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Influential Factors of Buying Smart Watches

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ABSTRACT

The market growth of wearables is trending rapidly in present era, smartwatches are playing vital role in market and creating huge impact on the perception of customers. Here in this paper, we will be finding the factors that are influencing customers to purchase smartwatches and understand which all factors affect the buying behavior. The primary research was done by preparing a questionnaire and circulating it, and responses were collected. Regression analysis was done to understand the factors affecting purchase behavior of smart watches and around 12 variables wore taken. The results suggested that the model is significant with p value less then 0.05, and R square value was found to be 55%. Also, there are 4 factors that is price, purchase channels, status symbol and brand reputation were seen significant and have more impact on the dependent variable.

Key words: Smart watches, Buying behavior, Regression.

INTRODUCTION

A wearable component watch is in the form of fashion accessories, classification and segmentation of the watches is done based on many categories and the performances with the benefits and lifestyle. Smart watches stated to create buzz in the market from the year 2015, many of researchers and designers upgrading the market with the new designs and adding the different features in it. Evolution of the watches from knowing the time has changed to tracking the health with fitness bands. The advanced smartwatches now can be collaborated with the smartphones, with both the interaction of smart gadgets the tacking of the health, receiving the calls, messages and other information related, games, browsing has turned the life easier. Health tracking in 21st century has turned to be important priority for humans, and humans are adopting to this technology for the health tracking benefits. Displays on the watch was the major question and according to the time the modifications wore done, the revolution from normal glass to LCD and OLED was introduced to the market. The report of Counterpoint says that India stands in the number one place with the highest production of smart watches.

According to 2022 census highest rate of smartwatches in the market is owned by Apple smartwatch with 32% and the 2nd place in the market Samsung with 11%. Early phase smartwatches in the year 1999 was introduced with the minimal light, and the buttons on them for convenience and the market according to the time always changed and due to the globalization in the markets most of the imports and exports increased, and this liberalization gave change in the fashion trends. And in 2015 people started accepting the trends and started adopting to them. That platform gave chance to designers and that led to the massive changes, now most of the smartphones comes with the chips which are integrated in them for the better performance and for the health tracking and many advantages.

One of the vital roles in the market was played by advertisements, advertisement helps in increasing the reach of product and increase in the awareness of the product in the market. This advertisement helped in boosting the sales of the smartwatches in the year 2017 and lifted the sales of it in the followed years. Many of the foreign brands has travelled across the counties to establish the brands. And in the year brand Apple is holding major market share with the highest percentage of consumers.

LITERATURE REVIEW

1. "Exploring consumers' intention to accept smartwatch" "Liang-Hong Wu a , Liang-Chuan Wu b, Shou-Chi Chang". 2016

Author speaks about the importance and the uses of smartphones and how the generation has accepted the technology, and this turned to be important role for designers and researchers for the advancement. The user centre design can be improved with the factors that identify influence. In this paper IDT, TAM, UTAUT has been studied. Final research shows people with the age group 35 to 54 enjoy the experience of smartwatch.

2. "A study on consumer satisfaction towards apple smartwatches: a market overview perspective"

"Manasi Prasad Kabade, Nandita Beria". 2019

Different types of the factors which influence the customer to prefer apple compared to other smartwatches is studied in this paper, the brand apple include cultural and social factors. The need of the product and the want for it create a perception in the minds of the customers. The perception leads to create negative or the positive image of the products according to the time and even repeat purchase behaviour.

3.   "Factors Influencing Consumer Acceptance of New Technology: A Case Study of Smartwatches".   "Ener Robin, Knutsbo, Linus". 2015

The trends and the fashion with the wearables turn to be commercial among the consumers, the smartwatch turn to provide more information in the humans life with the health tracking and measurement information. This research is done on the Swedish market millennials to know the level of acceptance. The research in this paper is done on the bases of qualitative, the group of research was on millennials.

4.   "The future of smartwatches : a case on the current status and expected category evolution on the Portuguese market".

