Investigating the Impact of Innovation and Brand Sustainability on Customer Purchase Intention: A Case of Mobile Phone Industry

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Abstract

This research aims to study the different types of innovations that are now implemented in mobile phone industry of Pakistan in order to check its influence on customer purchase intension. Pakistan is a developing country and currently a number of companies in Pakistan are adopting latest technologies to improve their overall performance and sustainability using innovative approaches. Both pros and cons of the distinct innovation types would be evaluated in the research study. This study also analysed that how these innovation helps brands sustainability at both national and international level to leverage reputation of Pakistan. Considering the current competition in mobile phone industry at the global level, it is mandatory to analyse performance of Pakistan's mobile phone industry, which further needs to strengthen its position in international market with adoption of latest technologies and innovative changes. For this purpose, quantitative research methodology is used, for which the researcher collected data from a sample of 200 respondents from mobile phone users in Faisalabad city of Pakistan using convenient sampling technique. Results depicted that product features, packaging, product sophistication, and product sustainability have a significant relationship with customer purchase intension and mobile phone companies should consider these factors while making production strategies.

Keywords: Innovation, Brand sustainability, Customer Purchase intension, Mobile Phone Industry.

Introduction

In recent years, innovation is important for the continued achievement and sustainability of an organization. Innovation is a process of bringing new changes, value addition and out of box thoughts to improve quality of products and services offered by the company. Innovation includes purposeful application of information, thoughts

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and initiative in deriving better and new values from resources and involves all processes by which new ideas are generated and converted into productive stuff. Innovation results in accelerated business and good production, especially when ideas are applied by the company in order to further satisfy the requirements and expectations of the targeted customers (Simpson, 2017).

Innovation is the capability to see alteration, as an opportunity not a menace; although it is always risky for every organization to bring change through innovation. Innovation is in fact the heart and soul of every business in today's competitive business arena. Innovation increases sales of an organization, by offering such services and products to the customers that are in demand. From the word innovative it can be taken as a procedure that enables its adopters to carry out business operations with improved and advanced means. It also enables organizations to design strategies effectively with innovative means, deliver latest information or re-launch and improved logistics (Schaltegger et al., 2016).

Pakistan is a developing country and currently a number of companies in Pakistan are adopting latest technologies to improve their overall performance and sustainability using innovative approaches. Considering current competitive business environment, breathing down the neck Pakistani brands have understood the importance of innovative technologies to sustain in the market especially at the global level. However, there are fewer studies conducted that relate innovation and brand sustainability with customer purchase intension in context of Pakistan and it creates a literature gap for future researchers, professionals, students and readers. This research dealt to achieve with the followings objectives;

- To identify the socio-economic factors of respondents in the study area.
- To analyze the impact of innovation and brand sustainability in the context of customer purchase intension considering the case of mobile phone industry.
- To suggest the suitable innovative and sustainable measures to increase the customer purchase intension for stakeholders.

This paper is organized as follows: After the introduction and problem statement, Section 2 highlights the extensive review of literature and key studies focused related to brand innovation and sustainability in mobile phone industry. The materials and methods of research are given in Section 3. An empirical case study describing factors affecting regarding consumer purchase intention regarding mobile phone users discussed in the Section 4. Section 5 depicts few points regarding research findings and managerial discussions in line with the results of the study. Finally, this study

closes with conclusions/policy implications, limitations and future research directions.

Literature Review

Research and development has been an important focus for all players of mobile phone industry and they invest and reinvest generously in R&D, in order to stay ahead of technological innovations and beat competition with best possible improvements in their respective products. Few researchers found that over past few decades, the revolution in the mobile industry has created a profound impact on the society. The socio-economic situation of South Asia played vital role in it. There is an important consideration in the current marketing literature about purchase intention of customer in the respective business sector. They featured the advantages of building effective brand value demonstrating that it encourages a company to produce differential effect on customers' buying decision, build knowledge of the brand and develop relatively positive consumer's reaction towards brand marketing that will automatically leads to better brand performance.

Veloutosou et al. (2004) identified that brand sustainability can be affected by number of factors such as product image as well as packaging. The strong brand image and brand name considered as the important factor in creation of loyalty of the customer towards product. He also suggested that product with a strong brand name and image can be a reason for making more loyal followers. It was additionally discovered that products with unique and innovative features impacts brand sustainability and brand loyalty within mobile phone sector.

