

The Effect of Smartphone Application (App) On Business Transactions Flow of Retail Business: A Scene from Bahrain

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"every time We remember to say, " thank you", we experience nothing less than heaven on earth"

Sarah Ban Breathnach

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ABSTRACT

Purpose : In the era of the information technology, where online competition has contributed to the success of many businesses. The Bahraini retailers should be initiated and go ahead to roll in this field to expand their businesses and raise the ceiling of profits. This dissertation investigated the effects of utilizing retail store smartphone app on the sales level, revenues, expenses, online communication with customers, solving customers' online problems, and increasing the in-store sales.

Design/methodology/approach: The researcher used quantitative research method to study the objectives, where questionnaire distributed among several Bahraini retailers that own smartphone app for their retail stores.

Findings: The findings of utilizing the retail store smartphone app were as follow: First, there is a positive relationship between sales level, revenues and expenses. Second, there is a positive relationship between online communication through smartphone app with customers and solving their online problem. Third, shopping in-store is positively affected by the availability of the product's characteristics on the retail store smartphone app. Fourth, the decision of switching to online-only Store is negatively related to smartphone app's maintenance cost.

Implications: The Bahraini retailers implicate the research while applying smartphone app through, for example, acquiring new payment options, add more creative product characteristics such as 3D pictures and by switching to online-only stores and allocate the expenses among the business transactions.

Conclusion: As a result of utilizing the retail store smartphone at the sales level increase together with everyone use and expenses, and to control the expenses increasing switching to an online-only retailer is the best idea. Another benefit of utilizing the retail store smartphone app is increasing in-store sale, where the smartphone app is considered as a great environment to surf among products' characteristics and communication channel with customers to answer the urgent questions or to solve their online problems.

Keywords: smartphone app, retailers, retail stores, in-store, an online-only retailer, e-store.

DECLARATION

I declare that the following material contained in the dissertation formed of a submission for the award of Doctor of Business Administration at SBS Swiss Business School (SBS), Switzerland. This dissertation, except where otherwise indicated, is my original research, has not been submitted for any degree or examination at any other university and does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.

Signature of Candidate

.....

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Manama Souq (the old market) is considered as the most popular retail market in Bahrain and in the Gulf region with its products variation. It is the attracted direction to the citizens and the tourists from all over the world as well as it combines the old days' essence and current days modern attractiveness.

The retail shops there are covering diverse categories such as food stores, fabrics, accessories, gold, pearls, tailoring, perfumes, traditional sweets, garment stores and herbs shops. These options make Manama Souq a comprehensive retail market.



Figure 1 Manama Souq, Manama, April 2018

In addition to Manama Souq excellence, Bahrain stunned tourists with a wide collection of malls with different sizes and locations among Bahrain.



Figure 2 City Centre Bahrain

(Source: <http://www.citycentrebahrain.com/>)

The largest mall is City Centre Bahrain that is in Seef area by the sea in the heart of Manama. City Centre Bahrain landed on 158,000 square meters of retail space with more than 340 retail shops (City Centre Bahrain, 2018).

Among series of incredible masterwork collection of malls, The Avenues- Bahrain opened its shops to give the shoppers the experience of outdoor shopping with its unique seafront enormous location along King Faisal Highway. The Avenues enriched with 130 retail shops to satisfy the citizens and the tourists with supplementary brands and new tastes (The Avenues, 2018).

Marketing took different forms over the years. As in 1935, it was pointed at the performance of business activities that direct the flow of goods and services from producers to consumers. Keefe (2008) cited that in 1985, marketing term turned to "an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders." He proceeded that "marketing is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives". While he defined it "in 2007 as the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners and society at large".

Pagan (2012) stated that marketing channels are the pipes use to reach a mass audience. Those channels are used in all stages of business, from the first stage to a much higher level. Some of these channels are cold

marketing, where marketers are eligible to call everyone, they know to tell them about the products. Door-to-door marketing, where marketers supposed to knock customers and ask them if they would like to buy their products. Blind direct mail, as mail an advertisement to an unknown email box in a bulk. Those marketing strategies are well working for the people that they are good at dealing with them.

Another marketing channels are Traditional mass marketing, for example, buy inclusion as to be included in a broadcast messaging that may send to lots of people, placing advertising on a show that million people may watch. The main idea is to ride along with someone else message. Besides the previously mentioned channel is the existing customer relationships channel, it is a messaging system but for the trustee people, endorsed marketing peace, for a strong relationship with certain customers as bundling offers of one company with another new to customers company. Another channel is search marketing, as customers type the name or features of the product, they want in search engines.

According to experts, the most powerful channel is the endorsed marketing.

The last style is one-to-one marketing, it is used to motivate an individual to refer or sell others by network model or word of mouth model, and it is considered as the weakest marketing channel that may ever use.

Regardless of the type of the customers that the marketer is dealing with, the online or internet marketing has taken advance steps these days.

Online marketing may carry out different ideas, as it could be a website or placing a banner advertisement on other people websites. Today, online marketing is involving in a border mix of marketing, where the company can use to increase sales even if the business has done totally online, partially online or totally off-line, depending on their overall marketing strategy. Although this option is up to the organization owners, it is recommended to have at least part of the business online as it highly needed. Online marketing is performing one or more of the following marketing services:

- Communicate company messages about itself, product or services online;
- Conduct marketing research according to their need;
- Selling goods and services online, the online website could be a great alternative to old brochures.
- E-mailing is sending to the customers the details of the products;
- Banner Advertisement, that placing the advertisement on a website against fee;
- Blog marketing is active communication expressing their opinion or to enrol in live chat and investigate product issues.
- Article marketing: as the marketer supposes to write an article and post it online;
- Social media marketing: which include Facebook, tweeter (Rapid Learning Life, 2010).

Where technology takes place, cell phones appear to help in facilitating the marketing process and to shrink the distance between the retailer and the customers by sending messages through Short Message Service (SMS) or Multimedia Message Service (MMS), with the latest offers to customers. More critical steps lead to a smartphone, where cell phone provides voice communicating, SMS, MMS, the smartphone goes beyond that to cover internet services that make the online marketing easier and so close to customers than an email sent to their inbox and could be viewed previously through computer device only.

The existing of the internet has developed something called (Apps), short for Applications, that have distinguished smartphones- iPhone, Android phones and Windows phones- from traditional cell phones. Those Apps in smartphones act as programs and websites for a computer device. The Apps idea has attracted the business owners to take advantage of them in marketing their Business.

While sharing the new features with customers or a certain promotion about a specific item was a very hard issue that took a long time of printing, distributing the advertisements then waiting for the customer reactions and feedback. With smartphone revolution, time factor controlled and shrank. Advertising through SMS helped to reach their customers faster. As technology took it steps forward, smartphone Apps converted to small virtual shops on the home screen of the customer smartphone, leading to easier and faster to reach shopping areas.

As shopping was trapped in the physical process of visiting the markets to choose items that displayed on shops shelves, today most of the tech rider traders enable the customers to select from their products by flipping the products images over their smartphones from the comfort of their homes or while enjoying a cup of their favorite beverage.

Moreover, and in advance level, customers can pick their items from those virtual shops, pay the product cost and arrange for the delivery of the chosen product.

1.2 Statement of the problem

Because of the high technology invasion in Bahrain, many retailers took advantage of this new concept to enrich their trade and boost their revenues.

As a result, smartphone Apps entered the trade world to be an excellent effective tool for many traders around the world. The universal smartphone retail Apps such as Amazon and Aliexpress are representing a positive model for attracting customers anywhere and anytime.

Many Retailers in Bahrain tend to represent their products through those Apps are not pretty sure if their step is a step forward or reverse a waste of money and time. Based on that, this research would be a great aid that could fill that gap to establish and activate their virtual shops through Apps. The study answered many pending questions about utilizing the smartphone app in the Bahrain market: What is the relationship between the increase in sales level and utilizing a retail store smartphone App? What is the relationship between the ability to solve customers' online problems and utilizing a retail store smartphone App? What is the relationship between providing product characteristics on a smartphone App and utilizing a retail store smartphone App? What is the relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App?

Similar studies investigated the effects of the smartphone App on the transactions of the retail's stores such as sales level, solving customer's online problems, the importance of product characteristics on a smartphone App and the idea of switching to an online-only retailer.

These studies targeted different countries and presented to fill the gap in those regions. As well as to uncover some necessary facts to interested retailers and investors of these regions.

1.3 Objective of the study

1.3.1 Primary Objective

The primary objective is to ensure the efficiency of utilizing a smartphone app for the retailers in Bahrain.

1.3.2 Secondary Objectives

Secondary objectives are:

1. To investigate the relationship between the increase in sales level and utilizing a retail store smartphone App.
2. To study the difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.
3. To examine the importance of providing product characteristics on a smartphone App.
4. To evaluate the decision of switching to an online-only retailer through utilizing a retail store smartphone App.
5. To compare the data collected with the data existed in the literature review.

1.4 Significance of the study

The results of this research will help retailers in Bahrain to make the right decision in either obtaining a new smartphone app or not. In addition, it may show the further add-ons to their businesses.

1.5 Research Questions

Question One: What is the relationship between the increase in sales level and utilizing a retail store smartphone App?

Question Two: What is the difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App?

Question Three: What is the relationship between providing product characteristics on a smartphone App and utilizing a retail store smartphone App?

Question Four: What is the relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App?

1.6 Hypotheses statement

Hypothesis One:

H0: There is no significant relationship between the increase in sales level and utilizing a retail store smartphone App.

HA: There is a significant relationship between the increase in sales level and utilizing a retail store smartphone App.

Hypothesis Two:

H0: There is no significant difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.

HA: There is a significant difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.

Hypothesis Three:

H0: There is no significant relationship between providing product characteristics on a smartphone App and utilizing a retail store smartphone App.

HA: There is a significant relationship between providing product characteristics on a smartphone App and utilizing a retail store smartphone App.

Hypothesis Four:

H0: There is no significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App.

HA: There is a significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App.

1.7 Structure of the study

The research will be distributed among six chapters:

Chapter one introduces the main idea behind conducting this study as it represents the importance of marketing channels in the development process of the retailer until reaching to the smartphone Apps as an advance, fast, easy and attractive way to market products and attract clients. In this chapter, the problem of the study- in other words- the goal of the study is stated as investigating the impact of utilizing smartphone Apps in retailer in Bahrain. The objectives are to investigate the impact of having a smartphone App on retailer sales level, solving customer's online problems, the importance of product characteristics on a smartphone App and the idea of switching to an online-only retailer. According to the previous point, the research question formulated to help the retail shops in Bahrain taking a better choice in related to adopting a smartphone App or not for their Retail shops.

Chapter two highlights the literature reviews that summarize the different aspects of the study. It is divided into four different sections: The first section: Theoretical framework, where the overall concept is mentioned. The second section: retailer that covers the impact of technology acceleration on customers satisfaction in the retail field. In addition to the role of smartphone App in retailer as it investigates different features: m-commerce, smartphone Apps development, smartphone App in e-commerce, smartphone operating systems, cost of acquiring an e-store (Smartphone App), the influence of e-store on retailer sales, transactions cost and revenues, retailer-customer communication and problem solving, e-stores payment options, smartphone App friendly usage, Customers opinions aim at e-store development, e-store products characteristics and in-store shopping, e-store update and maintenance and finally turning to totally e-store. The third section: is a summary of the literature that critical literature is highlighted. The fourth section: is exploring the research gap that force in conducting this research and here, it is the impact of utilizing smartphone Apps for the Retail shops in Bahrain.

Chapter three examines the research design and method that have been chosen. As well as, the methodology used to collect the data and analyze them. A comprehensive description of variables, sample collection, data collection and collection process will be provided.

An explanation of statistical analysis is stated in chapter four, as all the hypotheses are discussed in detail to figure out the relationship between variables to admit if the utilization of the smartphone Apps in retailer in Bahrain is efficient or not.

Chapter five is a case-study, where the critical findings from chapter four discussed with one of retailers in Bahrain that experienced utilized smartphone apps.

Finally, in chapter six a summary of the effect of utilizing smartphone Apps provided. Furthermore, some future recommendation to develop the concept makes it more benefit is delivered.

1.8 Scope and limitation of the study

This research of the “smartphone App” is restricted to retailers that they are launching smartphone App currently in Bahrain and will be focused on business transaction flow before and after the smartphone App acquisition.

CHAPTER TWO

LITERATURE REVIEW

2.1. Theoretical framework

This section of the dissertation is adapted to build up a theoretical framework, which works as a guide to follow through the discussion. This section is a mixture of principles and theoretical concepts.

Vinz (2015) stated that the theoretical framework is considered as a backbone for the dissertation. As it supports the investigation with a solid scientific base.

The theoretical framework applied in this research is the Technology Acceptance Model (TAM) developed by Fred Davis in 1986.

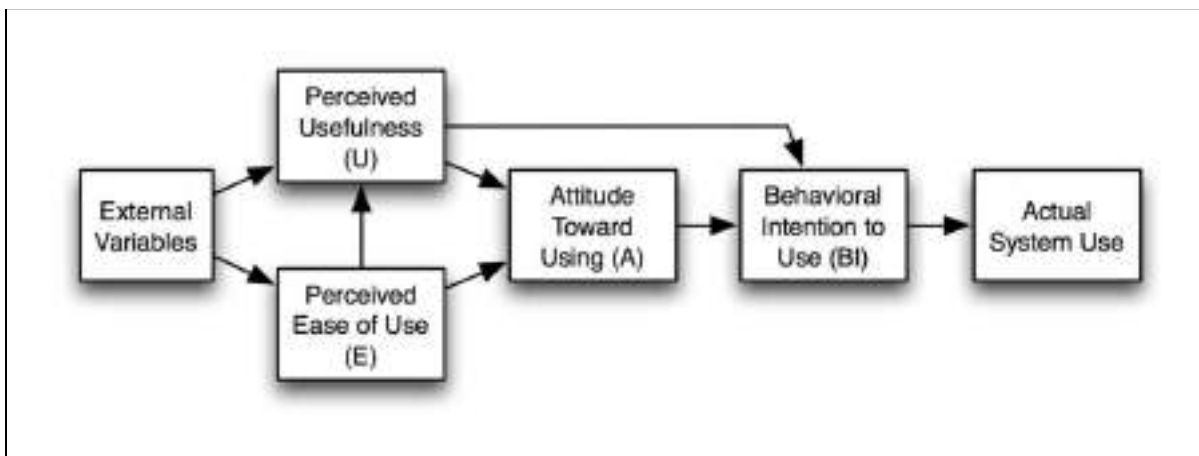


Figure 3 Technology Acceptance Model (TAM)

Source: https://en.wikipedia.org/wiki/Technology_acceptance_model

Kemp (2017) summarized that the TAM studies the behavioral intention (BI) of the users that affect their attitude toward using these technologies. Four perceives affect the user's attitude that has been contributed to the theory during several years' updates to the theory. First, perceived usefulness, where Davis defined it as “the degree to which a person believes that using a particular system would enhance his/her job performance.”

