siratan &Setiawan, 2021).

Financial literacy is what individual aware of in order to make crucial financial decision according to their individual interest. It is the integration of attitude,

awareness, skill, knowledge and behaviour which is needed for efficient financial decisions. It is related to individuals as well as country development because it is aimed at overall well being and socio economic development (Kanagasabai et al., 2020).

Middle income households face various constraints in financial decision making process. This constraints has an impact on investment decision. Lack of financial education and lack of financial needs are the factors relating to investment process of middle income people (Hasselbank et al., 2021)

## **OBJECTIVES**

- To examine the middle income household savings and their interest in investment
- To understand the investment process of middle income households.
- To analyse the financial literacy of middle income households.
- To identify the relationship between financial literacy and investment process.

## **METHODOLOGY**

Four districts will be selected based on the maximum number of middle income households and their financial literacy. Ernakulam, Kottayam, Thiruvananthapuram, Alappuzha are the districts have the highest number of middle income households. Primary as well as secondary data will be used. Primary data will be collected using a sample survey. 200 questionnaires will be given across the districts. Secondary data will be collected from various publications like articles, journals, magazines and also by referring the websites.

## **Data Analysis and Interpretation**

## **Reliability Statistics**

The study examines the impact of financial literacy in the investment process of the middle income households. The aspects considered include examination of middle income household savings and their interest in investment , to understand the investment process of middle income household, to analyse the financial literacy of middle income households, to identify the relationship between financial literacy and investment process. To identify these aspects , the researchers conducted a thorough review of the literature and developed measurement scales that are appropriate for the study . The Alpha (Cronbach) values relating to these aspects are presented in table 1.

Table 1: Cronbach Alpha for Measurement Scales used in the study.

Aspects	Cronbach's Alpha
middle income savings and investment	.823
Investment process of middle income households	.750
Analysis of financial literacy	.824
Relationship between financial literacy and investment	.751
Total	.800

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the four constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

## **Descriptive statistics**

Table 2: Examine the middle income household savings and their interest in investment

Examine the middle income household savings and their interest in investment	Mean	Std. Deviation
Risk and return	1.74	.712
Monthly Bank Statement	1.79	.733
Technology and Application	1.90	.772
Loan and Mortgages	2.00	.796
Total	1.86	0.75

Source: Primary Data, N=207

Table 2 shows the descriptive statistics of 4 variables which indicate the middle income savings and their interest in investment. The variable with the high mean score is Loan and mortgages (Mean=2, SD=.796) others are technology and application (Mean=1.90, SD=.772), monthly bank statement (Mean=1.79, SD=.733), risk and return (Mean=1.74, SD=.712). The average total score computed was 1.86 and standard deviation .75)

Table 3: To understand the investment process of middle income households

process of middle income household	Mean	Std. Deviation
Mutual fund	1.89	.860
Bond	2.00	.940
Stock	2.01	.947
Fixed Deposit	2.07	.844
Real estate	2.04	.949
ULIP	2.06	1.020
Government Securities	1.97	.880
PF	2.03	.934
Return on investment	1.88	.806

Liquidity	2.08	.869
Tax Benefit	2.02	.864
Risk in Investment	2.05	.912
Financial planning	1.71	.692
Risk and Return	1.91	.769
Financial Situation	1.95	.839
Ability and Knowledge	1.94	.803
Total	1.98	0.87

Source: Primary Data, N=207

Table 3 shows the descriptive statistics of 16 variables which indicate the investment process of middle income households. The variable with the high mean score is Liquidity (Mean=2.08, SD=.869) Fixed deposit (Mean=2.07, SD=.844),ULIP (Mean=2.06, SD=1.020), real estat (Mean=2.04, SD=.949). The average total score computed was 1.98 and standard deviation .87.

Table 4: To analyse the financial literacy of middle income household

To analyse the financial literacy of middle income household		Std. Deviation
Training Courses	1.66	.760
Seminars	1.87	.913
Books	1.75	.797
Websites	1.78	.853
Total	1.77	0.83

Source: Primary Data, N=207

Table 4 shows the descriptive statistics of 4 variables which indicate the analysis of the financial literacy of middle income household. The variable with the high mean score is Seminar (Mean=1.87, SD=.913) websites (Mean=1.78, SD=.853), books (Mean=1.75, SD=.797), training courses (Mean=1.66, SD=.760). The average total score computed was 1.77 and standard deviation .83.

Table 5: To identify the relationship between financial literacy and investment process

To identify the relationship between financial	Mean	Std.
literacy and investment process	Mean	Deviation
Credit Card Statement	1.56	.651
Financial Records	1.69	.719
Track Spending	1.79	.872
Financial Plan	1.81	.938
Total	1.71	0.80

Source: Primary Data, N=207

Table 5 shows the descriptive statistics of 4 variables which indicate the relationship between financial literacy and investment process. The variable

with the high mean score is Financial Plan(Mean=1.81,SD=.938),track spending(Mean=1.7,SD=.872), financial record(Mean=1.69,SD=.719),credit card statement(Mean=1.56,SD=.651). The average total score computed was 1.71 and standard deviation .80.

## **Independent Sample T-test**

H<sub>0</sub>:There is no significant difference between gender and middle income household's savings and their interest in investment

H<sub>1</sub>:There is significant difference between gender and middle income household's savings and their interest in investment

Table 6: Gender and middle income household's savings and their interest in investment

Middle income savings and interest		Std. Deviation	Independent Sample T-Test			
in investment and gender comparison	Mean		F	Sig.	t	df
Male	7.4356	2.18822	2.201	.139	.022	204
Female	7.4286	2.40135				

An independent sample t test was conducted to compare gender and middle income household's savings and interest in investment. There was significant difference in the male group (mean=7.43,SD=2.188)and female (mean=7.43,SD=2.40),f=2.201,P=.139.As P value is greater than 0.05 it states that the male and female group does not have any significant difference in the middle income household's savings and their interest in investment. In other words it means that middle income household's savings and their interest in investment will not change with gender.

## One way ANOVA

H<sub>0</sub>: There is no significant difference between age and financial literacy of middle income households.

H<sub>1</sub>: There is significant difference between age and financial literacy of middle income households.

Table 7: Age and financial literacy of middle income households.

		ANOVA			
Age groups	Frequency		Df	F	Sig.
13-25	153	Between Groups	3	.074	.974
25-33	30	Within Groups	202		
33-43	16	Total	205		
43-60	7				
Total	206				

A one way subject's ANOVA was conducted to compare the age and financial literacy of middle income households taking 4 age groups 13-25,25-33,33-43,43-60. Since P>0.05 the null hypothesis was accepted. There is no significant difference between age and financial literacy of middle income households.

#### Correlation

H<sub>0</sub>: There is no significant relationship between financial literacy and investment process.

H<sub>1</sub>: There is no significant relationship between financial literacy and investment process.

Table 8: Relationship between financial literacy and investment process

	Mean	Std. Deviation	1	2
Investment process of middle income households	31.6165	8.61669	0.000	
Analysis of financial literacy	7.0631	2.78163	0.000	1

A pearson's correlation was run to determine the relationship between financial literacy and investment process . From table 8, it is clear that there is significant relationship between financial literacy and investment process .(r=0.000,N=207,P=0.05) and which is statistically measured .

#### **FINDINGS**

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the four constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

Descriptive statistics of 4 variables which indicate the middle income savings and their interest in investment. The variable with the high mean score is Loan and mortgages (Mean=2, SD=.796) others are technology and application (Mean=1.90,SD=.772),monthly bank statement (Mean=1.79,SD=.733),risk and return (Mean=1.74,SD=.712). The average total score computed was 1.86 and standard deviation .75.

Descriptive statistics of 16 variables which indicate the investment process of middle income households. The variable with the high mean score is Liquidity (Mean=2.08, SD=.869) Fixed deposit (Mean=2.07, SD=.844), ULIP (Mean=2.06, SD=1.020), real estate (Mean=2.04, SD=.949). The average total score computed was 1.98 and standard deviation .87.

Descriptive statistics of 4 variables which indicate the analysis of the financial literacy of middle income household. The variable with the high mean score is Seminar(Mean=1.87,SD=.913)websites

(Mean=1.78,SD=.853),books(Mean=1.75,SD=.797),training courses(Mean=1.66,SD=.760). The average total score computed was 1.77 and standard deviation .83.

Descriptive statistics of 4 variables which indicate the relationship between financial literacy and investment process. The variable with the high mean score is Financial Plan (Mean=1.81, SD=.938),track spending(Mean=1.7, SD=.872), financial record (Mean=1.69, SD=.719), credit card statement (Mean=1.56, SD=.651). The average total score computed was 1.71 and standard deviation .80.

An independent sample t test was conducted to compare gender and middle income household's savings and interest in investment. There was significant difference in the male group (mean=7.43,SD=2.188)and female (mean=7.43, SD=2.40), f=2.201,P=.139.As P value is greater than 0.05 it states that the male and female group does not have any significant difference in the middle income household's savings and their interest in investment. In other words it means that middle income household's savings and their interest in investment will not change with gender.

A one way subject's ANOVA was conducted to compare the age and financial literacy of middle income households taking 4 age groups 13-25,25-33,33-43,43-60. Since P>0.05 the null hypothesis was accepted. There is no significant difference between age and financial literacy of middle income households.

A pearson's correlation was run to determine the relationship between financial literacy and investment process. From table 8, it is clear that there is significant relationship between financial literacy and investment process. (r=0.000, N=207, P=0.05) and which is statistically measured.

#### **SUGGESTIONS**

Aged and young people are equally unaware about the financial decision. More information regarding finance should be provided. It can improve their financial literacy of middle income households.

Apart from investment middle income households are not participating in savings decisions. It should also be changed. They should recognize the importance of savings will help them to survive in future.

Unawareness about different types of investment also considered as a drawback. so proper awareness and guidelines about various investment should be provided. Financial literacy can be attained by providing proper education about finance in school level.

#### **CONCLUSION**

Finance is a very important factor in all aspects of life. It is very important to take judicious decision before making an investment, savings or expenditure. Monetary education is basic since it outfits us with the information and abilities, we need to oversee cash successfully. Monetary education is the capacity to settle on educated decisions and powerful choices with respect to the utilization and the executives of cash. Each individual's role in economic development is very important and it must have a good financial background and knowledge.

#### REFERENCE

- Hasselbank, N., & Ooft, G. (2021). What drives investment decisions of households? Evidence from Suriname. *The Journal of Developing Areas*.
- Kanagasabai, B., & Aggarwal, V. (2020). The Mediating Role of Risk Tolerance in the Relationship between Financial Literacy and Investment Performance. *Colombo Business Journal*.
- Murugesan, R., & Manohar, V. (2022). Association Between Demographics and Financial Literacy of Women. *ComFin Research*.
- Nuryasman MN, N. S. (2020). Faktor-Faktor Yang Mempengaruhi Pengambilan Keputusan Investasi Saham. *Journal Ekonomi*.
- Rahim Khan, M. S., Rabbani, N., & Kadoya, Y. (2020). Is financial literacy associated with investment in financial markets in the United States? Sustainability (Switzerland).
- Siratan, E. D., & Setiawan, T. (2021). Pengaruh Faktor Demografi dan Literasi keuangan dengan Behavior Finance dalam Pengambilan Keputusan Investasi. Esensi: *Journal Bisnis Dan Manajemen*.
- Tustin, D. H. (2010). An impact assessment of a prototype financial literacy flagship programme in a rural South African setting. *African Journal of Business Management*.

# A STUDY ON THE PERCEPTION OF STUDENTS ABOUT ZOOM AND GOOGLE MEET WITH REGARDS TO THEIR ONLINE LEARNING IN THE COVID-19 PANDEMIC

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#### **CHAPTER 1**

#### INTRODUCTION

Coronavirus disease 2019 (COVID19) is a contagious disease caused by a virus, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease outbreak that originated in Wuhan China has spread all over the world. It has developed into a catastrophic global phenomenon with multiple impacts on the health and well-being of people, as well as far-reaching impacts across different industries and business sectors. Therefore, a coordinated global effort is urgently needed to meet this pandemic situation.

As was the case with many industries, the education sector was also severely impacted by the emergence of this global health crisis. Most of the countries have declared lock downs and social distancing orders. All education institutions were closed, affecting the lives of many including students, teachers and non-teaching staffs. This policy was done to prevent the spread of covid-19 from becoming more widespread (RISS, 2021). This social distancing policy greatly affected the learning activities. Thus learning process must be continued to meet the needs of the students.

The solution that can be offered today to the educators is through online learning. Media are all tools that can be used by teachers and students to achieve specific educational goals. One of the crucial components of education is that educators must be able to facilitate students with lectures, delivery of materials and even an assessment system. The online learning, thus provide multiple virtual platforms using various applications, websites and social networks. Students can explore at their own place and participate in organized learning programs led by their professors in real-time courses via virtual meeting platforms (Adeyeye et al., 2022). Some of the home tools for electronic learning are the applications like Zoom, Google Meet etc. It has the opportunity to generate impressive results by not only reducing costs but also enhancing the

organization (Aslam, Sonkar, 2021). It facilitates the learning as material delivery, assessment or merely collecting assignments. The dominant feature of online learning is the ease and flexibility of the learning process. This online learning activity is very beneficial for students who interact online to improve their performance quality (RISS, 2021).

In its implementation, distance learning using a variety of platforms, as a substitute for face- to- face, has several drawbacks. It creates lack of personal interactions, abundant distractions, lack of discipline, difficulty in understanding the lecture material provided online and many other factors. Understanding how students perceive the use of various media platforms is fascinating to study. Student interest in instructional media is strongly influenced by individual perceptions of the learning media itself. Individual behaviour is influenced by perceptions of technology, namely acceptance of learning platform users is determined by two key factors, namely perceived usefulness and perceived ease of use (RISS, 2021). Therefore, this study helps to analysis the student's perception about Zoom and Google meet with regard to their online learning in the Covid-19 pandemic.

#### **OBJECTIVES OF THE STUDY**

- The study is an effort to understand the perception of students about Zoom and Google meet with regards to their online learning during Covid-19 lockdown phase.
- To analyze the perception of students about Zoom and Google meet with regards to their online learning in the Covid-19pandemic.
- To access the effectiveness of e-learning during global pandemic.
- To analyze the effects of zoom and Google meet platform on respondents Academic Performance.

#### METHODOLOGY OF STUDY

Four districts in Kerala were selected which has the largest number of students pursuing online education. Kottayam district stands first; Pathanamthitta district comes second; Ernakulam district and Alapuzha district comes third and fourth respectively. Primary as well as secondary data will be used. Primary data has been collected using a sample survey. 200 questionnaires have been given among the students who have pursued online education. Secondary data has been collected from various publications of the central, state and local government and also by referring to the websites.

#### **HYPOTHESIS**

# **Hypothesis No: 1**

- H0: there is no significant relationship between perception of students about Zoom and Google meet and age
- H1: there is significant relationship between age and perception of students about Zoom and Google meet and age

# **Hypothesis No.2**

- H0: there is no significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age
- H1: there is significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age

#### DATA ANALYSIS AND INTERPRETATION

# **Reliability Statistics**

The study examines perception of students about Zoom and Google meet with regards to their online learning in the Covid-19 pandemic. The aspects considered include the perception of students about Zoom and Google meet with regards to their online learning, the effectiveness of e-learning during global pandemic, the effects of zoom and Google meet platform on respondents Academic Performance. To identify these aspects, the researchers conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for Measurement Scales used in the Study

Aspects	Cronbach's Alpha
perception of students	.723
effectiveness of zoom and google meet	.877
effects of zoom and google meet	.757
Total	.785

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score (Nunnally, 1978). Of the three constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

#### **Reference:**

Nunnally, J. C. (1978). *Psychometric theory* (2 nd ed.). New York: McGraw-Hill

Table 2: The perception of students about Zoom and Google meet with regards to their online learning in the Covid-19 pandemic: Descriptive Statistics

The perception of students about Zoom and Google meet in the Covid-19 pandemic	Mean	Std. Deviation
I have heard of Zoom and Google meet before	3.27	1.239
I have used Zoom and Google meet for other purpose	2.36	1.070
I like Zoom and Google meet	1.51	.854
I effectively used Zoom and Google meet	1.59	.986
I feel learning via Zoom and Google meet make me bored	2.95	1.427
The features of Zoom and Google meet are easy to be understood	3.61	.921
Zoom and Google meet are the best choices to be implemented in school	1.64	1.039
Total	2.41	1.076

Source: Primary Data, N=185

Table 3 shows the descriptive statistics of the seven variables which indicate the perception of students about Zoom and Google meet with regards to their online learning in the Covid-19 pandemic. The variable with the high mean score is that features of Zoom and Google meet are easy to be understood (mean=3.61, SD=.921)'. Others are Zoom and Google meet are familiar before with mean 3.27 and SD 1.239, learning via Zoom and Google meet makes bored(mean 2.95 and SD 1.427). The average total score computed was 2.41with a Standard Deviation of 1.076.

Table 3: To access the effectiveness of e-learning during global pandemic: Descriptive Statistics

•		
effectiveness of e-learning during global pandemic:  Descriptive Statistics	Mean	Std. Deviation
Zoom and Google meet was very effective	1.51	.879
Communication between me and my teachers was good	1.80	1.097
I learnt as much as I would have learned via face-to- face class	1.85	1.165
Zoom and Google meet should continue in schools	1.86	1.102
Zoom and Google meet are easier than other platforms	1.71	1.037
Total	1.74	1.056

Source: Primary Data, N=185

Table 3 shows the descriptive statistics of the five variables which indicate the effectiveness of e-learning during global pandemic. The variable with the high mean score is that Zoom and Google meet should continue in schools (mean=1.86, SD=1.102)'. Others are I learnt as much as I would have learned via face-to-face class with mean=1.85, SD=1.165 and Communication between me and my teachers via Zoom and Google meet was good (mean=1.80, SD=1.097). The average total score computed was 1.74 with a Standard Deviation of 1.056.

Table 4: To analyze the effects of zoom and Google meet platform on respondents Academic Performance

the effects of zoom and Google meet platform on respondents Academic Performance	Mean	Std. Deviation
Affected my academic performance positively	4.13	1.230
Affected my academic performance negatively	1.13	1.341
I had challenges using Zoom and Google meet for online classes	3.97	1.404
I would have better understood if different media was used	4.00	1.359
No effect on my academic performance	4.05	1.320
It creates difficulty in understanding the lecture material provided online	3.93	1.430
Total	3.63	1.347

Source: Primary Data, N=185

Table 5 shows the descriptive statistics of the six variables which indicate the effects of zoom and Google meet platform on respondents Academic Performance. The variable with the high mean score is that Zoom and Google meet affected my academic performance positively.(mean=4.13, SD=1.230)'. Others are no effect on my academic performance with mean=4.05, SD=1.320.The average total score computed was 3.63with a Standard Deviation of 1.347.

# INDEPENDENT SAMPLE T-TEST

H0: there is no significant relationship between perception of students about Zoom and Google meet and age

H1: there is significant relationship between age and perception of students about Zoom and Google meet

Table 5: Age and perception of students about Zoom and Google meet.

Age and perception of students about Zoom and Google meet.		Mean	Std. Deviation	F	P value	t	Df	P value
	10-15	18.6833	2.98296	001	071	1 50	1140	116
	15-20	19.4945	3.14951	.001 .971 1.58114		1149	.110	

An independent sample t-test was conducted to compare age and perception of students about Zoom and Google meet. There was a significant difference in the age group 10-15 (M= 18.6833,SD=2.98296) and age group 15-20(M=19.4945, SD=3.14951), f=.001, P=.116. As P-value is greater than 0.05, it states that there is no significant relationship between perception of students about Zoom and Google meet and age.

H0: there is no significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age

H1: there is significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age

Table 6: Effects of Zoom and Google meet platforms on respondents Academic Performance and age

effects of zoom and google meet	Mean	Std. Deviation	F	P value	t	Df	P value
	 21.3667 21.7253	3.92284 3.85592	.136	.713	.555	149	.579

An independent sample t-test was conducted to compare effects of Zoom and Google meet platforms on respondents Academic Performance and age. There was a significant difference in the age group10-15 (M=21.3667, SD=3.92284) and age group 15-20(M= 21.7253,SD=3.85592), f=.136, P=.579. As P-value is greater than 0.05, it states that there is no significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age.

#### ONE WAY ANOVA

H0: there is no significant relationship between perception of students about Zoom and Google meet and age

H1: there is significant relationship between perception of students about Zoom and Google meet and age

Table 7: Perception of students about Zoom and Google meet and age

A co Choung	NT	Maan	Std. Deviation	Anova			
Age Groups	N	Mean	Std. Deviation		Df	F	Sig
10-15	60	18.6833	2.98296		3		
15-20	91	19.4945	3.14951	Between Groups	3		
20-25	33	18.0606	4.01512	Within Groups	181	3.295	.022
25-28	1	12.0000		Total	184		
Total	185	18.9351	3.32907		104		

A one-way subject's ANOVA was conducted to compare perception of students about Zoom and Google meet and age. Since, P>0.05, the null hypothesis was

accepted. There is no significant relationship between perception of students about Zoom and Google meet and age.

H0: there is no significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age

H1: there is significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age

Table 8: effects of Zoom and Google meet platforms on respondents Academic Performance and age

Age Groups	N	Mean	Std. Deviation	Anova	Df	f	Sig
10-15	60	21.3667	3.92284	Between	3		
15-20	91	21.7253	3.85592	Groups	3		
20-25	33	19.1515	5.53467	Within	181	4.031	.008
25-28	1	14.0000	•	Groups	181 184		
Total	185	21.1081	4.32500	Total	104		

A one-way subject's ANOVA was conducted to compare the effect of Zoom and Google meet platforms on respondents Academic Performance and age. Since, P>0.05, the null hypothesis was accepted. There is no significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age.

# FINDINGS, SUGGESTIONS, AND CONCLUSION Our Findings

To analyze the perception of students about Zoom and Google meet with regards to their online learning in the Covid-19pandemic

Table 3 shows the descriptive statistics of the seven variables which indicate the perception of students about Zoom and Google meet with regards to their online learning in the Covid-19 pandemic. The variable with the high mean score is that features of Zoom and Google meet are easy to be understood (mean=3.61, SD=.921)'. Others are Zoom and Google meet are familiar before with mean 3.27 and SD 1.239, learning via Zoom and Google meet makes bored(mean 2.95 and SD 1.427). The average total score computed was 2.41with a Standard Deviation of 1.076.

An independent sample t-test was conducted to compare age and perception of students about Zoom and Google meet. There was a significant difference in the age group 10-15 (M= 18.6833,SD=2.98296) and age group 15-20(M=19.4945, SD=3.14951), f=.001, P=.116. As P-value is greater than 0.05, it states that there is no significant relationship between perception of students about Zoom and Google meet and age.

A one-way subject's ANOVA was conducted to compare perception of students about Zoom and Google meet and age. Since, P>0.05, the null hypothesis was accepted. There is no significant relationship between perception of students about Zoom and Google meet and age

To access the effectiveness of e-learning during global pandemic

Table 3 shows the descriptive statistics of the five variables which indicate the effectiveness of e-learning during global pandemic. The variable with the high mean score is that Zoom and Google meet should continue in schools (mean=1.86, SD=1.102)'. Others are I learnt as much as I would have learned via face-to-face class with mean=1.85, SD=1.165 and Communication between me and my teachers via Zoom and Google meet was good (mean=1.80, SD=1.097). The average total score computed was 1.74 with a Standard Deviation of 1.056

To analyze the effects of zoom and Google meet platform on respondents Academic Performance

Table 5 shows the descriptive statistics of the six variables which indicate the effects of zoom and Google meet platform on respondents Academic Performance. The variable with the high mean score is that Zoom and Google meet affected my academic performance positively.(mean=4.13, SD=1.230)'. Others are no effect on my academic performance with mean=4.05, SD=1.320. The average total score computed was 3.63 with a Standard Deviation of 1.347.

An independent sample t-test was conducted to compare effects of Zoom and Google meet platforms on respondents Academic Performance and age. There was a significant difference in the age group10-15 (M=21.3667, SD=3.92284) and age group 15-20(M= 21.7253,SD=3.85592), f=.136, P=.579. As P-value is greater than 0.05, it states that there is no significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age.

A one-way subject's ANOVA was conducted to compare the effect of Zoom and Google meet platforms on respondents Academic Performance and age. Since, P>0.05, the null hypothesis was accepted. There is no significant relationship between effects of Zoom and Google meet platforms on respondents Academic Performance and age.

#### SUGGESTIONS

- When possible, record your learning
- The platform should be easy to navigate and fully functional
- Prioritize personal connections
- Minimize the Technical issues
- Optimize the learning process and to be more engaging, innovative to increase their attention throughout the session.
- The government needs to take steps to provide uninterrupted power supply to every part of the country.

#### **CONCLUSION**

According to the findings of the study, it is found that the majority of students had a favorable attitude about the usage of Zoom and Google meet in educational activities during COVID-19 pandemic. Students found Zoom and Google meet to be very useful and beneficial, owing to its practicality, efficiency, and cost. Zoom and Google meet offer a number of advanced features that are simple to use. Additionally there are less expensive, which allow students to use it more often without fear of incurring excessive costs. The zoom and Google meet was seen to have great potential in the field of education. The integration between face-to-face learning and e-learning gave the students and teachers more choice in Teaching and Learning (T&L). The use of zoom and meet application in learning could help students and educators create and build their knowledge which to some extent was able to provide an interesting and more effective learning approach. It is a technological innovation in the world of education that needs to be considered for its existence.

#### REFERENCES

Randwick International of Social Science (RISS) Journal Vol. 2, No. 1, January 2021 | Page: 51-56

Adeyeye, B.; Ojih, S.E.; Bello, D.; Adesina, E.; Yartey, D.; Ben-Enukora, C.; Adeyeye, Q. Online Learning Platforms and Covenant University Students' Academic Performance in Practical Related Courses during COVID-19 Pandemic. Sustainability 2022, 14, 878.

Aslam, Sana and Sonkar, Sharad Kumar, "Platforms and Tools used for Online Learning all over the World during Covid-19: A Study" (2021). Library Philosophy and Practice (e-journal). 6205.

# A STUDY ON AWARENESS ON GREEN ENTREPRENEURSHIP IN THE TOURISM INDUSTRY WITH REGARDS TO CLEAN ENERGY

Research guide:

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#### INTRODUCTION

The increasing issue of global warming is the factor creating awareness of environmental preservations. This condition leads to the concept of eco-tourism. The development of eco-tourism has paved a way for entrepreneurial activities which is known as green entrepreneurship (Rahmawati et al.,2021).

One of the fastest growing segment in green economy is eco-tourism it focuses on environmental conservation, capitalist development and social economic development. It helps in boosting employment opportunities and entrepreneurship at local level (Anup et al.,2015).

Eco-tourism is a component of sustainable tourism. Sustainable tourism can be maintained over long term because it result in a benefit of social economic development. Site suitability can be evaluated to develop eco-tourism. Eco-tourism is considered as a part of protected areas management strategy (yuwono et al.,2021).

Increasing in the number of green start ups paved a way in response to the environmental problems (Demirel et al., 2019).

Green plants may mean that clean energy firms will lead to better performance than fossil fuel firms (Wan et al.,2021).

Use of energy from fossil fuels to enhance economic activities leads to environmental degradation. Use of renewable energy is an important factor to reduce environmental degradation. It is important for developing countries to make policies to use renewable energy for protect environmental quality (khan et al., 2021).

#### **Objectives**

- To identify the scope of green entrepreneurship in tourism.
- To analyse the impact of usage of clean energy in tourism industry.
- To understand the connection between green entrepreneurship and tourism.
- To identify the feasibility of green entrepreneurship techniques in tourism industry with regards to clean energy.

#### **METHODOLOGY**

Three Districts were selected based on the maximum number of tourists spots in Kerala. Idukki, Alappuzha and Kottayam were Selected. Primary as well as secondary data has been used. Primary data has been collected using a sample survey. 200 questionnaires have been given across the districts. Secondary data has been collected from various publications like articles, magazines, journals and also by referring the websites.

# **Data Analysis and Interpretation**

# **Reliability Statistics**

The study examines the awareness on green entrepreneurship in tourism industry with regards to clean energy. The aspects considered include scope of green entrepreneurship, analyse the impact of usage of clean energy, understand the connection between green entrepreneurship and tourism and the feasibility of green entrepreneurship techniques. To identify these aspects, the researchers conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in table 1.

Table 1: Cronbach Alpha for Measurement Scales used in the study.

Aspects	Cronbach's Alpha
Scope of green entrepreneurship	.922
Analyse the impact	.855
Feasibility of green entrepreneurship	.885
Total	.887

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the four constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

#### **Descriptive statistics**

Table 2: Scope of green entrepreneurship

~ .		~ . ~
Scope of green entrepreneurship	Mean	Std. Deviation
Economic benefits	1.88	.700
Entrepreneurial climate	1.96	.760
Natural resources	1.96	.827
Environmentally protected areas	1.95	.816
Green products	2.25	0.982
Investment cost	2.11	.799
Total	2.01	0.81

Source: Primary Data, N=179

Table 2 shows the descriptive statistics of 6 variables which indicate Scope of green entrepreneurship. The variable with the high mean score is green products (Mean=2.25,SD=.982)investment cost (Mean=2.11, SD=.799), economic benefits (Mean=1.88,SD=.700), entrepreneurial climate (Mean=1.96, SD=.760). The average total score computed was 2.01 and standard deviation .81.

