



Consumer Perception Towards Notebook Computers Over Desktop Computers in Sri Lankan Context

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ABSTRACT

The paper investigates the perceptual difference of Sri Lankan consumers towards notebook computers over desktop computers. The study follows two steps. First, an exploratory study using secondary sources where a literature review investigates variables that influence the perception towards buying a notebook computer over a desktop computer. Subsequently, a field survey underwent through a self-administered questionnaire to gather customers' perceptions in Colombo district of Sri Lanka. It covers Sri Lankan consumers of different ages, income levels, job statuses, and education levels with their opinion regarding relative advantage, complexity, compatibility, price, perceived risk, and demographic influence of notebook computers over desktop computers. Results of the study indicated that all categories of users perceive that laptop computers provide a higher advantage than desktop computers. Furthermore, consumers have a higher perception of notebook computers over desktop computers based on complexity, compatibility, and perceived risk, while it was revealed that gender has minimal impact on the perception of notebooks. Moreover, consumers with Higher education and higher occupation level have a higher perception of notebook computers over desktop computers.

Keywords: *Consumer Perception, Notebook Computers, Perceived Price, Perceived Attributes, Perceived Risk, User Preference*



1. INTRODUCTION

Recent years have witnessed that personal computers (PCs) have become a part of every business, either public or private organization, regardless if big or small, in scholarly institutions of each level, in the military, in medicine, in almost every house, etc. (Cheolho & Sanghoon, 2017). Moreover, computers are the fundamental blocks of IT and most organization in the world spend a large amount of their capital on computers because that enable the whole ICT activities of the business. Following the success of desktop computers, laptop computers have become highly popular as versions of desktops with the full functionality of desktop computing and portability which allows users to carry them anywhere (Vanessa & R., 2018).

The laptop once considered a luxury has now become an important gadget in the present era of a technology-rich world (Shawn, 2019). A laptop computer (also shortened to just a laptop; or called a notebook or notebook computer) is a small, portable personal computer (PC) (Igbaria, et al., 2015). The current laptop system is related to a fast processor, large storage capacity, and large RAM or memory (Gabriele & Daniele, 2016). Laptops are not only handy but packed with features that are designed for portability and convenience. When compared to desktop tower computers, laptops are smaller, weigh less, have fewer components, and consume less power. Despite this, laptops are a great choice for college students and busy professionals who travel often (Eastin, et al., 2016). Laptop computers have nearly the same performance as desktop computers, but typically have fewer upgrades, and configurations are often restricted (Benson, Krawczyk & Figueiredo, 2006). Previous empirical studies explored the “Technology Acceptance Model” (TAM) was widely used to study the level of user acceptance of new technology and information. (Elwood et al., 2006) The theory has suggested two factors- perceived ease of use and perceived usefulness influencing the adoption of new technology. However, researchers have argued that multiple factors influence the usage of new technology. Therefore, the results of this study facilitate to expand the theoretical underpinnings and extend for future research.



With many businesses offering building or campus-wide wireless, workers can carry their notebooks into meetings or to the cafeteria and remain connected to email and enterprise systems. Ozturk, Bilgihan, Nusair, & Okumus, (2016) denotes that digital literacy in Sri Lanka has been increased to 46% by 2020 and still Sri Lanka's overall current computer literacy rate is 32 percent with domestic computer usage remains at 22% (Department of Census and Statistics of Sri Lanka, 2020).

Whilst some research studies validated that laptop computers can be a vital learning tool, research conducted by Carrie B. F. (2008) revealed that laptop computers were negatively related to several measures of student learning, including self-reported understanding of course material and overall course performance. Further, a study in a large urban university in USA showed that the introduction of laptop computers did not statistically improve student achievement and reported statistically significantly less satisfaction for honors students with their education compared to honors students with no laptops (Wurst, Smarkola & Gaffney, 2008). Therefore, extant literature is ambiguous on the usage of laptop computers in education systems as well as corporate systems.

Currently, the IT industry is growing at a rate of 7 percent and out of the rate of computer usage, less than 0.2 percent use notebook computers. But it must be noted that the rate of growth for notebook computers has been accelerating during the past two years. Hence, this paper intends to understand what factors influence the perception held by individual consumers of notebook computers in Sri Lanka, and that will assist in providing recommendations to the key players in the computer industry in the country as to what actions should be taken to correct this issue at hand.