Munnukka (2005) conducted study in Finland's telecom sectors on price sensitivity in which they circulated 3000 questionnaires by post. Their study indicated that pricing policy utilized by mobile phone companies across 145 countries and resulted that flat pricing strategy is useful in growing mobile phone sector by expanding consumer satisfaction. They found that that people who are high and less usage are extra sensitive to price changes as contrasted with customers who are moderate usage. Consuegra et al. (2007) in his study also indicated that price of any product is considered as the vital determinant for customer satisfaction. Lee et al. (2009) suggested that a customer who is highly satisfied has higher probability to come back to a similar brand that he or she purchased. However, many researchers indicated that customer that has high satisfaction level will repeatedly back again to the same retailer or supplier in order to gain most favorable results (Islam & Muneer, 2018).

Ahmad and Ahmad (2014) conducted research on consumer purchase behavior revealed that the three are number of dominant factors which are responsible in reflecting of recent purchasing behavior of individuals such as quality, value, promotion, and some social factors too. Furthermore, the study also, revealed call tariffs, networks coverage, services quality and brand image increase the satisfaction and their preferences to purchase services from that particular brand.

Materials and Methods

A methodology of a research is defined in a manner that it does not seem like any other existing research. According to the study of Zohrabi (2013) quantitative method of research involves different elements from statistical approach of research in order to enrich the depth and understanding on the topic or the subject. Therefore, the research includes data collection methods that are based on survey questionnaire, interviews of focus groups, and secondary data that exists over the online database about the subject.

Research Design

In most generalized form, research design is referred as the plan of the research that is conducted by the researcher in order to answer and conclude the research question. According to the study of Ioannidis et al. (2014) research design can be distinctively categorized into two broad categories, conclusive and exploratory. The main reason behind the selection of quantitative tools is that the methodology aims at generalization of findings of study on the whole population of Faisalabad city of Pakistan in terms of using innovative mobile phones.

Data collection

Data collection is the most significant part of any research and is essential for the researcher in order to derive results and conclusion. The structured questionnaire survey is used in the study as it makes the comparison of responses easy and ease the process of data aggregation as same set of questions are asked from the different interviewees during the interviews (Walter & Andersen, 2016). The selected area for primary research is Faisalabad and it has been selected as per convenience of the researcher as it is easy to take responses from the people within the same city as researcher. The researcher has made a careful decision of selecting sample size based on related literature (Marshall and Rossman, 2014).

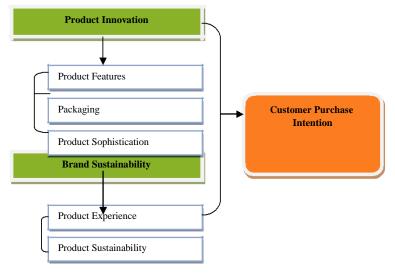
Research Instrument

The questionnaire has been used as a research instrument; it has designed for the study included few basic questions for knowing about the profile of respondents and 31 close ended questions. The 31 close ended questions in the questionnaire are those which inquire people about their brand preferences and purchase decisions when it comes to buy a mobile phone for them or may be for someone else.

Data Analysis

The collected data from primary source in a form of responses from sample population would be analyzed using statistical tool called SPSS version 21. Descriptive analysis of collected data has been done and presented by using basic features of data in the study.

This research aimed to provide in-depth understanding about the developed conceptual framework study. The results of the study are based on first-hand information that have been processed and analyzed after required procedures. Moreover, the results are based on a conceptual framework that is being sketched in Fig. 3.1. The framework has five components that have been analyzed in this section, such as: product features, packaging, product sophistication, product experience, and product sustainability. Impact of all these factors have been evaluated on the ultimate consumer purchase intension in mobile phone industry of Faisalabad. It was important to collect data from frequent users of mobile phone in order to get authentic information. For this purpose, data were collected from 200 respondents of different professions such as students, job holders, and businessman etc. research respondents were included both, males and females.



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Demographic Analysis

In demographic analysis, a detailed summary of survey respondent is presented in order to have keen insight into phenomenon. Table 4.1 highlights the demographic analysis of this study.