Second, perceived ease of use, where it defined by Davis as “the degree to which a person believes that using a particular system would be free from effort.” Third, perceived social norms, “the degree to which a person believes that using a particular system is affected by the people around the user.” Fourth, perceived

educational compatibility, the degree to which a person believes that using a system is suitable and aligned with the methodology or way of learning.

Since 1986 and the TAM is in a continuous update in 2000 and 2008 respectively. As in the 2000 update, the perceived enjoyment was added to make enjoyment as an option in applying and adopting the technology system. In 2008, the theory considered e-commerce and integrates it with the effects of trust and perceived risk on the use of the system.

Accordingly, this theory “is highly aligned with this research, where e-commerce is a very common phase. As a new face of e-commerce retail store smartphone App. Retailers that adopted the e-commerce a way to expand their trade, need to believe that e-commerce which represented by the smartphone App is useful, ease of use, trustable with an acceptable risk level (Kemp, 2017).

2.2 Retailer and e-commerce collaboration

2.2.1 Retailer

Sturgeon and Lester (2003) stated that research on the retailer is considered as marketing field's one of the mainstays. Progressively it has become global and wider in scope. The retailer is in the competitive and mature environment, in which there is a continuous increase in the expectations of clients. Customer satisfaction gained from the individual fulfilment of their expectations determine the continuous of the store choice. At first, retail theory concentrated on increasing the supermarkets' sales, convenience stores, and shopping centers. The last phase of the supply chain is concentrated more, and only fewer studies were on the experiences gained while shopping. But the companies now face new challenges with more strengthened competition because of the accelerated technological change pace, industry consolidation and management practices that are more sophisticated. It details why the attention has extended from growth and sales to customer loyalty. Using new ideas related to the experience of the customers will motivate the retail industry to develop various strategies that help in increasing the customer satisfaction. Ambience and the shopping experience are the two important factors that determine the customers' satisfaction in the large outlets of the retailers. For the retailing environment, creating superior customer experience is the main aim. Many programs introduced by the Retailer to influence and retain customers, that includes special offers, promotions, customer cards and discount coupons. But the current competitive intention of the retailer's stresses that the firms launch new strategies to initiate interactions between the stores and the customers and most of the strategies are based on the resources that are technology-based. For instance, an American retailer, Walmart's technological Apps are developed with two groups; one is related to the stores in

Bentonville and other in Silicon Valley, which handles the global e-commerce of the company (Taylor & Levin, 2014).

Rodríguez et al. (2016) stated that store environments consist of the basic elements that help in retail positioning and improves the shopping experience, employment, service quality and regarding merchandise. Resources that are technology-based leads to better interaction between the customers and stores, that supports a decision on the use or purchase, creating the favorable physical environment. On the advancement of the technology, these solutions could be unnoticed if the managers do not launch correct design strategies that focus on customer generated experience. Highly refined technology solutions would not guarantee on adding high value to the companies if there is not integrated context analysis. Using the methods of technology intelligence like patents, scenarios, scientific publications, benchmarking, road mapping, S-curves, or portfolios can offer with required evidence for the correct Approach of technology. And, the retail managers must be aware of the technology's four aspects, data analytics, e-commerce, software platforms, functions of inter-firm technology. The 'triangle model' for the analyzing the relationship between the customer-company, employee-customer, company-employee in the deployment of the interactive marketing activities presented. After two years, the 'Pyramid Model' was presented by Parasuraman to show that the interactions among the employees, customers, and companies are increasingly likely to be facilitated by some technology form. Despite, the accelerated technology pace in retail, the research on the impact of such systems on the customers' experience is in the promising stage.

Many Retailer attempts to shift from in-store only shops to online shops or as they call it cross-channel retailing, where Retailers could meet their customer face to face or through one of the advanced technology channels such as web pages, Facebook, Instagram, Snapchat, WhatsApp and any other customized Applications of any smartphone device. The studies presented that when retailer made changes from one channel to another, this has reflected three major aspects: First: Relabelled targeted customers, as the young customers are more attracted to these channels. Second: Shopping value new vision, as it is available anytime and conduct in a very convenience matter. Third: Modification of the value chain as new features and needs interface customers and Retailer as well. These findings lead the retailer to work hard and be more creative through all channels including the in-store shops to gain the targeted goals and satisfy all customers desires (Cao, 2014).

2.2.2 Retailer in Bahrain

The list of the malls in Bahrain never be less as many new malls are under constructions all around Bahrain that would attract more Retailer to open and would attract new Retailer to live the experience in the retail market of Bahrain.

The active retail market and the increasing size of shopping malls in a certain country are considered as a tool that would activate the commercial market in that region. This activeness is highly affected the real estate market as well, as the country will attract more and new retailers. That Retailer will rent shops or would buy a piece of land to launch their retail project on it. If this market is rewardable for these retailers, they would be interested more in the more massive commercial land to invest on, which in turn would boost the country economy and attract other retailers (Ahmad, 2012).

2.2.3 Smartphone Apps in Retailer

Main challenges faced by the Retailer are building integration in the presence of internet, mobile centres, call centres, internet presence and physical stores. Mostly the customers will have a single view of the retailer. That is the channel chose by the customers does not matter, the expectation is that the retailer knows the relationship history. In addition to that, information has to flow from the channel seamlessly to another channel. For instance, if a wish list is created by the customers, friends of that customer also able to access that registry from the mobile device. A customer of the omnichannel measures the value, brand, fulfilment, availability scenarios in purchase decisions. Retailer those share relevant and accurate information at the correct time and execute it efficiently the process needed to satisfy the customers and win their hearts. Proximity is the order of new retail. The need for satisfying the immediate answers and the imperative gratification. Customers have to find, purchase and get the goods anywhere, anytime. With this respect, mobility enables unparalleled access to the products, shipping and order information. In combination with the sensors, it makes the unprecedented process efficiency and inventory accuracy (Lee & Lim, 2017). Following is the example of how it works. A customer orders a product online being in the home using a shopping App on the tablet or mobile, due to urgency chooses pick-up from in-store, goes to the nearest store with the mobile and mobile will be connected with store's WIFI. She pays through the mobile and while walking out if she like any other product she could post on the site, Pinterest and adds to her wish list. In the above example, the customer's experience spans four various channels, with two different devices and two methods of delivery that is possible. However, the customer turned into able to carry out the transaction on one device, validate it on another and select up the merchandise at the shop – seamlessly. The customers enjoy turned into tailored to her records throughout all of those channels. This store does not see her as an “offline consumer” or a “mobile patron.” She's a consumer. They don't segment their stock throughout

channels – they have one distributed inventory throughout shops. Compared to different, much less forward-searching stores, these customers enjoy seamless, handy and the retailer met her wishes within the nice viable way. Chances are, the purchaser will go back for her next buy (Manser et al., 2017).

Independence of gadgets is a prerequisite in recent times as multi-retailing, that is everything has gone e-com. It is the truth and beginning to be completed as Omni (a steady, seamless brand experience pass all channels interdependently at the choice of the give up-consumer), and the cell will become even greater crucial. People can use mobile as a wallet and as a device of knowledge the repute of the modern purchase.

Heckmann et al. (2012) cited that many of retailers attempt to use multiple Retailing channels to satisfy their loyal customers' needs as that different style of customers with different lifestyles and interest will be needed multiple Retail channels instead of parallel channels format.

The study showed that there is a positive relationship between the availability of multiple channels and the loyalty of the Retailers' customers. That would recommend the Retailers to utilize multiple channels to satisfy the current loyal customers and to attract a new line of customers.

Besides, online Retailing opens different windows of revenues sources to the Retailer as they can expand their revenues from taking advantage of click, cookies, traffics and advertising, which in return may reduce the products' price and attract more customers.

In-store Retail influenced by smartphone devices during the shopping process. The research shows smartphones currently influences 5.8 percent of shopping trips and this fact leads to forecast the smartphone influence to be reached 15-18 percent of total retail sales. The smartphones influence factor varies by store category. It depends on the smartphone adoption rate and most customers are using their smartphones to search within the shopping trip. The study indicates that 23 percent of customers were using their smartphones on their last shopping trip used the App. Or Retailer's website. The smartphones' influence factor is exclusively calculated for each Retailer category using survey data. The formula to calculate the smartphone influence factor for each category is weighted by percentage (%) of total retail sales to the desired category. The smartphone influence factor prediction was based on the predictable increase in smartphone diffusion from multiple sources (Lobaugh, 2012).

Mobile devices and information technologies are a growing trend in the today's world. Utilization of the tablets and mobile phones is increasing rapidly, and there is a continuous battle for market share between the

companies. But the mobile devices have become more attractive with the innovation of personalized features like mobile Apps. The mobile App is considered as the new artefact of ICT.

Based on a report conducted by Compuware, Moth (2013) stated that 85 percent of the customers prefer shopping through Apps. instead of the websites. Moth (2013) referred this preference to several reasons: The Apps are more convenient, fast and easy to browse. The study witnessed 42 percent of the respondents expect that the smartphone Apps. are faster than the websites. As the customers that are using the smartphone Apps displayed impatient behavior, this behavior converted to a threat to the smartphone Apps that faces certain issues as the customer will repeat the attempt only two times and if they do not find a response, they will delete and forget the App. The study shows that only 16 percent of the customers will give more than two attempts to a smartphone App to response.

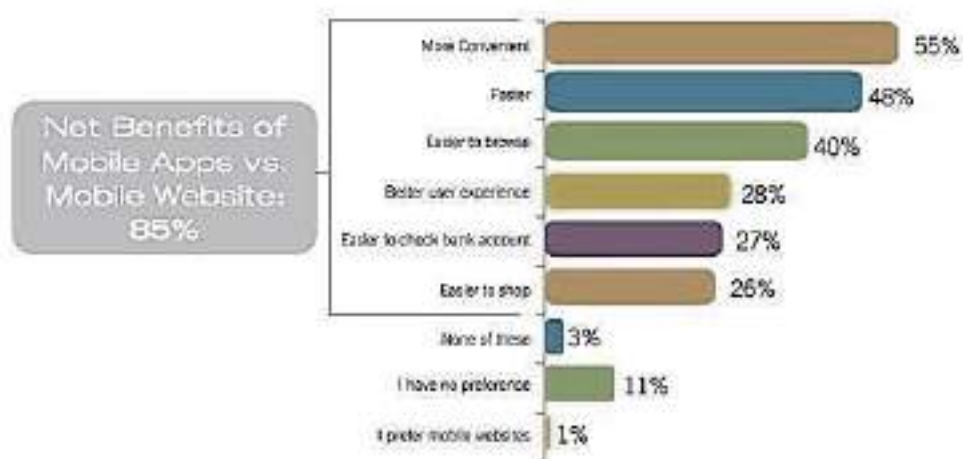


Figure 4 Net Benefits of mobile App Vs Mobile website

(Source: <https://econsultancy.com/blog/62326-85-of-consumers-favour-Apps-over-mobile-websites>)

The context of mobile technology, various studies have used the concept of observed value to research the utilization and adoption of the mobile technologies. As the model's fragment paid attention to the values of functions, which includes the function of utilitarian and services that a product provides. The product value is captured with the help of attributes like features that brings utilitarian performance. Many scholars found that there is a positive relationship between the consumers and functional value on the utilization of mobile services and information systems (Figure 3).

A theory on the structural model that examines the impact of different mobile App's characteristics and various categories on the consumers' demand for mobile Apps. The authors present the first model App

demand estimation, it is based on the behavior of the observing customers. That model consisted of the attributes of previous versions, price, Apps developed by the same developers, in-App purchases, etc. The analysis shows that there is an increase in the demand of the App, with the App description length, pictures in the description, number of days from the launch of the App, valence and the volume of review of the users. In other views, it is found that the demand for the App decreases concerning the file size (Alexova, 2015).

Concerning, availability, convenience, and variety of products, with timesaving are the important motivators for the people for shopping online compared to stores. It is continuously described by them that the online shopping provides customers with the capability to compare the products and the terms of features, price without travelling and look out for the stores. For online purchase, a person should have internet access which sometimes is considered as costly. With the help of e-commerce, credit cards are considered the main concern (Xu & Paulins, 2005). In the offline environment, it is recognized by the marketers that consumers shop based on the motivations for searching and is primarily experimental or goal oriented. Online shopping concerns are security issues and privacy, classified by consumer organizations and governments. Customers consider the internet as the efficient and effective method of shopping (Xu & Paulins, 2005). Many online stores are said to offer convenience, concerning the availability of services and products. Most of the online shopping sites or the stores won't Apply state or local taxes on the products, which makes the products' cost cheaper compared to stores and it is the important fact that the customer behavior has an impact on shopping with mobile Apps or online sites.