This kind of research study has not been done since the arrival of notebook computers in Sri Lanka. Therefore, as academics, it is important to understand the buying behavior towards hi-tech products like notebook computers. 1. To identify and understand the factors that affect the perception of notebook computers. 2. To identify what influences perceptions towards notebook computers. Findings can be applied to rectify the perception gap that exists toward notebook computers.



Recommendations can be provided to the management of the IT companies in Sri Lanka to make positive perception towards notebook computers. The main purpose of the study is to identify the key influencers that affect the end consumers of the considerably growing notebook consumers market in Sri Lanka. Although there have been several studies done in overseas markets context, there are no empirical studies that have been conducted in the Sri Lankan marketplace.

With the growing digital infrastructure in the Sri Lankan landscape, driving factors of consumer perception keeps on evolving. Understanding what acts as key decision variables in the end consumer decision-making journey would help not only computer manufacturers, marketers, digital marketing agencies, and other entities in marketing fraternity. The structure of the study cascades into five sections, consisting introduction where the background and purpose are established, a Literature review that investigates the existing literature on the topic, a Methodology that discusses the research methodology adopted while analysis and discussion details empirical findings and their wider ramifications.

2. LITERATURE REVIEW

Having the research objectives in mind, it is paramount important to review some of the theoretical and empirical research studies on perception in order to build and strengthen the theoretical model pertaining to the study. Perception is a relative concept that may vary from individual to individual. As per the Oxford Languages, it is a word that originated from the Latin “Percipere”, describes how something is regarded or interpreted by an individual. Perception in the context of organizational behaviour is simply defined as how a person perceives the world around them and interprets that information. It is a subconscious thing that the mind does and is dependent on your ability to pay attention to your surroundings and your existing knowledge. Factors that shape the perception in organizational behaviour are characteristics of the perceiver, characteristics of the target, and characteristics of the situation. (legalpaathshala.com)



Elwood et al., (2006) revealed in their study that there are multiple factors impacting the perceptions regarding laptop usage such as comparisons with desktops, social use of laptops, cost, library usage, faculty utilization, convenience, network access, hardware & software, anxiety, educator's technological competency, student's accomplishment, etc.

Jon-Chao & Pei-Chi (2019) demonstrated that it has become a necessity for today's generation for meeting their computing needs from every place at any time. Following the success of desktop computers, laptop computers have become highly popular as versions of desktops with the full functionality of desktop computing and the portability which allows users to carry them anywhere. Hong & Lin, (2017) emphasized that the notebook computer has become a phenomenon in recent eras because it has been able to provide solutions for the modern era of people who have dynamic jobs and moving places, so the laptop becomes a good solution because it can be taken anywhere. Consumers were beginning to look to laptops for their portability benefits, as charger wires could be used less frequently thanks to longer-lasting battery life. Plus, laptops have more powerful processors and technology embedded within that is like a personal computer (Jon-Chao & Pei-Chi, 2019). The Laptop users are feeling more flexibility for its handling and mobility to every place they can. Even though certain problems arise out of the usage of laptops & other sort of customer service providers, for all these types of problems there comes the solution that is Lap-Top (Hansen & Saridakis, 2018). Technology is changing so fast with the development of computer hardware. It has been observed that last two decades the purchase of laptops has increased significantly.

Now laptop purchases are feeling like purchases of fast-moving consuming items (Catherine & Agarwal, 2020). This signifies that people are very much interested to handle technological instruments in their day-to-day activities. Liu & Brock (2019) highlights the impact of unstructured vs. structured use of laptops for 177 university students and revealed that structured use of laptops resulted in significantly more time spent on note-taking and academic activities and significantly less time spent on sending personal emails, instant messages and playing games during class. Laptop



companies are introducing new features in their laptop brands. Further, customers preference and evaluation of high involved products can be changed based on country of origin (Wanninayake, 2014; Wanninayake & Chovancova, 2013). Hence, it became difficult and confusing for an ordinary consumer to decide which laptop to purchase and how to purchase it. The majority of the consumers preferred to purchase a brand of their own choice from local dealers or retailers and showrooms after going through the information available from reference groups like friends, relatives, technical experts, blogs, etc. (Lynn & James, 2020). It is investigated that most of the respondent's level of satisfaction regards to price, delivery, quality, style, and after-sale service is good, and they are ready to recommend the product to others. Today there are several brands available in the market and they differ in price, quality, capacity, type, etc. (Julian, 2015). Brand new laptops were unveiled, all with competitive prices helping to increase their sales, and outshining smaller tablets. With customers' demands for faster download speeds and streaming increasing, laptops seem to fit the bill over tablets (Benner & Tripsas, 2019). Features of laptops were considered the most important factor while purchasing a laptop. Overall, laptop features ranked first, followed by price as far as the satisfaction is concerned with the laptop purchase. Many consumers were in favor of moving to a new brand for their future purchase of laptops (Shinagawa, 2016).