Table 4.1. Demographic analysis of respondents

Variables	Category	Frequency	Percentage
Gender	Male	153	76.5
	Female	47	23.5
Age	Below 18 years	7	3.5
	18 - 25 years	151	75.5
	26 - 35 years	32	16.0
	Above 35 years	10	5.0
Qualification	Intermediate	41	20.5
	Graduate	84	42.0
	Master	42	21.0
	Post Graduate	33	16.5
Income	Below 15000	59	29.5
	15000-25000	38	19.0
	25000-35000	34	17.0
	More than	69	34.5
	35000		
Occupation	Student	151	75.5
•	Private	19	9.5
	Employee	12	6.0
	Public Employee	17	8.5
	Business	1	0.5
	Other		

(Source: Author's Own Calculations)

Table 4.1 shows that out of 200 respondents, 7 were below the age of 18 years, 151 respondents were having age in between 18 and 25 years. 32 respondents were of the age of in between 26 and 35 years, while remaining 10 respondents were above 35 years. This shows that majority of the respondents belonged to young age i.e. 18-25 years, and in this time period, people are fonder of mobile phones and they buy it after thorough research on alternatives. It also shows that out of 200 respondents of the study, 153 were male, while other 47 were female. Gender also has a prominent impact on purchase intension regarding mobile phones, they both buy mobiles with different preferences and demands. The qualification of respondents includes, 41 were having the degree of intermediate, 84 were graduated, 42 were masters, and only 33 were post graduated. Qualification plays a vital role in the process of selecting mobile phone. Highly qualified people consider checking all the technicalities and complexities of a phone before purchasing it, but less qualified only consider its general use. This table also depicts that respondents of the study were majorly good earned people, who can afford mobile phone, more specifically

smart phones. 59 respondents out of 200 were earning below 15000 RS, 38 respondents were earning 15000 to 25000 RS, 34 respondents' income lied in between 25000 to 35000 RS, while 69 respondents were earning more than 35000 RS on monthly basis. People with good income can consider buying good mobile phone, and they have concern with innovative products instead of people who have less income. Demographic statistics of the study shows that the survey majorly targeted students. It indicates that out of 200 respondents 151 respondents were students that are a huge number. 19 respondents were private employees, 12 respondents were public employees, and 17 were businessmen, while remaining 1 respondent was belonged to any other occupation.

Instrument Reliability and Validity Analysis

Reliability analysis enables a researcher to find out the tendency of the research's strength and connection among all the research constructs. The value of reliability, greater than 0.5 is said to be a good reliability. Table 4.2 shows that the overall reliability of this research is 0.8 i.e. 80%. This is a strong reliability that shows the strength and excellent association among research constructs.

Table 4.2 Reliability Statistics

Cronbach's Alpha	N of Items
.811	31

Table 4.3 Reliability of Research Constructs

Variables	No. of Items	Cronbach's Alpha
Product Features	6	0.656
Packaging	5	0.695
Product Sophistication	5	0.649
Product Experience	4	0.659
Product Sustainability	5	0.657
Customer Purchase Intension	6	0.643

Table 4.3 shows the reliability of all the research variables. It is important to check the reliability and association of all research in order to check their inner connection. Reliability of dependent variable i.e. customer purchase intension is 64%, while reliability of all the independent variables such as: product features, packaging, product sophistication, product experience, and product sustainability are: 65%, 69%, 64%, 65%, and 65% respectively. All these values are greater than 50% and thus they consider as reliable research constructs.

Regression Analysis

Table 4.4 shows that the overall research model is significant as its P-value is less than level of significance (i.e. 0.05) which means that innovation and brand sustainability have a significant relationship with customer purchase intension. Moreover, people are more inclined to buy innovative products in this highly competitive, thus, the importance of providing innovative products and services has got immense importance.