The mobile App is used extensively in most of the sectors nowadays. The retailer is getting developed with the help of smartphone Apps and online sites. In addition to the functional aspects of the App, marketing ability is also provided, in which the users can share the content with their social community which helps in expanding the reach and presence of the brand. If buying is made simple, the customers will be motivated more to from that business than going to the shops and wasting time and on the other sites that are potentially slow and cumbersome process. It is also Applicable to the websites that are service oriented and provides more components on functions that helps in monitoring the performance levels and the efficiency. With the help of mobile Apps, new customers can easily be identified and obtained. The App that offers real values to the customers to the existing customers will be known to others, and it gains additional attraction. It helps in driving the acquisition of the growth of the new customers naturally. Customers who demand the App will find the engaged customers, and they care about what services and products and respects that company. These customers are considered as an essential people, on the establishment and the growth of the brand. Though marketing strategies consider all platforms, most of the companies, identify that it prioritizes

the mobile platform compared to others. It true that the advertising mediums and search engines are taking a mobile-first Approach (AusIndustry, 2018).

In the behavior of consumers in purchasing a product, attributes are considered as an important thing. Some studies state that the product's physical attributes like color and size impacts on how customers perceive the purchase. A product's physical Appearance is said to create a first impression of what it delivered when it used. The framework which analyzes the impacts of the given environment on the behavior of the people within that environment for that invented. Authors consider this framework as paradigm SOR, Stimulus Organism Response, that details that the internal states like dominance, arousal, and pleasure are impacted by the physical stimuli of the atmosphere like the color. Internal states are considered as the intermediate variables which affect the customers' responses. Previous studies found that the stimuli of the environment in the websites and retail stores induce the arousal and the pleasure which increases customer satisfaction and the behavior of purchase. The layout of the product is also important in impacting the internal stimuli. Ampuero and Vila (2006) analyzed the packaging roles on the perception of the customers. Packaging is the important thing as it is the first thing that the customers look at before deciding it to buy. In the leading self-service economy, it is the complicated task for the manufacturers to package which attracts the potential buyers before the selection of brand. Packaging is said to be the important task for the benefits of the product as it reaches many potential buyers who involve it actively in looking up the description of the product (Ampuero & Vila, 2006). Hence it is important to develop the characteristics of images and texts, communicate the right values of the product and achieve correct visual level.

Palmquist (2017) stated that smartphones have drastically changed our lives and lifestyles. It has changed the behavior of the customers in buying a product. Some attributes that make smartphones attracting are interactivity, location awareness, and portability. Smartphones are also considered as in ideal companion for shopping. Many studies show that about 80 percent of the world population shoppers use their phones for help. Customers could able to access the description of the products, price, and reviews with just a swipe. Comparisons of price can be done easily with the help of the smartphone Apps which is not possible in shops. Companies spend more on mobile advertising; this is to grab the attention of the smartphone users of about 87 percent. A new study is used to isolate the impacts of mobile Apps on the essential metrics of retail, that includes the spending of every customer, products they return, and the purchase details and various features of the App. The reason for using a smartphone App for purchasing by the customers are listed below. Most of the people commonly used the features in relation to the special offers and loyalty rewards. The features noted by the authors are highly interactive. It is observed by the authors that people embraced the smartphones eagerly as the interactivity provides users with the feeling of control and the

sense experienced by the world around them with the help of technology. Activities, like saving the reward points and replying to special deals, plays right into this phenomenon of psychology. Palmquist (2017) added that the interactive features of Apps make people buy things frequently with higher engagement. The reason why people spend less on the purchase is maybe that people are drawn to the features of discount-laden interaction. Customers who didn't use the loyalty or special offers spent Approximately the same amount before and after downloading the App, and those who used these interactive features spent about 16 to 20 percent less for the average purchase. The authors also studied how people used the Apps on the day of purchase and the day before. If there is an increase in rewards and helps in explaining why consumers who make use of the Apps that tend to make more purchases, it partly accounts for the authors posit and high returns. Product purchased via the App and not by in-store is said to be impulsive, and people patter a button may feel less inhibited than waiting in a queue to register and hand over credit card or cash. It leads to the remorse of the buyer at a higher rate, as suggested by the authors. In addition to that, many returns usually stem from the disconnection between the product that is expected by the consumers and the one that shows up on the doorstep. Hence, it is advised by the authors to offer clear descriptions, videos, and pictures of the products to the Retailer on the App. It is suggested by the authors that have the information available in the hand of the shopper, interacting with online agents or the salesperson is said to be less important than it used to be. It is meant that the key jobs for the associates are to make the experience of the shoppers as efficient and quick as possible and then encourages to visit again.

International customers have thousands of options for the purchase they make, and the mediums that are ever changing which helps in engaging with the brands. About that, one constant trend shows that the buying habits are the reflections of their experience, that they had on the interaction with the e-commerce channel. This trend is validated with the recent survey done by Atomic Research, which further proves that the Retailer hopes to come out on the need to offer high speed, personalized offers, and convenient experiences. The outcomes are explained in the plain language that how critical the mobile App and the website helps in obtaining success for the retailers. The mobile App is said to be used only for the customers if it is used for their need. The survey found that poor performance not only leads to losing the customers but also affects their perception of the retailer.

From the research by Rakowski (2015), it is found that 73 percent of the users of the tablets and smartphones, strongly agree or agree that the performance of an App is the important thing on how they think about a retailer. For a brand image, performance is said to be the essential thing. The effect or the result of a poorly performing App is not only the reason, that the customer stops using the App, they also think twice or thrice before going for a store, and the customers will be lost for that retailer. Issues faced by

the Retailer is that ensuring the performance of the Apps are really becoming a challenging one. For a modern App with complex or complicated architecture, there are increased risks of performance issues that arise from various areas, like infrastructure, App-code, or the back-end database in tablet and smartphones used. A unified solution for monitoring which analyzes and correlates performance from the perspective of end-to-end is designed critical component of the strategy. Without this knowledge, Retailer is running the risk of the App performance problems that harm the customer experience immediately along with long-term damaging of the brand. Hence performance is considered the key to a great App, but the key to the great experience of shopping is convenience. Tech and digital innovation have made people poor, but the Apps offer the Retailer with the ability to connect with the customers at anytime from anywhere, brands have to realize that an App has to make the journey of the buyers more convenient. The successful strategy of the software needs to identify the friction points in the journey of the buyer and makes sure that the App alleviates those problems. It makes sure that the Retailer is developing the Apps that Appropriate for fulfilling the needs and requirements of the customers and providing convenience. It's not enough to have an App and advertising it through email or in-store. The retailer must use the GPS sensors in order to make the customers download it and past buying data to offer personalized offers that are highly contextual. An App has to make its every customer feel special; even it consists of millions of customers, it should be like the App built just for them (Rakowski, 2015).

Everywhere people are attached to the smartphones, seems to be unaware of what is happening around them. In the past years, mobile phones were used widely to text, talk and to play games. The global mobile device utilization changed the way of shopping, expectations, the interaction with the Retailer and what is expected of us from them and a driving force behind innovation. The way of internet access is changing, along with the increased number of users of smartphones and not computers. In the fourth quarter of 2012, mobile devices drove about 18 percent of the website traffic. After one year it just increased to 27 percent. The time consumed on the usage of web browsers are also said to increase. 80 percent of the time spent on the internet devices with the help of App is increased in 2013. In 2014 it was about 86 percent. Consumers no longer use browsers for accessing the internet from their mobile devices. It seems to be unabated continuously.

Depending on the research findings of Flurry Analytics, utilization of mobile Apps was increased amazingly in 2014 to 76 percent. The categories of Apps that are used to the max are as follows. Shopping or lifestyle Apps are first in that with about 174 percent growth, productivity or utilities is the second with 121 percent, and social media and messaging come third with 103 percent. Mobile is considered as an advantage to the Retailer as it creates a personalized experience. It is a great chance for the Retailer as they quickly jumped on the bandwagon. The retailer is coming up with creative methods to stay connected and close to the

customers. Concerning the outcomes of internet retailer and ComScore, the time spent on the retail online with the mobile was increased in 2014 to 66 percent from 52 percent in 2013. Also, the time spent on the Apps is decreased down to 63 percent and on browsers to about 37 percent. Sales through m-Commerce grew from \$66 billion in 2013 to \$118 billion in 2014, which represents 78 percent of growth. The growth concerning the revenues by browsers was at 58 percent and through Apps was at 42 percent. Tablets and smartphones increased the sales of the traditional desktop conversion rates (Ogden, 2015).

Clifford (2014) summarized the statically results that generated by www.mobstac.com, a cloud-based mobile-commerce platform, in describing the customer behavior towards mobile commerce. Although there was 44 percent of the customers are frequently do showrooming as they visit the in-store and check the products by themselves, they surf the product online through their smartphones and purchase it less expensive than the one displayed in-store. In providing a cross-channel experience through smartphone device, about 80 percent of the customers referred to the information related to their desired product that is provided on their smartphone while they are shopping in-store. Moreover, 57 percent of the customers are investigating the products online through their smartphone at the same shopping in-store time.

Other facilities that may attract the customer and save their time and efforts in shopping online are:

- Mobile payments: as the 73 percent of customers mentioned the positivity behind this idea as they could save time instead of waiting in line to complete the payment process in-store.
- In-store navigation feature on a smartphone: 66 percent of the customers find the location of the items through the Apps. would help them find their desired products smoothly and in a reasonable time and effort.

2.2.4 Demographics and technology in relation

In studying the relationship between the age and the usage of the extent of using smartphones in-store, Kiba-Janiak (2014) got surprised when he discovered that there is no correlation between the age and the extent of using the smartphone. Moreover, the study showed that females are using smartphones in shopping in-store more than the males.

Relating the age and the time consumed on smartphone Apps, Lella (2014) analyzed a study conducted on a group of U.S. users lead to the fact that the age group between 25-34 years old are considered as the heaviest users of the smartphone shopping Apps with 75 hours a month, whereas this number declined to 11 hours per month for the age range 35-54 years old. This rate reflects the technology available in 2014, which means that more advanced technology could easily alert these rates (Figure 4).

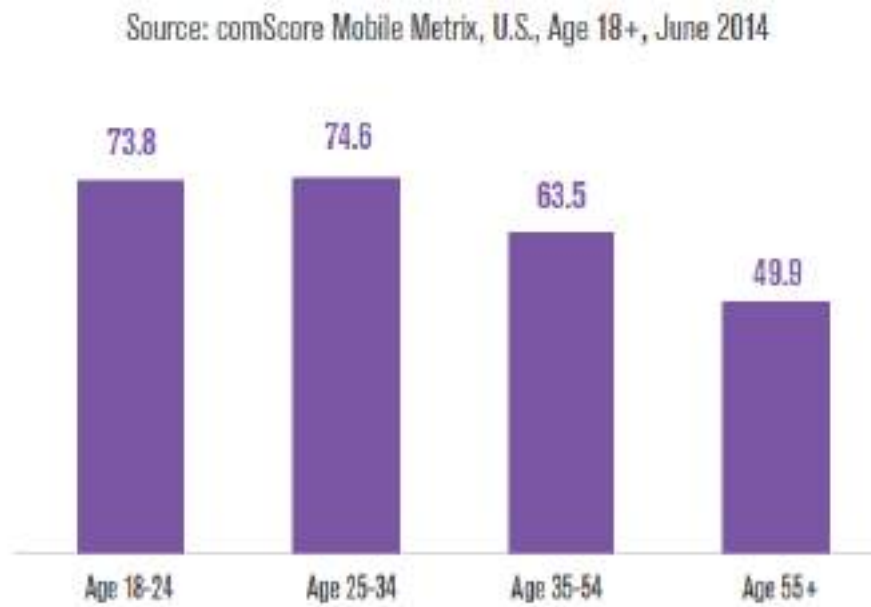


Figure 5 Smartphone App hours per user in the U.S. in 2014
(Source: comScore Mobile Metrix, U.S., Age 18+, June 2014)

In 2010 official census in Bahrain exhibited that the total population of the residents was 123457.1 and expected to reach 1.316 million, 1.592 million and 2.128 million in years 2014, 2020 and 2030 respectively with average growth rate is 7.4 percent.

According to age distribution, the percentage of population under 19 years old is 25.9 percent, 71.1 percent for the age 20- 64 years old, while only 2.1 percent are over the age of 65. Those percentages signposted that the Bahraini society is almost a youth society (Ministry Of Information Affairs, 2014).

Andone et al. (2016) concluded that age and gender are strongly linked to the smartphones that they chose, and Apps used. Communication and social Apps are highly used by young people and as Bahraini society is tended to be almost a young society, social Apps and communication Apps are dominant. This can be interpreted by the percentage of the smartphone penetration in Bahrain at the end of the third quarter of 2016 that reached 200 percent against 180 percent recorded at the end of the third quarter of 2015. (Telecommunications Regulatory Authority, 2016)

In related to gender impact, Ethan Mollick podcast interview through Knowledge@Wharton (2015) indicated that gender has a strong effect on personal decision to become an entrepreneur. Males are more likely to be an entrepreneur than females. Although companies run by females are so profitable and advanced.

The clue here is that males own a psychological predictor called overconfidence more than females, as they misplaced their confidence and think they can win while other keeps lose. This prediction makes males more initiative than females and leads them to become an entrepreneur more than females.

2.2.5 M-Commerce and mobile point of sale

Utilizing the in-store technology like web kiosks, and the smartphones of the customers are the latest trends. Retailers use mobile Apps, beacons technology, and Wi-fi. Social media is used to target the customers with the personalized offers that can be done with the help of customer analytics of the next generation. There is an ongoing payment process which makes them agile and overcomes the queue options with a mobile wallet, mobile PoS, and transfer methods. In addition to the native Apps and mobile websites, innovations in m-commerce build a broad array of the various capabilities. Basic Apps include the capabilities like, order now and store finder (Mariga, 2003). Many advanced Apps are developed to develop in-store experience and mobile. for combining mobile access with in-store shopping beacon technology is used by the big stores at a rapid rate. Many retailers have started to test devices in the stores that communicate through Bluetooth signals with the phones of the customers. This technology is used with the help of the Apps used by the customers, is most frequently used by the retailers to alert the customers of in-store coupons and sales or the customers (Marketing91, 2017). Some stores take beacons to the next level. Some Apps are developed that greets customers with the welcome message and styling and product tips while shopping (Chang, Chen, & Zhou, 2009).