According to Vaportzis (2017) that customers are aware of the features of laptops and they are satisfied with their laptop brand. The number of users of laptops has increased equally to that of computer users, many computer users changed their concept of laptops by its facilities & other advantages of using laptop. Shen & Chiou (2019) illustrates that Technology Acceptance Model has been one of the most influential models of technology acceptance, with two primary factors influencing an individual's intention to use new technology: perceived ease of use and perceived usefulness. An older adult who perceives digital games as too difficult to play or a waste of time will be unlikely to want to adopt this technology, while an older adult who perceives digital games as providing needed mental stimulation and as easy to learn will be more likely to want to learn how to use digital games. While Technology



Adoption Model (TAM) has been criticized on several grounds, it serves as a useful general framework and is consistent with a few investigations into the factors that influence older adults' intention to use new technology (Wang & Yeh, 2020).

Shaw & Sergueeva (2019) in their study based in Albania found that Albanian consumers have good knowledge of laptops and their brands, and they use different sources of information for making their decisions in buying a laptop. It was found that there are relationships between some demographics like age or gender and the appraisal for some attributes of the laptops like price, design, and high graphics card; it is also found that some technical features and other attributes of using laptops are some of the determinants that influence the laptops' purchases.

The study done by Zarcadoolas & Vaughn (2020) focused on five attributes of laptop computers in their studies such as Processor, RAM Memory, Brand, Operating System, and Hard Disk Capacity, and their attribute levels of three different brands. The brand was characterized by the respondents as the most significant factor for them in choosing a laptop computer. As per Bowers (2019), some core features like RAM, ROM, battery life, processor quality, lightweight or attributes that are connected to the purposes of using the laptop computers like practicality and mobility in using them, work and studying processes, quick access to the internet are determinant factors which influence the decision-making process of purchasing a laptop.

Brasel & Gips (2020) defines price which is given up in exchange to acquire a good or service. Koh & Sundar (2019) described the price as the amount of money charged for a product or service. Kim & Eastin (2017) demonstrated that price is the amount of money charged for a product or service or the sum of the values that customers exchange for the benefits of having or using the product or service or the value that customers sacrifice to obtain a product or service. According to Truong & Simmons (2019), pricing is how buyers view a product's price, as high, low, or fair, which ultimately affects consumers' willingness to buy the product. Perception of the price is a sense of whether the price of a product is expensive or cheap. Tham & Croy



(2020) emphasize that perceived price can significantly influence on customers' judgment of the quality dimensions. Price is the amount of value exchanged by consumers for the benefit of owning or using an exchange service product (Clemes & Gan, 2017). Product prices are divided into three dimensions: fair prices, fixed prices, and relative prices (Sullivan & Kim, 2018). Price is considered important to influence consumer perception. Gershoff & Frels (2015) conducted research that found that perceived price had a positive and significant effect on purchase intentions at the Taichung International Travel Fair Taiwan. Price plays an important role in generating consumer satisfaction, as customers always evaluate the value of a service by its price (Gabriele & Daniele, 2016).

Brender & Markov (2019) also suggested that customers' negative perception of unfair prices can cause dissatisfaction, decrease repurchasing behavior, negative word of mouth, and complaints. Moon and Zhong (2020) in their study explain that price includes information for evaluating the level of service which may influence customers' purchasing behavior. Customers are not only affected by the actual price of a product or service stated on the price tag but also affected by their perceptions which are shaped comparatively and subjectively (Jon-Chao & Pei-Chi, 2019). The actual price will not increase the quality of a product or service, but it will influence the subjective value (Koenig-Lewis & Palmer, 2017). When evaluating the quality of a product or service, the higher the price, the higher the quality the customers expect, because higher prices add equal value to the quality.