"Melo, sara cristina nunes de" 10-oct-2017

The paper talks about the new advancements that is happening on the technology and that is leading to change the purchase patter of the consumers, the advancement of the technology with smart watches is playing significant role in the tracking of the health and other aspects as well. The research was done on the market of Portuguese and its leverage. The qualitative research was conducted on the 3 groups, and resulting that smartwatches are the early adopters in the main market.

5.   "Gender differences in the wearable preferences, device and advertising value perceptions: smartwatches vs. fitness trackers". "Manali gupta, neena Sinha, Pratibha singh, stephanie"

In this paper the perception of the consumer towards the smartwatch is being studied, the factors such as the advertisement, publicity, life style and preference show the influence in the buying behaviour of an individual. The wearables and the buying behaviour depends on the gender and the demographic. The research data is collected with 217 Indian individual over the Facebook. Femail tend to purchase the watches which track the health and the purchase of males with smartwatches. The difference in buying among the gender.

6.   "To buy or not to buy: how young consumers approach new smart products in the social media context". "Jieqi Guan, Yui-yip lau, Huijun Yang, Lianping Ren" July 2021

The paper acknowledge the factors that influence the young customers in the market, and sustainingly increasing the demand for the product. The influence of the social media on the younger generation is very high, conducting of the interview is done with face to face with the people using the social media and the data is collected on the primary bases.

7.   "Preferences and Behaviour Toward E-Gadgets : A Study of Consumers in Chandigarh"

"Ubba Savita, upasana sheoran" 2020

The changes in the environment is being noticeable and this led to change in the customer purchases and resulting in the innovation of technology. The data is collected from the participants of 100 from the union territory. Friedman ranking test has been done to calculate the ranks on ordinal scale, young people tend to purchase the smartphones, laptops and the smartwatches so frequently compared to the other long term products.

8.   "Consumers' purchasing intention and exploratory buying behaviour tendency for wearable technology: The moderating role of sport involvement".   "Yu-Feng WU, Mei-Yen CHEN, Juan DU"

Following performed research was done between the years 2013 – 2019. The fashion which is updating with the trend is the major influence which tend the customer to buy the wearables. Researcher has seen the positive results in exploratory behaviour of the consumers using sport technique as moderator. The number of respondents are 302 where the questioner has been spread in Taiwan and the rate was 60.4%. the 2 difference of purchase that is on the spot and exploratory buying is being studied.

OBJECTIVES

- To understand the factors affecting user experience.

- To understand changes in the technology with time flow.

- To understand the factors affecting purchase behavior of customers on smartwatches.

RESULTS AND METHODOLOGY

This paper is based on data collected from primary sources. A questioner was distributed among 41 people which includes a mixture of people from different age groups. The data collected from questioner is analyzed and put through statistical tests and results wore analyed.

Age
41 responses
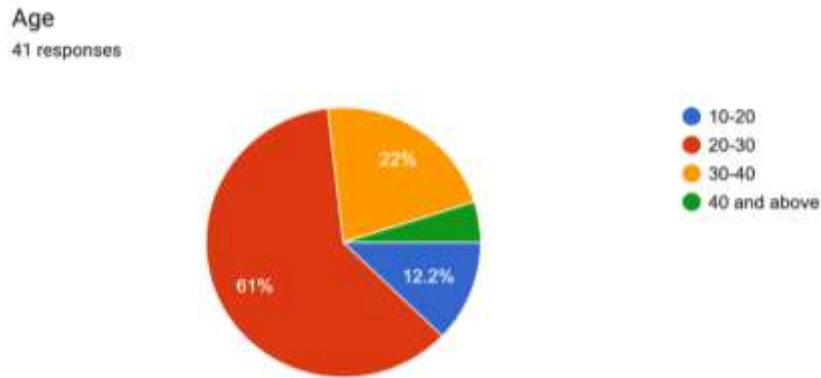
The collection of the data has been collected from different age groups. Out of 41 responses most of the people fall in the category of aged 20-30 with highest of 61%. And the second category from 30-40 with 22%, 12.2% of the people with the age of 10-20 and rest belong to 40 and above.