Table 4.4 ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	19.466	5	3.893	14.065	.000
Residual	53.700	194	0.277		
Total	73.167	199			

a. Dependent Variable: Customer Purchase Intension

Table 4.5 Multiple regression-coefficient values of study model

Model	Standardized Coefficients (B)	Sig.
(Constant)	0.389	0.045
Product Features	0.136	0.057
Packaging	0.137	0.018
Product Sophistication	0.241	0.001
Product Experience	-0.005	0.938
Product sustainability	0.222	0.000

Results and Discussions

Table 4.5 indicates the relationship between one dependent variable (customer purchase intension) and five independent variables (Product Sustainability, Packaging, Product Features, Product Experience, Product Sophistication). Results show that product features have a significant impact on customer purchase intension, as its P-value is less than 0.05 (0.045 < 0.05), which means that with one percent increase in product features, the customer purchase intension will also be increased by 13%. The association between product features and customer purchase intension is positive. Moreover, packaging has also significant impact on customer purchase intension regarding mobile phone industry, as its P-value is less than 0.05 which means that with one percent increase in packaging, the customer purchase intension will also be increased by 13%. Third variable of the study is product sophistication, it is analyzed through multiple regression analysis that product sophistication has a significant impact on customer purchase intension, as it P-value is

b. Predictors: (Constant), Product Sustainability, Packaging, Product Features, Product Experience, Product Sophistication.

also less than 0.05. Moreover, the coefficient column depicts that with one percent increase in product sophistication the customer purchase intension will also be increased by 24%. Product experience does not have a significant relationship with customer purchase intension according to the results, as its P-value is greater than level of significance. In the last, product sustainability has a significant relationship with customer purchase intension, as its P-value is less than level of significance (i.e. 0.000 < 0.05). Further, it is evaluated that if companies will increase one percent of product sustainability, the customer purchase intension will also be increased by 22%.

Conclusions and Policy Implications

This study focused on the purchase intension of the customers in the mobile industry. T The researcher took two variables as independent variables which are innovation and brand sustainability. The researcher has considered product features and product packaging as the factors of innovation. In the meantime, product sophistication, product experience and product sustainability are taken as the factors of brand sustainability to check the impact on customer purchase intension. Structural questionnaire was used as the tool of data collection in this primary research. The people who use brand mobile phones in Faisalabad were considered as the respondents for data collection in this research. Five-point scale is used in the questionnaire to analyze the intensity and depth of the response. Researcher used SPSS for the data processing and to get the effective results from the study. Descriptive analysis, reliability analysis and multiple regressions is applied in SPSS to find out the perfect results from the research study. The results found that the product innovation and brand sustainability have a significant impact on the customer purchase intensions. The researcher found that packaging and product features have a significant impact on customer purchase intension. These independent factors have a positive association with the customer purchase intension. Increase In these independent factors which are part of innovation will increase the product purchase intension as well. In addition, product sophistication, product sustainability has significant impact on customer purchase intension, but product experience has no significant impact on customer purchase intension. Factors of brand sustainability have positive association except product experience with the customer purchase intension. The people do not like to use the experienced product in Faisalabad in the context of mobile phone industry. They want to use the mobile phone with new features and new shape with good packaging because it also represents the personality of the customers to the other people.

Policy Implications

The research made following policy implication for the marketers to get the efficient and effective marketing knowledge.

- The mobile phone industry of Faisalabad should focus on the innovation in terms of design and features of the mobile phone. People in Faisalabad like stylish mobile phones and they want new features every time when they buy a mobile phone from the market. Mobile camera is very important in the innovation so that the mobile camera and sound should be under consideration while making the innovative changes in the mobile phone. New models of the mobile phones should be updated with strong mobile camera and in terms of looks that creates attraction in the product and increase the customer purchase intension towards the mobile phone that may increase the sales of mobile phone in Faisalabad.
- Packaging should be improved by the companies. The packaging gives first looks to the customers and it is first interaction of the customer with mobile phone. If the mobile looks good in packaging, then the customer my intent to see the phone and it can take the purchasing process deeper. Different color schemes and designs should be produced by the company to make an attractive packaging.
- The mobile phones should be environment friendly a safe for the customer. The production unit should focus on heat. The mobile phones should not get heated after use, because it may damage the health of the customer.
- Mobile companies should try new things in production, marketing and in sales because mobile phone company should keep its brand image a innovative mobile company which should be stated by every aspect.

These are the implications for the stakeholders through which a mobile company can affect the customer purchase intension in a positive way and these should be adopted by the companies for their betterment.

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