Risk in consumer behavior is viewed in terms of potential perceived uncertainty and negative consequence in a consumer's purchase decision and occurs in six different contexts (Chan & Ma, 2019), such as financial risk, performance risk, psychological risk, social risk, physical risk, and time risk. Vaportzis (2017) categorized perceived risk under five dimensions in their study on the effects of perceived risk dimensions on purchase intention replacing functional risk with performance risk and without having time risk which was demonstrated by Molina- (Clemes & Gan, 2017).



Functional risk is described in the previous studies (Rubio, 2019) as the uncertainty that the outcome of a product purchase will not meet consumer expectations. It is also expressed as a performance risk as it demonstrates the consumer's fear that a product will not perform to its promised abilities. Chia-Chi (2018) defined financial risk as the possibility of a monetary loss from a poor purchase choice/decision. In other words, it is the state of losing money by purchasing an inadequate or unfamiliar brand. Ström & Vendel (2017) defined physical risk as the state of the consumer's fear that purchasing certain products may damage their health or physically injure their person.

For instance, it is concerned with purchasing an unfamiliar product that could potentially hurt the consumers. Sreenivasan & Noor (2016) defined psychological risk as the state of a consumer's disappointment in making a poor product or service selection and it is related to a consumer's discontent with owning or using the product. Gerpott & Thomas (2019) associated social risk with the possibility that a choice will affect other people's opinions of the person. The prevailing literature on perceived risk demonstrates that there is a negative correlation between perceived risk and intention to transact. Reducing risk in an Internet store leads to a higher probability of purchases by consumers, and conversely, increases in perceived risk negatively affected consumer's intention to buy (Laufer & Jung, 2018). Another classification of perceived risk was introduced, and it can be measured as a consolidation of several components including financial risk, performance risk, physical risk, psychological risk, social risk, convenience risk, economic risk, personal risk, seller performance risk, privacy risk, and overall risk (Wu & Lin, 2017). Nettala (2019) suggested that measuring the perceived risk construct represents a challenge. The construct represents a situational and personal construct, primarily represented as the probability of a loss and a perception or belief of unfavorable consequences. To avoid loss, customers should take precautions to mitigate the risks (Gazley & McLaren, 2015). Furthermore, Kim & Eastin (2017) show that the value of a risky option decreases upon the addition of risky prospects of the same valence. Singh & Srivastava, (2019) conclude that demographic factors such as age, income, gender, and education are having significant role in product selection. Shopper groups



mainly vary in choosing a product based on their significance for patronage factors of a shop or dealer. Further Wanninayake & Chovancová, (2018) explore that consumer demographics make a significant impact on the consumers' shopping habits. Referencing Priporas & Stylos (2017), the study has evidenced of how gender influences peoples' conception of fairness toward perceived price seems to be complicated. Some scholars, for example, Algharabat & Dennis (2016) indicate that male customers are inclined to assign higher scores for fairness. Additionally, according to Bowers, (2019) who studied demand-based pricing and gender differences in perceived fairness, females tend to rate lower for perceived fairness, which means that they are more likely to perceive a price as unfair. On the other hand, Ghattas & Al-Abdallah (2020) argue that the influence of education level and age on consumer behavior can be significantly varied in the cross-cultural perspective.

The following hypothesis is tested through the study.

- a) H1: Sri Lankan consumers perceive laptop/ notebook computers has a higher relative advantage over desktop computers.
- b) H2: Sri Lankan consumers perceive that laptop/ notebook computer is less complex than desktop computers.
- c) H3: Sri Lankan consumers perceive laptop/ notebook computers as more compatible than desktop computers.
- d) H4: Sri Lankan consumers perceive that the price of laptop/ notebook computers is higher than desktop computers.
- e) H5: Sri Lankan consumers perceive laptop/ notebook computer as riskier than desktop computers.
- f) H6: Demographic differences influence the purchase and usage of laptop/notebook computers in Sri Lanka.



3. RESEARCH METHODS

This research falls under the descriptive research category since the researcher intended to discover conclusive findings from the study (Sekaran & Bougie, 2016). From a border perspective this research study can be considered as a conclusive research design because ultimately, it seeks to determine the difference of perceptions by Sri Lankan consumers of notebook computers.

This study is a quantitative cross-sectional survey study (Neuman, 2000). The research has been conducted in two steps. First, an exploratory study using secondary resources under the literature review will be conducted to figure out variables that influence the perception of buying a notebook computer (Buchanan & Bryman, 2009). Secondly, a field survey will be conducted through a close-ended questionnaire to gather data necessary for the final recommendations (Bryman et al., 2008) Customer opinion is rated on a five-point Likert scale on questions that cover their demographics, perception of all the variables considered in the study (Sekaran & Bougie, 2016).