Hypothesis

H0 : There is no significant impact of the factors on the buying behaviour of the customers of smart watches.

Ha : : There is significant impact of the factors on the buying behaviour of the customers of smart watches.

Descriptive Statistics

	Mean	Std. Deviation	N
Do you prefer buying smart watches 1= strongly dis 4 and 5= 5	2.32	1.293	41
brand_reputation	3.20	.813	41
price	3.54	.711	41
features	3.71	1.078	41
purchase_channel	3.85	.910	41
status_symbol	3.61	1.022	41
additional_features	3.66	1.039	41
health_benefits	3.80	.872	41
asthetics	3.63	.915	41
battery_life	3.68	.879	41
reviews	3.59	1.117	41
updates	3.44	.950	41

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.741[a]	.550	.379	1.019	2.087

a. Predictors: (Constant), updates, price, brand_reputation, additional_features, health_benefits, battery_life, asthetics, features, purchase_channel, status_symbol, reviews

b. Dependent Variable: Do you prefer buying smart watches 1= strongly dis 4 and 5= 5

1. The R square value is .550 that is around 55% of the total variance of the dependent variable that is usage of smart watches is being explained by the different factors that is the independent variables.

2. The value of Durbin Watson is 2.087 which is the feasible range of the 1.5 and 2.5 thus it can be said there is no auto correlation.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.758	11	3.342	3.217	.006[b]
	Residual	30.120	29	1.039		
	Total	66.878	40			

a. Dependent Variable: Do you prefer buying smart watches 1= strongly dis 4 and 5= 5

b. Predictors: (Constant), updates, price, brand_reputation, additional_features, health_benefits, battery_life, asthetics, features, purchase_channel, status_symbol, reviews

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.121	1.034		3.018	.005
	brand_reputation	.597	.292	.375	2.040	.051
	price	.619	.286	.340	2.167	.039
	features	-.233	.256	-.194	-.910	.371
	purchase_channel	-.942	.313	-.663	-3.007	.005
	status_symbol	.598	.285	.473	2.095	.045
	additional_features	.174	.266	.140	.652	.519
	health_benefits	.057	.256	.039	.224	.825
	asthetics	-.406	.267	-.287	-1.520	.139
	battery_life	.076	.302	.052	.251	.803
	reviews	-.339	.265	-.293	-1.279	.211
	updates	-.292	.316	-.215	-.924	.363

a. Dependent Variable: Do you prefer buying smart watches 1= strongly dis 4 and 5= 5

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.87	4.70	2.32	.959	41
Residual	-1.753	1.636	.000	.868	41
Std. Predicted Value	-1.514	2.485	.000	1.000	41
Std. Residual	-1.720	1.606	.000	.851	41

a. Dependent Variable: Do you prefer buying smart watches 1= strongly dis 4 and 5= 5

