



A Study on Students Preference on Smart watches

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ABSTRACT

The development and advance of technology are enormous this time. The most emerging technology by now is the Internet of Thing (IoT) which allow many technological devices to be connected through the internet. One of the implementations is wearable devices, the wireless sensor attached in the body that open new experiences to the daily life activities. Although experiments on wearables have been conducted since the early 1980s, wearables have only recently come into general users. Today's smartwatches run mobile operating system and function as a portable media player, FM radio player, audio, and video files through a Bluetooth or Wi-Fi connection. Smartwatch also has the ability as the extension of its pairing smartphone in providing phone call and texting features. According to the research from Counterpoint's Global Smartwatch Tracker, global smartwatch shipments grew 37% in Q2 2018 with Apple domination with 41% share. Further, smartwatch makers are looking to add cellular connectivity for standalone use-cases as 90% of smartwatches shipped today are not cellular capable. As many researchers developed studies on smartwatch usage and factor adoptions [6, 7, 8, 9, 10], none of them explore the influence factors that affecting customer's perceptions toward smartwatch, regarding its usability, brand, and pricing. This study closing this gap and provide a deep understanding of Indonesian user perception of a smartwatch. The growth of smartwatch in Indonesia has encountered ups and downs.

KEYWORDS: smartwatch, students preference, future,digital, technology.

INTRODUCTION

Students are keen to make use of new technologies to enhance their learning. At the latest, the launch of the smartwatch has made the general public aware of the smartwatch and the possibilities, at least according to the marketing hype, that these wearable computers offer. The sales of smartwatches are predicted to increase rapidly in the next years and many of the adopters of this technology will undoubtedly be students. Smartphones have become embedded in everyone's life. However, smartwatch as a extension of smartphones have experienced a different thing. The main aim of the study is to find which brand of smartwatch has highest usage. To know the perception of students in smart watches and to find which specification in smartwatch has highest usage. The study was taken between students with 106 respondents over 3 months. The study concluded that many students were highly interested to buy smartwatches. The study further touches on their efficient management of power, easy user interface and the minimal display. Many respondents suggested that battery life of the smart watch must be improved. Some of the devices were stop responding in sometimes this problem must be sorted out. Many respondents suggested that waterproof tech also must be improved. Display these watches are not comfortable for the vision so the display must be altered with other type of screen. Body built is not so much strong so it is very danger to use smartwatch while playing games, so the body must be built strong.

OBJECTIVES OF THE STUDY

The main aim of the study is to find which brand of smartwatch has highest usage. To know the perception of students in smart watches. To find which specification in smartwatch has highest usage.

REVIEW OF LITERATURE

Shweta A. Panchbudhe, Nandkishor Bankar, Sanika Kalambe, Ujwala Gawande, 2021, It is based on a Questionnaire Study about the Experiences of Smart Watches of Different Brands. Smart watches are becoming increasingly common because they allow users to access and communicate online information while on the move. Smart watches also offer the user spatial and temporal information and show a map on the screen. It's a modern device that came out a few years ago. A smart watch is a modern technology that incorporates smart phone functionality with

continuous data monitoring to encourage fitness, such as step tracking, heart rate monitoring, energy consumption, and physical activity levels. It also provides users with input to help them control their health. The study's findings indicate that smart watches are becoming more common and useful for people in their daily lives, as they allow users to access information about their environment and body-related conditions.

Mark M. Afrouz and Tobias Wahl, 2019, The rapid growth and increased competition in today's technology industry leads to a growth in consumers' expectations on new presented products. The results of this study provide empirical evidence that the attitude towards using was the strongest predictor for the intention to purchase smartwatches. The outcomes further show that the attitude is influenced by the two hedonic factors perceived enjoyment and design aesthetics as well as by the utilitarian factor perceived usefulness. Out of those three factors perceived enjoyment was found to exert the strongest influence on attitude. Contrary to previous research, the results of this study could not reveal a significant influence of subjective norms on purchase intention. However, beside the attitude, perceived behavioral control was also found to influence purchase intention. The findings of this research allowed to draw a variety of theoretical and managerial implications as well as to develop possible research opportunities for future studies.

APURVA ADAPA, 2016, This study aims to examine the factors and issues in adoption of smart wearable devices. Wearable devices have many functions to offer which make them very useful in our daily lives. However, factors influencing the adoption of these devices are not well understood. This research explores the inhibiting and contributing factors influencing the adoption of wearable devices by employing the laddering approach. Qualitative data were collected through in-depth interviews using the laddering technique in order to understand these factors. This research has advanced our understanding on the adoption of wearable devices and provide some insights into the key design criteria to better fit users' needs.