2.2.6 M-commerce in Bahrain

According to Alsultanny (2012) since 2005 and the number of mobile subscribers is in ascending stages as 1.24 million mobile subscribers were recorded. In the second quarter of the year 2008 in Bahrain for prepaid and post-paid mobile subscribers (Figure 5).

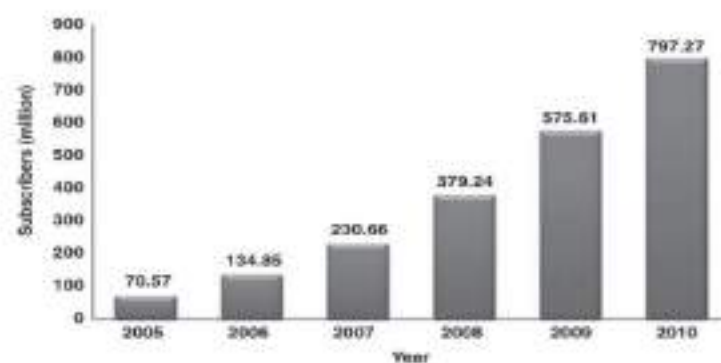


Figure 6 Number of mobile subscribers in Bahrain 2010

(Source: <https://link.springer.com/article/10.1057/dbm.2012.2>)

Mobile phone users around the world use their mobiles in multi-services such as viewing news programs, e-banking, web surfing, tickets reservation and retail stores purchasing.

In Bahrain, the mobile services have taken an advance shape in the world generally and in the Middle East especially. As the mobile services are in the beginning stages in many countries, the mobile services are in the development phase in Bahrain. This development could be clearly viewed through the following mobile services that offered by Bahrain mobile service providers such as:

1. Video calls
2. Auto fax and data
3. Radio channels
4. Credit transfer
5. Mobile Banking
6. Mobile office

And much more of unique and advanced services.

This development and noticeable growth in m-commerce due to several factors:

1. World Trade Organization (WTO): The organization that removes the commercial barriers between the members to make trading process running easy and fast online.
2. Bahrain Economic Development Board (EDB): That find the opportunities and lead the legal the authority in the commercial sector.

All the above-mentioned mobile services are implemented in various sectors and organizations around Bahrain including:

1. E-government: Activating 24- hours to serve citizens and businesses in all government issues.
2. Finance Sector: When banks launched the mobile banking services to facilitate users.
3. Health Sector: Then, some private clinics and hospitals provided their facilities to customers such as booking Appointments and Appointment reminding via SMS (Short Message Service).
4. Car Agencies: Where several car agencies generate multi-services to their customers online such as car service booking.
5. Bulk SMS: Some organization take advantage of this mobile service to send a bulk SMS to citizens to inform them about special events or promotions of other companies against an agreed amount of money.

2.2.7 Growth of mobile App in e-commerce

It is found by a recent survey that there is an overall increase in e-commerce is about 30 percent of the use of the mobile App. Many consumers are demanding the Apps that engage useful information and that helps in saving money on the purchase. Creating a mobile App for the Retailer is essential for an increase in the revenue and helps in moving forward the business. Mobile Apps also help in increasing the engagement and the customer base. It is found that an average user of the mobile spends 201.8 minutes per month on using the retail Apps (Sumita & Yoshii, 2010). Users prefer mobile Apps instead of the mobile sites as the Apps offer the best experience for the user. It is felt by the 63 percent of the consumers that mobile Apps were convenient to use. 57 percent of users felt the loading time is low and it is fast. It is felt by the 40 percent of the users that Apps offered the best user settings and saved them for later use. On just using the App 31 percent of the users were rewarded and benefitted. In order to increase the users on the retail mobile App, first the developer has to understand the shopper, as it should be Appealing to all the customers, and the interface should be user-friendly. For driving the sales, the user experience is the important one. Basic thing in developing an App is to first know the needs of the consumers and to fulfil it.

Einav et al. (2014) cited that the evidence about the penetration of smartphone e-commerce presented on eBay as they investigate the impact of Retailer through Apps. It shows the effect on customer behavior, and the nature of smartphone Retail used. The evidence should be taken into consideration as the smartphone is in their growing phases. More smartphone issues are linked to Retailers. As the interaction of online and offline shopping behavior, where customers use the smartphone while shopping in-store or exchanging items through different social media. The professionals in reading the time indicators can easily use statistics as suggesting that smartphones devices are primarily changing home shopping behavior. However, the opportunity to explore the prices, read reviews on products, compare online and offline products, and receive coupons and promotions, ultimately to have a substantial effect on Retailer. On another side, the issue of innovation and competition have highly raised in online Retailer. Customers using eBay on their smartphone devices almost everywhere, as they search for the products through the App, rather than searching through research engines. This concept will affect advertising and marketing as well, where they will be different on smartphone devices. As the study was in the early stage of the smartphone revolution, an expected significant room for innovation in this area is highly possible. The study hypothesis was assumed that the huge adoption of smartphone devices would facilitate new technologies that would take advantage of it and sooner or later would enhance the competitive phases. Many technology attractiveness is available to the smartphone devices to be updated and accordingly their effect on online Retailer improvement phases. Smith (2018) supported Einav et al. (2014) and to prove some facts that adopted there in that Currently, with more than half of all online traffic going through smartphone device, therefore, it is enormously important

for the Retailer to make sure that their Retailer website is well-informed for smartphone viewing. The fact is, that the Retailer customers will be shopping through the Retailer website through their smartphones instead of a desktop. An overlook to Black Friday sales which indeed were affected by smartphone fever, as nearly 40 percent of sales came from a smartphone device. That is a high percentage, and it represents just how great the opportunity is it for Retailer to invest in gaining customer relations by creating smartphone Approachable and user-friendly websites. Within this highly competitive environment, the customer would easily shift from on Retailer to another to fulfil their needs, if the other Retailer will fill the technology gap of the previous Retailer. A study of tracking the U.S. customer behavior showed that holiday shopping season for the last year was recorded that a third online purchase came from smartphone users.

There is an increase in the number of consumers who use smartphone Apps for retail shopping. About 54 percent of the people are using mobile Apps or the online sites. Mobile Apps are considered a boon to both the Retailer and the consumers. With the help of these online and the mobile App, Retailer can get ample chances later to stamp their brand in the minds of the customers and increase the value of the lifetime of all the customers who use the App. It is a great idea for the Retailer to invest in developing the mobile for easing and expanding the business boundaries (Chen et al., 2017).

Smartphone Apps have a clear advantage over online websites, as they directly target the customer concerned. Personal services such as advertising, banking, payment and so on, have now turned online. Smartphone App development is a lot more than just the cost of development and the profit factor. However, it might not turn out to be quite as profitable as an independent smartphone App developer, who does not have a high enough budget for it. Smartphone development and online marketing have become the current mantra for the success in any industry. Smartphone Apps created solely for marketing or branding are normally available free of charge, so their development cost will be high as there is no replacement for this cost such as Apps developed for income purpose for companies such as banks and huge Retailers, which have a considerable deal of capital at their disposal and a great number of customers, where ROI (Return on Investment) factor is usually very high. Having different smartphone platforms such as IOS and Android would be costly and so complicated in case of formatting to the Retailer, however, it would be more convenient for customers and more attractive (Viswanathan, 2017).

It would be totally wrong if the Retailer believes that the cost of the smartphone App development is a one-time cost as it considers as a continuous process to generate the desired return. The smartphone Apps need to be updated with the technology and equivalent the rapid changes in the market and upcoming customer services.

Today's customers expect a wonderful shopping experience anywhere and anytime. Information and the supply chain management has a potential to change the store operations completely to the digital method. Customer relationship in retail pivots on good commerce consistency, and the fulfilment of the experiences. On executing well in these areas, Retailer obtain loyalty and trust from the customers. If something goes wrong in the inventory and order requirements, customers will shift to another Retailer and may not return. Most of the companies now are moving ahead to obtain these goals. Reach of IDC in 2013 show that 24 percentage of the Retailer surveyed and listed smart technologies like RFID, sensors, M2M as their top initiatives. There are various benefits in using the mobility-based smart technologies in the supply chain, and they provide global information access, and collaboration across the external and internal organizations. Technologies also provide opportunities that are unparalleled for the real-time responsiveness for the reaction of changing conditions. For instance, visibility with respect to assets and goods movement, to shipment and demand routing, alerts and shared information with useful mobile Apps to accelerate responsiveness. Synchronized real-time pack, pick and the process of the ship, customer support same day, next day shipping visibility, and routing (Yan et al., 2010). Responsiveness will be increased to manage the orders and unplanned shipments anywhere and the last mile responsiveness. Mobile helps in capturing the data through the capabilities of 1D, NFC and 2D and offers visibility to status, tasks, and inventory which enables the flow of efficient processes. Service levels and the productivity soars enhance when the information is in the operator's hand, who then executes on keeping the assets and goods that move through the supply chain. Companies that are planning to implement the supply of mobile-based retail supply chain solutions must consider the mobility of a truly transformational nature. With this, process, technology and people must be addressed and incorporated into plans (Teklogix, 2008).

According to Google report that had used questionnaires that distributed among 500 participants from the U.S. and their age was between 18 and 64 years old to study how people shop on their smartphones, the following findings reached:

- Smartphones are the best favorable instrument for shoppers as they can use it at home, on their way out and in any situation that required an internet access. They found it easier and fast to browse products and a good source of deals and discounts.
- Good deals and attractive discount rates play as a driver to the customer to download and install the smartphone Retail Apps.
- The purpose of shopping through App is different than the purpose of surfing through websites, where smartphone Apps are representing the loyalty and sharing. While websites reflect browsing and source of information only.

- The main reason that smartphone users will avoid downloading the smartphone App is the size of the App as it would take a space of their smartphone memory that they may save it for future need (Figure 6)

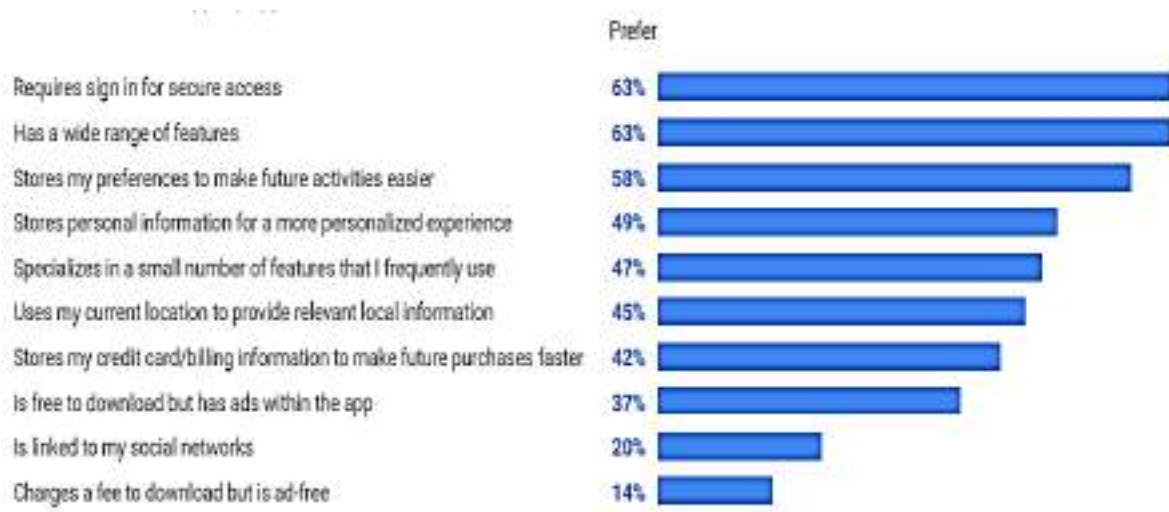


Figure 7 Features that people prefer to have in their favorite shopping Apps

(Source: <https://www.slideshare.net/khairulakbar/think-with-google-how-people-shop-on-their-phones>)

Unfortunately, some Retailers disappoint their customers while they are trying to find a new innovative way to serve them and to satisfy their needs. Starbucks, for example, tried to improve their smartphone Apps. to improve the experience of their customers. Starbucks has invented “Breakfast on Us” promotion. This promotion is improving and disappointing the customer experience. As customers would get the benefit of the promotion when they are shopping in-store. The customers will get a card along with one sticker reflects the purchase process and they must fill this card with stickers after each in-store purchase to win the free breakfast at the end. However, the customers that order through the Starbucks smartphone App. Would miss this promotion. Hence, this type of promotions would make the Retailer lose the customer after they got disappointed with the App experience (Kagan, 2017).

2.2.8 Smartphone Operating System

The smartphone operating system is operating a smartphone and mobile devices and make them able to run and activate programs and Apps. Accordingly, these operating systems are updated frequently to simulate the rapid advance in technology. Ericsson R380 was the first operating system. This operating system shortly disused and replaced with the more advanced operating system from Apple in 2007. The iOS from Apple was very popular until Google introduced Android by the end of 2007. Android competed for iOS for several years. During those years all, other operating systems eliminated, and the only survivals are iOS and Android with 87.7 percent users for Android by the second quarter of 2017 (Statista, 2018).

2.2.9 Cost of acquiring a smartphone App. (an e-store)

Retailer desire to shift their business from in-store to online stores (e-store), they have to launch certain electronic channel to communicate with them. Three options to acquire an e-store or a smartphone App.:

1. Online developers: They are specialists that offer building and designing an electronic shop either website or smartphone App. Upon retailer requested features. The developer could be a web developer or a smartphone App developer. For example, extract.co. The cost of building a website or a smartphone App depends on several aspects:

- Type
- Platform
- Design
- Number of pages
- Features and infrastructure

With respecting to the previously mentioned aspects, the smartphone App could be divided into three kinds: Simple, moderate and complex, with average working hours to accomplish them of 400, 500-800 and 800-1500 respectively. These working hours distributed among four specialists: The project manager, programmer, designer and quality assurance engineer. Each of those people works at a specific rate of money. The rates are varied from a company to another. The rate range is BD 4- 58. Most of the online developer provide their customers with an online rate calculator, where the customer can choose the features of the desired web page or smartphone App (ThinkMobiles, 2018).