Table 3: Impact of usage of clean energy

Impact of usage of clean energy	Mean	Std. Deviation
Environmental focus	1.86	.740
Consumer demand	2.05	.802
Business case	2.18	.822
Sound innovation policy	2.14	.846
Consumer reluctance	2.13	.789
Total	2.07	0.79

Source: Primary Data, N=179

Table 3 shows the descriptive statistics of 5 variables which indicate the impact of usage of clean energy. The variable with the high mean score is business case (Mean=2.18, SD=.822) environmental focus (Mean=1.86, SD=.740), consumer demand (Mean=2.05, SD=0.802), sound innovation policy (Mean=2.14, SD=.846). The average total score computed was 2.07and standard deviation .79.

Table 4: Feasibility of green entrepreneurship techniques

Feasibility of green entrepreneurship techniques	Mean	Std. Deviation
Better industry co-operation	1.97	.807
Chance of horizontal integration	2.17	.782
Stakeholders support	2.07	.779
Political commitment	2.22	.920
Total	2.10	0.82

Source: Primary Data, N=179

Table 4 shows the descriptive statistics of 4 variables which indicate the Feasibility of green entrepreneurship techniques. The variable with the high mean score is Political commitment (Mean=2.22, SD=.920) better industry cooperation (Mean=1.97, SD=.807), chance of horizontal integration (Mean=2.17, SD=.782), Stakeholders support (Mean=2.07, SD=.779). The average total score computed was 2.10 and standard deviation .82.

# **Independent Sample T-test**

H<sub>0</sub>: There is no significant difference between gender and scope of green entrepreneurship

H<sub>1</sub>: There is significant difference between gender and scope of green entrepreneurship

Table 5: Gender and scope of green entrepreneurship

scope of green	Mean	Std.	Ind	ependent	Sample T-T	est
entrepreneurship	Mean	Deviation	F	Sig.	t	df
Male	25.9880	7.6882	11.936	.001	3.651	179
Female	22.1875	6.2328				

An independent sample t test was conducted to compare gender and scope of green entrepreneurship. There was significant difference in the male group (mean=25.9880, SD=7.6882) and female (mean=22.1875, SD=6.2328), f=11.936, P=3.651. As P value is greater than 0.05 it states that the male and female group does not have any significant difference in the scope of green entrepreneurship. In other words it means that scope of green entrepreneurship will not change with gender.

# One way ANOVA

H<sub>0</sub>: There is no significant difference between age and impact of usage of clean energy

H<sub>1</sub>: There is significant difference between age and impact of usage of clean energy

Table 6: Age and impact of usage of clean energy.

		ANOVA				
Age groups	Frequency		Df	F	Sig.	
20-32	152	Between Groups	2	.786	.457	
32-42	21	Within Groups	176			
42-52	6	Total	179			
Total	179					

A one way subject's ANOVA was conducted to compare the age and impact of usage of clean energy taking 3 age groups 20-32,32-42,42-52. Since P>0.05 the null hypothesis was accepted. There is no significant difference between age and impact of usage of clean energy.

#### Correlation

H<sub>0</sub>: There is no significant relationship between scope of green entrepreneurship and feasibility of green entrepreneurship.

H<sub>1</sub>: There is no significant relationship between scope of green entrepreneurship and feasibility of green entrepreneurship.

Table 7: Relationship between scope of green entrepreneurship and feasibility of green entrepreneurship.

	Mean	Std. Deviation	1	2
Scope of green entrepreneurship	23.9497	7.18165	0.000	
Feasibility of green entrepreneurship	16.0503	4.80551	0.000	1

A pearson's correlation was run to determine the relationship between scope of green entrepreneurship and feasibility of green entrepreneurship.

From table 7, it is clear that there is significant relationship between scope of green entrepreneurship and feasibility of green entrepreneurship.

.(r=0.000,N=179,P=0.05) and which is statistically measured.

#### **FINDINGS**

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the four constructs measured , all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study .

Descriptive statistics of 6 variables which indicate Scope of green entrepreneurship. The variable with the high mean score is green products (Mean=2.25, SD=.982) investment cost (Mean=2.11,SD=.799),economic benefits (Mean=1.88,SD=.700), entrepreneurial climate(Mean=1.96,SD=.760). The average total score computed was 2.01 and standard deviation .81.

Descriptive statistics of 5 variables which indicate the impact of usage of clean energy. The variable with the high mean score is business case (Mean=2.18, SD=.822) environmental focus (Mean=1.86,SD=.740),consumer demand (Mean=2.05,SD=0.802), sound innovation policy (Mean=2.14, SD=.846). The average total score computed was 2.07and standard deviation .79.

Descriptive statistics of 4 variables which indicate the Feasibility of green entrepreneurship techniques. The variable with the high mean score is Political commitment (Mean=2.22, SD=.920) better industry co-operation (Mean=1.97, SD=.807), chance of horizontal integration (Mean=2.17, SD=.782) Stakeholders support(Mean=2.07,SD=.779). The average total score computed was 2.10and standard deviation .82.

An independent sample t test was conducted to compare gender and scope of green entrepreneurship. There was significant difference in the male group (mean=25.9880, SD=7.6882) and female (mean=22.1875, SD=6.2328), f=11.936,P=3.651. As P value is greater than 0.05 it states that the male and female group does not have any significant difference in the scope of green entrepreneurship. In other words it means that scope of green entrepreneurship will not change with gender.

A one way subject's ANOVA was conducted to compare the age and impact of usage of clean energy taking 3 age groups 20-32,32-42,42-52. Since P>0.05 the null hypothesis was accepted. There is no significant difference between age and impact of usage of clean energy.

A pearson's correlation was run to determine the relationship between scope of green entrepreneurship and feasibility of green entrepreneurship. From table 7, it is clear that there is significant relationship between scope of green entrepreneurship and feasibility of green entrepreneurship.

#### **SUGGESTIONS**

There are various key drivers of green entrepreneurship that influence the scope of green entrepreneurship. So if the government provides motivational factors it will improve the scope of green entrepreneurship

The impact of usage of clean energy leads to a drastic change in tourism industry. So green innovation in tourism with regards to clean energy can increase the impact.

The feasibility of green entrepreneurship relies on success factors of green entrepreneurship. Hence, government departments take initiative and responsibility for better industry co-operation.

#### **CONCLUSION**

One of the fastest growing segment of green economy is eco tourism it focus on environmental conservation, capitalist development and social economic development. So green entrepreneurship is an innovative idea for the sustainable development of society. Eco tourism is a component of sustainable tourism. It can be maintained over long term because it result in a benefit of social economic development.

#### REFERENCE

Rahmawati, Suprapti, A. R., & Pinta, S. R. H. (2021). Green Entrepreneurship: A Study for Developing Eco-Tourism in Indonesia. *The Journal of Asian Finance, Economics and Business*.

Anup, K. C., Rijal, K., & Sapkota, R. P. (2015). Role of ecotourism in environmental conservation and socioeconomic development in Annapurna conservation area, Nepal. *International Journal of Sustainable Development and World Ecology*.

- Yuwono, E., Maulany, R. I., & Barkey, R. A. (2021). SITE SUITABILITY EVALUATION FOR ECOTOURISM DEVELOPMENT: A CASE STUDY IN BULUE VILLAGE, SOPPENG DISTRICT, INDONESIA. *Journal of Sustainability Science and Management*.
- Demirel, P., Li, Q. C., Rentocchini, F., & Tamvada, J. P. (2019). Born to be green: new insights into the economics and management of green entrepreneurship. *Small Business Economics*
- Wan, D., Xue, R., Linnenluecke, M., Tian, J., & Shan, Y. (2021). The impact of investor attention during COVID-19 on investment in clean energy versus fossil fuel firms. *Finance Research Letters*
- Khan, I., Han, L., Khan, H., & Kim Oanh, L. T. (2021). Analyzing Renewable and Nonrenewable Energy Sources for Environmental Quality: Dynamic Investigation in Developing Countries. *Mathematical Problems in Engineering*.

# A STUDY ON ANALYZING THE IMPACT AND GROWTH OF OTT PLATFORMS IN THE PRE AND POST COVID ERA.

Research Guide:

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#### Researcher:

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#### INTRODUCTION.

COVID-19 (Coronavirus disease-2019), the novel and new disease spreads through recent coronavirus (SARS-CoV-2) from Wuhan, China This disease is characterized by acute respiratory disorder, pneumonia, dry cough, fever, and body pain with high rate of mortality, particularly in older people or those with underlying health conditions. COVID-19 has been declared as pandemic by World Health Organization (WHO) on March 11, 2020 across countries.

COVID-19 outbreak has resulted in significant economic, mental, and physical health consequences. Due to social distancing measures employed by several countries around the globe, the entire dynamic of how people communicate and work, how people live and interact with each other, how people move around, and travel has been changed. While adherence to the lockdown measures psychological traits like boredom, anxiety, stress, insecurities took a front seat for many of us. [Raka Ghosh Dastidar Psychology and Education Journal (2021)]

The entire media and entertainment industry went through unprecedented changes in this age of digital disruption. The rise of the Over-The-Top (OTT) platform has transformed consumer experience and expectations. OTT players (Netflix, Amazon Prime Video, Hulu, Disney+, etc.) offer a wide array of diverse choices of content while enabling consumers to choose their content, watching time, and place independently. OTT platforms and digital media have already seen increasing popularity across locations and demographics. Due to the COVID-19 pandemic, social lives have shifted to online, people were restricted to their homes, so inclination towards OTT and digital media has accelerated significantly. Consumer behaviour has undergone profound change as the world adjusts to this new normal. [Raka Ghosh Dastidar Psychology and Education Journal (2021)]

Now, coming to the main part, the Entertainment Industry is a huge industry in India. People are very keen on watching tv series, web series, movies, and plays as it counts in as a major source of entertainment for them. The media and entertainment industry of India was expected to reach a mind-boggling \$ 2.2 trillion by the year 2021[NASSCOM]. India being the largest consumer of mobile data reflects the amount of time invested by Indians in entertainment. India at the moment is the world's fastest-growing OTT (over-the-top streaming) market.

Some OTT platforms also added another feature, wherein one could watch a few movies or web series without having to subscribe to that particular platform. Another feature was added, that enabled the customers to pay for a particular month or two and enjoy the content, instead of having to pay for a whole year or at least six months. [MONIRUL ISLAM *ISBR MANAGEMENT JOURNAL* (2022)]

According to the Global Web Index report, India's streaming market is one of the biggest and fastest-growing in the world with biggies like Voot, AltBalaji, Zee5 and MX Player. The country's video market is valued at over \$700 million and is expected to grow to \$2.4 billion by 2023, with the OTT industry projected to have the highest growth. A trend of people viewing multiple content channels at the same time, along with demand for newer and more exclusive content will force the big budgets producers and directors to release movies directly onto the OTT channels rather than movie theatres.

# **OBJECTIVES OF THE STUDY**

- The study is an effort to analyse the impact and growth of OTT platforms in the pre and post Covid era.
- To analyse the impact and growth of OTT platforms pre and post covid.
- To study the factors that have influenced the consumer shift to OTT platforms over traditional forms of media consumption and its increased usage.
- To study and understand the change in consumer behaviour and awareness towards the adaptation of the OTT platform during pre and post covid.

#### RESEARCH METHODOLOGY

Four districts in Kerala were selected for the study. Kottayam district stands first; Pathanamthitta district comes second; Ernakulam district and Alappuzha district comes third and fourth respectively. Primary as well as secondary data will be used. Primary data were collected using a sample survey. 150 questionnaires were given among respondents who use OTT platforms. Secondary data were collected from various publications, journals, articles and various websites

#### DATA ANALYSIS AND INTERPRETATION

#### Reliability statistics.

The study examined the impacts and growth of OTT platforms during pre and post covid era. The aspects taken to conduct the study were the growth and impact of OTT platforms, the factors that have influenced the consumer shift to OTT platforms, study and understand the changing consumer behaviour and awareness towards the adaptation of the OTT platform during and study & assess consumer perception while using OTT platforms. To identify these aspects, the researcher conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table.1.

Table 1: Cronbach's Alpha for Measurement used in the study

Aspects	Cronbach's Alpha
Growth and impact	.703
Factors influencing	.779
Consumer behaviour and awareness	.762
Total	.748

The coefficient of reliability is used as a measure of the internal consistency or reliability of psychometric test score. A value greater that 0.7 is widely considered a good score. Of the four constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

# A. The impact and growth of OTT platforms pre and post covid era.

The rising implication of OTT platforms pre and post covid era.

The rise and growth were measured using a five-point scale with 4 variables. Table 2 shows the mean score of all the variables indicating the growth and impact.

Table 2: impact and growth of OTT platforms pre and post covid era: Descriptive statistics

Growing implication	Mean	Std. Deviation
familiar	2.14	1.176
consumption	1.61	.654
screen time	1.69	.714
usage	1.59	.615
Total	1.76	0.79

Source data: primary data, N=150

Table 2 shows the descriptive statistics of the four variables which indicate the growth and impact of OTT platforms pre and post covid era. The variable with the high mean score is familiarity (mean=2.14, SD=1.176). Others are consumption (mean=1.61, SD = .654), screen-time (1.69 mean and SD .714), usage (mean=1.59 and SD=.615). The average total score computed was 1.76 with a Standard Deviation of 0.79.

# B. The factors that have influenced the consumer shift to OTT platforms

The factors that have influenced the consumer shift to OTT platforms over traditional forms of media consumption and its increased usage.

The factors influencing consumer shift was measured using a five-point scale with 6 variables. Table 3 shows the mean score of all the variables indicating the factors that have influenced consumer shift to OTT platforms and its increased usage.

Table 3: factors that have influenced the consumer shift to OTT: Descriptive statistics

Factors Influencing	Mean	Std. Deviation
convenient	1.69	.590
consumer oriented/friendly	1.51	.553
choice	1.61	.541
satisfaction and pleasure	1.90	.947
affordable	1.71	.659
quality of content available	1.71	.659
language	1.69	.628
Total	1.68	.653

Source: Primary data, N=150

Table 3 shows the descriptive statistics of the seven variables which indicate the factors influencing the shit to OTT platforms from traditional mode of entertainment The variable with the highest mean score is satisfaction and pleasure (mean=1.90, SD=.941). Others are convenience with 1.69 mean and SD of .590, consumer oriented (1.51 mean and SD .553), more choice than multiplexes (mean=1.61, SD=.541), affordability (mean=1.71, SD=.659), quality of content available (Mean= 1.71, SD=.659) and language available to watch (mean=1.69 and SD=.628). The average total score computed was 1.68 with a Standard Deviation of .653

# C. Studying and understand the change in consumer behaviour and awareness towards the adaptation of the OTT platform during pre and post covid era.

The change in consumer behaviour and awareness towards the adaptation of OTT platforms during pre and post covid era.

The change in consumer behaviour and awareness towards the adaptation of OTT platforms pre and post covid era was studied using five-point scale with 6 variables. Table 4 shows the mean score of all the variables indicating the change in consumer behaviour and awareness using OTT platforms.

Table 4: change in consumer behaviour and awareness: Descriptive statistics

Behaviour and awareness	Mean	Std. deviation
Habit	1 .786	.764
other modes	2.226	1.210
binge watch	2.106	1.093
social life	2.613	1.487
psychological	2.760	1.417
work/academic performance	2.566	1.547
Total	2.343	1.253

Source: Primary data, N=150

Table 4 shows the descriptive statistics of the six variables which indicate the change in consumer behaviour and awareness on adaptation of OTT platforms pre and post covid era. The variable with the highest mean score is psychological change (mean=2.760, SD=.1.417). Others are: habit with 1.786 mean and SD of .764, other modes (2.226 mean and SD 1.210), binge watching (mean=2.106, SD=1.093), affecting social life (mean=2.613, SD=1.487) and affecting in work/academic performances (Mean= 2.566, SD=1.547). The average total score computed was 2.343 with a Standard Deviation of 1.253

# Karl Pearson's correlation.

#### **HYPOTHESIS NO.:1**

H0: There is no significant relationship between growth and impact of OTT platforms and age groups.

H1: There is significant relationship between growth and impact of OTT platforms and age groups.

Table 5: Growth and impact of OTT platforms and age: Karl Pearson's Correlation

iables	Growth and Impact	Age
Pearson Correlation	1	.488
Sig. (2-tailed)		.000
Pearson Correlation	.488	1
Sig. (2-tailed)	.000	
	Pearson Correlation Sig. (2-tailed) Pearson Correlation	Pearson Correlation 1 Sig. (2-tailed)  Pearson Correlation .488

Karl Pearson's coefficient of correlation test was run to determine the relationship between growth and impact of OTT platforms and age groups. Table 5 shows that there is a moderate positive relationship between growth and impact of OTT platforms and age groups. (r= .488, based on 150 observations.).

# **One-Way ANOVA**

# Hypothesis no.:2

H0: There is no significant relation between factors that have influenced the consumer shift to OTT platforms over traditional forms of media consumption & its increased usage and age groups.

H1: There is a significant relation between factors that have influenced the consumer shift to OTT platforms over traditional forms of media consumption & its increased usage and age groups.

Table 6: factors that have influenced the consumer shift to OTT platform and age : One-way ANOVA

N	Mean	Std.deviation	Anova	df	f	Sig.
3	9.333	2.081	between groups	11	4.11	0.001
19	10.473	2.48	C 1			
25	10.64	2.325				
27	12.296	2.743	within groups	139		
18	12.444	2.935				
17	11.529	2.400				
19	11.105	2.96				
5	17	4.527				
4	12	3.265	total	150		
2	14	2.828				
11	14.181	3.311				
150	11.82	3.054				
	3 19 25 27 18 17 19 5 4 2	3 9.333 19 10.473 25 10.64 27 12.296 18 12.444 17 11.529 19 11.105 5 17 4 12 2 14 11 14.181	3       9.333       2.081         19       10.473       2.48         25       10.64       2.325         27       12.296       2.743         18       12.444       2.935         17       11.529       2.400         19       11.105       2.96         5       17       4.527         4       12       3.265         2       14       2.828         11       14.181       3.311	3 9.333 2.081 between groups 19 10.473 2.48 25 10.64 2.325 27 12.296 2.743 within groups 18 12.444 2.935 17 11.529 2.400 19 11.105 2.96 5 17 4.527 4 12 3.265 2 14 2.828 11 14.181 3.311	3 9.333 2.081 between groups 11 19 10.473 2.48 25 10.64 2.325 27 12.296 2.743 within groups 139 18 12.444 2.935 17 11.529 2.400 19 11.105 2.96 5 17 4.527 4 12 3.265 2 14 2.828 11 14.181 3.311	3 9.333 2.081 between groups 11 4.11 19 10.473 2.48 25 10.64 2.325 27 12.296 2.743 within groups 139 18 12.444 2.935 17 11.529 2.400 19 11.105 2.96 5 17 4.527 4 12 3.265 2 14 2.828 11 14.181 3.311

A one-way ANOVA was conducted to study the factors that have influenced to study the factors that have influenced the consumer shift to OTT platforms over traditional forms of media consumption and its increased usage with respect to age.11 Age groups with class interval of 3 ranging from 14-36 (lowest and highest observation respectively).

# **Independent sample t-test**

#### **HYPOTHESIS NO.:3**

- H0: There is no significant relation between the changing consumer behavior and awareness towards adaption of the OTT platforms during pre and post covid era and Gender group.
- H1: There is significant relation between the changing consumer behavior and awareness towards adaption of the OTT platforms during pre and post covid era and Gender group.

Table 7: Change in consumer behaviour and awareness: independent sample t-test

			Independent t- test			
Change in consumer behaviour and awareness male	Mean 14.263	Std. Deviation 4.249	F	P-value	df	
female	13.871	4.400	0.256	0.614	14 8	

An independent t-test was conducted to study and understand the changing consumer behavior and awareness towards the adaptation of the OTT platform during pre and post covid with respect to gender classification.

# 4.FINDINGS, SUGGESTIONS, AND CONCLUSION

# Findings.

To analyze the growth and impact of OTT platforms during pre and post covid era.

Table 2 shows the descriptive statistics of the four variables which indicate the growth and impact of OTT platforms pre and post covid era. The variable with the high mean score is familiarity (mean=2.14, SD=1.176). Others are consumption (mean=1.61, SD = .654), screen-time (1.69 mean and SD .714), usage (mean=1.59 and SD=.615). The average total score computed was 1.76 with a Standard Deviation of 0.79.

Karl Pearson's correlation was run to determine the relationship between growth and impact of OTT platforms and age groups. From table, it is clear that there is a moderate positive relationship between growth and impact of OTT platforms and age groups. (r= .488, based of observations'=150)

To study the factors that have influenced the consumer shift to OTT platforms over traditional forms of media consumption and its increased usage.

Table 3 shows the descriptive statistics of the seven variables which indicate the factors influencing the shit to OTT platforms from traditional mode of entertainment The variable with the highest mean score is satisfaction and pleasure (mean=1.90, SD=.941). Others are convenience with 1.69 mean and SD of .590, consumer oriented (1.51 mean and SD .553), more choice than multiplexes (mean=1.61, SD=.541), affordability (mean=1.71, SD=.659), quality of content available (Mean= 1.71, SD=.659) and language available to watch (mean=1.69 and SD=.628). The average total score computed was 1.68 with a Standard Deviation of .653

A one-way ANOVA was conducted to study the factors that have influenced to study the factors that have influenced the consumer shift to OTT platforms over traditional forms of media consumption and its increased usage with respect to age.11 Age groups with class interval of 3 ranging from 14-36 (lowest and highest observation respectively).

From the table we can understand that p=<.05. Since p=<.05, the null hypothesis was rejected. So, we consider H1, i.e., there is a significant relation between factors that have influenced the consumer shift to OTT platforms over traditional forms of media consumption & its increased usage and age groups.

To study and understand the changing consumer behavior and awareness towards the adaptation of the OTT platform during pre and post covid.

Table 4 shows he descriptive statistics of the six variables which indicate the change in consumer behaviour and awareness on adaptation of OTT platforms pre and post covid era. The variable with the highest mean score is psychological change (mean=2.760, SD=.1.417). Others are: habit with 1.786 mean and SD of .764, other modes (2.226 mean and SD 1.210), binge watching (mean=2.106, SD=1.093), affecting social life (mean=2.613, SD=1.487) and affecting in work/academic performances (Mean= 2.566, SD=1.547). The average total score computed was 2.343 with a Standard Deviation of 1.253

An independent t-test was conducted to study and understand the changing consumer behavior and awareness towards the adaptation of the OTT platform during pre and post covid with respect to gender classification.

From the results we can understand that p=>.05. Since p value is greater than .05 we accept the null hypothesis; H0: There is no significant relation between the changing consumer behavior and awareness towards adaption of the OTT platforms during pre and post covid era and Gender group.

#### **SUGGESTIONS**

Availability of contents should not be limited to certain nations; the subscribers should be able to access the entire content.

OTT platforms should capture the uncaptured group of potential users by various modes of advertisement.

OTT platforms should add more features to the basic category like that of premium category which can induce more users and sustain the existing ones.

# CONCLUSION.

The COVID-19 pandemic and different social distancing measures attached to COVID-19 has not only changed economic activity and industries but has also led to a change in behavioral patterns in consumers, including that of digital consumption. As the media and entertainment industry is heavily dependent on many on-ground events, huge losses and slowdown is observed in this sector due to COVID-19. But to the contrary OTT media has boomed as a sustainable alternative of traditional Entertainment and Media industry.

The main aim of the project was to conduct study on analyzing the growth and impact of OTT platforms pre and post covid era. The subscription revenue, adaption rate of OTT platform is high because of the quality content, flexibility, and variety. Along with lucrative features, different innovative business strategies taken by different OTT players resulted in a new normal and indulge some permanent shift in the media consumption habit of consumers. More people are inclining toward the OTT platform during this lockdown period and the overall consumer mindset towards the OTT platform is showcasing significant positive responses.

# **REFERENCES**

Dastidar Raka Gosh Psychology and Education Journal (2021) Symbiosis Institute of Operations Management, Nasik, Symbiosis International (Deemed University). Pre and Post COVID-19 Sentiment Analysis of Consumers for OTT Platforms

- Gupta Garima, Faculty of Management Studies, University of Delhi.Consumption of OTT Media Streaming in COVID-19 Lockdown: Insights from PLS Analysis 2021)
- Madani Divya, Fernandes Semilia, Madani Nidhi, International Journal of Pervasive Computing and Communications. Analyzing the impact of COVID-19 on over-the-top media platforms in India (2021)
- Gopi Jisha, Faizal Muhammed, Vipin H Basic and Applied Research Journal.

  An Analysis of the Impact of Covid-19 on OTT Movie Releases and Its Viewers in India(2021)

# A STUDY ON ECONOMIC EMPOWERNMENT OF WOMEN THROUGH ENTREPRENEURSHIP IN MICRO ENTERPRISE

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#### INTRODUCTION

Women empowerment and economic development are closely related in one direction.it can play a major role in driving down inequality between men and women in the other direction, empowering women may benefit development. (Duflo E,2012). Women to be engaged with their rights of education, health, security, jobs, skills, decision making authority, better living standard, and respect. Woman Empowerment responsible for the development of the economy? (Sohail M,2014) Entrepreneurship is an economic development and gender equality is a critical sustainable development goal. In this economic empowerment aims to provide a multi-level framework for exploring women entrepreneurship in india. (Chipfunde d, yahaya s,othman2021).

This study is an endeavor to develop a women empowerment index using multi-dimensional factors in the context of demographic and socio-economic characteristics of women day to day environment at family level. The secondary objective of the study is also to measure the contribution of each factor towards the level of women empowerment.(Soharwardi, M. A., & Ahmad, T. I.2020). Entrepreneurship Is The future of the modern society. Entrepreneur is the future of the modern society. Business people are people who come out with New idea and innovations which is the significant for the growth of any business. Strengthening of women entrepreneur is an innovative success for development of the economy like India. Business among women's has lead to their empowerment in the country like India (Vaish, R., & Arra watia, Dr. M. A,2021).

This study around the opportunities, issues, challenges, and government policies for women entrepreneurship in India and the suggested answer to overcome the issue which women looking while at the same time chasing after their business. (Solanki, N.2019). In our society women empowerment strengthening through business improvement in arising economic growth. Women empowerment strengthening through business has expected more

prominent significance to push forward the financial advancement of agricultural nations across the world. Women empowerment has turned into a vital driver of strengthening and maintainable monetary advancement (Nepalese,2021.). The problems and prospects of women entrepreneurs in kerala.

# **OBJECTIVES**

In this research aims at connecting the relationship of significant opportunities for individuals women achieve financial independence and benefit the economy growth. This study will be the beneficial to the women for commencing a new business and able to understand the factors which are influencing to commence a business and barriers to commence a business. The main objectives of the study are as follows:

- To analyse the impact of online business with emerging marketing opportunities for women entrepreneurs.
- To evaluate the Motivational Factors like Creative thinking, Education and qualification, Role model to others, Support for family members and Growth for self development etc. which motivates the women's to become an Entrepreneur.
- To study the different types of challenges faced by women entrepreneurship.

#### **METHODOLOGY**

For the study women entrepreneurs will be selected on the basis of thiruvanathapuram, ernakulam districts. In this districts will be selected women entrepreneurs to analyse the online business to find out the profitable one. Primary as well as secondary data will be selected for the purpose of data collection. Primary data will be collected using a sample survey.200 questionnaire will be across the women entrepreneurs and the data will be selected for the purpose of data collection. Secondary data will be selected form various publications of the journal ,articles ,reference book and internet.

# **HYPOTHESIS**

- Ho: There is no significant relationship between factors influencing the women and the type of challenges that are faced by women entrepreneur.
- H1: There is significant relationship between factors influencing the women and the type of challenges that are faced by women entrepreneur.
- Ho: There is no significant relationship between motivational factors and the Age women Entrepreneur
- H1: There is significant relationship between motivational factors and the Age women entrepreneur.

# DATA ANALYSIS AND INTERPRETAION RELIABILITY STATISTICS

The study examines the economic empowerment of women through entrepreneurship in micro enterprise. To identify these aspects of his study is an endeavor to develop a women empowerment index using multi-dimensional factors in the context of demographic and socio-economic characteristics of women day to day environment at family level. The researchers conducted a thorough review of the a study on connecting the relationship of significant opportunities for individuals women achieve financial independence and benefit the economy growth. The Alpha (Cronbach) values relating to these aspects are presented in Table 2.

Table 1: Cronbach's Alpha for Measurement Scales used in the Study

T4	700 4 1	CI4	4 4	•
Item	-Total	Sta	tist	ICS

Aspects	Cronbach's Alpha	
Factors Influencing	.876	
Motivational factors	.845	
Type of challenges	.823	
Choice of business	.745	
TOTAL	.822	

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score (Nunnally, 1978). Of the four constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

#### **DESCRIPTIVE STATISTICS**

Table 2: What are factors that influencing the you to be an entrepreneurs

Descriptive	Statistics
Describuye	e Stausucs

factors that influencing the you to be		
an entrepreneurs:	Mean	Std. Deviation
As creativity thinking	1.18	.441
As decision making power	2.01	.603
As risk taking behaviour	1.75	.844
Profit making power	2.25	.924
Financial independent among women	1.49	.674
total	1.73	.697

Source: Primary data N=168

Table 2 shows the descriptive statistics of the five variables which study that factors that influencing the you to be an entrepreneurs .The variable with the high mean score profit making power is (mean=2.25, SD=.924) Others are as decision making power with (mean=2.01, SD=.603) of as risk taking behavior (mean=1.75, SD=.844), financial independence among women (Mean=1.49, SD=.674) and creativity thinking (Mean=1.18 and SD=.441) The average total score computed was 1.73 with a Standard Deviation of .697

**Table 3**. evaluate the Motivational Factors like Creative thinking, Education and qualification, Role model to others, Support for family members and Growth for self development etc. which motivates the women's to become an Entrepreneur.