Stephanie H.W. Chuah Philipp A. Rauschnabel Nina Krey, 2016, Although still in the early stages of diffusion, smartwatches represent the most popular type of wearable devices. Yet, little is known about why some people are more likely to adopt smartwatches than others. To deepen the understanding of underlying factors prompting adoption behavior, the authors develop a theoretical model grounded in technology acceptance and social psychology literatures. Empirical results reveal perceived usefulness and visibility as important factors that drive adoption intention, suggesting that smartwatches represent a type of 'fashnology' (i.e., fashion and technology). The magnitude of these antecedents is influenced by an individual's perception of viewing smartwatches as a technology and/or as a fashion accessory. Theoretical and managerial implications are discussed.

Dr.P kishore kumar and V venkateshwarlu, 2014, conducted a study on customer perception and purchasing intention toward smart watches, found that consumers believe smart watches can be used to complete personal and professional tasks very conveniently. . The consumers are thinking that smart watches are reasonably price based on its feature also consumers are likely own a smart watch in future to perform variety of tasks.

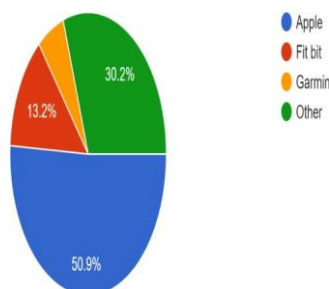
RESEARCH METHODOLOGY:

Based on my study I have used descriptive research . And also, I take 106 respondents for my study . I use questionnaire as a Primary data and Secondary data from articles.

RESULT

Table showing MOST PREFERRED SMARTWATCH BRAND

Particulars	No. of respondents	Percentage
Apple	54	51%
Garmin	6	6%
FitBit	14	13%
Others	32	30%



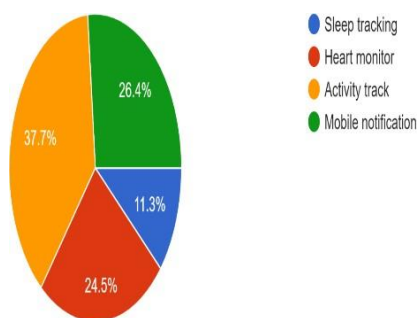
Particulars	No. of respondents	Percentage
Price	60	57%
Size	14	13%
Privacy concerns	16	15%
Others	16	15%

INFERENCE

Majority 51% respondents prefers Apple.

Table showing MOST LIKED SPECIFICATIONIN SMARTWATCHES

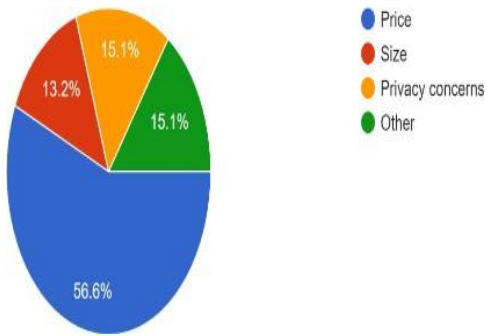
Particulars	No. of respondents	Percentage
Sleep tracking	12	11%
Heart monitor	26	25%
Activity Tracking	40	38%
Mobile notification	28	26%



INFERENCE

Majority 38% respondents likes activity tracking.

Table showing disadvantages of smartwatches

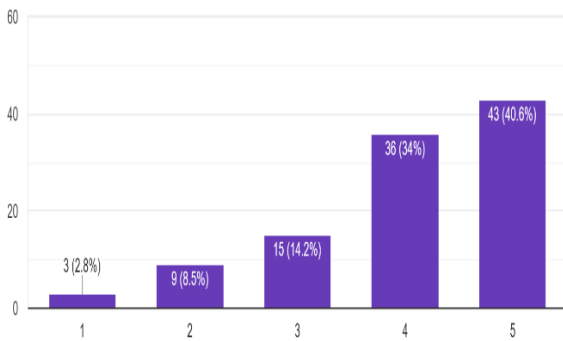


INFERENCE

Majority 57% respondents says that price is the disadvantage.