2. In-Country developers: Many smartphone App. Developers in Bahrain can perform the same online job with the ability to meet the specialists during building up different phases. This option is required a CR (Commercial Registration) for the desired business just unlike the online option. The Approximate cost range for this option is BD400- 20,000.

3. DIY (Do It Yourself) App. Maker: With simple, easy to follow and low-cost App. Makers Applications; the retailer can build up their simple smartphone App. Against certain monthly fees to run it starts from BD2.700 monthly. Examples of such Apps.: iGen App. And Universe App (Zhang et al., 2014).

4. Joining Online Ordering Platform: The famous and the easiest way to reach the customers in Bahrain, where many retailers occupied a space on a certain platform under different categories. The platform is a smartphone App. Plays a role in an online mall. The retailers communicate with their customers efficiently and in a competitive manner. Good examples of these Platforms are Talabat.com and Carriage. These platforms accept the desired retailers against an agreed fix amount that could be paid monthly starting from BD40, paid a yearly amount BD500 or share a predetermined percentage of the retailer sales starting from 20 percent.

2.2.10 E-store Influence Retailer Sales, Transactions Cost and Revenues

Although launching a new smartphone App. (e-store) would increase the retailer cost, but it would increase the total sales as it would stimulate more customers, which may find e-stores are more convenient and easier to reach the marketplace. This point discloses that e-commerce is enhancing the physical store's sales and not eliminate it or replacing it. As a market expansion to a worldwide, this would help in increasing the sales level (Duch-Brown et al., 2017).

The statistics exposed a rapid increase in sales worldwide via e-commerce and expected to that increase to be continuous and in parallel with the new technology (Orendorff, 2017).

Lorette (2018) pointed that transactions cost associated with e-commerce can be distributed among product that would be acquired to resell, warehouses to store products, smartphone App (e-store) build up cost and maintenance and product delivery services. The retailers could get over some of these costs or at least reduce them through the followings:

- Utilize ultimate use of economy of scale while purchasing the products. As they can buy them in bulks to reduce the cost allocated to per product.
- Adopt “drop shipping” instead of renting a warehouse, as a retailer can deliver the products directly from the manufacturers to customers.
- In the delivery phase, the retailer can assign the third party to avoid the extra cost for the delivery process.

Hence, the retailer that initiate to shift to online retailer only, would get benefit from previous cost control points in addition to the further reduction of labours, overcome shop rent, telephone calls and office supplies.

To generate revenues from e-commerce retailer must expand sales and try to avoid and eliminate transactions cost wisely. As revenues are depending mainly on the level of sales against the transactions cost associated with the selling process.

Using smartphone Apps for Retailer helps in increasing the sales flow and in turn, the sales flow increases the revenue. Keyways by which mobile Apps are getting advanced and lead to the increase in revenue are, push notifications, that are geo-targeted, additional opportunities of sales, geo-targeted advertising, dynamic offers, pushing via the funnel, data gathering, and high competency. Mobile devices offer users the data and information about the world in an automatic way. Recently, the technology has become a reality and it is a boon to business.

Business uses the push notifications that are geo-targeted as follows. If there are any offers in a retail store nearby or any tickets provided for a tour by the shops on a purchase will be notified by the smartphone App. National the chain sends the notification that are region specific or city-based notifications on special offers in the area interested. The loyalty of the shops can be increased by sending special offers to the customers who were in the past years and not in the last two or three months. The Retailer can also give season related offers, and it can be notified to the customers with the help of the App (Sluis, 2014).

Shopping and engagement opportunities leveraged using mobile phone Apps as there are additional sales opportunities using mobile Apps. Business and customer interaction have become geo-agnostic. People are using smartphone Apps to engage with the brand like standing in a queue to buy movie tickets, doctor's clinic, retail store billing, etc. The time previously spends on such activities will be now used for much more other activities. A smartphone App exploits the opportunities to reach users in the new time pockets. Users can be reminded with the help of a push notification of the nearly abandoned shopping cart, which brings back the shopping experience. Billing information and the more seamless experience of the stored login is the easier path of the transaction (Taylor & Levin, 2014).

Business can make use of the fly tweaks to campaigns and advertisements depending on what works for a specific geographic location. Coupons could also be displayed to the potential users or could the users to know about the business by advertising on a map (Miller et al., 2011).



Figure 8 Total worldwide e-commerce sales in trillions of U.S. dollars

(Source: <https://www.shopify.com/enterprise/global-e-commerce-statistics>)

On combining with the geo-targeting and push notifications, many advanced changes can happen in the business. Business could utilize the data collected via geo-tracking and advertisement campaigns to deliver

the just in time offer. Tip of the iceberg is Groupon now. For boosting the revenue of the mobile business, the App has the power to do anything. Some retail stores do not permit the people to just walk-in and search for a while like a window shopping and go out. But it is not in the case of smartphone Apps as users can just look at the App for a while and can switch to other Apps or sites. It is called a bounce, most of the user's online bounce for various reasons and on mobile. users may not have the credit card in hand and typing all the account details seems to be a tedious process, or they may get distracted. One of the best ways to battle the abandonment of transaction is by the automatic filling of address (Buchinger et al., 2015). With the help of GPS in phones, transactional Apps find the location of the users and fill the address data automatically. Many such online retail stores and food delivery are advertising that there is no need for filling in the address as it delivers to the location where the user is. One of the powerful tools available for online businesses is that the customer's moves can be tracked easily by the Retailer from when the user opens the site. App developers and the Retailer can know what engaged the users and what turned them off, where did the user goes, the kind of product the user searched, etc. Webmasters can easily answer the above questions. Mobile tracking devices are said to be open a new analytics world and the opportunities to gather is also said to increase for the Retailer stuck in the physical world. Online Retailer using price comparison tools that drive additional sales and traffic (Weedfald, 2013). Smartphone Apps are helping to increase the revenue on a large scale by increasing the efficiency. With the help of mobile Apps, users can be targeted easily and not advertising to a large group. Business can hold back the customers who haven't been for a while but are nearby. Customers could shop in a small pocket of time that gone to waste previously. Discount inventory could be precision in the last moments before it goes to waste. All the little efficiencies result in more revenue for the business in addition to enhancing the user's overall experience (Demko-Rihter, 2013).

2.2.11 Retailer-customer communication and problem solving on smartphone App (e-store)

Many retailers believed recently that differentiating themselves from competitors would attract more customers to them and especially to e-stores, where customers find themselves under lots of choices and they would spend more and attracted more to the e-stores, which trigger their thinking style and sentimental (Kim & Lennon, 2010; Moshrefjavadi et al., 2012; Mazaheri et al., 2014). To enhance the customer relationship with the e-store, online agents that representing the retailer would be a great scaffolding to customers during purchasing process and that would simplify the procedures for purchasing by giving the customer salesman friendly feelings and would encourage the customer to repeat the shopping experience with the same e-store and would convert the customer to a loyal customer.

Another study that supported the previously mentioned study is adopted by Elmorshidy et al. (2015) that discussed several communication channels with the customer while shopping online such as social

networking sites like Instagram, blogs, emails and live support chat (LSC). The results of this study assured that LSC is the best customer choice that builds trust usefulness as it is fast and easy. Despite the absence of face to face concept, still, the LSC considered the best. In addition to the mentioned channels of communication, other e-retailers might provide a hotline option on their smartphone App or websites to make communication smoother and faster. Accordingly, with an eventually suitable communication channel that retailers may implement while communicating with their customers, the problems of their online customers will be solved easy and fast. Otherwise, this issue will be so complicated, and the retailer will lose the trust of the customer and the opportunity of the future repurchasing process by this customer.

2.2.12 E-Store Payment Options

Alsultanny (2012) cited that the facilitating part of e-commerce is that it gives the mobile users the ability to skip payment rows in several places and relieved the users from the effort of driving a couple of kilometres to the nearest ATM (Automated Teller Machine) to withdraw money as users could conduct most of the financial transactions by their smartphone.

The wireless payment system makes the process of payment more personalize service and comfortable across the network when smartphone users can pay their bills or money liabilities through their mobiles using their bank page via mobile banking (m-banking) or through secured online ports using their credit cards or debit cards.

An advance payment experience was in the United States when users paid for their food using their smartphones in stadiums and their food delivered to their seats while watching a football match. Another payment experience from Germany, as the smartphone users can pay for a taxi using their mobiles under what it called “Micropayments” as only a few dollars are paid. This payment option simulates another option called “m-wallet” or mobile wallet (Alsultanny, 2012).

Beside the ordinary style of mobile payments such as credit card and debit card, Bahrain joined other nations in m-wallet option as internet service provider companies competed to offer the best in this field. M-wallet is a smartphone App allows the users to enter their personal information and save them for future use. M-wallets let users pay without physical money or using cards. Simply they can transfer money from their personal bank accounts via a safe port within the smartphone App and then pay and receive money.

Batelco (Bahrain Telecommunication Company) launched the m-wallet App at the beginning of the year 2018 under the name “b-wallet”. The App is available in both stores Apple and Google Play. The App is

obtainable for both Batelco and non-Batelco customers. The use of such App gives the customers the sense of convenience, security and provide speedy service (Batelco, 2018).

By April 2018 Viva, another mobile service provider in Bahrain offered the same App for Viva customers but with competitive offers; as users will be granted with 3GB, when they register, moreover, the customer will get 10 percent extra cash on their deposited amounts (Viva, 2013).

Both Apps are under the micropayment system as their maximum deposit amount is less than BD200 and are used only in Bahrain. Many retailers found the micropayment Apps easy, fast, free of charge payment option and with the ability to offer them when delivering the products.

Although providing several payment options to buy products online through e-stores and smartphone Apps is preferable, still 80 percent of Middle East shoppers preferred to use cash-on-delivery option according to the year 2017 statics done by go-gulf.com (customer web development) (Figure 8).

The blogger Hendrickson (2017) mentioned that the easier the retailers make it for their customers to accomplish a purchasing process, the more that they likely to make revenues. As shoppers would choose the retailer with more payment options to choose among the options upon the around circumstances. The study showed that 40 percent of the respondents are more comfortable surfing within online shop offers several payment methods.

In advance steps towards infrastructure modernizing for the Retailer is the utilization of the BenefitPay smartphone App. As the Retailer such as Asqar Ali perfumes, Nasser Pharmacy and Adidas stores, utilize this App to facilitate their customer's life beside coping the accelerating technology pattern. BenefitPay is an electronic wallet payment system. It is a payment App that is used for customer and Retailer as this App let the customer pay without cash or card. This App is utilized in the Kingdom of Bahrain since July 2017. Customers should download the App from any platform on their smartphones and then save their bank cards details on the App. So, the payment of the next purchasing process would be through the App without cash or card. The Retailer would scan the card image from the customer smartphone and the pin code will be requested. Thoroughly, the cost quickly, smoothly, securely and immediately will be deducted from the customer banking account. The benefits of this App to the customer could be summarized as follows:

- It is totally free
- Fast and easy without a card
- Safe and highly secured

- Replace cash payment or running out of cash problem
- The new and modern way of technology trends

Likewise, it has benefits to Retailer as:

- The retailer can download the App on any tablet or smartphone device
- The retailer has the full control of managing the App options
- Freedom in the phase of accepting payment either on point of sale or if delivery service takes place
- Retailer and customers will receive a notification of payment immediately
- The App is free and will be available even for small Retailers

The App. Is in its first phase as it mostly services the in-store Retailer, however, the second phase will be more advanced and more benefit as it will offer an online payment over the Retailer smartphone/online App (Benefit, 2018).

2.2.13 User-Friendly Mobile App

For building a responsive mobile App, the navigation time between the windows must be quick and easy. Customers will get irritated if it takes time to get a response from a window. Every element of the App must be designed specifically which Appeals to the customer. In the App high definition Apps must be used as the users will feel interacted and attracted to the interface. The App must provide many rewards to its users so that they will be retained, and it also increases the customer base. Geographical location technology must be used, deals, reward points and discounts must be offered. This strategy increases the customer base and in turn, increases the sales. Social marketing can be initiated and increased by letting customers post on the social media sites on the experience of the purchase of the App. Customer's needs to be prioritized. Customers must be offered with various options. Customers like the online stores that offer many selections and various additional features, like the delivery option to select from, secure methods of payment, sorting and filtering of the products etc (Rodríguez et al., 2016).

Performance of the mobile App can be enhanced by the data collection and statistics on the purchase of the users, products preferred, and the usage of the App. Feedback must be collected from the customers which improve the services. It also increases the App's efficiency and helps to be sustained for a longer period in the market (Kim et al., 2013).

2.2.14 Products Characteristics

Most of the online retailers tend to provide a picture or at least a simple description of their products to introduce them to shoppers and attract them to buy those products.

According to the annual analysis accomplished by the analyst Hufford (2017) that 88 percent of the shoppers specified that product characteristics are extremely important.

More details about the product would affect customer imagination to convert the different characteristics into a virtual picture.

2.2.15 E-store Product Characteristics and In-store Shopping

Shopping in-store is an amazing phase for lots of people, but it would be terrific to get people reviews, compare prices and find another location for stores. So, 80 percent of shoppers used the smartphone during shopping in-store (Hufford, 2017).

Most shoppers would download the shop App on their smartphone to view products and their specifications before visiting the in-store (Moes & Vliet, 2017). A milestone for Gallino and Moreno (2012) study about BOPS (Buy-online-pickup-at-store) Approved that providing a product features online with the ability to pick it in-store, would reduce the online sales and boost the in-store sales alternatively.