# **Descriptive Statistics**

Creative thinking, Education and		
qualification, Role model to others,		
Support for family members and Growth		
for self development	Mean	Std. Deviation
As creative thinking	1.23	.488
As role model to others	2.18	.735
As education and qualification	1.64	.798
As support for family members	1.99	.824
As growth for self development	1.60	.796
Total	1.73	.728

Source: Primary data N=168

Table 3 shows the descriptive statistics of the five variables which the study of evaluate the Motivational Factors like Creative thinking, Education and qualification, Role model to others, Support for family members and Growth for self development etc. which motivates the women's to become an Entrepreneur .The variable with the high mean score is as role model to others (mean=2.18, SD=.735)'. Others are as support for family members with (mean=1.99 and SD=.824) of, as education and qualification (mean=1.64 and SD=.798), as growth for self development (Mean= 1.60, SD= .796) and creativity thinking(Mean=1.23and SD=.488) The average total score computed was 1.73 with a Standard Deviation of .728

Table 4: To study the different types of challenges faced by women entrepreneurship.

**Descriptive Statistics** Std. types of challenges faced by women entrepreneurship. Mean Deviation 1.78 .944 Hindrance market my products do not have knowledge about the legal aspects of my 2.40 .666 business It have required knowledge and awareness on using 1.80 .868 technology It unable to expand my business due to family .784 2.10 responsibilities It anticipated competition and customer's complaints .783 1.67 before I started this business 1.99 .775 Total

Source : primary data N=168

Table 4 shows the descriptive statistics of the five variables which the study of type of challenges faced by the women entrepreneurs. The variable with the high mean score is do not have knowledge about the legal aspects of my business (Mean=2.40 and SD=.666) it unable to expand my business due to family responsibilities (mean=2.10, SD=.784)'. with It have required knowledge and awareness on using technology (mean=1.80 and SD=.864) of, My family does not give me the freedom to market my products(Mean=1.78 and SD=.783)It anticipated competition and customer's complaints before I started this business (mean=1.67 and SD=.666), The average total score computed was 1.99 with a Standard Deviation of .775

Table 5:. What are the motivation and entrepreneur's choice of business

Descriptive Statistics

Descriptive statistics			
the motivation and entrepreneur's choice of business	Mean	Std. Deviation	
it will enable me to achieve self independence	1.65	.742	
because it convenient for me as a women	2.01	.760	
because I have personal characteristics in line with this business	1.82	.821	
The government is supporting this type of business that is why I started it	2.37	1.016	
Total	1.96	.835	

Source : primary data N = 168

Table 5 shows the descriptive statistics of the four variables which the motivation and entrepreneur's choice of business. The variable with the high mean score is (Mean=2.37 and SD=.1.016) I choice this type of business because it convenient for me as a women (mean=2.01 SD=.821) I choice this type of business because I have personal characteristics in line with this business

mean=1.82 and SD= .760) I choice this type of business because it will enable me to achieve self independence (Mean=1.65 and SD=.742)The average total score computed was 1.96 with a Standard Deviation of .835

#### **CORRELATION**

Ho: There is no significant relationship between factors influencing the women and the type of challenges that are faced by women entrepreneur.

Hi: : There is significant relationship between factors influencing the women and the type of challenges that are faced by women entrepreneur.

Table 6: Relationship between factors influencing and the type of challenges that are faced by women entrepreneurs

Correlations			
	MEAN	SD	1
Factors influencing	9	1.445	0.017
Type of challenges	9.579	2	0.017

A Pearson correlation was run to determine the relationship between income and awareness of new policy .From table , 6 it is clear that there is no significant relationship between factors influencing the women and the type of challenges that are faced by women entrepreneur (r = 0.00, N = 170, p = 0.05) and which is statistically measured.

#### ONE WAY ANOVA

Ho: There is no significant relationship between motivational factors and the Age women entrepreneur

Hi: :. There is significant relationship between motivational factors and the Age women entrepreneur

Table 6 : relationship between Motivational factors and the Age women entrepreneur

ANOVA			
Motivational factors			
concerned factors	N	DF	
Sum of Squares			
Mean Square			
As Creative thinking	70		
Between Groups	8.858	2	4.429
As Role model to others	89		
Within Groups	442.125	166	2.663
As Education and qualification,	10		
Total	450.982	168	

As Support for family members As Growth for self development Total

169

#### **FINDINGS**

The study examines the economic empowerment of women through entrepreneurship in micro enterprise. The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score (Nunnally, 1978). Of the four constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

The descriptive statistics of the five variables which study that factors that influencing the you to be an entrepreneursMotivational factors

A Pearson correlation was run to determine the relationship between income and awareness of new policy .it is clear that there is no significant relationship between factors influencing the women and the type of challenges that are faced by women entrepreneur (r = 0.00, N= 170, p=0.05) and which is statistically measured.

#### **SUGGESTIONS**

Proper training for running the enterprises, maintaining accounts and marketing strategies are to be provided so that women get an opportunity to start microenterprises in their respective localities without up setting their family life.

Special training cum orientation programs are needed for those employees and officer who are supposed to help women entrepreneurs.

NGOs and government should come forward with awareness programs exclusively for young women , and make efforts to diffuse information on prospects of entrepreneurship among the less educated women.

Cheap credit facilities and information about different types of microenterprises that are suitable for the areas are to be provided to rural women so that they are encouraged to enter into entrepreneurship.

## **CONCLUSION**

Entrepreneurship is presently the most discussed and encouraged concept all over the world to overcome economic challenges development of any nation. Women are an important human resource of the nation and every state should try to utilize them as mediators of economic growth and development. Micro enterprises aim at developing and utilizing the entrepreneurial talent and potential of rural women below poverty line to meet the local needs. Survivor and growth of these enterprises are essential for the beneficiaries/entrepreneurs as they ensure better standards of living and thereby their individuals, family and their social empowerment. This study beyond any shadow of doubt has revealed that the enterprises have succeeded in the socio economic empowerment of rural poor. But the basic objective of eradicating poverty is yet to be realized.

NI.
N

Sum of Squares	DF	Mean Sq	uare	
	70			
Between Groups	8.858	2	4.429	89
Within Groups	442.125	166	2.663	10
Total	450.982	168	169	

# ONLINE PURCHASE OR OFFLINE PURCHASE: A STUDY ON THE CONSUMER'S BUYING BEHAVIOUR

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### Introduction

Nowadays, internet technology has become vast in many area's technology is being developing day by day, these technologies indulge buyers to buy goods and services through online shopping they are able to get information related to anything, anytime about any products. Online service allows customers to buy products according to their likes and dislike and are able to purchase 24/7 a day. As this makes them more convenient to sit at home, office or anywhere around the world to purchase their groceries, clothes, cosmetic, etc. As online shopping is changing worldwide many companies, organizations has changed their plan from traditional shopping to online shopping and this has created an online platform for customers to shop and pay in the same website along with their purchase as they have made payment option more safe and convenient for user. Online shopping has gained more fame and success within a couple of years compared to traditional shopping (Ahmed et al., 2018). Consumer buying behavior concentrated on they make the decision to buy a product. What they purchase, why they purchase, when they purchase it, where they purchase it, after buying the consumer assess the particular purchase (Singh et al.,2014).

The person who came up with this idea was Canadian businessman Lawrence Freiman he started a shop named Vis O Matic that was a different idea compared to traditional shops, it is not possible to purchase goods for which you want to spend money and it is not easy to get that purchased product to home. Although, Vis O Matic store give a new experience. The buyer sits in a chair in front of the television screen and he select the product using a sophisticated customer device. Then, the buyer will send the product to the customer house it is similar to today's online shopping. When buying the goods directly, the customer can directly check its quality, so the seller cannot cheat the customer. Offline purchasing helps the customer to check the standard of the product and also check that it is worthwhile or not (sari, 2021).

# Objectives of the study

Consumer's desires are changing day to day. Therefore, the main focus of this study is whether consumers prefer online or offline purchasing. The main objectives of the study are:

- Analyze the significant difference between the online and offline consumer groups in terms of demographic, technology use, availability and attitude of the consumer.
- To identify the main influencers in online and offline buying process.
- To examine the factors influencing the consumer to switch from the offline shopping to online shopping and vice versa.

# Methodology

This study takes us to three districts where consumer demand is equal for online and offline shopping. State of Kerala covering Kottayam, Ernakulam and Thiruvananthapuram districts. Primary as well as secondary data will be used. Primary data will be collected using a sample survey. 200 questionnaires will be given across the districts and the data will be collected direct from customers. Secondary data will be collected from various publications like journals, websites and books.

## DATA ANALYSIS AND INTERPRETATION

# **Reliability Stastistics**

The study is whether consumers prefer online or offline purchasing. The aspects considered include the consumer's perception towards the offline and online purchasing because, the consumers buying behaviour is changing day to day due to new technology and internet.

To identify these aspects, the researcher conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in Table 1.

Table 1: Cronbach's Alpha for Measurement Scales used in the Stu  Aspects	idy Cronbach's Alpha
Demographic,technology,avilability and attitude offline basis	.873
Demographic,technology,avilability and attitude online basis	.875
Main influencers in buying process offline	.872
Main influencers in buying process online	.871
Factors influencing the consumer to switch from offline to online	.875
Factors influencing the consumer to switch from online to offline	.875
Total	.893

The co-efficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than 0.7 is widely considered as a good score. The six constructs measured all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.

Table 2: Demographic, technology, availability and attitude offline basis

Descriptive Statistics

Descriptive Statistics				
	Mean	Std. Deviation		
Behavioural attitude	2.05	.727		
Age, gender, income offline	2.24	.917		
Ideas and perception offline	1.88	.802		
Product loyalty offline	2.48	.910		
Technology influence offline	2.11	.952		
Offline availability affect	2.20	.912		
Total	2.16	0.87		
· · · · · · · · · · · · · · · · · · ·				

Table 2 shows the descriptive statistics of the six variables which indicate the significant difference between technology use, availability and attitude of the consumer in offline purchasing indicates that the variable with high means score loyalty(M=2.48,SD=.910),others product seller's attitude (M=2.05,SD=.727),demographic factors(M=2.24,SD=.917),idea and (M=1.88,SD=.802),technology use(M=2.11,SD=.952),offline perception availability (M=2.20,SD=.912). The average total score computed was 2.16 with standard deviation 0.87.

Table 3: Demographic, technology, availability and attitude online basis

Descriptive Statistics

Descriptive statistics		
	Mean	Std. Deviation
Age,gender,income online	2.15	.972
Ideas and perception online	2.01	.746
Product loyalty online	2.29	.797
Technology influence online	1.97	.847
Online availability affect	2.17	.961
Total	2.118	0.865

Table 3 shows the descriptive statistics of the five variables which indicate the significant difference between technology use, availability and attitude of the consumer in online purchasing indicates that the variable with high means score is product loyalty (M=2.49,SD=.797),others are demographic factors(M=2.15,SD=.972),idea and perception (M=2.01,SD=.746),technology

use(M=1.97,SD=.847), online availability (M=2.17,SD=.961). The average total score computed was 2.118 with standard deviation 0.865.

Table 4: Main influencers in buying process offline

**Descriptive Statistics** 

	Mean	Std. Deviation
Advertisement offline	1.86	.666
Social media offline	1.88	.802
Celebrities offline	2.18	.898
Newspapers offline	2.24	.817
social media vloggers offline	2.15	.814
Campaigns or contest offline	2.29	1.038
Total	2.1	0.839

Table 4 shows the descriptive statistics of the six variables which indicate the main influencers in offline buying process indicates that the variable with mean score is campaigns or contest (M=2.29, SD=1.038), others are advertisement (M=1.86, SD=.666), social media (M=1.88, SD=.802), celebrities (M=2.18, SD=.898), newspaper (M=2.24, SD=.817), social media vloggers (M=2.15, SD=.814). The average total score computed was 2.1 with standard deviation 0.839.

Table 5: Main influencers in buying process online

Descriptive Statistics				
	Mean	Std. Deviation		
Celebrities and vloggers online	2.01	.863		
Mouth publicity online	2.03	.704		
Newspapers online	2.36	.900		
Advertisement online	2.04	.785		
Campaigns or contest online	2.41	1.291		
Social media online	2.04	.989		
Total	2.148	0.922		

Table 5 shows the descriptive statistics of the six variables which indicate the main influencers in online buying process indicates that the variable with mean score is campaigns or contest (M=2.41, SD=1.291), others are advertisement (M=2.04, SD=.785), social media (M=2.04, SD=.989), celebrities and vloggers (M=2.01, SD=.863), mouth publicity (m=2.03, SD=.704) newspaper (M=2.36, SD=.900), social media (M=2.04, SD=.989). The average total score computed was 2.148 with standard deviation 0.922.

Table 6: Factors influencing the consumer to switch from offline to online

**Descriptive Statistics** Std. Mean Deviation 3.23 Touch, feel and see offline 1.397 Price change offline 3.36 1.131 Bargaining offline 3.07 1.379 Large variety offline 3.41 1.165 Attaining trust offline 2.97 1.414 Check quality offline 2.96 1.497 Total 3.2 1.33

Table 6 shows the descriptive statistics of the six variables which indicate the factors influencing to switch from offline to online shopping indicates that the variable with high mean score is large variety (M=3.41, SD=1.165) others are touch, feel and see (M=3.23, SD=1.397), price change (M=3.36, SD=1.131), bargaining (M=3.07, SD=1.379), attaining trust (M=2.97, SD=1.414), check quality (M=2.96, SD=1.497). The average total score computed was 3.2 with standard deviation 1.33.

Table 7: Factors influencing the consumer to switch from online to offline

Descriptive Statistics

Descriptive Statistics		Cr. 1
	Mean	Std. Deviation
Price change online	3.43	1.178
Offers available online	3.08	1.267
Replacement online	3.13	1.297
Check quality online	3.13	1.317
Discount online	3.15	1.297
Free delivery online	3.03	1.378
Cash on delivery online	3.09	1.326
Safety transaction online	3.13	1.324
Total	3.15	1.3

Table 7 shows the descriptive statistics of the eight variables which indicate the factors influencing to switch from online to offline shopping indicates that the variable with high mean score is price change(M=3.43, SD=1.178) others are offers available (M=3.08,SD=1.267),replacement (M=3.13,SD=1.297),check quality(M=3.13,SD=1.317),discount(M=3.15,SD=1.297),cash on delivery (M=3.09, SD=1.326) free delivery (M=3.03,SD=1.378), Safety transaction (M=3.13,SD=1.324).The average total score computed was 3.15 with standard deviation 1.3

# **Independent sample t-test**

H0: There is no significant relationship while comparing price and features of other seller products and which lead to switch offline to online purchasing.

H1: There is significant relationship while comparing price and features of other seller products and which lead to switch offline to online purchasing.

Table 8: Comparing price and features of other seller products and which lead to switch offline to online purchasing.

switch from offline to online	Mana	Std.	Indeper	ndent sample t-test
purchasing	Mean	Deviation	F	P Value
yes	17.6210	6.85932	.091	.763
no	15.2308	6.32018		

An Independent sample t-test was conducted to compare the consumer switch from offline to online purchasing in Yes and No groups. There was a significant difference in the Yes (M=17.62, SD=6.86) and No (M=15.23, SD=6.32) f=.091, p=.763. Since p>.05 the null hypothesis was accepted. There is no significant relationship while comparing price and features of other seller product and which lead to switch offline to online purchasing.

# **Independent sample t-test**

H0: There is no significant relationship while comparing price and features of other seller products and which lead to switch online to offline purchasing.

H1: There is significant relationship while comparing price and features of other seller products and which lead to switch online to offline purchasing.

Table 9: Comparing price and features of other seller products and which lead to switch online to offline purchasing.

switch from online to offline	Maan	Std.	Indepen	dent sample t-test
purchasing	Mean	Deviation	F	P Value
yes	20.677	6.726	6.671	.011
no	21.461	4.718		

An Independent sample t-test was conducted to compare the consumer switch from online to offline purchasing in Yes and No groups. There was a significant difference in the Yes (M=20.677, SD=6.726) and No (M=21.461, SD=4.718) f=6.671, p=.011. Since p<.05 we reject null hypothesis was accepted. There is significant relationship while comparing price and features of other seller product and which lead to switch online to offline purchasing.

### **ONE-WAY ANOVA**

H0: There is no significant relationship between main influencer in offline buying process and age of consumer.

H1: There is significant relationship between main influencer in offline buying process and age of consumer.

Table 10: Comparing main influencer and age on offline basis.

	df	F	Sig.
Between Groups	5	2.023	.094
Within Groups	145		
Total	150		

one-way subject's ANOVA was conducted to compare the main influencer offline buying process, taking 5 age group less than 20-30, 30-40,40-50, 50-60 and 60-70. Since p>0.05 the null hypothesis was accepted. There is no significant relationship between main influencer in offline buying process.

## **ONE-WAY ANOVA**

H0: There is no significant relationship between main influencer in online buying process and age of consumer.

H1: There is significant relationship between main influencer in online buying process and age of consumer.

Table 11: Comparing main influencer and age on online basis.

	df	F	Sig.
Between Groups	5	.383	.820
Within Groups	145		
Total	150		

one-way subject's ANOVA was conducted to compare the main influencer online buying process, taking 5 age group less than 20-30, 30-40,40-50, 50-60 and 60-70. Since p>0.05 the null hypothesis was accepted. There is no significant relationship between main influencer in online buying process.

# FINDINGS, SUGGESTION AND CONCLUSION

# **FINDINGS**

1. Analyze the significant difference between the online and offline consumer groups in terms of demographic, technology use, availability and attitude of the consumer.

Table 2 shows the descriptive statistics of the six variables which indicate the significant difference between technology use, availability and attitude of the consumer in offline purchasing indicates that the variable with high means score is product loyalty(M=2.48,SD=.910),others are seller's attitude

(M=2.05,SD=.727), demographic factors(M=2.24,SD=.917),idea and perception (M=1.88,SD=.802),technology use(M=2.11,SD=.952),offline availability (M=2.20,SD=.912).The average total score computed was 2.16 with standard deviation 0.87.

Table 3 shows the descriptive statistics of the five variables which indicate the significant difference between technology use, availability and attitude of the consumer in online purchasing indicates that the variable with high means score is product loyalty (M=2.49,SD=.797),others are demographic factors(M=2.15,SD=.972),idea and perception (M=2.01,SD=.746),technology use(M=1.97,SD=.847), online availability (M=2.17,SD=.961). The average total score computed was 2.118 with standard deviation 0.865.

# 2. To identify the main influencers in online and offline buying process.

Table 4 shows the descriptive statistics of the six variables which indicate the main influencers in offline buying process indicates that the variable with mean score is campaigns or contest (M=2.29, SD=1.038), others are advertisement (M=1.86, SD=.666), social media (M=1.88, SD=.802), celebrities (M=2.18, SD=.898), newspaper (M=2.24, SD=.817), social media vloggers (M=2.15, SD=.814). The average total score computed was 2.1 with standard deviation 0.839.

Table 5 shows the descriptive statistics of the six variables which indicate the main influencers in online buying process indicates that the variable with mean score is campaigns or contest (M=2.41, SD=1.291), others are advertisement (M=2.04, SD=.785), social media (M=2.04, SD=.989), celebrities and vloggers (M=2.01, SD=.863), mouth publicity (m=2.03, SD=.704) newspaper (M=2.36, SD=.900), social media (M=2.04, SD=.989). The average total score computed was 2.148 with standard deviation 0.922.

Table 10 shows the one-way subject's ANOVA was conducted to compare the main influencer offline buying process, taking 5 age group less than 20-30, 30-40,40-50, 50-60 and 60-70. Since p>0.05 the null hypothesis was accepted. There is no significant relationship between main influencer in offline buying process.

Table 11 shows the one-way subject's ANOVA was conducted to compare the main influencer online buying process, taking 5 age group less than 20-30, 30-40,40-50, 50-60 and 60-70. Since p>0.05 the null hypothesis was accepted.

There is no significant relationship between main influencer in online buying process.

# 3.To examine the factors influencing the consumer to switch from the offline shopping to online shopping and vice versa.

Table 6 shows the descriptive statistics of the six variables which indicate the factors influencing to switch from offline to online shopping indicates that the variable with high mean score is large variety (M=3.41, SD=1.165) others are touch, feel and see (M=3.23, SD=1.397), price change (M=3.36, SD=1.131), bargaining (M=3.07, SD=1.379),

attaining trust (M=2.97, SD=1.414), check quality (M=2.96, SD=1.497). The average total score computed was 3.2 with standard deviation 1.33.

Table 7 shows the descriptive statistics of the eight variables which indicate the factors influencing to switch from online to offline shopping indicates that the variable with high mean score is price change (M=3.43, SD=1.178) others are offers available (M=3.08, SD=1.267), replacement (M=3.13, SD=1.297), check quality (M=3.13, SD=1.317),

discount (M=3.15, SD=1.297), cash on delivery (M=3.09, SD=1.326) free delivery (M=3.03, SD=1.378), Safety transaction (M=3.13, SD=1.324). The average total score computed was 3.15 with standard deviation 1.3

Table 8 shows an Independent sample t-test was conducted to compare the consumer switch from offline to online purchasing in Yes and No groups. There was a significant difference in the Yes (M=17.62, SD=6.86) and No (M=15.23, SD=6.32) f=.091, p=.763. Since p>.05 the null hypothesis was accepted. There is no significant relationship while comparing price and features of other seller product and which lead to switch offline to online purchasing.

Table 9 shows an Independent sample t-test was conducted to compare the consumer switch from online to offline purchasing in Yes and No groups. There was a significant difference in the Yes (M=20.677, SD=6.726) and No (M=21.461, SD=4.718) f=6.671, p=.011. Since p<.05 we reject null hypothesis was accepted. There is significant relationship while comparing price and features of other seller product and which lead to switch online to offline purchasing.

# **SUGGESTION**

The dimensions of consumer's perception, preferences, frequency of shopping, methods of shopping and various influencing factors in this research can help managers to formulate business strategies and plans in a superior manner.

With the technological development, there is also increase in hacking activities, frauds and other anti-social activities which increases risk elements in online shopping. This also provides new opportunities for researcher to undertake research in this area.

## **CONCLUSION**

Online shopping has a long way to go however, it is not a threat to traditional shopping because many consumers still value some of its features like quality of customer service, the experience of trying and buying products, how products are displayed, real hand experience, relations with shopkeepers and so on. However, we can say that most of the respondents are aware about internet shopping but not shopping online as they enjoy going out for shopping and they don 't like providing personal information. No doubt future will be conquered of online shopping only but it is also important for all of us to understand how to shop online safely and wisely.

### References

- Ahmed, Z., Su, L., Rafique, K., Khan, S. Z., & Jamil, S. (2018). A Study on the Factors Affecting Consumer Buying Behavior towards Online Shopping in Pakistan. *Journal of Asian Business Strategy*, 7(2), 44–56.
- Sari, N. W. (2021). Consumer Preference for Product Categories Sold Online and Offline. *International Journal on Social Science, Economics and Art*, 11(1), 46–59.
- Singh, A., Dhayal, N., & Shamim, A. (2014). Consumer buying behaviour.

  International research journal of management socialogy & humanity,
  17.

# A STUDY ON THE PERCEPTION OF PUBLIC IN USING PUBLIC TRANSPORTATION IN THE COVID PANDEMIC PERIOD

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## INTRODUCTION

The outbreak of the COVID – 19 pandemic dramatically affected the world's population in early 2020.mobility was particularly affected since several governments restrictions, as lockdowns, remote working and closure of shops. Since the onset of the COVID-19 pandemic cities

across the world have had to enforce massive restrictions in public transport in order to limit transmission of virus and ensure safe passage of key workers during the emergency response. The government has taken new protective measures and protocols to protect passengers in their journey. Transportation sectors has the one of the primary victim of COVID-19. From rickshaw puller to airlines, all have been affected economically by the pandemic. India's overall emergency demand fell by 11% in march 2020. Due to lock down in many countries the demand for passengers transport has been adversely hit.

A further focal point of the study is the passengers' attitudes towards preventive measures and their perceptions on how well responsible bodies have implemented the measures (Aydin N ,2022).

During the outbreak of COVID-19, crowding has more disutility for rail passengers and the value of having a seat while traveling increased (Esmailpour J,2021)

In essence, efforts need to be directed towards restoring users' confidence and trust by providing a safe, secure and healthy environment to the public transport users (Raoniar R,2021)

# **OBJECTIVES**

- To know the availability of transportation services on time
- To study the problem faced by passengers during COVID 19

- To know passengers get any awareness from government for preventing COVID – 19
- To find out the variations in transportation fair during COVID 19

# **METHODOLOGY**

Three districts from Kerala will be selected based on maximum number of people and popularity.

Ernakulam, Alappuzha, Kottayam, were the districts. Primary as well as secondary data will be used. Primary data will be collected using a sample survey. 200 questionnaires will be given across the districts. Secondary data will be collected from various publications like articles, journals, magazines and also by referring the websites.

# **HYPOTHESIS**

# Hypothesis 1

- H0 there is no significant relationship between availability of transportation service and variation in transportation fair during covid 19
- H1 there is significant relationship between availability of transportation service and variation in transportation fair during covid 19

# Hypothesis 2

- H0 There is no significant difference between factors influencing problems faced by passenger and gender
- H1 There is a significant difference between factors influencing problems faced by passenger and gender

# DATA ANALYSIS AND INTERPRETATION RELIABILITY STATISTICS

The study examine relationship between the perception of public in using public transportation in the covid pandemic period. The aspects considered include the perception of public in using public transportation in the covid pandemic periods, know the availability of transportation services on time, study the problem faced by passengers during COVID – 19, know passengers get any awareness from government for preventing COVID – 19, find out the variations in transportation fair during COVID – 19. To identify these aspects, the researcher conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha(Cronbach) values relating to these aspects are presented in Table 1.

Table 1:Cronbach's Alpha for Measurement Scales used in the Study

Aspects	Cronbach's Alpha i	ha if Item Deleted		
	availability of transportation	.75		
	problems faced	.723		
	safety awareness	.800		
	variation in trans	.740		

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score Of the 4 constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales for the study.

Table 2: know the availability of transportation services on time, study the problem faced by passengers during COVID – 19: Descriptive statistics

-	_	_
	Mean	SD
There is a sanitising facility	2.01	1.078
Cleaning of seats after every trip	2.43	1.093
Ensure social distancing	2.41	1.115
Controlling of over crowding	2.29	1.222
Were available during day time	2.06	1.008
During night time	2.53	1.124
Regular days	2.27	0.921
Public holiday	2.57	1.173
Total	2.321	7.707

Source: Primary Data, N=155

Table 2 shows the descriptive statistics of the 8 variables which indicate the know the availability of transportation services on time, study the problem faced by passengers during COVID – 19. The variable with the highest mean score is public holiday (mean=2.57,SD=1.173)'. Others are during night time with 2.53 mean and SD 1.008, cleaning of seats (2.43 mean and SD 1.093), and ensure social distancing (Mean=2.41,SD=1.115). The average total score computed was 2.321

Table 3: the problem faced by passengers during COVID – 19: Descriptive statistics

	Mean	Std. Deviation
No of trips	1.90	.874
Charge	2.17	.938
Proper safety measures	2.39	.983
TOTAL	2.153	0.931

Source: Primary Data, N=155

Table 3 shows the descriptive statistics of the 3 variables which indicate the the problem faced by passengers during COVID – 19. The variable with the highest mean score is proper safety measures(mean=2.39,SD=0.983)'. Others are charge with 2.17 mean and SD 0.938, no of trips (1.90 mean and SD 0.874). The average total score computed was 2.153 with a standard deviation of 0.931.

Table 4: know passengers get any awareness from government for preventing COVID-1: Descriptive statistics

	Mean	Std. Deviation
Proper safety measures	2.39	.983
Physical distance	1.87	.945
Wearing mask	1.86	.757
Cleaning of hands	2.05	.844
TOTAL	2.04	0.882

Source: Primary Data, N=150

Table 4 shows the descriptive statistics of the 4 variables which indicates the. The variable with the highest mean score is social media offers(mean=2.26,SD=0.896)'. Others are attraction towards stores with 2.19mean and SD 0.941, new product line(2.05 mean and SD 0.986), The average total score computed was with a standard deviation of

Table 5: find out the variations in transportation fair during COVID-19: Descriptive statistics

	Mean	Std. Deviation
Regular charge	1.90	0.910
Sanitising were with trans charge	2.22	1.008
Seating arrangement result in increase in trans charge	2.15	.981
TOTAL	2.09	0.966

Source: Primary Data, N=155

Table 5 shows the descriptive statistics of the 3 variables which the Factors that the influencing the customer for buying the Apple brand product through social media platforms. The variable with the highest mean score is sanitising were with trans charge (mean=2.22,SD=0.018)'. Others are more discounts with 2.15 mean and SD 0.981, seating arrangements(2.15 mean and SD 0.981), .The average total score computed was with a standard deviation of 0.966.

### **Correlations**

### **HYPOTHESIS No:1**

H0 there is no significant relationship between availability of transportation service and variation in transportation fair during covid 19

H1 there is significant relationship between availability of transportation service and variation in transportation fair during covid 19

Table 6: availability of transportation service and variation in transportation fair during covid 19

	Mean	SD	1	2
Availability of transportation	6.277	2.220	0.000	
Variation in transportation	18.574	5.347	0.000	1

A pearson correlation was run to determine the availability of transportation service and variation in transportation fair during covid 19. From table:6, it is clear that there is no availability of transportation service and variation in transportation fair during covid 19 (r=-0.00, N=155, P=0.05) and which is statistically measured.