3. The Anova table its can be seen that the p-value is less than 0.05 thus the model is significant and from the factors around four factors are significant that is price, purchase channel, status symbol, brand reputation, thus these factors have more impact on the buying behaviour of smart watches thus rejecting the null hypothesis.
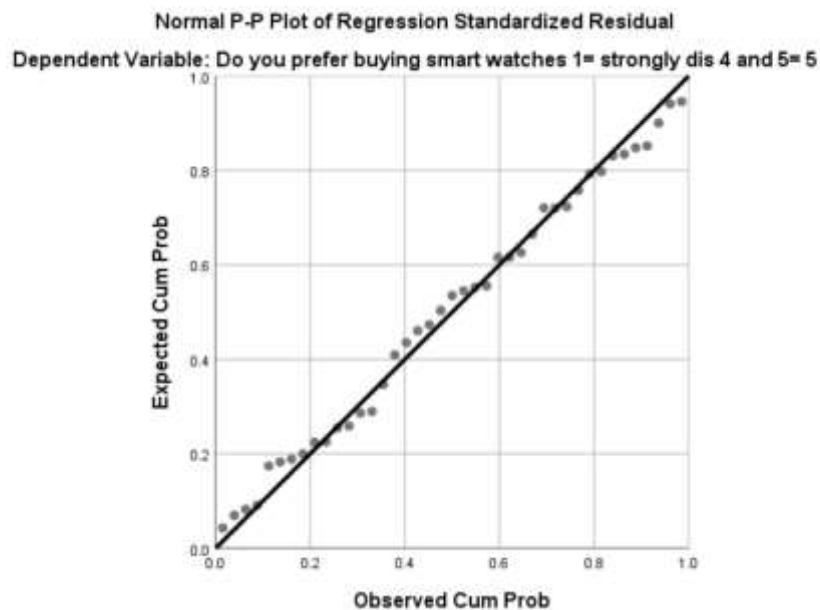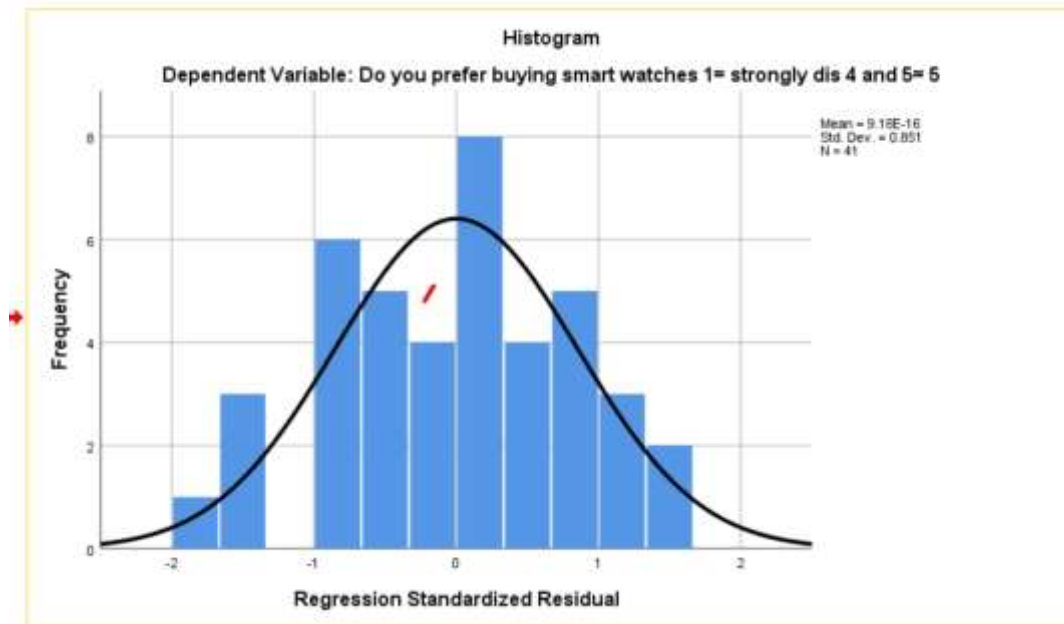
4. The equation is given by:

Y = 3.121 + .619 (price) – 0.942 (purchase channel) + 0.598 (status symbol) + 0.597 (brand reputation) + error

Where Y = Preference the usage of smart watches

Intercept = 3.121

Indicates in case of neglecting the impact of independent factors, the value of dependent variable will be 3.121

5. From the normal probability plot it can be seen the values are normally distributed and thus there is a liner relationship.

Histogram

Dependent Variable: Do you prefer buying smart watches 1= strongly dis 4 and 5= 5

Mean = 9.18E-16
Std. Dev. = 0.851
N = 41

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Do you prefer buying smart watches 1= strongly dis 4 and 5= 5

CONCLUSION

Smartwatches have many benefits with various levels of health tracking, information, and comes in many upgraded features. The elements of smart watch influences are price of the watches, reputation which is related with the brand, features and the integrated specifications, social influence, status, budget allocation, levels of satisfaction and many others are determining the factors of influence. According to the time user experience is changing with much informative and advancement in the technology. This data of health tracking is helping doctors to analyze health condition. According to many researchers, consumers tend to purchase the brands which brings them social status and gradually they tend to convert into brand loyal customers.

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