The study is a single cross-sectional in time horizon. The target population for the study included senior executives in the top 30 corporates in Sri Lanka as per Business Today's Top 30 in 2019/20. It was estimated to be 400 Top executives in corporates. Therefore, the sample size of 200 was calculated using the Survey Monkey online tool (Ary et al., 2006). Data was gathered via face-to-face interviews with two hundred respondents, selected from Greater Colombo areas due to the high internet penetration (Saunders et al. 2019). The survey was conducted until reaching perfect responses from 200 copies of questionnaires among the sample of top management executives in the Top 30 corporates in Sri Lanka, who are aged between 30-55 years. Venable & Baskerville (2017) in their study in suggests that data collection using face-to-face interviews and questionnaire methodology works best in extracting customer opinions. Furthermore, Noble & Smith, (2018) reveals in their study that using a T-test to validate between opinions yields accurate results. The employment of demographic analysis proves to amplify the weight of the findings through the

comparison of results against multiple demographics to better understand customer opinions (Mohajan, 2018).

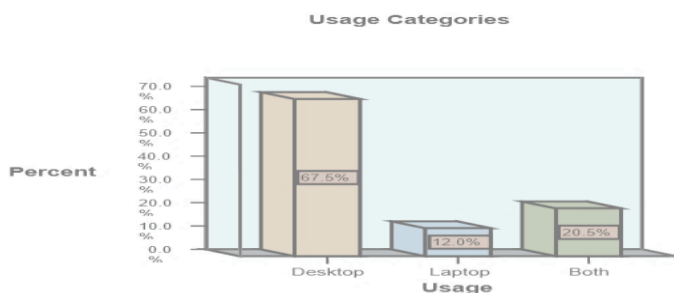
Data analysis is conducted using the statistical tool – SPSS IBM, including descriptive statistics and the appropriate formula for the T-test. The conclusion was reached by the t-test in terms of the marketing research problem (Sekaran & Bougie, 2016).

4. FINDINGS AND DISCUSSION

Throughout this section of the paper, the researcher shares important information and vital knowledge that he has gathered during the research process. Data is presented and analyzed in terms of questions mentioned in the questionnaire. The researcher intended to identify the respondents' status of usage from the first question of the questionnaire. Accordingly, respondents were given three choices (desktop computers, laptop/notebook computers or both) from which researcher tries to analyze the total research findings based on this classification.

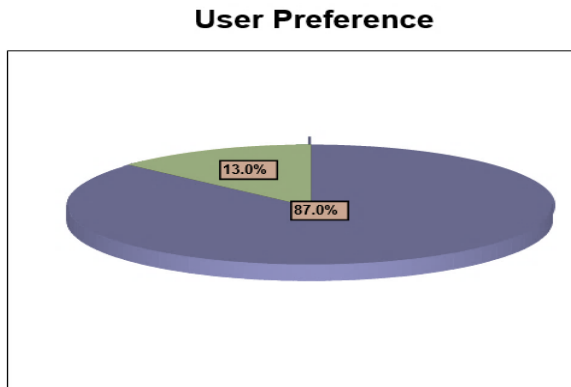
As figure 1 indicates Sri Lankan consumers prefer desktop computers to laptop computers in their day-to-day activities due to some unobserved reasons. Subsequently, researcher attempts to figure out the preference for laptop computers in general from the selected respondent group. Followings are the statistical observation obtained from the questionnaire given to the respondents.

Figure 1 - Analysis of user categorization



As evident in figure 2, 87 percent of the respondents claimed that they prefer to have laptop computers for their daily activities, whereas 13 percent argued that they will not prefer laptop computers.

Figure 2 - Analysis of user preference



The researcher has identified that Sri Lankan consumers generally prefer laptop computers irrespective of the user categories. Perceived attributes were the first criterion, and it was analyzed based on three attributes namely creative advantage, complexity, and compatibility. Therefore, the following statistical analysis precisely covers and tests the above-mentioned attributes more comprehensively.