## **Independent Samples t-Test**

# **Hypothesis No:2**

H0 There is no significant difference between factors influencing problems faced by passenger and gender

H1 There is a significant difference between factors influencing problems faced by passenger and gender

Table 7: Concern level in problems faced and gender:

concern level in the problems faced by	Mean	n SD		Independent sample t-				
passenger	Mean			SD		test		
			F	P value	t	Df		
Male	6.1974	1.932	1.299	256	-1.225	148		
Female	6.6081	2.169						

An independent sample t-test was conducted to compare the problems faced by passenger and gender

project in male and female groups. There was a no significant difference in male group (M=6.1974, SD=1.932) and female (M=6.6081, SD=2.169), f=1.299, p=256. As p- value is greater than 0.05, it states that the male and female groups have no significant differences in the problems faced by passenger and gender. In other words, it means problems faced by passenger will not change with the gender

## **Anova Test**

# **Hypothesis No:3**

H0 there is no significant relationship between awareness of safety measures to passengers from government about covid 19 and age

H1 there is a significant relationship between awareness of safety measures to passengers from government about covid 19 and age

Table 8: awareness of safety measures of passengers from gov about covid 19

Age group	N		Df	ANOVA	F	Sig
19-29	13	Between groups	4		0.848	0.497
29-39	6	Within groups	150			
39-49	98	Total	154			
49-59	7					
59-69	31					
Total	155					

A one way subjects ANOVA was conducted to compare the awareness of safety measures to passengers from government, taking 5 age groups less than 19, 29-39, 39-49, 49-59 and above 59. Since, p>0.05, the null hypothesis was accepted. There is no significant difference between awareness of safety measures to passengers from government about covid 19 and age.

# FINDINGS, SUGGESTIONS, AND CONCLUSION OUR FINDINGS

# To know the availability of transportation services on time

Table 2 shows the descriptive statistics of the 8 variables which indicate the know the availability of transportation services on time, study the problem faced by passengers during COVID – 19. The variable with the highest mean score is public holiday (mean=2.57,SD=1.173)'. Others are during night time with 2.53 mean and SD 1.008, cleaning of seats (2.43 mean and SD 1.093), and ensure social distancing (Mean=2.41,SD=1.115). The average total score computed was 2.321

# To study the problem faced by passengers during COVID – 19

Table 3 shows the descriptive statistics of the 3 variables which indicate the the problem faced by passengers during COVID – 19. The variable with the highest mean score is proper safety measures(mean=2.39,SD=0.983)'. Others are charge with 2.17 mean and SD 0.938, no of trips (1.90 mean and SD 0.874). The average total score computed was 2.153 with a standard deviation of 0.931.

To know passengers get any awareness from government for preventing  $\underline{COVID} - \underline{19}$ 

A one way subjects ANOVA was conducted to compare the awareness of safety measures to passengers from government, taking 5 age groups less than 19, 29-39, 39-49, 49-59 and above 59. Since, p>0.05, the null hypothesis was accepted. There is no significant difference between awareness of safety measures to passengers from government about covid 19 and age.

Table 4 shows the descriptive statistics of the 4 variables which indicates the. The variable with the highest mean score is social media offers(mean=2.26,SD=0.896)'. Others are attraction towards stores with 2.19mean and SD 0.941, new product line(2.05 mean and SD 0.986), The average total score computed was with a standard deviation of

# To find out the variations in transportation fair during COVID - 19

Table 5 shows the descriptive statistics of the 3 variables which the Factors that the influencing the customer for buying the Apple brand product through social media platforms. The variable with the highest mean score is sanitising were with trans charge (mean=2.22,SD=0.018)'. Others are more discounts with 2.15 mean and SD 0.981, seating arrangements(2.15 mean and SD 0.981), .The average total score computed was with a standard deviation of 0.966.

A pearson correlation was run to determine the availability of transportation service and variation in transportation fair during covid 19. From table:6, it is clear that there is no availability of transportation service and variation in transportation fair during covid 19 (r=-0.00, N=155, P=0.05) and which is statistically measured.

## **SUGGESTIONS**

- Ensure that the paasengers are keeping social distancing and wearing masks in their journey
- The number of services should be increased in remote area
- In order to encourage ticket booking through online, discount may be given to those who book ticket through online
- Provide sanitzers to passengers

## **CONCLUSION**

The main aim of the project was to conduct a study on the perception of public transportation in the covid-19. The study helped to find out more about covid-19 affect public transportation. The analysis helped to identify the problem faced by passengers. The main objective is to accelerate urban and rural mobility for providing efficient, adequate, economically and properly coordinated system of transport services. COVID-19 situation the government has adopted new seating arrangements to ensure social distancing. The State Government has decided to increase the bus fairs to cover the losses incurred The government has taken new protective measures and protocols to protect passengers in their journey

### REFERENCE

- Aydin, N. (2022). The impacts of COVID-19 on travel behavior and initial perception of public transport measures in Istanbul. *Decision Analytics Journal*, 2, 100029.
- Esmailpour,J.(2021). Effects of COVID-19 on rail passengers' crowding perceptions. *Transportation Research Part A: Policy and Practice*, 154, 186–202.
- Raoniar, R.. (2021). Impact of COVID-19: A radical modal shift from public to private transport mode. *Transport Policy*, *109*, 1–11.

# ROLE OF SOCIAL MEDIA ADVERTISING: A STUDY ON THE BUYING DECISION OF WOMEN IN METROCITIES IN THE STATE OF KERALA.

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## INTRODUCTION

To drive digital engagement advertisers are integrating social media into their advertising programmes. Assessment with social media monitoring tools will help to understand the effectiveness of digital engagement. Digital engagement will lead to digital experience. It gives an insight to consumers engagement with social media platform(voorveld et al,2018).

Social media is a platform that is designed to allow people to share content quickly and in real time. It is a growing medium that could provide more awareness and promote positive social action it is in expensive since it uses internet. It will help to remove the burden of time constraints in traditional methods of communication (chirume, 2021).

Online advertisement has several parameters that lead to consumer buying behaviour it has created a great impact in purchasing habit of common people. It is a fast developing phase and play a significant role in buying behaviour. online advertising influence and give innumerable shopping opportunities for women with different national and international brands. There is a huge effect of online advertising on choosing cosmetic brands through social media advertising (sultana,2021).

## **OBJECTIVES**

- > To identify the effectiveness of social media advertising.
- To understand the parameters of buying decision of women.
- ➤ To analyse the impact of social media advertising in buying behaviour of women.

### **METHODOLOGY**

Three districts were selected based on the women in metro cities in Kerala. Ernakulam, Kottayam and Thiruvananthapuram were the districts selected as sample. Primary as well as secondary data has been used. Primary data has been collected using a sample survey. 200 questionnaires have been given across the districts. Secondary data has been collected from various publications write journals, magazines, articles and also by referring websites.

# **Data Analysis and Interpretation**

# **Reliability Statistics**

The study examines the buying decision of women in metro cities in the state of kerala. The aspects considered include identification of effectiveness social media advertising, understand the parameters of buying decision of women, and to analyse the impact of social media advertising in buying behaviour of women. To identify these aspects, the researchers conducted a thorough review of the literature and developed measurement scales that are appropriate for the study. The Alpha (Cronbach) values relating to these aspects are presented in table 1.

Table 1: Cronbach Alpha for Measurement Scales used in the study.

Aspects	Cronbach's Alpha
Effectiveness	.831
Social media help to maintain	.802
Parameters of buying decision	.813
Impact of social media advertising	.830
Total	.858

The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the four constructs measured , all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study .

# **Descriptive statistics**

Table 2: Effectiveness of social media advertising

Effectiveness of social media advertising	Mean	Std. Deviation
Consumers buying online such cosmetics items that are not available offline	2.09	.963
Cosmetics items online as it comes with a discount and gift voucher	1.87	.726
Items online from overseas market	2.01	.901
Smaller towns buy online such cosmetics items	2.00	.979
Total	1.99	0.89

Source: Primary Data, N=218

Table 2 shows the descriptive statistics of 4 variables which indicate effectiveness of social media advertising. The variable with the high mean score is Consumers buying online such cosmetics items that are not available offline (Mean=2.09,SD=.963) others are Cosmetics items online as it comes with a discount and gift voucher (Mean=1.87,SD=.726), Items online from overseas market (Mean=2.01,SD=.901), Smaller towns buy online such cosmetics items (Mean=2.00,SD=.979). The average total score computed was 1.99 and standard deviation .89.

Table 3: To understand the investment process of middle income households

To understand parameters of buying decision of women	Mean	Std. Deviation
Social media is higher in urban and rural areas	1.91	.780
Promote creation and maintain ties online	2.05	.804
Win over local language audience	2.03	.910
Self promotion on the parts of users	2.09	.864
Total	2.02	.839

Source: Primary Data, N=218

Table 3 shows the descriptive statistics of 4 variables which indicate the parameters of buying decision of women. The variable with the high mean score is Self promotion on the parts of users(Mean=2.09,SD=.864) Social media is higher in urban and rural areas (Mean=1.91,SD=.780), Promote creation and maintain ties online (Mean=2.05,SD=.804), Win over local language audience (Mean=2.03,SD=.910). The average total score computed was 2.02 and standard deviation .839.

Table 4: To analyse impact of social media advertising in buying behaviour of women

To analyse impact of social media advertising in buying behaviour of women	Mean	Std. Deviation
Customer engagement and improve conversion rates	1.86	.837
Better brand perception and loyalty	1.89	.866
Renewal cross selling and up selling	1.99	.859
Marketers should raise average order value	2.04	.945
Total	1.94	0.87

Source: Primary Data, N=218

Table 4 shows the descriptive statistics of 4 variables which indicate the impact of social media advertising. The variable with the high mean score is Marketers should raise average order value (Mean=2.04,SD=.945) Customer engagement and improve conversion rates (Mean=1.86,SD=.837), Better brand perception and loyalty Mean=1.89,SD=.866), Renewal cross selling and up selling

(Mean=1.99,SD=.859). The average total score computed was 1.94 and standard deviation .87.

# **Independent Sample T-test**

H<sub>0</sub>: There is no significant difference between gender and effectiveness of social media advertising.

H<sub>1</sub>: There is significant difference between gender and effectiveness of social media advertising.

Table 5 Gender and effectiveness of social media advertising

Effectiveness of social	Mean	Std. Deviation	Independent Sample T-Test			
media advertising and gender comparison			F	Sig.	t	df
Male	7.9950	2.6543	1.419	.235	.498	216
Female	7.6842	1.8575				

An independent sample t test was conducted to compare gender and effectiveness of social media advertising. There was significant difference in the male group (mean=7.9950,SD=2.6543)and female (mean=7.6842,SD=1.8575),f=1.419,P=.498.As P value is greater than 0.05 it states that the male and female group does not have any significant difference in effectiveness of social media advertising. In other words it means that effectiveness of social media advertising will not change with gender.

### One way ANOVA

H<sub>0</sub>: There is no significant difference between age and impact of social media advertising in buying behaviour.

H<sub>1</sub>: There is significant difference between age and impact of social media advertising in buying behaviour.

Table 6: Income and impact of social media advertising in buying behaviour.

		ANOVA			
Age groups	Frequency		Df	F	Sig.
16-26	174	Between Groups	2	.234	.792
26-36	39	Within Groups	169		
36-46	4	Total	171		
46-56	1				
Total	218				

A one way subject's ANOVA was conducted to compare the age and impact of social media advertising in buying behaviour. taking 4 age groups 16-26,26-36,36-46,46-56. Since P>0.05 the null hypothesis was accepted . There is no significant difference between age and impact of social media advertising in buying behaviour.

## Correlation

- H<sub>0</sub>: There is no significant relationship between effectiveness of social media advertising and parameters of buying decision.
- H<sub>1</sub>: There is no significant relationship between effectiveness of social media advertising and parameters of buying decision.

Table 7: Relationship between effectiveness of social media advertising and parameters of buying decision.

	Mean	Std. Deviation	1	2
effectiveness of social media advertising	7.9679	2.5927	0.000	
parameters of buying decision	7.7844	2.8323	0.000	1

A pearson's correlation was run to determine the relationship between effectiveness of social media advertising and parameters of buying decision. From table 7 ,it is clear that there is significant relationship between effectiveness of social media advertising and parameters of buying decision (r=0.000,N=218,P=0.05) and which is statistically measured.

### **FINDINGS**

- The coefficient of reliability is used as a measure of the internal consistency or reliability of a psychometric test score. A value greater than .7 is widely considered a good score. Of the four constructs measured, all aspects have got a value beyond this threshold limit indicating higher reliability of the measurement scales adopted for the study.
- Descriptive statistics of 4 variables which indicate effectiveness of social media advertising. The variable with the high mean score is Consumers buying online such cosmetics items that are not available offline (Mean=2.09,SD=.963) others are Cosmetics items online as it comes with a discount and gift voucher (Mean=1.87,SD=.726), Items online from overseas market (Mean=2.01,SD=.901), Smaller towns buy online such cosmetics items (Mean=2.00,SD=.979). The average total score computed was 1.99 and standard deviation .89.

- Descriptive statistics of 4 variables which indicate the parameters of buying decision of women. The variable with the high mean score is Self promotion on the parts of users(Mean=2.09,SD=.864) Social media is higher in urban and rural areas (Mean=1.91,SD=.780), Promote creation and maintain ties online (Mean=2.05,SD=.804), Win over local language audience (Mean=2.03,SD=.910). The average total score computed was 2.02 and standard deviation .839.
- Descriptive statistics of 4 variables which indicate the impact of social media advertising. The variable with the high mean score is Marketers should raise average order value (Mean=2.04,SD=.945) Customer engagement and improve conversion rates (Mean=1.86,SD=.837), Better brand perception and loyalty Mean=1.89,SD=.866), Renewal cross selling and up selling (Mean=1.99,SD=.859). The average total score computed was 1.94 and standard deviation .87.
- An independent sample t test was conducted to compare gender and effectiveness of social media advertising. There was significant difference in the male group (mean=7.9950,SD=2.6543)and female (mean=7.6842,SD=1.8575),f=1.419,P=.498.As P value is greater than 0.05 it states that the male and female group does not have any significant difference in effectiveness of social media advertising. In other words it means that effectiveness of social media advertising will not change with gender.
- A one way subject's ANOVA was conducted to compare the age and impact of social media advertising in buying behaviour. taking 4 age groups 16-26,26-36,36-46,46-56. Since P>0.05 the null hypothesis was accepted. There is no significant difference between age and impact of social media advertising in buying behaviour.
- A pearson's correlation was run to determine the relationship between effectiveness of social media advertising and parameters of buying decision. From table 7,it is clear that there is significant relationship between effectiveness of social media advertising and parameters of buying decision (r=0.000,N=218,P=0.05) and which is statistically measured.

## SUGGESTIONS

- The findings shows that social media can be used as an effective platform for advertising. so it is suggested to consider it as a effective marketing strategy to influence the buying behaviour of women.
- The drawback and challenges related with social media should also be assessed and it is suggested to provide proper safety measures.

## **CONCLUSIONS**

Social media advertising is considered as an effective marketing tool to influence the buying behaviour of women by utilising more features of social media it can bring out more opportunities in marketing a product. And it can also influence the buying behaviour of women in urban areas.

# **REFERENCE**

- Chirume, E. (2021). The Effects of Covid-19 on the Financial Sector and the Role of Social Media as an Advertising Tool in these Trying Times in Zimbabwe. *Journal of Economics and Behavioral Studies*.
- Sultana, A. (2021). Impact of online advertising and the use of cosmetic products: a study on the influence of online advertisements and change in the purchasing behaviour of women in Kerala. *International Journal of Communication and Society*.
- Voorveld, H. A. M., van Noort, G., Muntinga, D. G., & Bronner, F. (2018). Engagement with Social Media and Social Media Advertising: The Differentiating Role of Platform Type. *Journal of Advertising*.

# ROLE OF AUGMENTED REALITY (AR) IN MARKETING

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### **Abstract:**

Augmented reality (AR) is an enhanced version of the real physical world that is achieved through the use of digital visual elements, sound (or) other sensory stimuli delivered via technology. AR can be used to provide audience engagement. Brands can use AR to allow customer to try products before they buy them, with augmented shopping experience .AR in marketing advertising have found a unique and interactive way to engage audience with the company brand. AR helps the customers to visualize objects and observe, there by helping customers make well—informed buying decision. Many companies like Apple, Microsoft, Nike Ikea get benefited by using AR technology during pandamic situation .AR combine the real world and virtual world in wide large to target the customers .This paper aims at understanding how AR technology is enhancing throughout his/her buying decision process in the real world.

## **Keywords:**

Augmented Reality, Advertising, Augumented shopping experience, buying decision process.

## **Introduction:**

Augmented Reality is the integration of digital information with the user's environment in real time .AR delivers visual elements, sound and other sensory information to the user through a device like a smartphone (or) glasses. AR is used to either visually change natural environment in some way (or) to provide additional information to users. The primary benefit of AR is that it manages to blend digital and three-dimensional components with an individual's perception of the real-world.

Augmented Reality (AR) is an emerging trend in marketing and sales strategies. It allows brands to give customers unique experience with the convenience of tapping into their mobile devices. AR can provide users with sub-immersive feeling by allowing interaction's to occur between the real and

virtual world .Augmented Reality was first achieved to some extent by a cinematographer called Morton heilig in 1957. He invented the sensorama which deliverd visuals, sounds, vibration and smell to the viewer of course, it wasn't computer controlled but it was the first example of an attempt at adding additional data to an experience. Then in 1968, Ivan sutharland the American computer scientist (named the father of computer graphics) created an AR head- mounted display system.

# **Literature Review:**

Augmented Reality is the best tool to see the real time information in the form of graph's audio (or) other virtual enhancements. AR is becoming more popular technology used by many popular companies to attract the customers. AR is used not only in the shopping experience of the customers but also in schools, games, architecture field also.

AR is now used in medical training. Its application range from MRI applications to performing highly delicate surgery. But it's not limited to just training. AR also has used in during operations where it can help to reduce the need for more traditional invansive camera's and probes.

# **Objective:**

- To understand the significance of Augumented Reality in marketing.
- To present how different companies like IKEA, Zara etc., using AR to give the customer better experience.

AR in marketing is a way for brands to communicate with their target audience using interactive content through their mobile application's ,from clothing to home- bilding and brands can use AR to allow consumers to try products before they buy them , with Augmented Reality shopping experience becoming increasingly popular . There are some different companies using AR are IKEA, L'Oreal, Zara and many more.

## 1. IKEA:

IKEA a world-wide known "Assemble &install –it –yourself "furniture company with Swedish origin, launched an Augmented Reality App, namely IKEA place, it main aim to solve the problem like where the furniture to be placed in the house. IKEA App good because it automatically scales products – based on room dimension with 98% accuracy. The AR technology is able to see the texture of the fabric, as well as known as how light and shadows are rendered on your furnishing. IKEA start using this AR technology in September 2017. In order to visualize a product within a space, the application scans the room through iphone; user's can browse 2000 IKEA products as on

online database to their selection. The IKEA plans to realse an android version in the next couple of months.

IKEA has struggled with e-commerce sales partially because the customer was not satisfied about the product placements in the house for instance when a customer buys a sofa it doesn't fit in the house and colour was not matched with the house so the customer postpone to purchase a new sofa. After introducing the App AR in 2017 the IKEA described potentional uplift in sales from AR as a "Dream scenario" for IKEA, which is targeting €5 billion (\$5.9 billion) in online sales by 2020, up from the €1.4 billion (\$1.6 billion) it generated in 2016. IKEA place, customers can view 3-D rendring from different angles. IKEA place, the home decoratting chains mobile App that users AR to help people pick out furniture. IKEA is ranked NO: 2 among the free apps that use Apple's ARK it platform, ahead of dozen of gaming app's sensory data show.

## 2. L'OREAL:

L'oreal engages it's customers with immersive brand experience using AR to drive the products sampling & sales.It is the world's largest cosmetic company owns a unique international portfolio of 36 diverse and complementary brands- covering makeup, cosmetics, haircare, perfumes, skincare. In order to sustain its 100-old −legacy L'oreal company has invested €985 million in research and innovation in 2019 alone technologies such as AR and AI.In 2018 L'oreal announced the acquisition of modiface an international recognized leader in the application of AR in the beauty industry.

The company launched mobile app called style my hair, which allows consumers to try out different haircuts, colours and styles by using these app, we can use location technology app displays the nearest hair salons where users can get their hair style immediately. L'oreal Paris are investing in the development of its AR app "makeup Genius". L'oreal and perfect corp have launched a global partnership to integrate the group's makeup products into the "youcom makeup "AR app. L'oreal company partnership with amazon to allow the customers to buy the product, which were try on its makeup products before they buy.

## **3. ZARA:**

Zara is one of the largest international fashion companies. Zara is one of most successful fashion retail brands in the world. Zara Company has introduced AR displays to its stores on April 2018. AR displays in 120 stores around the world. Zara made it easy for shoppers to download the Zara app so they can point their smartphone at the shop windows and enjoy the AR experience of

top models is walking and talking around while sporting Zare's latest studio collection.

Customers can improve the price and get information on products in stores for many years by integrating AR; Harley Davidson is taking to next level like the AR technology is used in retail environment, shoppers are using their smartphone to see the price difference and also look at the additional information about the product. World famous motorcycle brand Harley Davidson is one great instance of a brand making the most of this trend. Harley Davidson is taking to the next level by developed a special AR app for its customers helps to view a motorcycle in store and customize it by changing painting jobs, adding accessories on their phone.

Harley Davidson conduct an AR demo let Participants swap between a vintage rusted out "Barn find" to a fully restored version of the bike superimposed over the real world space. Taking this experience of the customers can view the Bike to zoom in and look at all its internal parts in full 3D and its quality. Harley Davidson implemented AR app helps the business not spend more time on bike design, colour, model based on the customers requirements, as all we know that many customers says the colour, design and how the bike should be before they buy, they place the order according to his taste and preference and according to the customer wants the company should design the product, but now with the help of AR the customer can design himself the product before they buy instead of saying the details of colour, style, design with this AR customers may also get satisfied.

In a recent report is to believed, 60% of consumers prefer stores to provide AR experience, which 40% of them would love paying more after experiencing products through AR. If you want to shop for some antique furniture placed in the new house we scan with AR technology with 360 degree so that before placing it we use check whether the place is fit to place the furniture. Augmented Reality statistics says 35% of AR users are aged between 16 to 34. Augmented Reality market size, share and trends analysis report overview companies are using AR based apps for assembling functions, manufacturing functions, production line and analysis task and find solutions. According to a Neilson global survey from 2019, consumers listed Augmented Reality as the top technologies they are seeking to assist them in their daily lives. In fact 51% said they were willing to use this technology to asses' products.

AR technology can help in providing an immersive experience using 2D/3D models, AR books, AR games and subsequently, aid in the development of skills in the students. It also helps the travelers in searching for tourist spots

and suitable accommodations using AR based virtual tours For instance, Hub hotels by premier inn has using AR technology they placed a map to guide the tourist for best place and attractions nearby. AR technology can improve the imaginary skills in the students so that they can implement the ideas with the help of AR so that the hidden talents are come out from the students. The drum reports AR can capture people's attention for over 85 seconds, increase interactions rates by 20% and improve click through rates to purchase by 33%

AR shopping statistics says that by 2020, 100million consumers will use AR to shop both online the best example is IKEA AR technology. AR marketing is growing exponentially by 2030, experts estimate the industry as a whole will be worth more than \$76 billion, a massive growth from \$26.75 billion in 2021. AR classroom education can be more extraordinary and more interactive, because with the help of AR teachers can show visual examples of concepts and add gamming elements to provide textbooks and material support. AR is an excellent tool for bringing lessons to life and helping students remember in detail, and helps the students to grasp the abstract concept. The concepts of AR were used by the teachers are in more subjects and as well as in games. To better understand the subject more effective to the students there are some special apps like Mentimeter, Quizlet, Photomath, Evernote and Additio.

AR has gained more boosts to the mainly in medical education. The AR based technology enables the medical students to learn using a 3D holographic anatomy programme which dives deeper into the human body AR in training gives an immersive, multi-sensory experience which is more effective than traditional methods like classroom, lectures & textbooks it results effective training. AR play's a major role in maintenance and repair for instance Hyundai was the first mainstream introduced AR technology with the help of a smartphone; tablet users get information about maintenance, repair and features. AR allows inexperienced people to identify the problem in the maintenance & repair and these AR can guide step-to-step in detail about the problem just if we placed these AR technology in taqblet near the product it will identify and give the guide about how to repair yourself without a mechanic

AR is also plays a major role in the games app. Some of the games using AR is Zombie Run, Jurassic world alive, Temple treasure hunt and many more

## 1. Zombie Run:

These AR games out these that are redefing the Augmented Reality experience by engaging users with stunning visualsb and graphics. AR

games that are literally rocking the AR market. These Zombie Run game main aim of designing the AR gaming app is for those who love a morning jog throughout the city. It is afree app that offers adventure to the players in this game.

From the start of the game throws a player into the Zombie world where Zombies attack the player in that items in the middle thay have to collect the items in the middle of running itself and also game plays music, motivational narrations to give the boost to the player. The Zombie Run game was downloads are 20k on July 2022 worldwide and its revenue \$40. The average rating is (21,258).

## 2. Jurassic world alive:

Jurassic world alive (JWA) game was released in 14-march 2018.JWA is a free to play location based Augmented Reality game. This game takes player into the prehistoric times where huge creachers are running freely in modern day civilization.

Players can see different aspects of the Jurassic world come across mammoths, dinosours, tyramosurus and pteranodons and players can collect the DNA and create its own creation. They can share their creation to the other players in the mobile phone.

The game gives the best experience to the customers and also at time knowledge about theb dianosour with fun and entertainment. JWA game was downloaded by 1cr, rating is 4.3 & JWA revenue total more than \$40million worldwide.

### **Conclusion:**

This study and research of this thesis have been stated the idea about ability of AR technology in the market in order to give the best experience to the customer try the product, before they buy it. During this paper presentation writing clearly understand that the AR is used in different places like schooling, marketing, architecture field, games and many more. AR can change the world completely. After this research I strongly believed that AR play most powerful role in the market in the concept of satisfaction of the customer. AR technology can save the time of the customer for searching the product in the fast running world.

### **References:**

- 1. Alexander S. Gillis, Technical writer and Editor, Augmented Reality (AR) published in whatls.com
- 2. International design Foundation article about Augmented Reality- The past, The present and future

- 3. Christopher McFadden (15- Nov -2020), 9 powerful Real –World Applications of Augmented Reality published in INTERESTING ENGINEERING
- 4. Jovan (27 April- 2022) AR Statistics Published in KOMMANDO TECH
- 5. Selcen Ozturkcan (13 August 2020) research article
- 6. Ikea Francing (12 september 2017) ikea launches ikea ,a new app that allows people to virtually place furniyure in their home
- 7. Samuel Axon (24- June 2022) AR, and meet ML: IKEA app lets you erase and replace furniture Published in arstechnica
- 8. Zachary Amos, What's the future of AR in 2022 published in ZESIUM
- 9. Toshendra Sharma (1- March, 2019) How the bussiness are using AR to enhance their apps
- 10. Cristina Ferrandez (2-september -2021) Augmented Reality Cosmetics published in popular. studio
- 11. Nabeel (13-January- 2021) Best Augmented Reality games for 2022 Published in popular.studio
- 12. Simon Designan (5- 7-2021) AR apps used in education published in TE<REVOL
- 13. Murat Akcayir, Gokce Akcayir (November 2016) an of Advantages and challenges associated with AR for Education published in Research gate.

# A STUDY ON THE EFFECTIVENESS OF VIRTUAL CLASSES DURING LOCKDOWN PERIOD

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# **Abstract**

COVID-19 is a highly infectious disease caused by Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2) originated in Wuhan city in China. On 11 march 2020 World Health Organization (WHO) declared COVID-19 as a pandemic. On March 22 and 24 India observed Janata Curfew to combat the corona virus pandemic and from 25 march 2020, the first phase of lockdown was announced by the Prime Minister. In all the phases of lockdown from lockdown 1.0 to lockdown 5.0, the whole educational sector in the country was temporarily closed down. The COVID-19 has resulted in schools shut all across the world. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. This study is to analyse the effectiveness of virtual classes during COVID-19 pandemic and also helps in understanding various dimensions of virtual classes and the attitude of undergraduate students towards online classes. The study collected data from the undergraduate students in Kottayam district through convenient sampling method. A structured questionnaire is circulated through Google form for this purpose among the students and 60 samples were collected. The major tools used for testing the hypothesis of this study are Mean, Median, Standard Deviation and One-way Anova. The test was conducted using Statistical Package for Social Sciences (SPSS). The findings of the study state that the support and encouragement provided to student during virtual classes have influence on the effectiveness of classes as well as the engagement of students during online classes. The study also states that the implications of online classes is not related to the academic year of the students. The study reflects the need for inculcating more student engagement programmes as well as support systems to ensure the effectiveness of virtual classes. This is significant as virtual classes continued to be a promising academic platform even though the restrictions of Covid-19 were withdrawn. The study will be beneficial for the policy makers and educational institutions to frame strategies to make better learning outcomes and also to address relevant problems related to virtual classes.

# **Keywords:**

Virtual class, Online learning, Lockdown, Covid-19

# Introduction

21st century is now witnessing the downside of a health crisis which is COVID – 19. The genesis of COVID-19 disease has been tied to the Hubei Province of China and rapidly progressed to the level of a global pandemic, with multiple countries across the globe reporting exponentially increasing numbers of cases (WHO 2020). In all spheres of life, the shadows of this contagious virus have made painful marks. People are pursued to follow unaccustomed practices and life style. Global community accepted the need of the hour with extreme caution. Governments of almost all the nations came forward with multiple measures to mitigate and prevent the spread. The pandemic is potential enough to influence the world's economic as well as social structure. This strange scenario brought certain new pattern of life among the people. One such phenomenon is Virtual Learning.