2.2.16 Shoppers Opinions Contribute to E-store Development

Retailers should pay more attention to related to this point. As the ability to create an attractive atmosphere on their e-stores improve the shoppers shopping experience would affect the behavior of the shoppers towards e-stores (Eroglu et al., 2003).

Competition between businesses is in continuously bases and word of mouth from a loyal customer empowered the business marketing tools (Khare t al., 2011).



Figure 9 Online Shopping in the Middle East using Cash-on-delivery

(Source: <https://www.go-gulf.com/blog/middle-east-shoppers-online-shopping-behavior-and-trends/>)

2.2.17 Update and Modifying Smartphone App (E-store)

Publishing a new smartphone App does not mean that the work is done. As this smartphone App still must be tracked and should be updated with new contents.

A rule of thumb is the cost of smartphone App (e-store) maintenance is almost 20 percent of the cost of building up the App on a yearly basis. For Example, if the cost of building up a certain smartphone App is BD700, then BD140 will be the yearly cost of maintenance and update.

The update and maintenance process will be easy if the smartphone App (e-store) owner knows how to edit the App through the App Dashboard. Otherwise, the retailer would add more cost to hire someone to work on it (Moore, 2018).

Update the e-store is considered a highly demanded aspect, as it attracts the customers and enriches their shopping experience. Enabling customers to manipulate images on smartphone App or e-stores such as flipping, and rotating is better than watching only statics diagrams (Padilla et al., 2012).

By update the e-store with the innovative technologies, its potential value will be increased.

This will enhance the shopping involvement and encourage them to spend more on shopping and purchasing. Likewise, using the advance and up to date image interactivity technology (IIT) would make products become closer to reality and this would overcome the need for physical touch to test the product and improve the accuracy of the product purchased (Blazquez Cano et al., 2017).

The infrastructure of the sound network and the integrated IT is considered critical to the business by the modern retailers. Apps and the customer-facing devices should be integrated tightly with the back-end systems. Sales channels and supply drives efficiency and satisfies the customers' needs with the help of integrating manufacturing ability and it ensures sales. An order management system, for example, helps the sales associate to locate the desired product, which is opted by the customers and that is not in a stock. In this case, the order management system helps in locating the product which would be available in another location, close the sales, and ship the product. Use of the secured management system and the networks becomes essential as the technology will be integrated further and enabled for the customers and the retailers. Most recent technologies do not provide or create any values until the technology pillars are stabilized and business process are modernized to use the mobile-driven model (Smith, 2008).

2.2.18 Turning to Totally E-stores (online-only retailer)

The maturity of the online-only retailers is establishing pop-ups or physical storefronts to connect with their customers. According to Forbes, short-term retail is an \$8 billion industry. Short-term Retailer enables Retailer to take advantage of the temporary conditions like the customer bases location or seasonal sales. Pop-up Retailer depends on the various techniques of mobile. On the simplification of payment, access to offsite inventory and the headquarters connection, pop-ups are made by the mobile devices for a various range of retailers. For the access to inventory, mobile devices can also be used for store associates that power on a mobile device to access the inventory instantly and check the customer without register (Di Rienzo et al., 2016).

Many retailers, particularly in high-end retail, had introduced the mobile devices that are wearable like Google Glass to the sales representatives. Wearables help in cutting down the training cost of the employees, induction and onboarding cost in addition to offering training, on-job instructions and direct guidance from the superiors. A newly hired sales representative does not need to undergo a lengthy training cycle that gets acclimated to the retailer products as google glass guides and gets started without many superior inventions. A sales rep or the store uses glasses to start daytime clock, and starts working on the daily task, accesses the online company information of the product, handbook or manuals if it is stuck anywhere, calls the superior and sends the status of the task completed. The sales rep will also be quickly able to view the profit related to customer digital and wish list and able to look at the products, concerning the requirements of the customers, make alternate suggestions, etc. Retailer considers this wearable technology as a game changer. With the help of a simple device, a surge is seen in the customer satisfaction and sales, with equal gains in the visits of the customer to the physical stores. In addition to that, the training cost also will be less. Salespeople will be empowered more, selling more, staying longer and building the relationships that last with customers as there is high-calibre service. Technology allowed them to deliver meaningful, personalized experiences for the customers, on driving the retail growth (Pantano, 2014).

Retailer relies on the mobile devices to get the sales associates out of the cash wrap and on to the sales floor. There the interaction with the customers are made easy, guide shopping experience, look at the product rating, reviews, and check inventory on out of stocks to save the sales and avoid the disappointment of the customers. Previous deployments are promising, and now just we are at the beginning phase of the retail revolution of the mobile (Amit & Zott, 2012).

Doherty and Ellis-Chadwick (2010) noted that shifting to e-stores carried certain benefits to the retailers:

- Personalized the interaction between buyer and seller, through a certain webpage or a customer email.
- Perfect place for competition as internet plays a great role in facilitating the shopping process among different competitors.
- Low-cost compared to physical stores.
- Eliminate the role of middleman as the retailer will meet their customers directly.

Although online-only Retailer would gain a great opportunity to cut cost in term of rent and utilities that required to run the physical Retailer, still some Retailer preferred the in-store style for several reasons. One important reason is that some customers preferred to touch the products by their hand to test them before they purchase them. This type of customers will find shopping from the online-only Retailer very challengeable and will try their best to avoid it. Another reason is that the online-only Retailer has no showcase to lead the customers to it, as the customer must search through the internet to find the online store or someone has to recommend the online-only Retailer to this particular customer. Here, the physical stores play as an advertising tool for themselves as they lead the customers to shop in them. Furthermore, the time that the customer will spend to meet the online-only Retailer is very short considered with the time that the customer will spend in recognizing the physical Retailer while shopping in a mall. Customers scrolled so quickly through the internet and the time they spend viewing the online-only Retailer in not rememberable. Furthermore, some scholars were agreed with Nguyen et al. (2016), where they found the online retailers and customers have a separation point in terms of space and time. This separation may affect the online order-fulfilment of the customers. The order-fulfilment has a very critical effect on customer future behavior towards a certain retailer.

2.3 Summary of the Literature Review

In summary, the literature demonstrates several facts in related to utilization of retail store smartphone app in different nations such as the U.S. and the U.K. The literature highlights that although smartphone app would increase the retailer's cost, yet it will help in increasing sales with the ability of expenses controlling (Duch-Brown et al., 2017). Besides, the literature supported the fact that good communication channels with online customers facilitate solving their online problems (Elmorshidy et al., 2015). While raising online payment options, Hendrickson (2017) stated that customers are attracted to retailers with more payment options and that would increase those retailer revenues accordingly. The literature links the product's characteristics and in-store shopping. Gallino and Moreno (2012) approved that providing a product's characteristics online would boost in-store shopping. The literature through, Doherty and Ellis-Chadwick (2010), denied any relationship between the smartphone

app maintenance cost and the decision of switching to online-only retailers, as shifting to online-only retailer would provide certain benefits to retailers such as personalization of relationship between buyers and sellers, perfect place for competition, direct communication with customers and the most important is the opportunity to control and cut costs.

2.4 Gap in Literature and significance of the Research topic

Many researchers conducted on the effect of the smartphone app on the retailer. Some studies evaluated how the smartphone apps were gaining profit compared to the traditional retail stores, the customer's perspective on buying the products online and buying from the in-store. This study is based specifically on investigating the impact of the smartphone Apps on the sales flow and accordingly the effect on revenues and expenses. The research specifically studies the effect on the retail store before and after launching the smartphone Apps. The case is considered and conducted in Bahrain. Such a study has not been conducted in Bahrain, and it fills that research gap. Most of the studies or researchers would not cover all the factors like smartphone apps in the retailer, smartphone operating system, the cost of acquiring a smartphone app. E-store influence retailer sales, transactions cost and revenues. Retailer-customer communication and problem-solving on the smartphone app, e-store payment options; e-store product characteristics and in-store shopping, shoppers opinions contribute to e-store development, update and maintenance smartphone app and switching to totally e-stores (online-only retailer). Only a few studies are there that studies on the smartphone app impact in the Bahrain region. In this research, one of the Bahrain shops would be under the telescope, as he has just started to use a smartphone App for his retail store and to measure his business achievements and transformation before and after the implementation of the retail store smartphone App.

CHAPTER THREE

PROCEDURES AND METHODOLOGY

3.1 Introduction

This chapter provides an outline of research methods that were conducted all through this study. It offers a comprehensive idea about the respondents and their selected criteria, who they were and the base in which they sampled. The researcher describes the research design that was chosen for this study and the reasons behind this choice. The instrument that was used for data collection is described as well, thereby, the carried-out procedures during the study were included. The researcher also discusses the data analysis methods that were used. Finally, the ethical issues that were followed during the research process are discussed.

3.2 Research Philosophy

The instrument that was used to collect the data was a survey questionnaire. It conducted to investigate the effect of smartphone App on the business Transaction flow of retail business in Bahrain. The survey questionnaire was applied to a population of Bahraini retailers that utilized a smartphone app. The use of the questionnaire indicated that the research is interpretive in nature. Moreover, this research instrument is highly reliable and based on positivism, where specific observed data gathered and used in process of describing the reality from an objective viewpoint. The research tended to follow a deductive quantitative approach. The research reflected this approach clearly as the hypotheses were built, examined through a questionnaire, specific data gathered and interpreted to a logical conclusion (Bradford, 2017).

3.3 Research Design and Strategy

The effect of the smartphone App on business transaction flow of retail business examined through a quantitative 5-points Likert scale style online questionnaire survey style.

The research is a mono research method, where the quantitative method will be used to interpret the data collected from the questionnaire such as sales level, revenues and other expenses. Mono method is a research method that uses either quantitative or qualitative method and in case of the quantitative method, the data take a numerical form. This data is analyzed via quantitative analysis tools (Azorín & Cameron, 2010).

As the questionnaire was distributed and collected at one time-point only, then it followed the cross-sectional descriptive study design. The study design followed a quantitative component of research.

3.4 Hypothesis development

Hypothesis One:

H0: There is no significant relationship between the increase in sales level and utilizing a retail store smartphone app.

HA: There is a significant relationship between the increase in sales level and utilizing a retail store smartphone app.

Hypothesis one considered that there is a positive relationship between the increase of sales level and the utilizing a retail store app as sales level increases if the retailer adopted a retail store smartphone app.

Hypothesis Two:

H0: There is no significant difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.

HA: There is a significant difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.

Hypothesis two considered that there is a positive relationship between communicating quickly with customers online and the ability of the retailers to solve the customer's online problems through the smartphone app. As the smartphone app considered as a link between customer and retailer through its different communication channels.

Hypothesis Three:

H0: There is no significant relationship between providing product characteristics on a smartphone app and utilizing a retail store smartphone app.

HA: There is a significant relationship between providing product characteristics on a smartphone app and utilizing a retail store smartphone app.

Hypothesis three considered that there is a positive relationship between providing product characteristics on a smartphone app and utilizing a retail store smartphone app. As the availability of the product characteristics will make the shopping in-store faster and smoother.

Hypothesis Four:

H0: There is no significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone app.

HA: There is a significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone app.

Hypothesis four considered that there is a positive relationship between the retailer's decision to switch to online-only retail store and utilizing a retail store smartphone app, where retailer would gain more benefits, for example, cost control.

No	Objectives	Research Question	Hypothesis	
			Null	Alternative
H1	To investigate the relationship between the increase in sales level and utilizing a retail store smartphone App.	What is the relationship between the increase in sales level and utilizing a retail store smartphone App?	There is no significant relationship between the increase in sales level and utilizing a retail store smartphone App	There is a significant relationship between the increase in sales level and utilizing a retail store smartphone App
H2	To study the difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App	What is the difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App?	There is no significant difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.	There is a significant difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.
H3	To examine the importance of providing product characteristics on a smartphone App.	What is the relationship between providing product characteristics on a smartphone App and utilizing a retail store smartphone App?	There is no significant relationship between providing product characteristics on a smartphone App and utilizing a retail store smartphone App	There is a significant relationship between providing product characteristics on a smartphone App and utilizing a retail store smartphone App

H4	To evaluate the decision of switching to an online-only retailer through utilizing a retail store smartphone App.	What is the relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App?	There is no significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App	There is a significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App
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Table 1 Table of objectives, research questions and Hypotheses

3.4.1 Dependent Variables

The *dependent variable* is depending on other factors that are measured and expected to change during the experiment (University of Southern California Libraries, 2018).

In relation to this study, the dependent variable was the utilization of the retail store smartphone app. As this research studies the effectiveness of the smartphone app on retail stores, therefore, the existing of the smartphone app was measured against different important factors such as sales level, solving customer's online problems, providing product's characteristics on the smartphone app and the decision of switching to online-only retailer.

3.4.2 Independent Variables

The *independent variable* is the constant and unaffected by the other variables (University of Southern California Libraries, 2018).

In relation to this study, the independent variables were as follows:

In hypothesis one, the sales level is considered as independent variable. Sales level is a major indicator for other business transactions such as revenues and expenses. An increase in sales level after utilizing retail store smartphone app considered as a positive effect of the smartphone app and vice versa.

In hypothesis two, the independent variables were communicating quickly with customers online and the ability to solve the customer's online problems. As the customers are the most important elements in business chain, the speed to communicate with them and the ability to solve their problems are priorities for every business to attract more customers and gain their loyalty.

In hypothesis three, since this hypothesis discussed the impact of providing the products characteristics on the in-store purchasing process, then the independent variable was providing the product characteristics on smartphone app. Thereby, if the existing of the retail store smartphone app would cause the sales in-store to increase by providing the product’s characteristics for the customers, then the smartphone app is effective and vice versa.

In hypothesis four, the retailer decision of switching to online-only retail store considered as independent variable. If the smartphone app is doing well, reducing some cost and giving the retailer free time, then the decision of switching to online-only highly recommended.