Figure 2 - Analysis of relative advantage

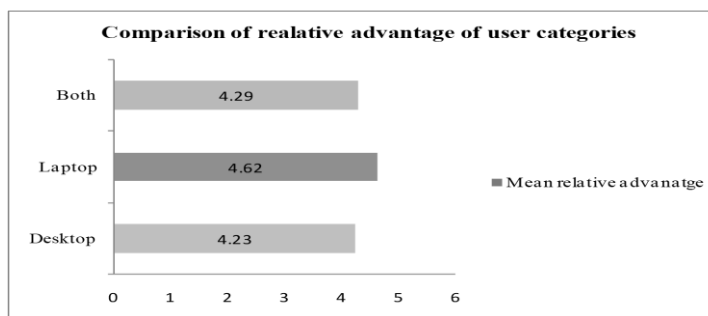
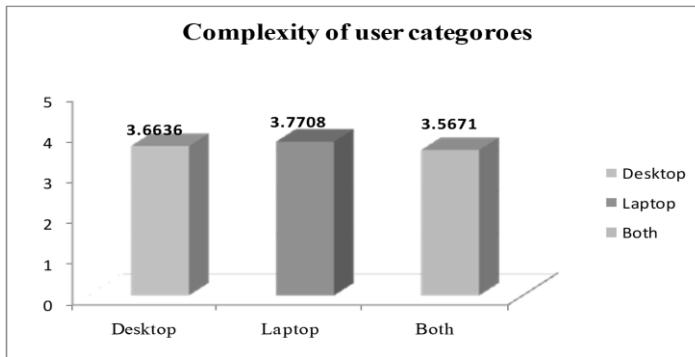


Figure 3 shows that out of the total respondents, laptop computer users have a higher mean relative advantage over the other groups and the overall mean value for relative

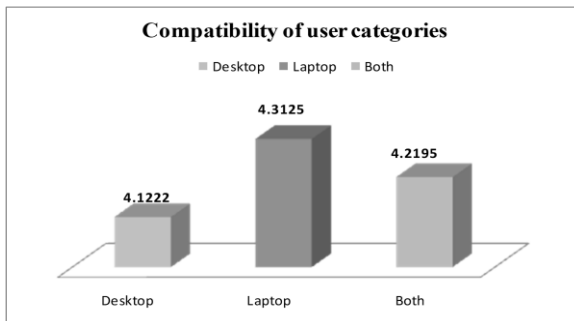
advantage is above the critical value of three and it is around the value of four. Hence, it's understood that respondents perceive laptop/ notebook computers have a higher relative advantage than desktop computers.

Figure 3 - Analysis of complexity



By analyzing the Figure 4 statistics, the researcher can identify that laptop computer users perceive that laptop computers have higher complexity than the other two groups and this statistic was an interesting one because current users of laptop computers rated higher value for the complexity.

Figure 4 - Analysis of compatibility



The Figure 5 shows that generally all respondents have rated higher value for the compatibility of the laptop computers and out of which current laptop users rated higher value than rest of the other groups. Hence, it indicates that Sri Lankan consumers have higher perceived value for the compatibility of the laptop/ notebook computer.

Figure 5 - Analysis of perceived price

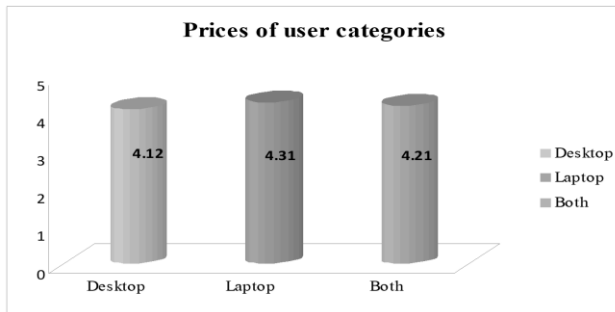


Figure 6 has indicated that the price of laptop computers has rated over the value of the four and especially respondents who use both laptop and desktop computers have rated higher than the rest groups. This was a good indicator since it further increases the negative perception held towards laptop computers. Overall consumers perceive that the prices of laptop computers are expensive compared to desktop computers.

Figure 6 - Normality Test

	Kolmogorov-Simonov ^a			Shapiro-Wilk		
	Stat	df	sig	Stat	df	sig
Rel. Ad	0.12	134	0.353	0.21	134	0.353
Compx.	0.32	134	0.367	0.31	134	0.367
Compa.	0.6	134	0.437	0.12	134	0.437
Price	0.34	134	0.458	0.16	134	0.458
P.Risk	0.12	134	0.761	0.21	134	0.761
Dem.Di	0.34	134	0.341	0.21	134	0.341

Figure 7 depicts the normality distribution assessment of the variable of the study. Shapiro-Wilk test was evaluated due to the size of the sample. ($n < 2000$) The results indicated that $r > 0.05$ for all variables tested, therefore it concluded that the data set is nonnormalized.