The impact of COVID-19 has resulted in closure of all educational institutions across the world. Above 1.2 billion students are out of the classroom during the lockdown period. As a result, educational system has completely changed by adopting e-learning, where learning process are conducted through digital platforms. Virtual classroom is an online learning platform which allows the live interaction between the teachers and students and allows access towards video screen sharing, conferencing, interactive hours etc. Virtual classrooms are meant to replicate the experience of physical classrooms, with added benefits of file sharing, instant feedback, interaction.

# **Review of Literature**

(Francis, 2020) conducted a study to achieve the objective of analysing the effectiveness of online teaching and learning among the students during covid 19 lockdown. The study focuses on students' perception towards online teaching and learning based on the faculty. The survey focused on aspects such as (i) Personalized Learning (ii) Expert Help (iii) Comfortable (iv) No

time limits (v) Easy and quick assessments. The findings of the paper highlighted that personalized learning were the most suitable during online teaching and learning towards academic achievement among the students and No time limit was found to be the least preferred among them. The study recommends to encourage the students to adapt the collaborative forms of learning, engage in group activities, comprising on the right blend of groups (based on faculty) this will help in peer mentoring and a care-share approach.

(Radha, Mahalakshmi, Kumar, & Saravanakumar, 2020) analysed the effect of e-learning during COVID-19 lockdown period. It aims to study the e-learning process among students who are familiar with web-based technology. The stratified sampling method has been adopted in this study and the sample size is 175 across the world. The study was done for the students who are studying in various colleges and universities and even schools to gain additional information regarding the contribution of e- learning during this pandemic. The results of the study reveals that the effect of e- learning has resulted in increasing the student's interest in using e-learning resources, and also their performance. The result of the study shows that virtual learning has become an emerging concept among the students all over the world during the COVID-19 pandemic period.

(Muthuprasad, Aiswarya, Aditya, & K Jha, 2021) examined the Agricultural Student's perception and preference towards the online learning through an online survey of 307 students in India. This study also explored the student's preferences for various attributes of online classes, which will be helpful to design effective online learning environment. The findings of the study states that majority of the respondents are willing to opt online classes to manage the problems arising during the pandemic period. Using content analysis, it was found that students prefer recorded classes with quiz at the end of each class to improve the effectiveness of learning. The respondents are of the opinion that flexibility and convenience of attending online classes makes it an attractive option, but the connectivity issues in rural areas makes it a challenge for them to make use of online resources.

(Sanad & EI-Sayyed, 2020) has made a study at exploring the perceptions of students and teachers on the use of e-learning during the COVID-19 lockdown phase among the students of various Egyptian private and governmental universities. Many challenges and difficulties faced different universities as it was the first time for some of them to depend on e-learning completely. Instruments included a teachers' reflection survey and a students' reflection survey. They were used to determine the perception of the respondents.

Findings of the study states that, teachers and students are willing to adopt elearning options during and after the lockdown phase, despite some challenges. The study suggested that e -learning programs be organised to develop English language skills such as reading, vocabulary and speaking.

(Jena, 2020) conducted a study to determine the impact Covid-19 pandemic on the education sector in India. The article emphasizes on how online learning is beneficial during times of crises like work absences or pandemics. The main objectives discussed are it enlightens various online tools/platforms adopted by educational institutions during the pandemic

Covid-19, highlights some merits and demerits of online learning, enlist the views of learners and educators on online learning system during lockdown. Some journals and e-contents relating to online learning system are studied to find out the problems associated with the online learning system especially during the lockdown. The finding of this research is that online learning is the most common method of distance learning today. During the lockdown period for Covid-19 online learning is the best platform to keep learners/educators engaged and safe by maintaining social distance.

#### **OBJECTIVES**

- To assess the support and encouragement provided to the students towards the effectiveness of virtual classes.
- To examine the support and encouragement provided in increasing the engagement of students in online classes.

#### HYPOTHESIS OF THE STUDY

- Ho: There is no significant difference among the effectiveness of virtual classes and the support and encouragement provided to the students.
- Ho: There is no significant difference among the engagement of students in virtual classes and the support and encouragement provided to the students.

## **TESTING OF THE HYPOTHESIS**

- A) Effectiveness of online classes
- H0: There is no significant difference among the effectiveness of virtual classes and the support and encouragement provided to the students.
- H1: There is significant difference among the effectiveness of virtual classes and the support and encouragement provided to the students.

Table 1: support and encouragement provided to students and effectiveness of online classes during the pandemic covid-19

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups Within Groups Total	2.396 3.394 5.790	13 46 59	.184 .074	2.498	.011

Source: Primary Source

A one-way ANOVA was conducted to compare the effectiveness of virtual classes and the support and encouragement provided to the students. Since P<0.05, the null hypothesis was rejected. So, there is significant difference among the support and encouragement provided to students and the effectiveness of online classes during the pandemic COVID-19.

## B) Engagement of students in online classes

H0: There is no significant difference among the engagement of students in virtual classes and the support and encouragement provided to the students.

H1: There is significant difference among the engagement of students in virtual classes and the support and encouragement provided to the students.

Table 2: Support and encouragement provided to students and engagement of students in online classes

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups Total	6.931 11.622 18.554	13 46 59	.533 .253	2.110	.032

Source: Primary Source

A one-way ANOVA was conducted to compare the engagement of students in virtual classes and the support and encouragement provided to the students. Since P<0.05, the null hypothesis was rejected. So, there is significant difference among the support and encouragement provided to students and engagement of students in online classes.

#### **FINDINGS**

- There is significant difference among the effectiveness of virtual classes and the support and encouragement provided to the students
- There is significant difference among the engagement of students in virtual classes and the support and encouragement provided to the students

#### SUGGESTIONS

- Providing more infrastructure facilities to students will improve the effectiveness of virtual learning.
- Training on the virtual learning tools will enhance the knowledge of students as well as teachers in their engagement in virtual classes.
- A creative and effective approach towards online learning mechanism should be included in the curriculum.
- Awareness and support system for virtual classes should be introduced in schools and colleges.

#### **CONCLUSION**

Virtual classroom is an online learning system which allows the students and teachers to communicate and collaborate in real time. The virtual learning platform can replace the physical classrooms with the added benefit of file sharing, instant feedback, time management etc. apart with some limitations. From the study it was found that the support and encouragement provided to the students during the online classes can improve the effectiveness of virtual classes. In addition to this, it will improve the engagement of students in the classes. Therefore, the study reflects that an increased support and encouragement will help taking all the advantages of virtual classes.

#### **BIBLIOGRAPHY**

- Francis, R. (2020). Students' Perception on Online Learning during Covid-19 Lockdown. *Editorial Board 9 (7)*.
- Jena, P. K. (2020). Impact of pandemic COVID-19 on education in India. *International journal of current research*.
- Muthuprasad, T., Aiswarya, S., Aditya, K., & K Jha, G. (2021). Students' perception and preference for online education in India during COVID-19 pandemic. *Social Sciences & Humanities Open*.
- Radha, R., Mahalakshmi, K., Kumar, V., & Saravanakumar, A. (2020). E-Learning during lockdown of Covid-19 pandemic: A global perspective. *International journal of control and automation* 13 (4), 1088-1099.
- Sanad, D., & EI-Sayyed, H. A. (2020). Perceptions towards E-learning in times of COVID-19
- Lockdown phase in the Tertiary Education. *Journal of Research in Curriculum Instruction and Educational Technology* 6 (4).

## **GROWTH IN E-COMMERCE SECTOR AFTER COVID-19**

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#### **ABSTRACT**

Before the innovation of smart phones customers used to consume products in traditional manner. Even after the innovation of Smart phones and E – commerce platforms, the customers some people may buy Goods through E-Commerce platforms Like (Amazon, Flipkart, Walmart, Etc...) and rest of the uses to buy goods Traditionally. After 2014 the E Commerce sector slowly grown up. But after the Covid pandemic there is a Boom in E-commerce Sector. Although it has advantages, it also has limitations.

This paper provides a brief overview on E-Commerce sector development after Covid Pandemic. Suggestions are given to reach out this facility to rural areas.

**Key words:** E-Commerce, Boom, online shopping, Consumers, Covid pandemic.

#### INTRODUCTION

E-Commerce is also Known as Electronic Commerce. Through electronically all the products and services are traded. It enables consumer to buy products at cheaper price and at door step. The outbreak of Covid-19 has forced people to stay at home. The constant lockdowns imposed in the early outbreak of Covid-19 has changed the life style of people in buying products and services and this led consumers to move into E- Commerce. This also enables many brand, small retailers to adopt Online route leading to online business.

#### **REVIEW OF LITERATURE**

S. Chakraborty and V. Soodan (2019) examined the utilitarian and hedonic motives which leads to shopping intentions. Online shopping generates value for the customers and wide range of benefits like convenience, reduced cost, more choices, discovering latest trends and shopping online across the world. Utilitarian shopping motivation is task- oriented like convenience, availability of information, cost saving and product selection or variety. In utilitarian shopping, the value is derived when a user gets the desirable product with minimum efforts or annoyance. Hedonic shopping motivation is pleasure oriented like entertaining, playful and emotive. In hedonic shopping, the value is derived when a user experiences pleasure in shopping. The author emphasised the E – Commerce provided benefits like convenience, reduced cost, more choices, discovering latest trends. It has reached both Urban and

Rural areas. So, the people can get the desirable products at minimum efforts and cost. So, the consumers can get benefitted with this Online shopping.

**A.B. Jibril et. al. (2020)** used Stimulus-Organism-Response framework accompanied by online consumer behaviour to understand the initial adoption of online retail stores in low internet penetration areas. The author mainly focuses on three types perceived Ease to access, perceived convenience, Economic benefit of pricing and intention of use online products. The continuous growth of Internet usage will result in stimulus for online shopping adoption and usage in retail environment

**Phil Pomford, Business Standard** (**March 10, 2021**) "The Indian E-Commerce industry has witnessed a huge upsurge due to COVID-19 and there is substantial room for future growth,". The author states that in India there is a huge Upsurge in Indian E – Commerce sector after Covid pandemic, in future India's E - Commerce sector will grow very rapidly.

## RESEARCH OBJECTIVES

- To examine the impact of Covid 19 on Indian E Commerce Sector.
- To analyse the reason for shifting to online Shopping from the view point of customers.
- To explore the challenges faced by customers in online shopping.
- To offer suggestions for enhancing the growth of E Commerce.

## RESEARCH METHODOLOGY

The present research paper is based on explorative research. The Sample is collected from 195 respondents. Statistical tools such as Chi – square testing, correlation is used to analyse the data with the help of SPSS.

### **Sources of Data:**

- Primary data is collected from 195 respondents through online forms.
- Secondary data is collected from Website, Newspapers and Research articles.

#### SCOPE OF THE STUDY

This paper provides a brief overview on E-Commerce sector development after Covid Pandemic. Suggestions are given to reach out this facility to rural areas.

#### **TESTING OF HYPOTHESIS**

## **Hypothesis 1**

- **H**<sub>0</sub>: There is no significant relationship between age and Online shopping of Products and services.
- H<sub>1</sub>: There is significant relationship between age and Online shopping of Products and services.

## **Hypothesis 2**

- **H**<sub>0</sub>: There is no significant relationship between Gender and Online shopping of Products and services.
- **H**<sub>1</sub>: There is significant relationship between gender and Online shopping of Products and services.

#### FINDINGS IN RESEARCH

## Results of Hypothesis 1 based on Chi square Testing Chi-Square Tests

			Asymptotic
	Value	df	Significance (2-sided)
Pearson Chi-Square	13.540a	4	.009
Likelihood Ratio	9.983	4	.041
N of Valid Cases	193		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is .16.

## Symmetric Measures<sup>c</sup>

		Value	Approximate Significance
Nominal by Nominal	Contingency Coefficient	.256	.009
N of Valid Cases		193	

c. Correlation statistics are available for numeric data only.

#### **Inference:**

According to the result, it was inferred that there is significant relationship between age and Online shopping of Products and services.

## Results of Hypothesis 2 based on Chi square Testing Chi-Square Tests

	_		Asymptotic
	Value	df	Significance (2-sided)
Pearson Chi-Square	14.002 <sup>a</sup>	2	.001
Likelihood Ratio	11.389	2	.003
N of Valid Cases	193		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .16.

#### **Inference:**

According to the result, it was inferred that there is significant relationship between gender and Online shopping of Products and services.

#### INTERPRETATION OF RESULTS

After the outbreak of Covid - 19 in India, the Indian E – Commerce sector
has grown up, which led to the opening up of a new opportunities in various
sectors of Business. Now E – Commerce is the most preferred option for
every consumers. In addition to this, a growing number of exclusive

products in the market and lower prices of goods due to the direct distribution channel also contribute towards the growth of the global ecommerce market.

- It is inferred from the Research that, 84% of the respondents were using online shopping, the rest were adopting to retail business.
- 49% of the respondents were less than 20 years, and 41% of the respondents were in the age group between 20 and 40 years.
- Around 37% of users used E-Commerce sites seasonally, 27% of users used online shopping every month and 23% of users used online shopping sites every week.
- Respondents belonging to the age group of 40 to 60 started using online shopping during and after the pandemic. This indicated that there is an increase in usage of mid aged online shoppers during and after pandemic.
- Based on my research, out of 195 respondents, 79% of the respondents were Male and 21% of the respondents were Female which showed male preferred online shopping purchasing than Female.
- 76% of the respondents using E-Commerce were located in Urban area, 10% of the respondents were in Sub Urban and 14% of the respondents were in Rural area. This indicated penetration of E-Commerce in Sub Urban and Rural area is quite low When compared to Urban area.
- Amazon, Flipkart and Swiggy were the most preferred online shopping sites and apps by the users.
- Most of the Male consumers preferred to buy electronic appliances, food, clothing and books. But Female consumers preferred to buy electronic appliances, home appliances, dairy product, cosmetics, groceries, Clothing's and vegetables through online.
- E Commerce was the most preferred option to every Consumers due to convenience, easy access, discovery of new trends, availability of comparison of products at one platform.
- According to the users, E-Commerce store provided lesser price when compared to physical stores. Hence it was the most beneficial factor that motivated the customers to move into E-Commerce.it was followed by Convenience as many products were available in the door step without standing in queues at physical stores. Saving in Time was rated as third beneficial factor from the viewpoints of customer.
- Cyber security issues posed to be one of the major challenge in E-Commerce as people felt there is lack of security in sharing personal and financial data in E-Commerce websites. This was followed by wrong and delayed delivery of goods. Poor quality and Refund issues was also considered as major challenge by customers in adopting to E-Commerce.

#### SUGGESTIONS TO ENHANCE THE GROWTH OF E-COMMERCE

- E Commerce websites and apps can focus in spreading Digital literacy with special reference to online shopping of goods and utilization of services.
- Financial literacy programmes can be organised by Banks and Financial Institutions to ensure safety of customers while using E- Commerce transactions.
- E-Commerce sites have to build trust amongst the customers.
- E-Commerce sites have to advertise their sites with attractive features and provide customer friendly online shopping features in order to attract mid aged consumers and senior citizens.
- E-Commerce websites and apps must take adequate measures to ensure cyber security and protect personal, financial data of the users.
- E-Commerce website must concentrate in providing qualitative service, prompt delivery of goods and delivering goods and services as per the specifications mentioned in the websites.
- Special focus must be given to sub urban and Rural areas by E-Commerce organisations in order to penetrate into Rural Sector.
- Government and Telecommunications Authorities can focus in establishing good infrastructure with regard to telecommunication and Internet facilities.
- Hubs, Delivery point centres, Point of service terminals, Customer care centres can be established In Rural and Sub-Urban areas in order to provide E-Commerce benefits to the consumers residing in developing areas of our country.

## **CONCLUSION**

As a result, E-Commerce is a good initiative, with lot of advantages. Ensuring Cyber Security, Creation of good infrastructure, awareness on Digital and Financial Literacy, Establishment of customer care centres can definitely help in the help of E-Commerce.

## **REFERENCES**

- 1. Chakraborty, S., & Soodan, V. (2019). Examining Utilitarian and Hedonic Motivations in Online Shopping in India: Moderating Effect of Product Browsing Behaviour. International Journal of Recent Technology and Engineering (IJRTE), 8(May 1C2), 117–125.
- 2. Jibril, A.B., Kwarteng, M.A., Chovancova, M., Vykydalova, N. (2019). The role of the social media brand community on consumers' purchasing attitude. In ECSM 2019 6th European Conference on Social Media (p. 135). Academic Conferences and publishing limited.
- 3. Business standards (March 10, 2021 15:44 IST), Digital commerce accelerated during the pandemic worldwide, says report that tracked trends in 41 countries.

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E References:
1. https://www.business-standard.com/article/economy-policy/indian-e-
commerce-to-grow-84-in-4-years-helped-by-covid-19-impact-study-
121031000846_1.html
2. What are the Limitations of eCommerce Businesses - Shiprocket
3. https://www.become.co/blog/ecommerce-advantages-consumers-
businesses/

#### HR ANALYTICS IN HRM

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#### **Abstract:**

The growth and adoption of HR Analytics helps to demonstrate the performance of an organization .HR Analytics is mostly used by top level managers. This method conveys about the information of nature of skills that every employee consisting to train them and may reach greater heights along with organizational development. To find out whether the HR Analytics is useful in Human Resource Management. To verify the usefulness in HRM we are conducted a questionnaire to some of the HR managers .It results in the proper efficient performance of the manager. This paper mainly aims to provide the information about HR analytics and in which areas of applications of this HR analytics particularly helps us develop the human resource which is the permanent movable asset of an organization and helps to give more productivity.

## **Keywords:**

Efficient performance of Management, Human resources management, HR Analytics.

#### **Introduction:**

Human resource management is aligned towards investing all the tools and techniques, practices, strategies, approaches and measures to understand the performance of employees and employees who work together to achieve organizational goals. As we all know, Humans are the most permanent and important resource for any organization.

HR Analytics is a topic that is rising in popularity among HR professionals. Analytics in HR aims to be the leading platform about this subject. Normally people work in an organization as teams. Teams are consisting of more than two members. In teams we are having talented, engaged employees helps a company gain a competitive advantage.

In this paper, I want to convey the issue about the why employees of an organization are leaving the organization and also who is the next employee

ready to leave the organization to analyze this issue and able to predict the employee to stay back within the organization.

## Companies that are using HR Analytics:

The companies that are using HR Analytics to increase the work force of an organization. Namely they are:

- 1. Google.
- 2. Juniper Networks.
- 3. Wal-mart.
- 4. Microsoft.
- 5. Royal Dutch shell.

#### 1. Google:

Google has been able to completely changes the HR works with emerging trend as HR Analytics . It helps to take better management decision and increases the productivity metrics to measure the effectiveness and also these metrics helps to improving methods and morale .

It uses analytics differently by regularly, surveying employees and verification can be optimize through the numerous areas of its people processes and it contributes increases in working culture of any organization.

#### 2. Juniper Network:

A Networking and cyber security solutions company believes in pushing the envelope when it comes to the radically changing HR industry. They are aiming for more and best outcomes with the available and latest technology process to achieve success in their business.

This HR Analytics aim to diverse industry as career paths, helping Juniper develop fresh and modern strategies for attracting and retaining current and future talent.

#### 3. Wal-mart:

It mainly focuses on largely capability metrics, helping the business determine if processes are being rolled out the way they initially designed to. If - over time – the process is working as intended then they begin to analyze the value it brings to the business and employees.

The company also focuses on employee turnover and movement as it relates to their work force metrics. The way that Wal-Mart uses people analytics enables them to illuminate roles and career path of employees. Especially in relation to talent development band capability. The outcome is improved performance, efficiency and greater success in virtually all the company does to achieve organizationalgoal.

## 4. Microsoft:

Microsoft focus on data driven, HR as a best practice. HR Analytics helps manage their customers and businesses as well. One of the most innovative things microsoft is the using HR Analytics is to develop statistical profiles of the employees.

They begin a variety of HR interventions, such as assigning mentors and opening further discussion for growth and earning potential within the organization, making opportunity for enhanced workplace communication.

HR Analytics helps to reduce attrition rates and high turnover rates by more than half in each instance and ia able to adopt the same tactics to the other areas of business. It helps to identify the overall employee experience and organizational process to reach the goals.

## 5. Royal Dutch Shell:

This is petroleum company took to analyze their wealth of data. They collected information or data around 1400 employees regarding the organization and work force in several departments, through this they are able to analyze the data with different circumstances and identified the problems and they sorted all the problems with help of Big data, HR Analytics, HR metrics and people Analytics. Know the organization performance is effective and efficient in its productive levels in order achieve its common goals.

## The areas that uses HR Analytics mainly:

- 1. Turnover.
- 2. Recruitment.
- 3. Collecting data.
- 4. Organizational performance.
- 5. Operations
- 6. Process optimization.
- 7. Time to hire.

#### 1. Turnover:

When employees quit, with several reasons. In this aspect HR Analytics helps to determine the employee engagement and employee satisfaction and performance.

#### 2. Recruitment:

Organization are hiring people not only based on their skills but also they verifies the nature of the employee and they are able to decide the work

culture and performance and creative nature of the employee in solving the problems of organization.

## 3. Collecting data:

It helps to sort out the problems of an organization through the collection of data in all aspects of employees available in the organization. It is related to the talent management and it also helps in recruitment, training and performance evolution of the employee of an organization.

## 4. Organizational performance:

It is HR Analytics monitored area, as the data is to be collected and compared to better understand turnover, absenteeism and recruitment are the outcomes and altogether only we can demonstrate theorganization performance.

#### 5. Operations:

The data is monitored to determine and describes about the effectiveness and efficiency of HR functions and initiatives daily ,all these comes under the Operations of the organization.

## 6. Process optimization:

The data that is collected in an organization helps to determine the employee productivity levels through the predictive analysis and it also demonstrates the difference between the organization performance and operations, it helps to notify the process Optimization of the organization productivity.

## 7. Time to hire:

It comes under the decision making aspect of HR Analytics as the employee should be hired by the management when there is necessary in recruiting employees to increase productivity of the organization.

All these are the major areas of HR Analytics used in the present scenario of the digitalized era. Now a day's world is a rounded with the technology. It helps to determine the employee productivity of the organization.

#### **Conclusion:**

HR Analytics is the process of collecting and analyzing human resource data in order to improve an organization work force performance. The process can also talent Analytics, people Analytics, even workforce analytics and also it HR as to collect the data and analyze it for the organizational goals and strategies.

Finally I concluded that HR Analytics helps to determine the employee turnover and assess the employee productivity levels of an organization. Its helps to analyze the collected data from the employees of an organization and HR can be able sort the problem with the available best solution by using the

different decision making analytics. As employees are the movable asset of the organization. HR always tries to protect the employees of an organization in all aspects of their life.

"Employee with satisfaction in the organization, able to produce more productivity and helps to achieve organizational goals".

#### **References:**

- Ben-Gal, H.C. (2018), "An ROI-based review of HR analytics: practical implementation tools", Personnel Review.
- Bhattacharyya, D.K. (2017), HR Analytics: Understanding Theories and Applications. New Delhi: SAGE Publications.
- Chib, S. (2019), "Monograph on HR reporting using using HR dashboards", International Journal of Scientific and Research Publications.
- Fred, M.O. and Kinange U.M. (2015), "Overview of HR Analytics to maximize Human capital investment".
- Gurusinghe, N, Arachchige, B.J.H. and Dayarathna, D. (2019), Identified Research Gaps in HR Analytics, Conference: Challenges to Humankind in the Face of New Technologies at Colombo, Sri Lanka.
- Jabir, B., Falih, N. and Rahmani, K. (2019), "HR analytics a roadmap for decision making: case study", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 15, No. 2, pp. 979-990.
- Jain, A. and Nagar, N. (2015), "An Emerging Trend in Human Resource Management", SS International Journal of Economics and Management, Vol. 5, No. 1, pp. 1-10.
- Kiran K.S., Sharma, N. and Brijmohan D.R. (2018), "HR analytics: transactional to transformational HR approach", International Journal of Advance and Innovative Research, Vol. 5, No. 3, pp. 1-11.
- Kirtane, A. (2015), "corporate sustainable HR Analytical practices", Journal of Management & Administration Tomorrow, Vol. 4, No. 1,pp. 33-40.
- Levenson, A.R (2005), "Harnessing the power of HR analytics: why building HR's analytics capability can help it add bottom-line value", Center for Effective Organizations, Vol. 4, No. 3, pp. 3-12.
- Lochab, A., Kumar, S. and Tomar, H. (2018), "Impact of Human Resource Analytics on Organizational Performance: A Review of Literature Using R-Software", International Journal of Management, Technology And Engineering, Vol. 8, pp. 1252-1261.

## DRIVERS AND DAMPENERS OF ONLINE START UPS – ENTREPRENEUR'S OUTLOOK

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#### **Abstract:**

Entrepreneurship has regained its prominence in the recent economic atmosphere and evolved as the most desired means of livelihood of the young generation. People with unique ideas start their businesses with very little money and generate profit by providing goods and services online or offline. A study was carried out on the basis of data collected from 75 respondents to evaluate the prospects and problems experienced by online business owners when setting up and operating their operations through online platforms. The report makes it obvious that choosing the internet as a platform for their business has both benefits and drawbacks. We also saw that business owners are using internet platforms without adequate awareness of governmental regulations and help schemes. Additionally, our research assisted us in identifying a number of issues that business owners encounter as they try to develop and maintain the seamless operation of their day-to-day operations. However, the study's findings have provided some recommendations for resolving the issues that online business owners encounter in order to ensure their successful operation. It would be beneficial to the society at large if the services provided by institutions responsible to support entrepreneurships and start-ups are redesigned and updated to address this issue. If that is done our great nation would have more number of start-ups in future.

**Key words:** Entrepreneurship, start up, government regulations

## **INTRODUCTION**

Entrepreneurship has regained its prominence in the recent economic atmosphere and evolved as the most desired means of livelihood of the young generation. Setting up an enterprise from the scratch, which is popularly known as start-ups, is now done with an aim to grow rapidly by offering something that addresses a particular market gap. Here people with unique ideas start their businesses with very little money and generate profit by providing goods and services online or offline. Aligned with other developed countries, India also made ready its fields to feed entrepreneurial investments

and intentions. Implementing entrepreneurial intentions can be made in several ways and among them online mode of doing business gained and proved its significance in a very short span of time. The volume of online business has expanded considerably since the turn of the century. Consumers may now choose any product from a retailer's website and have it delivered to them in a matter of minutes with the help of online business procedure. Additionally, online business allows entrepreneurs to flourish in a variety of ways while also assisting them in developing additional entrepreneurial. People find it handy and trouble-free to shop from the comfort of their own home or office, therefore online business has risen in popularity over time. The internet is no longer merely another way to communicate with customers.

However, it is a crucial avenue for attracting new customers as well as maintaining relationships with existing ones. In addition to all these, to establish and flourish in the area of online start-ups is neither an easy task nor an impossible with. With a perfect blend of skills, opportunities and all means of capital, an online start up can be established and expanded. A clear cut idea regarding the entrepreneurial skill required setting up an online start-up and self-assessment on the extent of such skills possessed by these business people is of high importance in this regard. Clarity on the benefits that can be achieved by setting up an online start-up and difficulties that may arise during the process of establishing and running the business is also essential for this. That is why we decided to conduct a study which intends to learn about the prospects and problems faced by entrepreneurs in setting up an online start-up.

## **OBJECTIVES**

- 1. To analyse the skills required by entrepreneurs to set up an online business
- 2. To understand the professional and personal benefits gained by entrepreneurs by setting up their own business.
- 3. To study the challenges and problems faced by online entrepreneurs in setting up and carrying forward the business.

## METHODOLOGY OF THE STUDY

This is a descriptive study based on primary data which was collected through questionnaire. Responses from a sample of 75 entrepreneurs—doing some sort of online business are collected. The sample respondents were identified through simple random sampling. The data collected was analysed using statistical and mathematical tool and techniques like percentage, graph, mean, etc. Microsoft Excel was used in the process of data analysis. The results of analysis of presented in the form of tables and graphs.

#### THEORETICAL FRAMEWORK

The researcher (Chanchai Phonthanukitithaworn, 2019) did a study with a goal to look into the aspects that contribute to an internet entrepreneur's success. With the recent rapid rise of the internet market for various goods and services, there is a pressing need to research online entrepreneurs' business strategies in specific markets, such as Thailand, and extract significant success elements. The researcher gathered data by measuring the replies of 180 internet firms in Bangkok, Thailand, using a seven-point Likert-type scale. The studies revealed that ACO, EOU, government assistance, networking, risk-taking proclivity, reliability, AFF, BIM, logistics and transportation, product quality, product price, and social media promotion are the thirteen most important aspects for an online entrepreneur.

The analyst (Daniel, 2016) has featured Home-based firms and their founders as the important aspect of entrepreneurship that has received little attention. Home-based firms, far from being little hobby businesses with little economic influence, contribute significantly to national economies in terms of both turnover and employment. Online home-based enterprises have been identified as a significant and distinct segment of the home-based company domain, with unique opportunities for innovation and business diversity. The report is a thorough evaluation of the existing literature on internet home-based entrepreneurs and their companies. The review's findings are organised and examined via the lens of entrepreneur-venture fit theory. The study's use of this lens allows it to bring previously fragmented existing investigations together, laying the groundwork for future research in this field. The research also introduces a fresh concept.

#### RESEARCH GAP

Online starts ups are now one of the best ways of establishing and expanding an entrepreneurial intention. There are many forces that drive the entrepreneurial thoughts of an aspirant to materialize it, but, at the same time there are even more forces to put it down, including certain socio-economic and political factors.