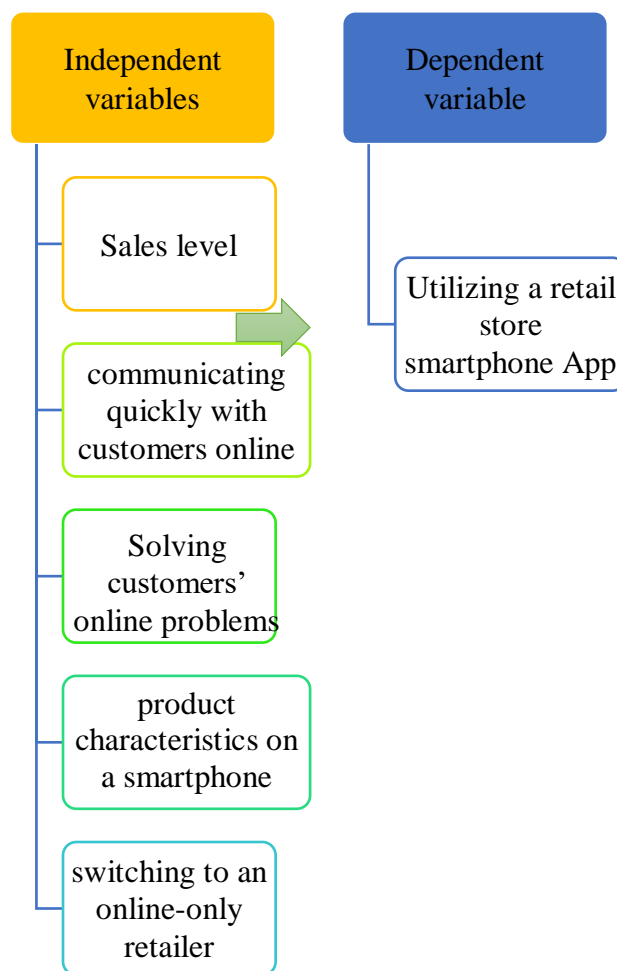


Figure 10 Conceptual model of the study

3.5 Data collection

3.5.1 Research Instrument Development

The researcher used a survey questionnaire as a research instrument. The questionnaire built-up with series of questions that designed to answer the research questions and to investigate among certain related areas.

The researcher built the questionnaire answers based on five-point Likert scaled data. Boone, Jr. and Boone (2012) declared that Likert scaled data used to analyze the interval scales. The Likert scaled data are considered as parametric statistical data. This type of statistical data has a normal distribution.

3.5.2 Pilot Study of the Research Instrument

A pilot study was conducted to 20 retailers that own smartphone apps for their retail stores to verify the validity of the questionnaire before the final version was distributed. The respondents asked about their general opinion regarding the questionnaire. They were asked about the simplicity of the questionnaire, if it met the target objectives and if they have any additional elaborations that improve the questionnaire.

The questionnaire reliability and validity were tested through Pilot Study. Swanson (2014) clarified that validity is a well built and justified; and it is highly related to reliability, which means dependable and trustful.

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded	0	.0
	Total	20	100.0

Listwise deletion based on all variables in the procedure

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.805	.796	15

Table 2 Results of Cronbach's Alpha analysis

To investigate the questionnaire reliability and validity, the Pilot study processed through SPSS (Statistical Package Social Science) to calculate the Cronbach's alpha.

Cronbach's alpha is an analytical test used to measure the reliability of the instruments and to make sure they are valid (Tavakol & Dennick, 2011). It was used to evaluate the reliability and validity of the questionnaire. The Cronbach's alpha for the Pilot study was 0.805. A very close to one which indicate the high reliability and if it is reliable, then it is valid. (Table 2)

The prototype of the questionnaire was easy to fill, very smooth and short in time.

3.5.3 Data Collection Procedure

The main source of data was the questionnaire. It was designed, checked and distributed among the respondents. To facilitate the distribution process of the questionnaire, an online version of the questionnaire was built up using Google Forms. A hyperlink to the target questionnaire was provided and then distributed among the respondents through the social media channels. The respondents accessed the questionnaire smoothly through the hyperlink. This oriented of distributing the questionnaire has two advantages: First it would maintain the anonymity of the respondents; Second, it would save time and speed the process of distributing the questionnaire.

3.5.4 Research Population

The population were selected retailers that utilized a smartphone App (e-store) in Bahrain. The sample size was 100 participants. They were provided with the questionnaire link through social media.

3.6 Statistical Test Used for the Analysis of the Data

3.6.1 Data Encoding

The results of the questionnaire that was collected from the respondents were processed in Excel sheet from Google Forms and the data gathered encoded into Microsoft Excel and financial test such as a one-sample t-test was conducted. The results of the analysis were summarized and represented in the form of tables and charts in the proceeding chapter. Then, the hypothesis tested upon analyzing data, where the relationship and difference between variables were discussed. The researcher measured the percentages for all the questions of the questionnaire to figure out the average answer of the respondents' and form a solid conclusion base on them. Furthermore, the researcher measures Means and Standard deviation of different respondents' responses to compare between responses' Means and Standard deviations of related questionnaire's questions to investigate the hypotheses relationship and build a meaningful interpretation.

3.6.2 One Way ANOVA

One-way ANOVA test that was conducted to compare the Means of two or more than two groups. This type of statistical analysis tests applied to examine the data related to hypothesis two. In hypothesis two, the researcher compared the Means of the respondents' responses related to communicating quickly with customers online and the ability to solve the customer's online problems.

3.6.3 One-Sample t-test

One sample t-test was conducted to compare the Mean of a single sample of the respondents against the hypothetical Mean of the study. This type of statistical analysis tests applied to investigate the data related to each of the hypotheses one, three and four. The average Mean of the variances (hypothetical Mean) compared to the sample Mean within each hypothesis to study the strength of the relationship between the variables. In hypothesis one, the researcher compared the average Mean of the study to the Mean of the respondents' responses related to the increase in sales level while utilizing retail store smartphone app. In hypothesis three, the researcher compared the Mean of the respondents' responses towards the importance of providing the product's characteristics on the smartphone app and the average Mean of the study. While in hypothesis four, the average Mean was compared to the Mean of the respondents' responses related to the retailers' decision to switch to online-only retailers. When the results of the statistical analyzes give Means higher than the average Mean, it indicated that there is a strong positive relationship between variables.

3.6.4 Correlation

Correlation was conducted to test the strength of the relationship between the independent variables. This type of statistical analysis tests applied to examine the data related to hypothesis three. In hypothesis three, the relationship between providing product's characteristics online and in-store sales. The correlation results indicate the strength of the relationship between the independent variables, as a positive correlation indicates that there is a relationship between independent variables while a negative correlation indicates that there is no relationship between independent variables. As the positive correlation closer to 1, it indicates a stronger relationship between the independent variables.

3.7 Ethical Protocol Statement

The ethical issues in this study concentrated on merit, permission and confidentiality. In term of merit, the cover page of the survey questionnaire described the study in short and the purpose behind it and how the respondents' responses are valuable to reach the suitable conclusion. Permission, term, can be clearly mentioned on the cover page of the survey questionnaire as well. The respondents were informed that they had the right either to fill in the survey questionnaire or not. The confidentiality could be found where the

respondents were promised that all the information gathered would be kept anonymity as it was mentioned on the cover page of the survey questionnaire unless the researcher granted a written permission from the respondent to publish the name of the respondent and related information. Moreover, the survey questionnaire sent to respondents through a hyperlink from Google Forms to assure the privacy. The researcher treated the survey questionnaires in a conventional and professional way as the data entry phase done by the researcher herself and the responses are not shared with anyone else.

3.7.1 Informed Consent

In relation to the case study, the volunteer retailer was briefed fully on the purpose behind conducting this study during the interview. The researcher made it very clear to the retailer that his participation was voluntary, and he could withdraw at any stage without penalty. The researcher shared with the volunteer retailer the rationale behind this study. The process of data collection and analysis was described clearly to the volunteer retailer. After the volunteer retailer agreed on the clarity of the research concepts, he asked to grant his consent to participate in this study through signing a written consent form. As this form maintained the confidentiality and protected the anonymity of the volunteer retailer. The consent form signed would be found at the Appendix.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

In this chapter the researcher presented the results of the statistical analysis of the data gathered from the questionnaire that reflected the view of the sample of the study. In addition, different statistical methods used to test the hypotheses.

In this study, descriptive and deductive statistical tests were used. Moreover, Microsoft Excel was used to analysis this study data.

The results represented through three sections to cover the desired variables.

4.2 Questionnaire Data Analysis

4.2.1 Section One: “My App Creation”

The target of this section was to introduce the demographic characteristics of the respondent, which helped in identifying the characteristics of the study community.

Type	Frequency	Percentage
Male	62	62%
Female	38	38%
Total	100	100%

Table 3 Respondents classification according to sex (Source: Field study data 2018)

Table 3 indicated that males formed 62 percent of the respondents, while 38 percent were females. This indicated that the males are more initiative than females towards being entrepreneurs.

Type	Frequency	Percentage
Food	16	16%
Clothes	46	46%
Stationery	18	18%
Others	20	20%
Total	100	100%

Table 4 Respondents classification according to business activity (Source: Field study data 2018)

When investigating the business type (business Activity) of the respondents. Clothes business scored the highest percentage of 46 percent as most of the smartphone app were for selling clothes. This business followed by 20 percent of different type of businesses as laundries, flowers and bookshops. Then, stationery scored 18 percent of respondents. After that, food with 16 percent. (Table 4)

Type	Frequency	Percentage
Less than 1 yr.	18	18%
1- 5yr.	71	71%
6- 10yr.	0	0%
More than 10yr.	11	11%
Total	100	100%

Table 5 Respondents' in market period (source: field study data 2018)

When respondents asked about the duration of their business in market. The responds ranked as follows: 71 percent of respondents have been in market for one to five years; 18 percent of the respondents have been in market for less than one year. Finally, 11 percent of them have been in market for more than 10 years. (Table 5)

Type	Frequency	Percentage
Less than 1 yr.	72	72%
1- 5yr.	17	17%
More than 5yr.	11	11%
Total	100	100%

Table 6 Respondents started online activity (source: Field study data 2018)

As the base of the study is the smartphone App, the respondents were asked about the first time they have launched their retail store smartphone App. The responses were as following: 72 percent started in less than a year, 17 percent started from one to five years and 11 percent of them started for more than 15 years ago. (Table 6)

Type	Frequency	Percentage
IOS	11	11%
Android	20	20%
Both	69	69%
Total	100	100%

Table 7 The retail App operating system (source: Field study data 2018)

Through this question, the researcher found that retailers are trying to satisfy their customers as they can. 69 percent of the smartphone App were suitable for both IOS and Android operating system. Then, the Android scored 20 percent while IOS scored only 11 percent. (Table 7)

Type	Frequency	Percentage
Private made by specialist	27	27%
Private made by me	49	49%
A subscription on a platform	24	24%
Total	100	100%

Table 8 Retail App creator (Source: Field study data 2018)

The outcome disclosed that 49 percent of the smartphone Apps were created by the retailers themselves. Then, 27 percent of the smartphone Apps were created through App creating companies in Bahrain and outside Bahrain. Finally, 24 percent of the respondents preferred to join a platform, for example, Talabat.com. (Table 8)

Type	Frequency	Percentage
It cost me nothing as I build it by myself	44	44%
Less than BD100	38	38%
BD101- BD500	0	0%
BD501- BD1000	18	18%
Above BD1000	0	0%
Total	100	100%

Table 9 Cost of retail App (Source: Field study data 2018)

The cost of the smartphone App was the last question in this section and the response took the following path: 44 percent of the respondents indicated that the smartphone App cost them nothing and it was perfectly match with the responses of the previous question, where most respondents designated that the respondents made the smartphone App by themselves. 38 percent of the respondents showed that the cost of the smartphone App is less than BD100. Finally, 18 percent of the respondents presented that the smartphone App cost was between BD501 and BD100. (Table 9)

4.2.2 Section Two: “Transactions Flow and Business Expenses”

Respondents answer according to Likert scale	The scale
Strongly Agreed	5
Agreed	4
Neutral	3
Disagreed	2
Strongly Disagreed	1

Table 10 Likert scale

From the data in table 10 the calculation of the hypothetical mean of these weights was as follows:

Hypothetical mean equals total weight \div number of weights = $15 \div 5 = 3$, so the hypothetical mean of this research was three. The purpose of calculating the hypothetical mean was to compare it with actual mean of the answering weights of the respondents. If the actual mean value is larger than the hypothetical value, it indicates the Approval of most of the sample. However, if the actual value is smaller than the hypothetical mean, which indicated most of the sample were disagreed.

After activating my business smartphone App my business revenues increased				
	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	34	34.0	34.0	34.0
Agree	46	46.0	46.0	80.0
Neutral	20	20.0	20.0	100.0
Disagree	.00	.00	.00	100.00
Strongly Disagree	.00	.00	.00	100.00
Total	100	100.0	100.0	

Table 11 Question 1 Analysis (Source: Field study data 2018)

Based on the previously mentioned 5-point Likert scale the researcher analyzed each question of section two:

Table 11 stated that 34 percent from the respondents strongly agreed that the activation of smartphone App increased their revenues, 46 percent of the respondents agreed that the activation of smartphone App increased their revenues, while 20 percent of the respondents were neutral.

My Revenues Increase					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10%	35	35.0	43.8	43.8
	10%- 50%	29	29.0	36.3	80.0
	More than 50%	16	16.0	20.0	100.0
	Total	80	80.0	100.0	
Missing	System	20	20.0		
Total		100	100.0		

Table 12 Business revenues increase (Source: Field study data)

When the respondents generally agreed that the activation of smartphone App increased their revenues, they were asked about the Approximate percentage of that increase. Their responses were as follows: 35 percent of the respondents said that their revenues increased not more than 10 percent of total revenues, 29 percent of them agreed that their revenues increased from 10 percent to 50 percent, while only 16 percent specified that their revenues increased for more than 50 percent. (Table 12)

After activating my business smartphone App my business sales increased					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	16.0	16.0	16.0
	Agree	64	64.0	64.0	80.0
	Neutral	20	20.0	20.0	100.0
	Disagree	.00	.00	.00	100.00
	Strongly Disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 13 Question 2 Analysis (Source: Field study data)

Table 13 pointed out that 16 percent of the respondents strongly agreed that their sales level increased after activating the smartphone App, 64 percent of the respondents agreed that the activation of their business smartphone App increased their sales level, while 20 percent of the respondents were neutral.