Figure 8 illustrates the dispersion of the descriptive statistics relevant to each variable of the study. The mean value of relative advantage, compatibility, and demographic difference showed a higher value ($c > 4$) than other variables. Perceived risk showed higher SD ($s = .76$) and other variables in the range of 3 to 4.

Figure 7 - Descriptive Statistics Table

Descriptive Statistics						
	N	Min	Max	Mean	Mode	Std. Dev
Rel. Ad	200	3.67	4.91	4.625	4.21	0.353
Compx.	200	3.12	3.81	3.770	3.31	0.367
Compa.	200	3.67	4.52	4.312	4.12	0.437
Price	200	3.12	4.32	4.166	3.72	0.458
P.Risk	200	3.45	4.12	3.833	3.77	0.761
Dem.Di	200	3.81	4.41	4.231	3.81	0.341

The hypothesis testing section consists of 6 hypotheses that are tested in the study. H₁: Sri Lankan consumers perceive laptop/ notebook computers has a higher relative advantage over desktop computers.

To test this hypothesis researcher has conducted the one-sample t-test and the following table summarized its statistics.

Figure 8 - T-Test Relative Advantage

Usage	One-Sample Test: Test Value = 3					
	t	df	Sig 2-tailed	Mean difference	95% confidence interval	
					Lower	Upper
Lap Rel. Ad	23.0	134	.000	1.237	1.131	1.343

This analysis attempts to verify whether the means of user categories for relative advantage has been rated over the tested value of three or not. This analysis shows that with the 95 percent confidence level, the means of each user category rated over the tested value of three due to the positive lower and upper mean differences given by the t-test.

Hence, it accepts H₁ ($r < 0.05$) because the means of relative advantage is over the critical value of three and thereby Sri Lankan consumers perceive laptop computers have a higher relative advantage than desktop computers.

H₂: Sri Lankan consumers perceive that laptop/ notebook computer is less complex than desktop computers.

The following table verifies the validity of the second hypothesis.

Figure 9 - T-Test Complexity

Usage	One-Sample Test: Test Value = 3					
	t	df	Sig 2-tailed	Mean difference	5% confidence interval	
					Lower	Upper
Lap. Cx	23.0	134	.000	1.132	.9412	.9985

This analysis shows that mean values of user categories on complexity are over the tested value of three at a 95 percent confidence level. ($r < 0.05$) All the user categories perceive that laptop computers are relatively more complex than desktop computers.

H₃: Sri Lankan consumers perceive laptop/ notebook computers as more compatible than desktop computers.

Figure 10 - T-Test Compatibility

Usage	One-Sample Test: Test Value = 3					
	t	df	Sig 2-tailed	Mean difference	5% confidence interval	
					Lower	Upper
Lap Comp.	16.6	134	.000	1.122	.9893	1.255

The lower and upper level of the mean value of user categories on compatibility indicates positive figures and meanwhile, it claims that with a 95 percent confidence level, means values of user categories on compatibility get over the tested value of three. ($r < 0.05$).

Hence H₃ is accepted and thereby researcher concludes that Sri Lankan consumers perceive laptop computers are more compatible than desktop computers.

H₄: Sri Lankan consumers perceive that the price of laptop/ notebook computers is higher than desktop computers.

Figure 11 - T-Test Price

Usage	One-Sample Test: Test Value = 3					
	t	df	Sig 2-tailed	Mean difference	5% confidence interval	
					Lower	Upper
Lap Price	17.1	134	.000	1.081	.9566	1.206

With a 95 percent confidence level, the researcher can claim that mean values of user categories on prices are beyond the tested value of three by considering the lower and upper difference of means. ($r < 0.05$) Therefore, H₄ is accepted, and the researcher

concludes that Sri Lankan consumers perceive that the price of the laptop computer is relatively higher than desktop computers.

H₅: Sri Lankan consumers perceive laptop/ notebook computers as riskier than desktop computers.