Researchers all over the world have made an attempt to learn about these factors but no methodological study to the best of the knowledge of the researcher has been conducted to examine the drivers and dampeners of online start-ups in a particular state. It is in the backdrop that the present study has been taken up.

This section of the analysis is intended to give an overview of the profile of the sample respondents who participated in the study.

**Table I: Profile Analysis** 

Profile of Respondents- Personal Details							
Gender							
Male	Male 45 Female						
	1	Age					
Less than 40 Years 63 More than 40 years 7							
	Educationa	l qualification					
High school-1	gh school-1 Plus two – 9 Degree– 50 PG –10						
Pro	Profile of Respondents - Business Details						
	Nature	of business					
Small Organization -38	Med	lium– 26		Large s	cale – 6		
	Type o	f business					
Cooking/baking - 14	Cooking/baking - 14 Fashion-20 Electronics -10 g				Other -23		
Place of business							
Kottayam – 12 Ernakulam – 17 Other – 41					r – 41		
	Work I	Experience					
Below one year -5	Below	5 years -57	M	lore than	5 years –8		

## **B]** Inferential Analysis

This section of the analysis deals with a deeper inferential analysis of the primary data. Based on the review of literature, four factors were identified to capture the prospects and problem of online entrepreneur.

Table II
Skills required by entrepreneurs to set up an online business.

Sl. No	Entrepreneurial skills	Mean scores	Inference
1	Market Awareness	4.34	Required
2	Innovation	4.07	Required
3	Time management	4.04	Required
4	Creative thinking	4.02	Required
5	Communication	3.85	Required
6	Strategic Management	3.82	Required
7	Analytical skill	3.81	Required
8	Branding	3.8	Required
9	Risk taking	3.65	Required
10	Attention to details	3.51	Required

Source: Primary Data

The most noticeable improvement that was required for an online employer among the primary categories of entrepreneurial skill listed was market knowledge, since it has the highest mean value [4.34] of all those criteria. Innovation [4.07] is the next kind of factor that is required, followed by time management [4.04], creative thinking [4.02], etc. Attention to detail has the lowest mean value [3.51], making it the least frequent factor in the category.

According to the research, a key quality that an online enterprise must possess is market awareness.

## Findings I

Among the skills which an online entrepreneur must have, market awareness was the most notable skill as its mean value is the highest [4.34]. The next category of changes adjacent to the latter is innovation [4.07] and time management [4.04]. The least suggested entrepreneurial skill was attention to details as its mean value was the lowest [3.51]. The findings from the result says that the most required skill that an online entrepreneur must have is market awareness and they are only conscious about attention to details when compared between other skills.

Table III

Professional and personal benefits gained by entrepreneurs by setting up their own business

Sl. No	Professional and personal benefits	Mean scores	Inferences
1	Freedom of choosing location	4.47	Correct
2	Better income and growth potential	4.31	Correct
3	Increased professionalism	4.25	Correct
4	Access to worldwide market	4.14	Correct
5	Reduce overhead costs	4.1	Correct
6	Increased selection and availability	4.1	Correct
7	Flexibility of time	4.1	Correct
8	Complete job security	4	Correct

Source: Primary Data

The mean responses from respondents on the benefits listed are displayed in the table above. The variables with the highest mean values are those that do have a high impact, whereas the variables with the lowest mean values are those that are less affected. With a mean value of [4.47], freedom of location choice appears to be the most frequent benefit, followed by greater income and growth potential [4.3] and increased professionalism [4.25]. Additionally, it was discovered that full job security had the lowest mean score [4]. Thus, we can draw the conclusion that the ability to choose one's own location is the best perk most entrepreneurs' experience.

## Findings II

Accordingly, the responses to those variables show an inference range [correct] to all listed benefits they gained by having online business. Freedom of choosing location was the supreme benefit with a mean value of [4.47]. The benefit adjacent to this includes better income and growth potential [4.31], increased professionalism [4.25] and access to the worldwide market [4.14].

Others show the value ranges below 4.14 in case of reduced overhead costs [4.1], increased selection and availability [4.1], flexibility of time [4.1] and complete job security [4].we can draw the conclusion that the ability to choose one's own location is the best perk most entrepreneur's experience.

Table IV

To study the challenges and problems faced by online entrepreneurs in setting up and carrying forward the business.

Sl. No	Challenges faced	Mean scores	Inferences
1	Attracting the perfect customer	3.97	Correct
2	Raising capitals	3.94	Correct
3	Hiring employees	3.91	Correct
4	Product return and refund policies	3.8	Correct
5	Online identity verification	3.74	Correct

Source: Primary Data

The results addressing the opinions that the respondents encountered while operating an online business are clearly shown in the table above. According to respondents, attracting the perfect customer [3.97] is the main issue an online business faces, followed by raising capital [3.94], hiring employees [3.91], and issues with their return and refund policies [3.8]. Online identity verification is the least of their problems, with a mean score of 3.74, leading us to the conclusion that attracting the perfect customer is their biggest challenge.

## **Findings III**

The mean scores show that variables having higher mean values are the toppest challenges faced by online entrepreneur. In the opinion of respondents, attracting the perfect customer [3.97] is the toughest job followed by raising capital [3.94], hiring employees [3.91], product return and refund policies [3.8]. From the response we saw that online identity verification was least faced challenge with a mean score of [3.74]. to draw the conclusion, we find that attracting the perfect customer is their biggest challenge.

## LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

The outcome of the study is greatly dependent on the willingness of respondents in giving true and complete information sought, apart from this the unavailability of respondents for the study and their readiness to furnish accurate information is also a problem followed by the difficulty to generalize the findings of the study since the sample is too small. Further would be recommended that future research should be extended to other areas of Kerala and should focus on other factors with regards to online entrepreneurs.

#### **REFERENCES**

- Al-Atabi, M., & DeBoer, J. (2014). Teaching Entrepreneurship using massive open online course. *Technovation*, *34*(4), 261-264.
- Arefa Sharif, H. B. (2017). Online business and influence of e-marketing on customer satisfaction. *Journal of Humanities Insights* 1, 86-90.
- Chanchai Phonthanukitithaworn, C. K. (2019). Relevant factors for success as an online entrepreneur in Thailand. *Sage Open*.
- Chen Li Ifenthaler, D. Y.-K. (2021). Online and blended entrepreneurship education: a systematic review of applied educational technologies. *Entrepreneurial education*, 4(2), 191-232.
- Dan Dumitriu, P. V. (2015). Competitive marketing advantages in online business. *International Conference on Management and Industrial Engineering*, 251-259.
- Daniel, M. N. (2016). The role of entrepreneur-venture fit in online home-based entrepreneurship: A systematic literature review. *Journal of Enterprising Culture*, 419-451.
- Dheeriya, P. L. (2009). A conceptional framework for describing online entrepreneurship. *Journal of Small Business & Entrepreneurship*, 22(3), 275-283.
- Fang Wu, V. M. (2003). An analysis of e-business adoption and its impact on business performance. *Journal of the Academy of Marketing Science*, 425-447.
- Galope, R. V. (2014). What Types of Start-ups Receive Funding from the Small Business Innovation Research (SBIR) Program? Evidence from the Kauffman Firm Survey. *Journal of Technology Management & Innovation*.
- Ganesh Vaidyanathan, S. D. (2003). Online risk in e business. *Communication of the ACM*, 356-361.
- Goyayi, T. v. (2019). The influence of technology on entrepreneurial self-efficacy development for online business start-up in developing nations. *The International Journal of Entrepreneurship and Innovation*, 168-177.
- Krom, I. (2015). Global online entrepreneurship and the impact of innovation on brands. *EMAJ: Emerging markets journal*, *5*(2), 90-101.
- Kvedaraitė, N. (2014). Reasons and obstacles to starting a business: Experience of students of Lithuanian higher education institutions. *Management Journal of Contemporary Management Issues*, 1-16.

- Lin, S.-J. C.-M.-F. (2019). An emerging online business decision making architecture in a dynamic economic environment. *Journal of Intelligent & Fuzzy Systems*, 1893-1903.
- Muhammad Naveed Anwar, E. D. (2016). Importatants of home-based firms. *Journal of Enterprising Culture 24*, 419-451.
- N. M. TAWIL, R. H.-B. (2015). ENHANCING ENTREPRENEURSHIP SKILL AMONG. *Journal of Engineering Science and Technology*, 71 80.
- Nashrudin Setiawan, V. C. (2018). IMPACT OF CYBERCRIME IN E-BUSINESS. *International Journal of Civil Engineering and Technology* (*IJCIET*), 652–656.
- Natalie, S. &. (2017). The Suitcase Entrepreneur: Create freedom in business and adventure in life. *Simon and Schuster*.
- NGUYEN, M. H. (2019). Customer Electronic Loyalty towards Online Business: The role of Online Trust, Perceived Mental Benefits and Hedonic Value. *Journal of Distribution Science*.
- Robert Greenberg, B. W.-O.-W. (2008). Culture and consumer trust in online business. *Journal of Global Inofomation Management (JGIM0*, 26-44.
- Sanjoy Kumar Paul, M. A.-M. (2021). A recovery planning model for online business operations under the COVID-19 outbreak. *International Journal of Production Research*.
- Smith, M. (2020). Effective Leadership in Online Small Businesses: an Exploratory Case Study. *nternational Journal of Entrepreneurial Knowledge*, 27-41.
- Song, Y. (2015). From online social networks to offline social networks: Changes in entrepreneurship. *Informatica Economica*, 19, 120.
- Susan P.Williams, P. A. (2006). Online business reporting: An information management perspective. *International Journal of Information Management*, 91-101.
- Winkler, E. L. (2020). From Offline to Online: Challenges and Opportunities for Entrepreneurship Education Following the COVID-19 Pandemic. *Sage journals*, 346-351.

# THE INFLUENCE OF LOYALTY CARD ON CUSTOMER PURCHASING BEHAVIOUR

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#### Abstract:

Marketing is a significant business activity which contributes greatly to the success of an organization. A loyalty program is a marketing strategy designed to build repeat business by offering participating customers something that isn't available to non-participating customers. These Programs exist covering most types of commerce, each one having varying features and rewards scheme. The loyalty cards are generally issued by shopping mall, food and beverage, cosmetics shop and jewelry shop and so on. The research was conducted to know whether the customer choose to a specific store due to a loyalty card they have and to find out how loyalty influence the purchase behavior of customer and the factors influencing customer store loyalty. This Study examines how loyalty card influences the card users and secondly, we look out how loyalty card increases the loyalty among customers and lastly to put some suggestion based on our findings. This study was not intended as an exhaustive survey of all aspects in the field of promotion of products. Rather, the study aimed to conduct to access the various factors affecting the use and benefits of loyalty cards. The sample size used for the study was sixty-four and mathematical and statistical tools were used for data analysis. The result of the study observed that there is a positive influence of loyalty card on customer purchasing behavior and Quality of product is the most important factor affecting customer store loyalty.

**Keywords**: Loyalty Card, Store loyalty, Purchasing behavior.

## INTRODUCTION

Loyalty card program is a marketing strategy, which encourages the customers to be loyal towards the product and continue to shop or use the service of business. These program covers most types of commerce, each one having varying features and rewards scheme. The loyalty cards are generally issued by shopping mall, food and beverage, cosmetics shop and jewelry shop, tour

packages, petrol pumps and so on. The aim of a loyalty card program is to boost repeat business by offering favor for participating customers, which is something that isn't available to non- participating customers. It is a card issued by a retailer to its customers as part of a customer incentive scheme, credits are accumulated for future discounts at every time a transaction is recorded. Loyalty cards often resemble plastic credit cards, typically a loyalty card has a barcode or magnetic stripe that's scanned at the point of sale (POS). The card identifies the perspective customer and sends information about what the customer bought to a database. The information in the database helps the retailer to understand and influence his customer's buying habit. Customers are offered product discounts, coupons, points toward merchandise or some other rewards for their voluntary participation in the program.

#### **REVIEW OF LITERATURE**

"This paper is to investigate if and to what extent the program activity based on regency, frequency and monitory frame. Work reflects the effectiveness of a specific loyalty program. They collected data from 818 business customers" (Thanasi-Bose, 2019).

This case study extends loyalty program research by asking business and leisure customers of a Finnish hotel chain, without a loyalty program, what hotel attributes and loyalty program features appeal to them. They examine 1315 responses for considering intangible and symbolic benefits, which would cost less than discounts or other tangible benefits (Juho Antti Pesonen, 2019).

"The aim of this paper is to define the significance of different indicators that affect the expected benefit of customers when using loyalty cards in the purchasing process in the retail sector. As the most important indicators that affect expectations while using loyalty cards, the following was tested: price discounts, more efficient service and rewards, personalized communication, payment option, better information, status symbols and additional benefits (Jelena KONČAR, 2019).

"The aim of this study was to build an extremely significant understanding of the influence of client's loyalty programs on buyer's retention. The context of the current study was set for Pakistani consumers. A quantitative analysis method was adopted to achieve the objective of the research. The findings suggest that there is a significant impact of loyalty programs for retaining valuable customers" (SYED MAJID KHALIL, 2018).

"This paper investigates reward expiry for loyalty programs. They develop and solve a game- theoretic model that reflects consumer behavior in choosing products and redeeming rewards. The findings shows that a firm offering rewards that do not expire should increase its price if the competing firm changes its reward policy from no expiry to expiry, even when the expiry period is quite long. Finally, when customers highly value rewards and time, reward expiry is a dominant strategy" (Amirhossein Bazargan, 2016).

#### **OBJECTIVES**

- To identify the factors influencing customer store loyalty.
- To access the benefits offered to loyalty card holders.

## HYPOTHESES OF THE STUDY

- There is no significant difference among varied age group with regard to benefits offered to card holders.
- There is no significant difference between male and female with regards to factors influencing purchasing behavior.

#### RESEARCH METHODOLOGY

The present study is based on both primary and secondary data. For the purpose of the study, the primary data was collected using various journals, bulletins, magazines and questionnaire method. The secondary data are from journals, books, internet, records, etc. The study was conducted only among respondents in Kottayam district. Data were collected from 64 respondents in Kottayam district. In order to select the samples, convenient sampling method was adopted. collected data were analyzed using SPSS and the tools used are Independent Sample T- Test and One Way Anova.

## ANALYSIS AND INTERPRETATION

To achieve the objectives of this study we make an analysis on the basis of the collected data. Table 1. Factors affecting customer store loyalty

Ranks	Quality of products	Store Location	Working Hours	Vast Range of Products	Discounts and Offers	Ease of Product Return	Sales Staff Attitude	After Sales Services	Customer Notification	Assortment of Product
Rank	25	12	28	15	12	19	17	14	14	11
Rank	14	28	13	20	22	16	18	19	20	18
Rank	16	13	12	16	11	13	13	13	13	17
Rank	4	4	5	6	6	8	3	3	4	3
Rank	1	1	2	3	5	5	2	2	2	3
Rank	1	1	1	1	2	2	3	3	3	1
Rank	1	1	1	0	0	2	2	3	1	1
Rank	0	0	0	0	1	2	2	2	3	3
Rank	1	0	0	2	2	1	3	1	3	2
Rank	1	3	1	1	1	1	1	3	2	5
Total	64	64	64	64	64	64	64	64	64	64

The above table depict the overall ranking of factors affecting store loyalty. It is clear from the table that the "quality of product" is the most important factor affecting customer store loyalty i.e., rank 1 and the least affection factor on customer loyalty is "assortment of product" i.e. rank 10. In between this "store location" has rank 2, "working hours" rank 3," availability of vast range of product" rank 4," discount and offers" rank 5," ease of product return "rank 6," sales staff's attitude "rank 7," after sale service" rank 8 and rank 9 for "customer notification".

## **TESTING OF HYPOTHESES**

**H0:** There is no significant difference between male and female with regards to factors influencing store loyalty.

**H1:** There is significant difference between male and female with regards to factors influencing store loyalty.

Table 2. Relationship between factors influencing purchasing behavior and gender

Test used: Independent Sample T-Test							
Variable Name (Gender) Size Mean		Mean	Standard Deviation	t- value	p- value		
Male		30.3750		0.225	0 274		
Female	32	30.0000	6.92820	0.235	0274		

Source: Computed

The above table shows the relationship between factors influencing store loyalty and gender. The test is conducted through t-test. Here the p value is 0.274 which is greater than 0.05 therefore we accept the null hypothesis statement and reject the alternative hypothesis.

**H0:** There is no significant difference among varied age group with regard to benefits offered to cardholders.

**H1:** There is significant difference among varied age groups with regard to benefits offered to cardholders.

Table 3: Relationship between benefits offered to cardholders and age

Test used: One Way Anova					
	Sum of Squares	df	Mean Square	f- value	p- value
Between groups	114.783	4	28.696		
Within groups	1780.451	59	30.177	0.951	0.441
Total	1895.234	63			

Source: Computed

The above table clearly explains that the p value is 0.441 which is greater than 0.05, the null hypothesis is accepted at 5% level of significance and hence it can be concluded that there is no significant difference among varied age group with regard to benefits offered to cardholders.

#### **FINDINGS**

- A total of 64 respondents responded to the survey; with an equal participation of men and women.
- Majority of the respondents in the study ranged between 21 to 30 years of age.
- There is no significant difference among varied age group with regard to benefits offered to cardholders.
- There is no significant difference between male and female with regards to factors influencing store loyalty.
- "Quality of product" is the most important factor affecting customer store loyalty

#### **SUGGESTIONS**

- 1. Customers find it difficult to carry different loyalty cards every time they go for shopping. One card for all: This would ease the burden of carrying many cards at the same time; Code based usage.
- 2. The second option is to remove the card system and allot the customers special codes. This would just require the customers to remember the code every time they go for shopping.
- 3. Integrate it with the credit card: The best possible option is to integrate the loyalty card with the credit card. Customers always carry their respective credit card for shopping this will ensure that customer is not required to make any additional effort to avail the benefits of a loyalty card.
- 4. The purchase limit for loyalty cards should be decreased in order to assure the participation of lower class people.
- 5. Don't just focuses on adding members instead create a process to engage and grow the loyalty of existing members so that your customers feel valued.

## **CONCLUSION**

A loyalty program is an important element of customer relationship management for firms which focuses on wide range of activities. This research studies whether loyalty cards issued by stores have an impact on customer loyalty in general. Loyalty programs are common nowadays, which makes customers loyal to the product. Both customers as well as the brand have certain benefits from the loyalty card, that the customers get incentives and the brand get loyal customers and more sales. It is clear from the study that the "quality of product" is the most important factor affecting customer store loyalty followed by store location, working hours, availability of vast range of product, discount and offers, ease of product return, sales staff's attitude, after sale service and customer notification.

## **Bibliography**

- Amirhossein Bazargan, S. K. (2016). Modeling reward expiry for loyalty programs in a competitive market. *SSRN Electronic Journall*.
- Jelena KONČAR, R. M. (2019). ANALYSIS OF KEY INDICATORS THAT AFFECT THE EXPECTED. *Journal of Business Economics and Management*.
- Juho Antti Pesonen, R. K. (2019). PLASTIC LOYALTY INVESTIGATING LOYALTY CARD PROGRAMS FOR A FINNISH HOTEL CHAIN. *Elsevier*.
- SYED MAJID KHALIL, O. U. (2018). The Effect of Customer Loyalty Programs on Customer. *Journal of Business and Tourism*.

Thanasi-Bose, P. K. (2019). Loyalty program activity: make. *Emeraldinsights*.

# INCREASED USE OF UPI TRANSACTIONS: A COMPARATIVE STUDY BEFORE AND AFTER THE PANDEMIC

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#### **Abstract:**

Unified Payments Interface (UPI) is an instant real-time payment system developed by National Payments Corporation of India, facilitating inter-bank transactions. The interface, regulated by the Reserve Bank of India, works by instantly transferring funds between two bank accounts on mobile platforms. UPI crossed 1 billion transactions for the first time in October 2019, almost three years after its launch. The next billion came in under a year in October 2020 where it proceeded more than 2 billion transactions.

The Covid 19 pandemic has made a remarkable shift in people onto contactless payments for their daily transactions. Though a significant number of people started using contactless payment options, such as UPI, before the pandemic, its usage has grown significantly since the pandemic. Almost one-third of the total amount transacted on this four-year-old platform was in the last six months (the period following the lockdown).

NPCI (National Payments Corporation of India) launched UPI on August 26, 2016. Total amount transacted on the UPI platform was ₹43.45-lakh crore between the years of 2016 and

2020. Of this, ₹14.26-lakh crore were transacted in six months between the months of March and August, 2020. And this is almost one-third (32.82 per cent) of the total amount transacted on the platform throughout the last four years.

The study intends to analyse the growth of UPI transactions before and after the pandemic in the districts of Ernakulam and Idukki, of Kerala. Ernakulam is considered as the commercial capital of Kerala and Idukki is a backward district in Kerala. Data will be collected through focus group interviews for primary data and a collection of reports for secondary data.

#### INTRODUCTION

The introduction of digital payment systems has been on an upward swing ever since its inception, and it is no exception in India. Rapidly expanding technology has digitised almost every sector in the economy including banking and transacting. With the introduction of UPI system which provides ease of use in money transactions like no other online banking systems and the large majority of the population owning smartphones, it is no longer a tiresome process to wire or to receive money anymore. The recent Covid-19 pandemic, which enforced no contact for a prolonged period of time has resulted in the immense growth of online transactions using UPI. All signs indicate a major transformation of the economy to a cashless or cash-lite one. A major change of this size has a profound impact on every part of the economy, which makes studying its path and its current state all the more important. This paper analyses the growth path of digital banking and UPI through literature review and the study conducted examines individuals and business's experiences with UPI and of the same post pandemic.

#### LITERATURE REVIEW

Varda Sardana and Shubham Singhania (2018) examines the evolution, extent, and direction of digital technology in the banking sector of India. The study gives an account of the evolution of technology in the banking sector, its digital transformation, the scope of digital banking, digital banking from the perspective of banks and the consumers, and challenges that India faces in digitising banking in India.

Rahmath Safeena, Hema Date and Abdullah Kammani (2011) examines the factors influencing the consumer's adoption of Internet Banking (IB) in India thereby investigating the influence of perceived usefulness (PU), perceived ease of use (PEU) and perceived risk (PR) on use of IB. Analysing a sample of students from an educational institution they were able to discover that PU, PEU, and PR are the determining factors of internet banking adoption. When online banking is viewed as useful, customer's intention to adopt is greater, and consumers anchor their interest in adopting IB to the beneficial outcomes and ease of use of the system, however individuals are still reluctant to adopt the system because of the risk associated with it.

Mahesh A. and Ganesh Bhat (2021) examines the growth and progression of the Unified Payment Interface (UPI) in the economy over the years. Along with analysing its growth and progression the paper analyses UPI's position in the digital payment ecosystem and its strength, weaknesses, opportunities, and threats that it faces through a SWOT analysis. The paper makes use of

an explanatory research method, analysing secondary sources such as government reports and published research papers. According to RBI data (May 2021) UPI accounted for 58.47 percent of all digital payment transactions, thus accounting for more than half of the total digital transactions in the digital payment ecosystem. Using SWOT analysis, the following strengths, weaknesses, opportunities, and threats were found. UPI's strengths included catering to even low-level petty businesses, deterring corruption, simplifying the payment mechanism, notifying future payments, and multiple virtual payment addresses. UPI's weaknesses include delays in transactions due technical issues, annoyance caused by double verification process, the transaction limit of Rs. 2,00,000,and its vulnerability to cybercrimes. UPI's opportunities include a strong banking network that can propel the country to a cashless economy, growth in retail digital payment, an increase in consumer base due to the spread of the internet, widening the range of digital payment services, and building a cash-lite economy. The threats that UPI faces include raising awareness, preference of cash in the society, poor grievance redressal system, and taxes on UPI system.

Rahul Gochhwal (2017) analyses the growth of payment systems in India and examines the technology behind UPI, particularly its architecture and security, with the help of empirical and theoretical literature review. The paper concludes that UPI is great for financial inclusion in India, allowing a large portion of the population to be a part of the digital economy due to its high teledensity and it has done away with complicated payment systems. It has allowed even the smallest merchant to accept digital payments.

Aniket Chandrakant Godambe (2020) gives a detailed account of how the United Payment Interface (UPI) system functions and its various features, its advantages to the consumer, and the challenges and technical issues in UPI transactions. It concludes that UPI is more secure and easy to use than online bank payments.

## RESEARCH METHODOLOGY

The study is conducted through primary and secondary sources of data. Primary data collection was conducted on individuals and business organisations of Ernakulam and Idukki districts of Kerala. Secondary data was collected from the government released data and other journals previously done.

#### **FINDINGS**

## **Study on individuals:**

A study was conducted among young individuals between the age group of 18-25 years of Ernakulam and Idukki district to understand more about their UPI Transactions before and after the pandemic.

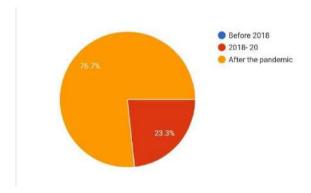


Fig. 1

It is evident from Fig. 1 that 76.7% of the respondents started using UPI Payment Method after the pandemic, which represents the increase in use of UPI Payment Methods over cash payments during the pandemic.

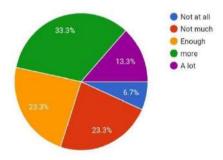


Fig. 2

The given Fig. 2 illustrates the responses of individuals on the increase of UPI transactions after the pandemic. The majority of the respondents agree to the fact that there has been an increase in the UPI transactions as 33.3% say there is a more increase and 23.3% say that there is enough increase compared to 23.3% and 6.7% saying there is not much and there have not been an increase respectively.

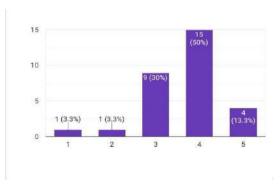


Fig. 3

In Fig. 3, people have rated their digital literacy regarding UPI Transactions on a likert scale of 1 to 5, with 1 representing not satisfactory and 5 representing outstanding. 50% of the respondents rated their digital literacy at 4.

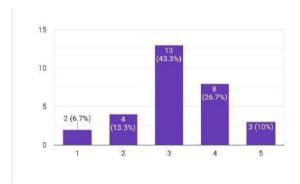


Fig. 4

Fig. 4 represents the way the respondents rate their parent's (who belong to the previous generation) digital literacy. The majority of the respondents have rated it at 3 on a Likert scale of 1 to 5, where 1 represents not satisfactory and 5 represents outstanding.

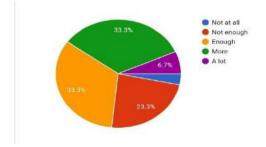


Fig. 5

Fig. 5 represents the increase in parents knowledge on UPI payment Methods post pandemic.

33.3% each of the respondents respond it as enough and more during the period of pandemic, which throws light on the fact that there is an increase in UPI Payment Methods post pandemic as compared to the period prior to it.

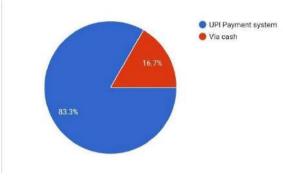


Fig. 6

Fig. 6 represents 83.3% of the respondents say that they prefer UPI Payment System over cash payments.

## Study on Business Organizations:

The interaction with business organizations of both the organizations again proves the increase in UPI Payment Methods post pandemic. One of the form responded that, they even prior to the pandemic had the payment scanning system, but it came into functioning only post pandemic. They also said that they prefer cash payments over UPI Payment Systems in case of immediate payments to be made. Another firm responded that they deal more with other businesses, where the major form of transaction methods is via cheques. They also responded that clients below the age of 35 prefer UPI Payment Methods and people above the age of 35 prefer cheques and cash payments. All the firms agreed to the fact that UPI Payments increased post pandemic.

#### **CONCLUSION**

The study was conducted in two districts of Kerala, namely Ernakulam and Idukki, among which one is the commercial capital of the state and another is an economically backward one. Through the primary and secondary sources of data, it was found that there was a huge increase and awareness about UPI Payment Methods among the population. From individual point of view, most of them started using the UPI system during the pandemic and those who were using it increased the usage as well. From business point of view, the UPI Payment System became more functional during the pandemic especially among the younger generation. From the survey, it was also evident that the pandemic created a lot of digital literacy among the

current and previous generation regarding this new payment system born in India.

## **REFERENCES**

- Sardana, Varda & Singhania, Shubham. (2018). Digital Technology in the Realm of Banking: A Review of Literature.
- Safeena R, Date H, Kammani A. *Internet Banking Adoption in an Emerging Economy: Indian Consumer's Perspective*. Int. Arab J. e-Technol. 2011; 2(1):56-64.
- A., Mahesh & Bhat, Ganesh. (2021). *Digital Payment Service in India A Case Study of Unified Payment Interface*. International Journal of Case Studies in Business, IT, and Education. 256-265. 10.47992/IJCSBE.2581.6942.0114.
- Gochhwal, Rahul. (2017). *Unified Payment Interface—An Advancement in Payment Systems*. American Journal of Industrial and Business Management. 07. 1174-1191. 10.4236/ajibm.2017.710084.
- Godambe, A. C. (2020). *Unified Payments Interface (UPI) Advantages and Challenges*. International Research Journal of Engineering and Technology (IRJET), 07(12), 971–973

## NEUROMARKETING: INSIDE THE MIND OF THE CONSUMERS

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#### **Abstract:**

In recent years, Neuromarketing has raced up significantly, as online shopping has paved its path during Pandemic. Neuromarketing refers to the measurement of physiological and neural signals to gain insight into customers' motivation, preferences, and decisions, which can help inform creative advertising, product development, pricing, and other marketing areas. Many companies like Frito Lay, CBS, Google and Amazon have been achieving better results by applying Neuromarketing techniques like FMRI (Functional Magnetic Resonance Imaging), EEG (Electroencephalography), Eye tracking, facial encoding, Biometric etc. It helps marketers to estimate the customer preference in online platforms. The present paper concentrates on how Neuromarketing techniques help companies to know the pulse of customers and ensure the right product reaches the right customer by guiding alterations in the marketing strategy.