Table showing overall satisfaction for the smartwatches

Particulars	No. of respondents	Percentage
Highly unsatisfied	3	3%
Unsatisfied	9	8%
Neutral	15	14%
Satisfied	36	34%
Highly satisfied	43	41%



INFERENCE

Majority 41% respondents were highly satisfied by the smartwatches.

ONE-WAY ANOVA TEST

Null hypothesis(H0): There is no significance difference between overall satisfaction and affordability of smartwatches.

Alternate hypothesis(H1) : There is a significance difference between overall satisfaction and affordability of smartwatches

Overall satisfaction*affordability of smartwatches					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.119	3	3.373	18.241	0.043
Within Groups	36.428	197	0.185		
Total	46.547	200			

DESCRIPTIVES								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
5	43	2.033	0.182	0.023	1.986	2.081	2.000	3.000
4	36	2.193	0.476	0.050	2.092	2.294	2.000	4.000
3	15	2.620	0.490	0.069	2.480	2.759	2.000	3.000
2	90	2.500	1.000	0.500	0.908	4.091	2.000	4.000
1	3							
Total	106	2.258	0.482	0.034	2.191	2.325	2.000	4.000

INFERENCE

Since p value 0.043 is less than 0.05, null hypothesis is rejected and alternate hypothesis is accepted. Hence, There is a significance difference between overall satisfaction and affordability of smartwatches.

CHI-SQUARE TEST

Null hypothesis(H0): There is no significant association between education and their perception of smartwatch usefulness in studies.

Alternate hypothesis(H1): There is a significant association between education and their perception of smartwatch usefulness in studies.

Educational qualification*usefulness of smartwatches in studies						
		Usefulness of smartwatches in studies				Total
		yes	no	Maybe		
Educational qualification	UG	Count	11	39	25	77
		Expected Count	18.0	37.5	19.9	77.0
	PG	Count	13	24	14	52
		Expected Count	12.2	25.4	13.5	52.0
	DIPLOMO	Count	11	23	11	46
		Expected Count	10.8	22.4	11.9	46.0
	OTHERS	Count	12	12	2	26
		Expected Count	6.1	12.7	6.7	26.0
	Total	Count	47	98	52	201
		Expected Count	47.0	98.0	52.0	201.0

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.110 ^a	9	0.118
Likelihood Ratio	14.955	9	0.092
Linear-by-Linear Association	10.876	1	0.001
N of Valid Cases	201		

INFERENCE

Since p value 0.118 is greater than 0.05, Null hypothesis is accepted. Hence, There is no significant association between education and their perception of smartwatch usefulness in studies.

FINDINGS

- Majority 44% respondents gave 5 rating for battery performance.
- Majority 57% respondents says that price is the disadvantage.
- Majority 58% respondents says that features are easily understandable.
- Majority 41% respondents think smartwatches give accurate data on health and wellness.
- Majority 45% respondents says smartwatches are worth for its price.
- Majority 41% respondents says that smartwatches helps them in studies.
- Majority 44% respondents were highly satisfied for the design of the smartwatches.
- Majority 40% respondents were highly satisfied for the availability of apps in smartwatches.
- Majority 59% respondents likes waterproof to be inserted.
- Majority 36% respondents were highly satisfied by the speakers in smartwatches.
- Majority 41% respondents were highly satisfied by the smartwatches.

SUGGESTIONS

- Many respondents suggested that battery life of the smart watch must be improved.
- Some of the devices were stop responding insometimes this problem must be sorted out.
- Many respondents suggested that waterproof tech also must be improved.
- Display these watches are not comfortable for the vision so the display must be altered with other type of screen.
- Body built is not so much strong so it is very danger to use smartwatch while playing games, so the body must be built strong.

CONCLUSION

The study concluded that many students were highly interested to buy smartwatches. The study further touches on their efficient management of power, easy user interface and the minimal display. As a result of that many companies were started to infuse more technology in smartwatches. The wearable world is constantly changing. Every year, new products and brands are

introduced, offering better metrics and user experience, while other brands fade away from the consumer market for different reasons. Improvements in product quality provide new research opportunities. This project set out to determine if the smart watch would be useful to university students. A review of literature was first conducted where wearable computing was discussed further, specifically in the area of smart watches where their known advantages and disadvantages were acknowledged. Previous work done on application development for smart watches and other mobile devices such as smart phones was also investigated. The application requirements of users found in previous usability studies were documented, where it was found

that users want similar functionalities from different devices. Possible future smart watch advancements based on current research were also discussed.

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