Figure 12 - T-Test Perceived Risk

Usage	One-Sample Test: Test Value = 3					
	t	df	Sig 2-tailed	Mean difference	5% confidence interval	
					Lower	Upper
Lap. Risk	22.1	134	.000	1.038	1.024	1.085

With a 95 percent confidence level, this analysis indicates that mean values of user categories on perceived risk are over the tested value, and in fact, a desktop computer seems to be riskier than a laptop computer. ($r < 0.05$) Therefore, H₅ is accepted based on the above analysis and thereby researcher can claim that Sri Lankan consumers perceive laptop/ notebook computers as riskier than desktop computers.

H₆: Demographic differences influence the purchase and usage of laptop/notebook computers in Sri Lanka.

Figure 13 - T-Test Demographic Diff.

Usage	One-Sample Test: Test Value = 3					
	t	df	Sig 2-tailed	Mean difference	5% confidence interval	
					Lower	Upper
Lap DI	19.1	134	.000	1.012	1.012	1.093

Based on the statistics above, it should be noted that upper and lower values of user categories on demographic characteristics have shown positive figures and hence mean values for each category are beyond the tested value of three at 95 percent level of confidence. However, the figure is not much significant since the mean values are just above the value of 3.5 Hence, H₆ is accepted and thereby researcher concludes that demographic characteristics of Sri Lankan consumers influence the purchase and usage of laptop/notebook computers.



5. CONCLUSION AND FUTURE RESEARCH DIRECTIONS

The conclusion chapter summarizes the findings of the empirical investigation of the study with subsequent hypothesis testing results. The study reveals that 87 percent of the respondents prefer to have a laptop computer to conduct their daily activities. Hence, it is understood that there will be more demand for laptop computers than desktop computers in the future. Further, it has been identified that all categories of users perceive that laptop computers provide a higher advantage than desktop computers.

Furthermore, the study reveals that laptop computers are relatively more complex than desktop computers. The study has revealed that laptop computers are relatively more compatible than desktop computers. It has been found that the price of laptop computers is relatively more expensive than desktop computers.

The study proved that the perceived risk of consumers on laptop computers is riskier than on desktop computers. It has been identified that gender has little influence on the purchase and usage of laptop computers. It has proved that consumers who have higher education are generally purchased laptops and desktop computers. It has been discovered that consumers who have higher occupational status often purchase laptop computers than desktop computers.

The study proved that high-income consumers often purchase laptop computers. Finally, it has been proved that the demographic characteristics of consumers influence the purchase and usage of laptop computers. Therefore, the following points outlined below include the suggestions given by the researcher to create a positive attitude toward laptop/notebook computers. Attributes of laptop computers would be communicated most simply through advertising.

Similarly, Salciuviene & Lee (2019) indicates that the brand image of electronic appliances including laptops has a positive correlation with advertising expenditure. Furthermore, Seo, et al (2019) states that emphasis made on product attributes



positively impacts consumer purchase intention. Moreover, negative price perception can be avoided by promoting the key attributes of laptop computers. As Çakır & Pekkaya (2020) argues negative impact created by the pricing of a product can be alleviated by effectively communicating the value for money delivered by the products.

Perceived complexity can be mitigated through product briefings and with the support of highly skilled employees who encounter the consumers. Similarly, Manandhar (2021) states that the employment of expert employees significantly reduces the consumer perceived complexity. However, Moslehpour et al (2018) argue that for technical appliances product briefings only have a moderate impact in mitigating perceived complexity. Exhibitions, product launches, conferences, and point of sales materials will reduce the perceived risk towards laptop computers. Moreover, perceived risk can also be reduced by investing in branding and ultimately creating positive word of mouth in the industry. Hoffman (2021) reveals that integrated marketing campaigns significantly reduce perceived risk. Arogundade & Enitilo (2021) indicates that general acceptance across demographic barriers can be significantly reduced by heavy advertising. Similarly, demographic barriers can also be reduced through continuous advertising especially focusing on youth in the content of the advertising to mitigate the exclusiveness of the product.

The researcher suggested that the findings of the study can be further improved by extending the study to other districts of the country. Also, the findings of the study can be extended to related research areas such as mobile computing, physical implications due to mobile computing, and information technology. The researcher suggested that the scholars can expand the results further by extending into relatable research by revising the methodology of the study. Further, the findings of the study can be important for educational systems or organisations to introduce new learning systems by adopting mobile computing. The government of Sri Lanka can further extend the results of the study by expanding into rural areas of the country and related areas of research concern.



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