#### **Keywords:**

Neuromarketing, Online platform, Customers, Physiological, Neural signals.

## **Introduction:**

Neuromarketing is a combination of marketing efforts and neuroscience concepts. The term "Neuromarketing" was introduced in 2002 by Dutch marketing professor Gerald Zaltman patented the ZMET (Zaltman Metaphor Elicitation Technique), to study people's emotional and cognitive response to media or marketing stimuli. It refers to the use of latest advances in brain and psychology sensor technology to understand more about the customer's mental process while making the purchase decision. The companies like Amazon, Google follows this strategy to know about the customer needs, taste, preferences and it increases the understanding regarding consumer decision and actions that are unconscious and act not taken into account by other, more traditional, market research methodology and the neuromarketing techniques

are FMRI (Functional Magnetic Resonance Imaging), EEG (Electroencephalography), Eye tracking, Facial encoding, Biometric etc. Research investigates how consumers are responding when a product is exposed to them. Nowadays customers are in the stage of choice overload, so that it makes customers dilemma. In order to make them as first priority to the customers and to promote their products and services.

# **Objectives:**

The specific objectives of neuromarketing are as follows:

- To know how the human nervous system receives, encodes, stores and retrieves information from stimuli.
- To get data to guide on the best choice of formats that allows greater emotional connection with the consumer.

### **Literature Review:**

Neuromarketing is the science to know the customer psychology. By practicing different ways to measure the activities of the brain of a consumer to discover how the people respond to products and different marketing stimuli. The goals of neuromarketing studies are to accrue relevant information about the inner working of the brain. The spontaneous reaction of the brain is captured and records brain signal and activation. By applying the neuromarketing techniques the marketer is able to know about customers thoughts and gives the relevant information and helps them to give their best. And also promotes their advertisements to enlarge them in the market. This leads to building a good view for the customer.

## **Neuromarketing Techniques:**

To know about the customers' response towards their companies services and products. The companies follow techniques founded by neuroscientists. They did several researches on customer's psychology and then they gave birth to a new way called Neuromarketing. This neuromarketing says about the movement of neuro signals in the customer brain about the product and service. To find a response from the customer, the company must know the reaction and should calculate it. For that they apply some techniques.

The neuromarketing techniques are explained below:

## **Outside Reflex:**

### Eye - Tracking:

Most of the Knowledge in life is gathered through the eye sight. Eyesight is one of the most important senses. In 1999, the new invention took place by

Kyualg Nam Kim and S.R.Ramakrishnan proposed a vision based eye gaze method using HCI.

Later it was developed into eye - tracking technology, and then it was modernized for market research as one of the neuromarketing techniques. Eye-Tracking is measured where a person look providing insight into their thinking and the measures:

## Scan pattern -

It is about measuring how consumers tend to stand for something. This can help to determine whether the information is logical and efficient.

## Heat Mapping -

These heat mapping platforms provide color - coded data to give an indication of areas of a website or mobile page users are interacting with the most. The red colored spots show where the areas the user focuses the most and light colors are the areas indicated as less focus.

# Fixation and gaze points -

Gaze points are measures that are recorded by the eye tracker and it is the basic units of measure. When a gaze point happens to close in time to range the resulting cluster denotes a fixation. Fixation is a period of time where the eyes are locked towards a specific object.

## Areas of Interest (AOIs) -

AOIs measure the area of interest. By repeated actions in a website or a mobile page of a user and provides the information related to it.

## **Facial Encoding:**

Facial Encoding is considered based on facial recognition. It was discovered by *Woodrow Wilson Bledsoe* in 1960. After some development this facial encoding technique became one of the tools in neuromarketing.

Facial Encoding is measured based on facial expressions associated with emotions and 24 muscle movements combinations are identified seven basic emotions (Angry, Disgust, Fear, Happy, Sad, Surprise, Neutral) and by considering the facial expression, rating is given according to the measure the facial encoding is done.

#### **Biometric:**

Biometric technologies are currently mostly used in law enforcement and security, it has serious privacy implications. Later neuromarketing systems include biometric to identify the customers. Biometric is scientific tracking. There are two categories of identification in biometric. They are:

## Physiological -

This technique includes fingerprint recognition, facial recognition, iris recognition, rental scanning and hand geometric.

#### Behavioral -

This technique includes voice recognition, handwriting recognition, device interaction analysis and eye tracking.

#### **Inside Reflex:**

## EEG (Electroencephalography) -

German psychiatrist *Hans Berge* discovered Electroencephalography (EEG) in 1924. This technique is used for recording the electrical activity of the brain. The electrodes measure the brain waves associated with different states of stimuli.

In marketing EEG is used for identifying the key point of advertisement or video material testing, which helps to develop advertisements, testing new campaigns, and product movement of correlation, in store of experiences and also used for testing website design, usability and taglines etc.

#### FMRI (Functional Magnetic Resonance Imaging) -

FMRI technique was invented by *Bell Laboratories* led by *Seiji Ogawa* in 1990. It detects changes in blood flow and oxygen levels that analyze information of brain activities. FMRI is the only technique that measures conscious and unconscious thoughts and emotions. This FMRI technique is used for advertisement testing, concept testing, branding, packaging etc.

#### **Conclusion:**

With this paper, I would like to convey that marketing more default now a days with choose customers and also include tough competition and it is very important to survive in market. In order to survive, the marketer customers choose their mind set, this neuromarketing is the way chosen to know customers' view towards the company and it helps to inform creative advertising, product development, pricing, and other marketing areas which leads to gain good opinion from customers. So I conclude that neuromarketing is an emerging tool marketer.

### **References:**

WILFRIED DIMPFEL, "Neuromarketing: Neurocode-Tracking in Combination with Eye-Tracking for Quantitative Objective Assessment of TV Commercials", *Journal of Behavior and Brain Science*, 2015, 5, 137-147.

- SURYA NARAYANAN V and PRAVEEN RAJ N, "Neuromarketing: The Science of Consumer Beha", *Indian Institute of Management Kozhikode, ICMTS* 2020, *ISBN*: 978-93-5419-748-2.
- AVINASH L. TANDLE, "Methods of Neuromarketing And Implication of the frontal theta asymmetry induced due to musical stimulus has choice modeling", international conference on computational intelligence and data science (ICCIDS 2018) 1877-0509 C 2018 The Authors. Published by Elsevier Ltd.
- SARAH KARI, AURSHI ARUN, MAHEK PUNDIR, "Neuro-Marketing and its effect on Consumer Behavior and Brand Perception", *International Journal of creative Research Thoughts (IJCRT)*, volume 8, issue 5 May 2020, ISSN:2320-2882.
- EBEN HARRELL, "Neuromarketing: What You Need to Know", *Harvard Business Review, Jan 23, 2019.*
- MOHAMMAD OSMAN GANI, SOBAH MOHAMED SALEH, MD RABIUL, MD. RABIUL ISLAM RABI, Neuromarketing: Methodologies of Marketing science, Research Gate, Oct 2015.
- AHMED H. ALSHARIF, NOR ZAFIR MD SALLEH, ROHAIZAT BAHARUN, Neuromarketing Research in the last five years: A Bibliometric analysis, Cogent Business Management, vol 8, 6 Oct, 2021.
- JODIE SHAW, "Eye Tracking Technology Uses in Market Research", *Kadence International*.
- SUSIE HOOD, "Technology & How can Marketer use it", *Enquire Today*, 15 Oct 2018.
- "How Neuromarketing can help create better Apps", Applify, Jan 28, 2019.
- "The Facial Action Coding System for Characterization of Human Affective Response to Consumer Product Based Stimuli: A Systematic Review", *Systematic Review article*, 26 May 2020.
- UMA R. KARMARKAR, CAROLYN YOON and HILKA PLASSMANA, "Marketers Should Pay Attention to FMRI", *Harvard Business Review*, *Nov* 03, 2015.
- FAZAL RABBI MASHRUR, FERDOUSI SABERA RAWNAQUE, KHANDOER MAHMUDUR RAHAMA, MOHAMMAD TOHIDU ISLAM MIYA, "Marketbrain: An EEG based intelligent consumer preference prediction system", *ResearchGate, Dec 2021*.

# A STUDY ON THE STRESS LEVELS OF IT PROFESSIONALS DUE TO WORK SPACE SHIFT DURING COVID-19

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#### **Abstract:**

Employees are the foundation of every successful business whether big or small. Productive employees will help the organization to improve the efficiency and attain its goals and objectives in the long run. Training and development, salary package, motivation and work environment are some of the factors contributing to the productivity of the organization. With the advent of COVID 19 pandemic everything turned upside down. The usual mode of 'work at office' was shifted to 'work at home' due to social distancing measures. This workspace shift was a drastic change mainly in the Information Technology (IT) sector. This mandatory requirement of 'work at home' might have created severe mental stress to the workforce in IT sector due to unmanageable and intensive workloads. Under this scenario, there are chances for the productivity of the business being affected. The research study was conducted to know the stress level faced by IT professionals due to the 'new normal' i.e., workspace shift. This study also examines the consequences and factors of stress that the employees are exposed to if any. Since such a massive change is new, there are chances for the productivity going down. In such a case, the organization have to implement coping strategies to balance the crisis. The data was collected from a sample of seventy IT professionals in Ernakulam district with the help of convenient sampling technique and mathematical and statistical tools were used for data analysis. The results of the study observed that IT professionals were exposed to stress during the pandemic.

**Keywords:** Stress, Stress management, workspace shift.

#### INTRODUCTION

The Latin word "Stringere," which means hardship, is where the word "stress" originates. People struggle to deal with stress for a variety of reasons, including ignorance or other factors. Workplace stress is a significant issue that can result in negative physical, psychological, and behavioural effects. We have heard that IT professionals today are subject to high levels of mental stress. Due to social distance-inducing tactics, there was a change in the sort of job after the Covid-19 pandemic outbreak. As a result, "work from home" became a need. Some of the problems people have encountered when working from home may include intensive and unmanageable job loads and lengthy working hours without breaks. It was discovered that the health problems seen are rising blood pressure, sleep difficulty, anxiety and depression risk. In this case, the organisations are unable to raise productivity. Therefore, the company must put certain coping strategies in place to get through the crisis. Since the pandemic's impacts are unlikely to be short-lived, the firm should not only concentrate on boosting its productivity but also consider the welfare of its personnel. The goal of this study is to estimate the level of stress that IT professionals experienced during COVID-19 in Ernakulum. Additionally, it helps the business put the right policy procedures in place to deal with the problem.

### **REVIEW OF LITEARTURE**

The researcher (Awada, 2021) examined how worker, workplace, and work-related factors influenced productivity, and time spent on a Work from Home Day during the pandemic. WFH has created effects on workers mainly on their productivity, health and well-being. Organisations are aiming to engage the employees in a new system as if the WFH situation is not likely to change in the near future. The findings highlighted that the productivity of the workers did not change due to remote work transition but better productivity was associated with employees having better mental and physical health.

The professor (Kniffin, 2020) has featured the component of Covid-19 impact on workers' workplaces and work practices. The pandemic resulted in the present changes in work practices, impacts both economic and psychological (unemployment and well- being) and shows how the employee were affected. Social distancing issues, loneliness, economic inequality, increased stress were the factors discussed. It also includes the importance of moderating factors like, age, race, ethnicity and personality. Work From Home (WFH) as a drastic change created during the period is highlighted.

The analyst (Schieman, 2021) did and find out the corona virus pandemic altered work family and social life. Work-life conflict has emerged whereby an individual finding it difficult to manage both family and his profession. People experiencing it complain that they are not having enough family time. The author observes that the pattern of work life conflicts with the help of a national survey conducted among Canadian workers and raises a question "how have the work life conflict changed with the rise of the pandemic?" The findings suggested that there has been a reduced work life conflicts during the pandemic. But this is where restricted by age of youngest child at home and degree of work-home integration.

The professor (Kumar, 2021) has featured the impacts created by the pandemic on employees' distress and job performance. Job performance is the application of a person's skills and abilities in setting a job. The Covid-19 induced causes of stress like role overload and lifestyle choices were the predictors of distress during the period of lockdown. Results says that role overload did not affect the performance of employees whereas family distraction and occupational discomfort did. Subsequently the impact of job performance on the employees' life satisfaction is also reduced. Good job performance can contribute to overall satisfaction, distress diminished in to it. Since physical contact was not possible authors used a non- probability sampling to collect data. The number of demographics used in the study is very limited. Analysing of other factors will add more content to the existing literature. Similarly, the data is collected from the working professionals in Delhi. Expanding the area can give more results for the study.

The professor (Giorgi, 2020) stated in their research about the various psychological and social implications linked to work related factors, following Covid-19 pandemic. Social distancing norms, lockdowns, fear of getting sick, job insecurity, loss of income influences the mental as well as the physical health of the workers. The results are anxiety, depression, PTSD, sleep disorders, suicidal ideas and drug and alcohol addiction. Possible actions to reduce the impact of the mental health of employees include improvement of infrastructure in workplace, monitoring mental health and implementation of training programs. Promoting the development of preventive measures is essential. It also describes the psychological conditions related to workplace after Covid-19 in order to address up-coming psychological critical issues in the work place.

### **OBJECTIVES**

- To analyse the impact of workspace-shift on the stress level of IT professionals during the pandemic.
- To analyse the factors that influence stress level of employees in the IT sector during COVID-19.
- To identify various mechanisms that might reduce the stress faced during the pandemic.

## HYPOTHESES OF THE STUDY

- H<sub>0</sub>: There is no significant difference among job tittle with regards to impact of stress in IT professionals
- H<sub>0</sub>: There is no significant difference among age with regards to factors influencing stress in IT professionals
- H<sub>0</sub>: There is no significant difference among impacts of stress with regards to effectiveness of coping strategies in IT professionals.

#### **TESTING OF THE HYPOTHESES**

# A. Impacts of stress in IT professionals

H<sub>0</sub>: There is no significant difference among job title with regards to impact of stress in IT professionals

H<sub>1</sub>: There is a significant difference among job title with regards to impact of stress in IT professionals

Table 2.1: Job title and impact of stress in IT professional

Impact of Stress		df	N	Mean Square	F	Sig.
	Sum of					
	Squares					
Between Groups	2.271	3	3	.757	1.387	.254
Within Groups	36.026	6	6	.546		
Total	38.298		69			

ANOVA

Source: Primary data, n=70

The table 2.1 shows a one-way between subject's ANOVA was conducted to compare the job title of IT professionals and impacts of stress in IT professional during covid-19 pandemic. Software engineer, data analyst, system developer, programmer etc., are the various classification considered

under job title of IT professional. Since, P>0.05 the null hypothesis was accepted. There is no significant difference among job title with regards to impact of stress in IT professionals. That means the job title one of the reason for stress of IT professionals.

#### **B. FACTORS AFFECTING STRESS**

Ho: There is no significant difference among age with regards to factors influencing stress in IT professionals

H<sub>1</sub>: There is a significant difference among age with regards to factors influencing stress in IT professionals

Table 2.2: Age and factors influencing stress

Factors Influencing Stress		df	Mean Square	F	Sig.	
		Sum of Squares				
Between (	Groups	1.364	3	455	1.000	.398
Within Gr	roups	29.989	66	.454		
Total		31.353	69			

Source: Primary data, n=70

The table 2.2 shows a one-way between subject's ANOVA was conducted to compare the age of IT professionals and factors influencing stress during covid-19 pandemic. Age of the employees are classified as, 20-25, 25-30, 30-35, 35-40, above 40. Since, P>0.05 the null hypothesis was accepted. There is no significant difference among age with regards to factors influencing stress in IT professionals. That means the age one of the factor influencing stress of IT professionals.

# C. Effectiveness Coping strategies

H<sub>0</sub>: There is no significant difference among impacts of stress with regards to effectiveness of coping strategies in IT professionals.

H<sub>1</sub>: There is a significant difference among impacts among impacts of stress with regards to effectiveness of coping strategies in IT professionals.

Table 2.3: Impacts of stress with regards to effectiveness of coping strategies

MEN STATES THE STATE MATERIAL STATES		AN				
Impact of Stress	Sum of Squares	df	M	lean Square	F	Sig.
Between Groups	7.480	19	.3	94	.639	.857
Within Groups	30.818	50	.6	16		
Total	38.298	69				
		AN	OVA			
Effectiveness of Coping	Sum of	df	Mear	Square	F	Sig.
strategies	Squares			# <del></del>		1,0000
Between Groups	.306		4	.077	.160	.958
Within Groups	31.047	65	.478			
Total	31.353	69				

Source: Primary data, n=70

The table 2.3 shows a one-way between subject's ANOVA was conducted to compare the impacts of stress with effectiveness of coping strategies in IT professionals. On both conditions, P>0.05 the null hypothesis was accepted. There is no significant difference among impacts of stress with regards to effectiveness of coping strategies in IT professionals. That means this coping strategies helps to overcome the stress level of IT professionals due to workspace shift during covid-19 pandemic

## **FINDINGS**

- There is no significant difference among job title with regards to impact of stress in IT professionals. That means the job title one of the reason for stress of IT professionals.
- There is no significant difference among age with regards to factors influencing stress in IT professionals. That means the age one of the factor influencing stress of IT professionals.
- There is no significant difference among impacts of stress with regards to
  effectiveness of coping strategies in IT professionals. That means this
  coping strategies helps to overcome the stress level of IT professionals due
  to workspace shift during covid19 pandemic

#### **SUGGESTIONS**

Based on the study, following suggestions are put forward for reducing stress level of IT professional.

1. Employees should be provided with both technical and financial assistance may help to overcome the stress arises due to workspace shift.

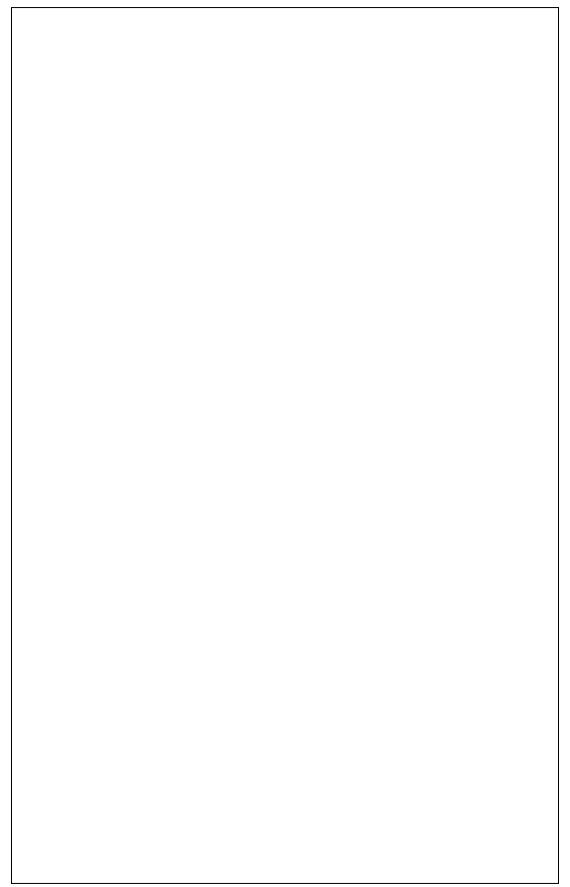
- 2. To provide technical trainings and orientations that might help the employees to adapt with the Changing working environment.
- 3. The organization is responsible for adjusting and conducting those programs and activities, which an employee can accommodate with current working scenario and reduce stress.
- 4. Equitable division of work load among the employees may help to reduce work pressure and employees' turnover.

#### **CONCLUSION**

This study was conducted to assess the problems related to the challenges faced by employees in relation with workspace shift mainly stress level of employee during COVID 19 Pandemic. It is made clear through the study that the Pandemic situation brings in a lot of challenges in relation with workspace shift from office to home and it generate both mental stress and other health issues in employees. It is also noted that both network as well as technological inefficiency, doubled the routine work of employees. This study proves that how to manage employees stress in an organisation and improve their potential with full satisfaction. And findings of the study suggest some solutions to the area of proper management of employee stress and well as employee satisfaction.

#### **BIBLIOGRAPHY**

- Awada, M. (2021). Working from home durning covid-19 pandemic: impact on office work productivity and work experience. IOSS PRESS, 19.
- Giorgi, G. (2020). COVID-19 RELATED MENTAL HEALTH EFFECTS IN THE WORK PLACE: A NARRATIVE REVIEW. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, 22.
- Kniffin, K. M. (2020). Covid-19 And The work place: Implications, Issues And Insights For Future
- Research And Action. HARVARD BUSINESS SCHOOL, 44.
- Kumar, P. (2021). Working In Lockdown: The relationship between Covid-19 induced work stressors, job perfomance, distress and life satisfaction. Current Psychology, 16.
- Schieman, S. (2021). Work-Life Confilcts During Covid-19 Pandemic. SOCIUS, 19.



#### AN EXPLORATORY STUDY ON MOOCS IN HIGHER EDUCATION

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#### Abstract:

The Sustainable Development Goals (SDGs), also known as the Global Goals, adopted by all United Nations Member States in 2015 includes 17 Sustainable Development Goals, building on the principle of "leaving no one behind". The fourth goal in the 2030 Agenda for Sustainable Development is 'the access to quality education'. It is here where our study titled "MOOCs in Higher Education" gains its importance. With the advancement of information technology, the walls of the classrooms are now not a barrier for students as well as teachers to enhance their knowledge. For students and working professionals, the internet offers a new platform to conduct their studies and expand their vision in the form of Massive Online Open Courses or popularly known as MOOC courses. There are plenty of platforms that provide the students with a wide variety of courses and the prominent ones being Coursera, edX, FutureLearn, Udacity, and the India governments' initiative SWAYAM platform of which many are controlled and maintained by recognized universities. Our study is not intended as an exhaustive survey of all aspects in the field of MOOCs. It aimed to access the level of awareness of various MOOC courses and satisfaction level of the users. The study revealed that majority of the respondents are aware about the various MOOC platforms and the most satisfying factor is the convenience to complete course wherever we are.

**Keywords**: Massive Online Open Courses, Higher Education, Online learning

#### INTRODUCTION

Web platforms envisage a new era of education with unlimited participation. Massive Open Online Courses (MOOC) is one such initiative aimed at unlocking knowledge through online courses; MOOC has silently entered our higher education sector. Many students of higher education sign up for courses offered through world-class universities over various platforms and some have even moved closer to receiving micro and nano degrees by accumulating

credits from these. Courses of diverse variety are available online, starting from "Being Happy" to "Death". While students may sign up for subject related courses, laymen have wide variety to choose from including magic, soft skills, foreign languages, gardening and cooking.

#### **REVIEW OF LITERATURE**

(Israel, 2015) studied the effectiveness of integrating MOOCs in traditional classrooms for undergraduate students. This paper further discusses the preliminary findings related to the

impact of MOOCs on the learning outcomes of students. The findings of the study stated that there is a significant change in the learning pattern and outcomes of students with regards to the usage of MOOCs.

(yuan & powell, 2018) This report helps the decision-makers in higher educational Institutions to gain a better understanding of the usage of massive online open course (MOOCS) and trends towards greater openness in higher education and to think about the implications for their institutions. Secondary data is used for data analysis. This paper gives

the suggestion that MOOCs promise to provide a better higher education experience by providing flexible, affordable, and fast-track completion of universities courses for free or at a low cost for the learners who are interested.

(Kalvala, 2016), in their research paper titled "Student engagement in massive open online courses", undertakes to study the behavioral and engagement pattern of students in online learning platforms. The paper also discusses the existing limitations of MOOC courses and states that instead of giving video presentations, we must adopt forums, which increases the participation of students through different activities like discussions and debates.

(Evans, Baker, & Dee, 2016), in their article titled "Persistence patterns in massive open online courses (MOOCs)", examines various critical patterns of enrollment, engagement, persistence, and completion among students in online higher education. Primary data is used for the analysis. The findings of the article suggest that some changes in the course designs are required to make the students more engaging, interesting and for the successful completion of the courses.

(Leblanc & Jacoby, 2015), in their journal article titled "Strange Bedfellows: How to Think about Innovation in a World of Regulation" studies how the new players in education, the Massive Online Open Courses have disrupted the way in which universities conduct them business. Their article states that

universities can earn income from activities like course fees, selling information about students to employers and other interested parties and payment for assessment and certification.

#### **OBJECTIVES OF THE STUDY**

The objectives of this study are as follows.

- 1. To understand the level of awareness of online courses among the users.
- 2. To analyze the satisfaction level of users.

## HYPOTHESES OF THE STUDY

H0: There is no significant difference between male and female with regards to satisfaction levels on MOOCs.

H0: There is no significant difference among varied age groups with regard to satisfaction levels on MOOCs.

#### RESEARCH METHODOLOGY

The present study is with the help of both primary and secondary data. For this, the primary data was collected using various journals, bulletins, magazines, and questionnaire methods. The secondary data are from journals, books, the internet, records, etc.... The study was conducted in Marian college Kuttikkanam (Autonomous), data was collected from 60 respondents. In order to select the sample, convenient sampling method was adopted. The collected data were analyzed using SPSS and the tools used are Independent Sample T- Test and One Way Anova.

#### ANALYSIS AND INTERPRETATION

Table 1: Awareness Level on MOOC

Awareness Level	Yes	Percentage	No	Percentage	Total	
Different MOOC	36	60	24	40	60	
Different Courses	43	71.67	17	28.33	60	
Information From	41	68.33	19	31.67	60	
College On MOOC	41	06.33	19	31.07	60	
Facilities From College	45	75	15	25	60	
Learning Process	46	76.67	14	23.33	60	

Source: Primary Data

With regards to the above information, we can see that 60 % of the respondents are aware of the different MOOC platforms while 40% are not aware of it. Further, we can see that 71.67% of respondents know the different varieties of courses provided by MOOC platforms whereas 28.33% respondents are not aware of it. 68.33% of respondents came to know about MOOC from the information provided to them by the college and the rest 31.67% of respondents gained knowledge about MOOCs from other sources.

75% of the respondents are aware of the different facilities provided by the college to promote online learning while 25% of respondents are not aware of such facilities. Of the 60 respondents, 76.67% respondents are aware of the learning process through MOOC and the rest 23.33% are not sure about the learning process.

Factors	Mean	Std. deviation
Convenience	4.15	0.685
Instructional Quality	3.70	0.776
Multiple Courses	3.50	1.017
Quality Of Courses	3.65	0.899
Variety of Courses	3.78	1.091
Time Zone and Physical Boundaries	3.55	0.982
Employer Acceptance.	3.55	0.910

Source: Primary Data

Convenience is the factor that has the highest mean of 4.15. It is followed by 'Course Varieties' with a mean of 3.78, 'Instructional Quality' with a mean of 3.70. The factor 'Quality of Courses' has a mean of 3.65. The factors 'Time zone and physical boundaries' and 'Employer Acceptance' had the same mean of 3.55. It was followed by the 'Ability to do multiple courses' which had the lowest mean of 3.50.

#### **TESTING OF HYPOTHESIS**

# **Testing of Hypothesis Based on the Satisfaction Level of MOOC Users with Demographic Factors**

H0: There is no significant difference between male and female with regard to satisfaction level on MOOC.

H1: There is significant difference between male and female with regard to satisfaction level on MOOC.

Test Used: Independent Sample T-Test								
Variable Name (Gender)	Size	Mean	Standard Deviation	t-value	P-value			
Male	54	25.7222	3.71847	0.096	0.220			
Female	6	27.3333	4.54606	-0.986	0.328			

Source: Computed

Since p-the value is more than 0.05, the null hypothesis is accepted at a 5% level of significance. Therefore, there is no significant difference between male and female with regards to satisfaction levels on MOOCs.

- H0: There is no significant difference among varied age groups with regard to satisfaction level on MOOC.
- H1: There is significant difference among varied age group with regard to satisfaction level on MOOC.

# Relationship between satisfaction level on MOOC and Age

Test Used: One Way Anova								
	Sum of Squares	Df	Mean Square	f-value	p-value			
Between Groups	20.066	1	20.066					
Within Groups	830.117	58	14.312	1.402	0.241			
Total	850.183	59						

Source: Computed

The above table clearly explains that the p-value is 0.241 which is greater than 0.05, thus the The null hypothesis is accepted at a 5% level of significance and hence it can be concluded that there is no significant difference among varied age groups with regards to satisfaction level on MOOC.

#### **MAJOR FINDINGS**

- a) Demographics
  - The major demographic findings indicate that the respondents were almost equally divided based on their gender,
  - The majority of the respondents were young undergraduate students.
  - Almost 90% of the respondents are in the age group of 18 25. b) Awareness Level
  - 60% of the respondent are aware of the different MOOC platforms.
  - 75.5% of the respondents know the different courses available in MOOC platforms.
  - The 41 respondents securing 68% came to know about MOOC from the information provided to them by the college.
  - 75% of the respondents are aware of the different facilities provided by the college to promote online learning.
  - Of the 60 respondents, about 76.6% respondents are aware of the learning process through MOOC and the rest 23.3% are not sure about the learning process.

### c) Satisfaction Level

• The study has revealed that convenience is the factor that has the highest mean of 4.15 followed by 'Course Varieties'.

#### **SUGGESTIONS**

- Conduct various promotional activities to encourage the participation of learners in MOOCs.
- Should simplify the learning process through MOOC.
- Should introduce more dynamic courses to increase the participation of learners.
- The courses provided must meet industrial standards.
- Should provide offline delivery of courses in pen drives and CDs in areas of poor infrastructural facilities.
- Should make the courses more interactive in order to increase the satisfaction level of the learners.
- Provide flexible timing to complete the courses.
- Identify new channels of communication to access the less informed learners.

#### **CONCLUSION**

The present study tried to understand the level of awareness of online courses among the users and the satisfaction of end-users towards Massive Online Open Courses. MOOCs try to provide new and innovative courses to both students and working professionals at the cheapest price. MOOCs aim to eliminate the division of those having access to education and those not having. Even many recognized universities and colleges now come up with such courses. MOOC courses are a boon to the students as they promote distance education without any time constraints. With the recognition of MOOCs as a credible platform for education by employers, we are about to witness the revolution in education.

MOOCs can be used as a form of open education offered for free through online platforms. The (initial) philosophy of MOOCs is to boost the quality of higher education to a wider audience. As such, MOOCs are an important tool to achieve goal 4 of the 2030 Agenda for Sustainable Development. With the availability of highly updated technologies, MOOCs provide an opportunity for students and professionals to explore the world of knowledge without the restrictions of a number of courses and the subjects.

# **Bibliography**

- Evans, Baker, & Dee. (2016). Persistence Patterns in Massive Open Online Courses. *Center for education policy analysis*.
- Israel, M. J. (2015). Effectiveness of Integrating MOOCs in Traditional. *International Review of Research in Open and Distributed Learning*, 118.
- Jacoby, L. &. (2015). Strange Bedfellows:. newbusinessmodels.
- Kalvala, S. &. (2016). Student engagement in massive open online courses. *International Journal of Learning Technology*.
- Leblanc & Jacoby. (2015). Strange Bedfellows:. newbusinessmodels.
- yuan & powell. (2018). Beyond MOOCs: Sustainable Online Learning in Institutions. *reserach gate*.

#### **SACHU**

#### INTRODUCTION

Social media marketing refers to the process of gaining traffic or attention through social media sites. Social media itself is a catch-all term for sites that may provide radically different social actions. For instance, Twitter is a social site designed to let people share short messages or 'updates' with others. Facebook, in contrast is a full blown social networking site that allows for sharing updates, photos, joining events and a variety of other activities.

Social media marketing is the use of social media platforms and websites to promote a product or service. Although the terms e-marketing and digital marketing are still dominant in academia, social media marketing is becoming more popular for both practitioners and researchers. Most social media platforms have built-in data analytics tools, which enable companies to track the progress, success and engagement of ad campaigns. Companies address a range of stakeholders through social media marketing including current and potential employees, journalists, bloggers, and the general public. On a strategic level, social media marketing includes the management of marketing campaign, governance ,setting the scope and the establishment of a firm's desired social media 'culture' and 'tone'.

## Significance of the Study

Social media is a powerful channel of marketing. Thus social media marketing is the process of marketing through social media like twitter, facebook, youtube, etc. A social media strategy can be simple as having a company 'Blog', 'Twitter Account' or attaching 'Digg this' etc tags to the end of to an article. Business on a scan improves search ranking, leads, sails and traffic using search media. This can be done at reduced marketing expense.

Nowadays, social media marketing has a vital role in our society. It will lead to real relationship building. The benefits to marketing via social networks are numerous and largely gained at a low cost. And also social media marketing activities perceived by customers are influential to all customer equity drivers.

# **Objectives**

- To study the perception of consumers towards social media marketing.
- To identify the various factors influencing social media marketing.
- To study the relationship between social media marketing and consumers' behavior.

# **Hypothesis**

Ho: There is significant relationship between perception and preference of brands that are promoted on social media sites.

H1: There is significant relationship between perception and preference of brands that are promoted on social media sites.

#### Methodology

The study has been conducted by collecting both primary and secondary data.

## **Primary Data**

50 respondents from Thiruvalla Taluk has been taken for the study. The sample respondents were interviewed by means of questionnaire.

## **Secondary Data**

The secondary data are collected from journals, websites and newspapers.

### **Limitations of the Study**

- The study is limited to Thiruvalla Taluk.
- Time was the most limiting factor.
- Most of the respondents were reluctant to reveal the accurate information.

#### **REVIEW OF LITERATURE**

Now a day's marketers are using the social networking sites more and more to reach the consumers and potential customers with their ads and promotional offers as well as personalized messages. A previous study by Yaakop et al. (2012) suggested the various factors that influence consumer's attitude towards advertising on Facebook as perceived interactivity, advertising avoidance and privacy. Another study by Bond et al. (2010) concluded that social media advertising could have powerful impact on consumer's brand loyalty and engagement. Forbes (2010) examined credibility, engagement and interactivity of three types of endorsements: a corporate endorsement, a third-party endorsement and social network endorsement and found that corporate web site are most credible where Facebook is one of the most trustworthy and engaging.

As per the results of empirical study by Schivinski and Dabrowsk (2014) user generated social media communication had a positive influence on both brand attitude and equity and that further leads to the purchase intention also. Engagement can be promoted through entertaining and interactive posts, useful and relevant content, word of mouth communication from other consumers, as well as extrinsic reinforces such as promotions and giveaways. Social media, like Facebook and Twitter helps build relationship with

consumers to get product and brand related information (Smith, 2014). Haida and Rahim (2015) studied and proposed a model of social media advertising which suggested that being informative is a predictor for both product awareness and advertising value while irritation caused due to unwanted social media advertising creates negative impact towards product awareness and do not add any value for advertising. Direct advertising by the firm is unable to influence consumers towards brand whereas social media content by firm creates viral response and attracts more customer in one go and generates more brand awareness and brand attitude (Kodjamanis and Angelopoulos, 2013).

## DATA ANALYSIS AND INTERPRETATION

TABLE 1

#### **Users of Social Media**

Users	No. of Respondents	Percentage
Yes	38	76
No	12	24
Total	50	100

Source: Primary Data

Out of 50 respondents, 76 per cent of respondents are users of social media and 24 per cent do not use social media.

FIGURE 1
Users of Social Media

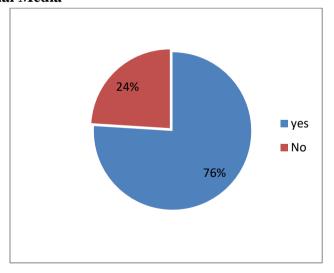


TABLE 2
Respondents Who Notice Advertisement in Social Media

Criteria	No. of Respondents	Percentage
Always	18	47.36
Often	15	39.47
Sometimes	2	5.26
Rarely	2	5.26
Never	1	2.63
Total	38	100

Source: Primary Data

47.36 per cent of respondents are always noticed advertisements on social media, 39.47 per cent of respondents often notice the advertisements on social media, 5.26 per cent of respondents sometimes and rarely notices the advertisements and 2.63 per cent respondents never notice the advertisements.

FIGURE 2
Respondents Who Notice Advertisements in Social Media

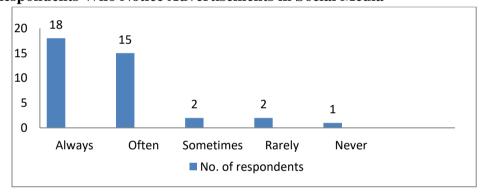


TABLE 3
Influence of Social Media Advertisements

Influence	No. of Respondents	Percentage
Very Much	32	84.21
Little Much	5	13.15
Never	1	2.63
Total	38	100

Source: Primary Data

Table 3.10 explains influence of advertisements in social media in the buying decision of respondents. Of the total 38 users 84.21 per cent of users are influenced by advertisements in social media in the buying decision. 13.15 per cent respondents are least influenced of advertisements in social media in the buying decision and 2.63 per cent of respondents never influenced by this advertisements for buying decision.

FIGURE 3
Influence of Social Media Advertisements

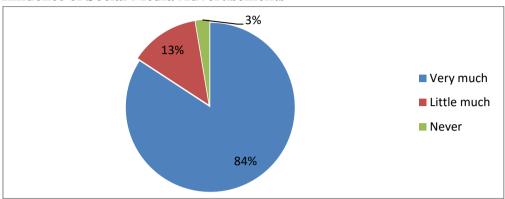


TABLE 4
Sharing of Comments/Reviews by Respondents

Criteria	No. of Respondents	Percentage
Always	10	38.46
Often	12	42.85
Sometimes	3	10.71
Rarely	1	3.57
Never	2	7.14
Total	28	100

Source: Primary Data

38.46 per cent of the respondents always like to share comments /reviews to friends after purchase, 42.85 per cent of respondents often like to share the comments/ reviews with friends after purchase, 10.71 per cent respondents sometimes share comments/reviews with friends , 3.57 per cent respondents rarely share comments and 7.14 per cent of respondents never share comments/reviews with friends after purchase.

FIGURE 4

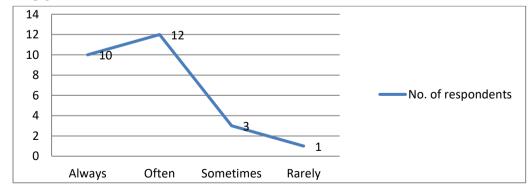


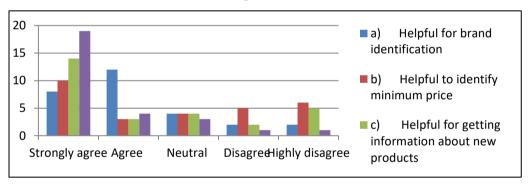
TABLE 5
Benefits of Social Media Marketing

Factors		Strongly Agree		Agree No		Neutral		Disagree		Highly Disagree	
ractors	No.	%	No	%	No ·	%	No	%	No ·	%	
Helpful for Brand											
Identification	8	28.57	12	42.85	4	14.28	2	7.14	2	7.14	
Helpful to Identify											
Minimum Price	10	35.71	3	10.71	4	14.28	5	17.85	6	21.42	
Helpful for Getting											
Information About	14	88.26	3	10.71	4	14.28	2	7.14	5	17.85	
New Products											
Helpful to Identify	19	67.85	4	14.28	3	10.71	1	3.57	1	3.57	
More Offers											

Source: Primary Data

The factors about social media marketing. In this, respondents are highly agree with the benefit of helpful to identify more offers as compared to other benefits of social media marketing and other benefits like helpful for brand identification are agree with them.

FIGURE 5
Benefits of Social Media Marketing



# **FINDINGS**

- Out of 38 respondents, 47.36 per cent of respondents are notice the advertisements in social media.
- Out of the 38 users 84.21 per cent of users are influenced by advertisements in social media in the buying decision.
- 38.46 per cent of respondents always like to share comments/ reviews to friends after purchase
- 88.26 per cent of respondents are strongly agreed with the benefit of helpful for getting information about new products.

# **Suggestions**

- Every organisation should create social media channel plan for attracting consumers.
- The organizations should deliver content consistently and also put right systems in place to keep organization's posts relevant, interesting and valuable for customers.
- It is advised to use short and concise updates in social media.
- Better to create share worthy blog content.
- To give more offers through social media marketing at a low rate.
- Discover the best and newest ways to deploy and track social media tactics.
- Improve professional development in social media marketing at a low cost.
- Use visual content in social media advertisement for more engagement in social media marketing.
- The organizations should target website visitors with social media.

#### Conclusion

The present study here examines the perception of consumers towards social media marketing.it is found that many respondents are not properly aware about the term social media marketing. In this survey, some of the respondents are not the users of social media. Most of the respondents are using face book as a social media for social media marketing. The benefits like new offers, brand identification, market prices etc provided through social media marketing are satisfied with the respondents.

On the basis of the findings of the present study, some valuable and visible suggestions were given in this study. If the above suggestions are considered, the social media marketing is beneficial. It aims at facilitating better customer choice, improved service quality and introduction of innovative service offering in the market.

#### SOCIAL PAYMENTS MAKE SHOPPING SEAMLESS

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#### **Abstract:**

Social payments are payment methods that incorporate aspects of social media. These kinds of payments are typically made via an app or website. The growth of social payments rapidly increased from 0.4% to 3% during 2015-2022. Social payments are accepted by millions of merchants as it is very quick enough to send and receive money and shop online. It offers interactive social features and colourful emojis to make payments friendly and fun. The present paper focuses on how consumer behaviour influenced cause of social payments. For the present study, data was collected from 198 young college going students in Krishna district using structured questionnaire and appropriate statistical tools were used. The outcome of the paper will be helpful to frame marketing strategies in line with the customer changing behaviour patterns.

**Keywords:** Key words: social payments, buying behaviour, emojis, merchants.

# Introduction

Social payments are payment methods that incorporate aspects of social media. These kinds of payments are typically made via an app or website. Those involved in the transaction exchange usernames, phone numbers, or email addresses rather than financial information like Twitter buy, apple pay, pay pal. Because of these social payment apps the behaviour of consumer easily change or influenced, because if the consumers have cash in their accounts and those accounts directly connect with these social payment apps

the behaviour of the consumer will change. When consumers open these payments, they will attract by these payment apps because no of products, things, fashionable items are available in these payment apps, people or consumers they don't need those products but they attracted to buy.

The Covid-19 pandemic has boosted the use of digital and contactless payments. Cash in circulation reached a decade high due to a surge in demand for high-value banknotes, suggesting that cash was increasingly held as a store of value rather than for making payments. The Covid-19 pandemic accelerated the digitalisation of payments. The latest Red Book Statistics from the BIS Committee on Payments and Market Infrastructures (CPMI) show that consumers have shifted from physical cash to digital and contactless payment instruments at a rate unprecedented since the start of the Red Book Statistics.

#### Literature

Zimmerman, Jamie M.; Baur, Silvia. 2016 reported that digital Social Payments (DSPs) offer a variety of potential benefits over traditional cash, voucher, or in-kind methods. Proponents most often cite increased efficiency, reduced leakage, and faster, more convenient and more secure payments to recipients. When linked to bank accounts or mobile wallets that offer store-of-value opportunities or access to additional financial services, DSPs to the bottom of the pyramid could pave a way to fuller financial inclusion. However, evidence shows that the financial inclusion benefits of DSPs have thus far been limited: most recipients withdraw 100 percent of their payment at once and by and large do not use the account again until the next transfer takes place, let alone take advantage of additional financial services that may be available to them. This lackluster use has led some to question the promise of DSPs as a financial inclusion gateway.



## **Key Barriers to digital payments:**

One of the major problems was dealing with country-by-country financial and payments regulations, many of which differ from place to place.

## **Confusion and Irritability Among New Users**

No ability to earn interest on money on money deposited with social payments

Fees for some services.

Speed of transaction and payment failure

# Burdensome KYC requirements

Transaction charges

Sometimes products booked but don't visible in the cart with respective social payments, so consumers are in dilemma is product booked or not.

#### **Objectives**

To understand the significance of social payments post covid.

To analyze the impact of digital social payments on change in buying behaviour of consumers.

# Methodology

For the present study, primary data was collected from 198 young college going students in Krishna district using structured questionnaire. Respondents belong to different age groups ranging from 17 yrs to 22yrs and from different disciplines.

## **Importance of Digital Payments Cost Savings**

Digital Payments will reduce a huge amount of cost that governments and companies used to invest.

# **Accessibility and Convenience**

Usingdigitalpaymentmodesisveryeasy. Youcanmakeonlinepayments within asec ond. In case of a contactless transaction, you need to hover your card over the payment equipment. People can use it using any mobile device.

#### Lower Risk

Onlinepaymentgatewaywillsecurelysendtheimportanttransactiondetails. Thereis no specific time formaking a nonline transaction, you can do it when every out want.

#### **Trace Everything**

The best part of using digital payment mode is that you can trace your transaction.

## **Future of Digital Payment**

After the arrival of COVID-19, the online payment industry is booming. Various digital payment companies are doing their hardest to encourage digital payment methods. There is no doubt that the post pandemic era will be the era of digital payment mode. There are several enterprises that have introduced advanced payment terminals as technology progresses. These payment terminals would make it easier for retailers to take payments via credit card. Customers would now have the option to make deposits in a comfortable

manner. As a consequence, for small merchants, the digital payment mode will be a blessing in disguise.

## **Various Modes of Digital payments**

Formed in 2008, under the patronage of RBI and Indian Bank Association, NPCI has embarked on a machine for touching every Indian across its diverse range of digital payment items like UPI (Unified Payment Interface), BHIM (RuPay, NETC, AePS (Aadhaar enabled Payment System), BHIM Aadhaar, Bharat Bill pay, NFS (National Financial Switch), NACH (National Automated Clearing House), CTS, IMPS(Immediate Payment Service) and to facilitate Safe and protected digital payments.

This research helpful in

Shift of money from person to person

Person to business, such as kirana stores, petrol stations, recharges, ecommerce, Business to business, such as a retailer to supplier or distributor

Business topers on a salaries, reimbursement, claims

## Non-cash payments

The pandemic has made a marked impact on non-cash payments. In particular, the total value of non-paper-based or digital credit transfers grew strongly in both advanced economies (AEs) and emerging market and developing economies (EMDEs). These payments include transfers initiated via online banking, a mobile banking app or an automated transfer. As a result, the growth in total credit transfer usage was so strong that the share of non-cash payments in total GDP sharply increased across the globe. This, together with a decline in the share of private consumption expenditure in GDP suggests a meaningful move away from cash payments.

In addition to the decline in cash payments, the growth in the number of card payments lost momentum or even declined in various jurisdictions. The shift away from cash and cards towards digital credit transfers is probably driven by a combination of on-going trends and Covid-19-related developments. The latter include:

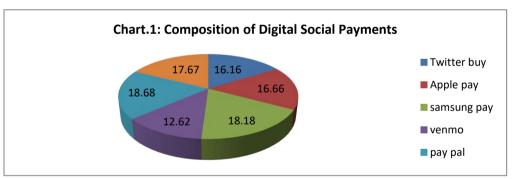
- the worldwide migration to working-from-home;
- temporary shutdowns of shops, hotels and restaurants;
- some merchants refusing cash payments;
- the surge in e-commerce;
- the growth in digital person-to-person payments; and
- the distribution of Covid-19 benefit payments by governments.

# Cash withdrawals and cash holdings

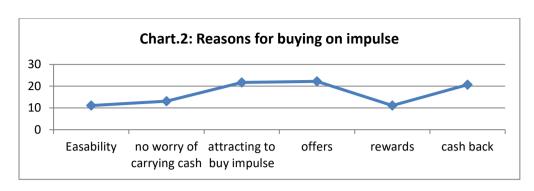
The decline in cash usage during the Covid-19 pandemic is also reflected in the cash withdrawals data. Compared with 2019, both the number and value of cash withdrawals dropped in 2020 in most countries. Generally, the total number of cash withdrawals declined by 23%, exceeding the 10% decline in value. This suggests that consumers took out cash less frequently, but when they did, they withdrew larger amounts. The decline in the number of withdrawals might be due to fewer commuting and shopping trips <sup>11</sup> during the pandemic and a tendency to avoid the use of automated teller machines (ATMs) or to visit bank branches because of fear of being infected with the virus. <sup>12</sup> However, country differences in withdrawals are large, with five annual withdrawals in China and India and 50 in Saudi Arabia. In terms of value, cash withdrawals were the lowest in Sweden and the Netherlands (3% and 4% of GDP, respectively) and highest in China and Russia (39% and 26%, respectively).

# **Data Analysis & Results:**

It is observed that the respondents are using digital social payments like twitter buy, apple pay, pay pal, venom, Samsung pay, and mi pay in different proportions as shown in Chart. 1. Out of the mentioned digital modes of social payment platforms, pay pal occupies major portion say 18.68%, and, 12.62% of the respondents are using venmo for their shopping payments.



There are several reasons associated with the impulse buying behaviour of customers like easability, no worry of carrying cash, etc. Majority of the respondents use social payment platforms for cashback and very minor percentage of respondents use these social payments for their easy access.



#### **Conclusion:**

The COVID-19 induced lockdown in India was an inflection point for onboarding of new users into digital payments. The COVID-19 pandemic has spurred financial inclusion – driving a large increase in digital payments amid the global expansion of formal financial services. As of 2021, 76% of adults globally now have an account at a bank, other financial institution, or with a mobile money provider, up from 68% in 2017 and 51% in 2011. Importantly, growth in account ownership was evenly distributed across many more countries. The pandemic has also led to an increased use of digital payments. In low and middle-income economies (excluding China), over 40% of adults who made merchant in-store or online payments using a card, phone, or the internet did so for the first time since the start of the pandemic. The same was true for more than a third of adults in all low- and middle-income economies who paid a utility bill directly from a formal account. In India, more than 80 million adults made their first digital merchant payment after the start of the pandemic, while in China over 100 million adults did.

Two-thirds of adults worldwide now make or receive a digital payment, with the share in developing economies grew from 35% in 2014 to 57% in 2021. In developing economies, 71% have an account at a bank, other financial institution, or with a mobile money provider, up from 63% in 2017 and 42% in 2011. The digital revolution has catalyzed increases in the access and use of financial services across the world, transforming ways in which people make and receive payments, borrow, and save. Through the use of smart phones, the digitization of the banking sector is bound to satisfy the increasing expectations of the population. Indeed, it reduced human error and improved comfort. With the aid of digital banking, most enterprises do not have to focus on the timing of banking operations. Transactions will now be made even in odd hours.

#### **References:**

- Auer, R, G Cornelli and J Frost (2020a): "Covid-19, cash, and the future of payments", *BIS Bulletin*, no 3, April.
- Auer, R, J Frost, T Lammer, T Rice and A Wadsworth (2020b): "Inclusive payments for the post-pandemic world", *SUERF Policy Note*, no 193, September.
- Akana, T (2021): "Changing US consumer payment habits during the COVID-19 crisis", *Journal of Payments Strategy & Systems*, vol 15, no 3, pp 234–43.
- Alfonso, V, C Boar, J Frost, L Gambacorta and J Liu (2021): "E-commerce in the pandemic and beyond", *BIS Bulletin*, no 36, 12 January.
- Boar, C and A Wehrli (2021): "Ready, steady, go? Results of the third BIS survey on central bank digital currency", BIS Papers, no 114, January.
- ECB (2020): "Study on the payment attitudes of consumers in the euro area (SPACE)", December.
- Chen, H, M Stratheam and M Voia (2021): "Consumer cash withdrawal behaviour: branch networks and online financial innovation", Bank of Canada, *Staff Working Papers*, no 28, June.
- Guttmann, R, C Pavlik, B Ung and G Wang (2021): "Cash demand during Covid-19", *RBA Bulletin*, March.
- IMF (2021): "Policy response to Covid-19 Policy Tracker", last updated on 2 July.
- Judson, R (2017): "The death of cash? Not so fast: demand for U.S. currency at home and abroad, 1990–2016", Conference Paper for International Cash Conference 2017 War on Cash: Is there a Future for Cash?, April.

#### ALIN E-COMMERCE

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#### **Abstract:**

With the rapid development of science and technology and economic society, the application of artificial intelligence (AI) is more and more common, its development has a profound impact on our work and lifestyle. In the field of e-commerce, AI technology has also been well applied and achieved good results. Al has become an important driving force for the development of e-commerce. This paper simply described the e-commerce development situation and prospects of AI technology, analysis the present situation of the application of Al technology in the field of e-commerce, mainly study and discuss in detail from the aspect of assistant of Al, intelligent logistics, recommendation engine and the optimal pricing application through the research of e-commerce intelligent operation instance — Baidu take away, probes into the important impact and great significance on the e-commerce development of artificial intelligence.

#### **Introduction:**

E-commerce or electronic commerce is an emerging concept that describes the process of buying and selling or exchanging of products, services and information via Computer network including the internet. Entering into the electronic array, the way includes and organisations do business and undertake commercial transactions has been changed. This indicates the moment towards electronic commerce. This means there is no paper work and physical interaction is limited if at all. The emergence of electronic commerce started in early 1970with the earliest example electronic funds transfer (EFT), which allows organization to transfer funds between one and another electronically.

Ecommerce is not just having a website, but e-commerce is more than that there are number of applications of e-commerce such as home banking, online shopping, finding a job etc, To execute the applications it is necessary to have supporting information and organisational infrastructure.

How e-commerce works

The consumer moves through the internet to the merchant's website .From there, he decides that he want to purchase something, so he is moved to the online transaction server, where all if the information he gives is encrypted. Once he has placed his order, the information moves through a private gate way to processing network, where the issuing and acquiring banks completed or deny the transaction .this generally takes place in no more than five to seven seconds .there are many different payments systems available to accommodate the varied processing need of merchants, from those who have a few orders a day to those who process thousands of transaction daily With the addition of secure socket layer technology, e-commerce is also a very safe way to complete transactions.

E-commerce is a modern business methodology, which helps the companies and the consumers to have better business facilities through less cost while improving the quality of good and services and increasing the speed of transaction s.

E-commerce covers online selling and transaction, web retailing and wholesaling, electronic data and fund transfer, electronic banking interactive marketing etc. It involves multimedia, advertising, product information, customer support, on the world wide via internet payment mechanism through banks etc.

It connects the management of the enterprises to the various aspects of trading viz, supplies, distributors, retailers, consumers and we'll other traders on the global e-commerce infrastructure.

#### **Global trading environment**

E-commerce has given a global platform to the manufacturers, traders sellers& buyers or consumers. Now sellers can treat world as a global market and buyers also have a wide range of choice to buy any product from any where in the world. In the other worlds we can say that world is acting like a single market consumers have accepted the e-commerce business model there are several factors which have a role in the success of any e-commerce venture. Some of possible factors to make it successful are listed below

- Providing value to customers.
- Providing service and performance.
- Providing an attractive website.
- Providing an incentive for customers to buy and return.
- Providing personal attention.

- Providing a sense of community.
- Providing reliability and security.
- Providing a 360 degree view of the customer relationship.
- Owning the customer's total experience.
- Streamlining business process.
- Letting customers help themselves.
- Helping customers do their job of consuming.
- Constructing a commercially second business mobel.
- Operating on or near the cutting edge of technology.
- Product suitability.

To do all operations smoother and faster companies start adopting AI technology in their apps. This is the latest trend in E-commerce.

Artificial intelligence refers to any human like behaviour displayed by a machine or system. In Ai's most basic form, computers are programmed to "mimic" human behaviour using extensive data from past examples of similar behaviour

Weather you are talking about deep learning, strategic thinking, or another species of Al, the foundation of its use is in situations that required lighting, fast responses with AI, machines can work efficiently and analyse vast amount of data in the blink of a eye, solving problems through supervised, unsupervised or reinforced learning.

While it's early forms enabled computers to play game s like checkers against humans ,Al is now part of our daily life. We have Ai solutions for quality control , video analytics , speech to text ,and autonomous manufacturing Financial services ,and entertainment , e-commerce

AI can help today's online retailers deliver an optimised customer experience on and off there e-commerce websites by using collected business and customer data to make better business decisions and more accurately predict the future

- By using Ai in e-commerce we have many advantages those are
- More targeted marketing and advertising
- Increased customer retention.

- Sales man automation .
- Efficient sales process
- Ai used cases in e-commerce
- Personalized product recommendation
- Pricing optimization
- Enhanced customer service
- Customer segmentation
- Smart logistics
- Sales and demand fore casting
- How to implement Ai into e-commerce?
- Create a strategy
- Find narrow use cases that are relevant to the over all corporate strategy
- Leverage third party/ experience
- Build a full scale solution.

## **Application of AI:**

Day by day technology is developed similarly AI technology is also improved in sale and e-commerce segmentation. At, present the application of artificial intelligence in the field or e-commerce is mainly reflected in the following aspects.

#### **Artificial intelligence assistant:**

It is the primary function. It is automatically respond to the customers simple questions and simple voice commands. And it also provide recommendations to the customers by using a natural language processing system. Chartbot on e-commerce site are based on the machine learning algorithms programs. It is use to communicate customers with suppliers and vice-versa in a personalized manner. Chartbot helps customers by finding suitable products and availablity of the products, compare the products and finally help customers to pay. Of there any complaints and questions, the chartbot can also help customers to contact corresponding savice person.

## **Recommendation engine:**

It is recommendation system work based on mechine learning algorithms. AI predict and analyse the behaviour of customer based on the previously collected massive data and predict which products are likely to attract the

customers. Firstly, based on the recently searches by potential customers. The mechine learning algorithms in the recommendation engine is able to record key details of the surched products based on the calculation results, the recommendation engine then generate appropriate suggestions for the browser and list them on a personal page ultimately helping customers find the products quickly.

# **Intelligent logistics:**

It is a logistic development mode in which equipment and control are made intelligent by using information technology, so as to replace people with technology when compare with the traditional logistics mode, intelligence logistics is granterly improve service quality and operation efficiency. This concept is first proposed by IBM in 2009. Now,many e-commerce companies are followed this strategy.

# **Optimal pricing:**

The current e-commerce industry is booming. This kind of long term continuous price adjustment is a big challenge to the supplies. AI technology which can process big data quickly. By using this technology it is easy to adjust the prices of the products according to the current market.

#### **Conclusion:**

It is necessary in business to adopt new technologies to sustain in market and run the business in long run. so, adoption of AI in E-commerce is also important to some extent.

#### **References:**

- David2AI.5 ways artificial intelligence is shaping the future of e-commerce [EB/OL].CSDN,2018-03
- Chen Shangyi, jiang xiaolin, qin weijun. Intelligent practice of mobile e-commerce. Information and communication technology, 2015,9 (04):9-14.
- Zhou Xiaoyuan. Artificial intelligence: ushering in the era of subversive intelligence Beijing: taihai press, 2018.
- Lin Jianhong. Application of artificial intelligence technology in e-commerce, China business review, 2019(02):19-20.