My Sales Increase					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10%	36	36.0	45.0	45.0
	10% - 50%	28	28.0	35.0	80.0
	More than 50%	16	16.0	20.0	100.0
	Total	80	80.0	100.0	
Missing	System	20	20.0		
Total		100	100.0		

Table 14 Business sales increase (Source: Field study data)

Since 80 percent of the respondents declared that their sales level increased after activating smartphone App, the respondents were asked about the increasing percentage of their sales level and the responses were as follows: out of the total 80 percent, 36 percent their increase was less than 10 percent, 28 percent of them their sales increased from 10 percent to 50 percent and 16 percent of them their sales level increased for more than 50 percent. (Table 14)

After activating my business smartphone App my business expenses decreased					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	.00	.00	.00	.00
	Agree	28	28.0	28.0	28.0
	Neutral	72	72.0	72.0	100.0
	Disagree	.00	.00	.00	100.00
	Strongly Disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 15 Question 3 Analysis (Source: Field study data 2018)

Table 15 showed 28 percent of the respondents agreed that their expenses decreased after activating their smartphone App. However, 72 percent of the respondents were neutral.

My Expenses Decrease					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10%	17	17.0	60.7	60.7
	10%- 50%	11	11.0	39.3	100.0
	Total	28	28.0	100.0	
Missing	System	72	72.0		
Total		100	100.0		

Table 16 Business expenses decrease (Source: Field study data)

The decrease in expenses was very shallow. The outcome of the total 28 percent of the agreed respondents on the reduction of the expenses was split as follows: 17 percent of them their expenses decreased by less than 10 percent, while the remaining 11 percent of them indicated that their expenses decreased from 10 percent to 50 percent. (Table 16)

Through my e-shop (smartphone App) I can communicate with my customers more quickly					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	.00	.00	.00	.00
	Agree	80	80.0	80.0	80.0
	Neutral	20	20.0	20.0	100.0
	Disagree	.00	.00	.00	100.00
	Strongly Disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 17 Question 4 Analysis (Source: Field study data 2018)

Table 17 designated that 80 percent of the respondents agreed that through their smartphone App they can communicate with their customers more quickly. However, 20 percent of the respondents were neutral.

I handle the problems of my customers related to purchases through my online shop quickly					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	36	36.0	36.0	36.0
	Agree	27	27.0	27.0	63.0
	Neutral	.00	.00	.00	63.00
	Disagree	20	20.0	20.0	83.0
	Strongly disagree	17	17.0	17.0	100.0
	Total	100	100.0	100.0	

Table 18 Question 5 Analysis (Source: Field study data 2018)

Table 18 declared that 36 percent of the respondents strongly agreed that they can handle the problem of their customers through their smartphone quickly, 27 percent of the respondents agreed that they can handle the problem of their customers through their smartphone quickly, 20 percent of the respondents disagreed that they can handle the problem of their customers through their smartphone quickly. In addition, 17 percent of the respondents strongly disagreed that they can handle problems of their customers through their smartphone App.

I prefer to provide a variety of ways of payments through my online shop (smartphone App)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	72	72.0	72.0	72.0
	Agree	11	11.0	11.0	83.0
	Neutral	17	17.0	17.0	100.0
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 19 Question 6 Analysis (Source: Field study data 2018)

Table 19 presented that 72 percent of the respondents strongly agreed to provide a variety of ways of payments through their smartphone App, 11 percent of respondents agreed to provide a variety of ways of payments through their smartphone App, while 17 of them were neutral.

I take my clients' opinions seriously and develop my online shop (smartphone App) based on their advice					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	52	52.0	52.0	52.0
	Agree	48	48.0	48.0	100.0
	Neutral	.00	.00	.00	100.00
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 20 Question 7 Analysis (Source: Field study data 2018)

Table 20 specified that 52 percent of the respondents strongly agreed, and 48 percent of the respondents agreed to take their clients' opinions seriously and develop their smartphone App.

I care that my e-store (smartphone App) interface easy to understand and use					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	72	72.0	72.0	72.0
	Agree	28	28.0	28.0	100.0
	Neutral	.00	.00	.00	100.00
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 21 Question 8 Analysis (Source: Field study data 2018)

Table 21 showed that 72 percent of the respondents strongly agreed that their smartphone App interface should be easy to understand and use, and 28 percent of the respondents agreed that their smartphone App interface should be easy to understand and use.

I am interested in displaying the description and characteristics of my products on my e-shop (smartphone App)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	55	55.0	55.0	55.0
	Agree	45	45.0	45.0	100.0
	Neutral	.00	.00	.00	100.00
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 22 Question 9 Analysis (Source: Field study data 2018)

Table 22 showed 55 percent of the respondents strongly agreed to display their products description and characteristics on their smartphone App, along with 45 percent of the respondents agreed to display the products description and characteristics on their smartphone app.

I am sure that having a description and characteristics of my products on my e-shop (smartphone App) helps my customers while they are shopping in my physical shop					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	71	71.0	71.0	71.0
	Agree	29	29.0	29.0	100.0
	Neutral	.00	.00	.00	100.00
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 23 Question 10 Analysis (Source: Field study data 2018)

Table 23 exhibited that 71 percent of the respondents strongly agreed that having description and characteristics of the products on their smartphone App help their customers while they are shopping in their physical shop, and 29 percent of the respondents strongly agreed that having description and characteristics of the products on their smartphone App help their customers while they are shopping in their physical shop.

Maintenance and update process of my e-shop (smartphone App) is easy					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	35	35.0	35.0	35.0
	Agree	11	11.0	11.0	46.0
	Neutral	54	54.0	54.0	100.0
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 24 Question 11 Analysis (Source: Field study data 2018)

While Table 24 showed that 54 percent of respondents were neutral, it exposed that 35 percent of the respondents strongly agreed that maintenance and update process of their smartphone App is easy, and 11 percent of respondents agreed that the process of maintenance and update of smartphone App is easy.

Maintenance and update process to my e-shop (smartphone App) is costly					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	.00	.00	.00	.00
	Agree	65	65.0	65.0	65.0
	Neutral	35	35.0	35.0	100.0
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 25 Question 12 Analysis (Source: Field study data 2018)

Table 25 indicated that 65 percent of the respondents agreed that the maintenance and update process to their smartphone App is costly, while 35 percent of the respondents were neutral.

It is important to be aware of how to update my e-shop (smartphone App) to do it myself					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	34	34.0	34.0	34.0
	Agree	66	66.0	66.0	100.0
	Neutral	.00	.00	.00	100.00
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 26 Question 13 Analysis (Source: Field study data 2018)

Table 26 indicated that 34 percent of the respondents strongly agreed to the impact of being aware of how to update their smartphone App to do it by themselves and 66 percent of the respondents agreed that it is important to be aware of how to update their smartphone App to do it by themselves.

I look forward to transforming (switching) my e-commerce business entirely (online-only retailer)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	34	34.0	34.0	34.0
	Agree	29	29.0	29.0	63.0
	Neutral	20	20.0	20.0	83.0
	Disagree	.00	.00	.00	100.00
	Strongly disagree	17	17.0	17.0	100.0
	Total	100	100.0	100.0	

Table 27 Question 14 Analysis (Source: Field study data 2018)

Table 27 showed 34 percent of the respondents strongly agreed to switch entirely to online-only retailer, 29 percent of the respondents agreed to switch entirely to online-only retailer. Since 20 percent of the respondents were neutral, 17 percent of the respondents strongly disagreed to be online-only retailers.

I advise retailers to acquire e-store (smartphone App)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	69	69.0	69.0	69.0
	Agree	31	31.0	31.0	100.0
	Neutral	.00	.00	.00	100.00
	Disagree	.00	.00	.00	100.00
	Strongly disagree	.00	.00	.00	100.00
	Total	100	100.0	100.0	

Table 28 Question 15 Analysis (Source: Field study data 2018)

Table 28 disclosed that the majority of 69 percent of the respondents strongly agreed that they advised other retailers to acquire a smartphone App. Additionally, 31 percent of the respondents agreed that they advised other retailers to acquire a smartphone App.

4.3 Hypotheses Testing

As each of the hypotheses had one dependent variable and one independent variable, then the only statistical test suitable for analyzing these hypotheses was one sample t-test.

4.3.1 Hypothesis One

There is no significant relationship between the increase in sales level and utilizing a retail store smartphone App.

	<i>My Sales</i>
Mean	3.96
Variance	0.362020202
Observations	100
Hypothesized Mean	3
df	99
t Stat	15.95529469
P(T<=t) one-tail	0.000000
t Critical one-tail	1.660391156
P(T<=t) two-tail	0.000000
t Critical two-tail	1.984216952

Table 29 One sample t-test for hypothesis 1 (Source: Field study data 2018)

The result of the one-way sample t-test showed that:

1. The Mean of the test (3.96) is more than the hypothetical Mean (3.0)
2. t Stat (15.95529469) is more than t Critical (1.660391156)
3. P value (0.000000) is less than 0.05
4. $t [99] = 15.95529469, p < 0.05$

As a result, there is a significant relationship between the increase in sales level and utilizing a retail store smartphone app. Therefore, the null hypothesis can be rejected. (Table 29)

The results supported Orendorff (2017) study as it indicated that sales level would increase rapidly through the e-commerce and parallel to the increase in technology. Accordingly, the utilization of the smartphone app in the retail store would help the retailers to increase their sales level and make higher revenues.

4.3.2 Hypothesis Two

There is no significant difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Communication with customers quickly	100	380	3.8	0.16161616 2
Solve Customers online problems	100	345	3.45	2.41161616 2

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	6.125	1	6.125	4.76054955 8	0.030297	3.88885 3

			1.28661616
Within Groups	254.75	198	2
	260.87		
Total	5	199	

Table 30 One-way ANOVA Analysis for hypothesis 2 (Source: Field study data 2018)

The ANOVA single factor test results were as follows that:

1. An average of 3.8 which is higher than the hypothetical Mean 3.0 indicated that the retailers can communicate online with their customers quickly.
2. An average of 3.45 which is higher than the hypothetical Mean 3.0 indicated that the retailers can solve customers' online problems.
3. Retailers can communicate online quickly with customers (3.8) better than their ability to solve their customers' online problems (3.45)
4. F value (4.760549558) is more than F critical (3.888853)
5. P value (0.030297) is less than 0.05

Based on the above results, there is a significant difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone app [F (1,198) = 4.760, p= 0.030]. (Table 30)

		Difference	n (Group 1)	n (Group2)	SE	q stat	q crit
quickly communication	Solving problems	0.35	100	100	0.1281916	2.730289	2.800

Table 31 Post hoc test (Source: field study data 2018)

Accordingly, Post hoc comparisons using the Tukey HSD test conducted. (Table 31)

The Post hoc test indicated that q statistical (2.730289) is less than q critical (2.800). Therefore, the null hypothesis cannot be rejected. As it shows that there is no significant difference between communicating quickly online with customers and the retailers' ability to solve those customers' online problem if the

retailer would choose effective communication channels such as hotlines and live support chat (LSC) and this outcome supported Elmorshidy et al. (2015) study.

The above results support Kim & Lennon, 2010; Moshrefjavadi et al., 2012 and Mazaheri et al., 2014 studies as they indicated that the ability of the retailer to solve the customer's online problems would encourage the customer to repeat the shopping experience with the same store in future time.

4.3.3 Hypothesis Three

There is no significant relationship between providing product characteristics on a smartphone app and utilizing a retail store smartphone app.

	<i>Product characteristics</i>
Mean	4.55
Variance	0.25
Observations	100
Hypothesized Mean	3
df	99
t Stat	31
P(T<=t) one-tail	0.000000
t Critical one-tail	1.660391156
P(T<=t) two-tail	0.000000
t Critical two-tail	1.984216952

Table 32 t-Test: One Sample Analysis for hypothesis 3 (Source: Field study data 2018)

The result of the one-way sample t-test showed that:

1. The Mean of the test (4.55) is more than the hypothetical Mean (3.0)
2. t Stat (31) is more than t Critical (1.660391156)
3. P value (0.000000) is less than 0.05
4. $t [99] = 31, p < 0.05$

According to the above results, there is a significant relationship between providing product characteristics on a smartphone app and utilizing a retail store smartphone app. Consequently, the null hypothesis can be rejected.

The results supported Hufford (2017) findings, as the findings exposed the importance of providing the product characteristics online, where the customers use the smartphone app to search for the products details such as price, size and material. Moreover, the customer uses these details while he is shopping in-store, which make the shopping experience fast and convenient.

As the literature review indicated that there is a positive relationship between providing products' characteristics online and in-store sales, the researcher conducted a correlation test to test this fact on the data collected. The following are the results of the correlation test:

	<i>Online Product characteristics</i>	<i>Product Characteristics and in-store sales</i>
Online Product characteristics	1.00	
Product Characteristics and in-store sales	0.71	1.00

Table 33 Correlation Analysis Test (Source: Field study data 2018)

Table 33 showed that providing product's characteristics online through smartphone app and in-store sales are positively correlated (0.71). The results supported Gallino and Moreno (2012) outcome that the in-store sales increased after launching the retail store smartphone app. These results ensured the importance of providing product's characteristics online through the smartphone app and accordingly reinforced the third hypothesis outcome.

4.3.4 Hypothesis Four

There is no significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App.

	<i>Online-only retailer</i>
Mean	3.63
Variance	1.952626263
Observations	100
Hypothesized Mean	3
df	99
t Stat	4.508488709
P(T<=t) one-tail	0.000000
t Critical one-tail	1.660391156
P(T<=t) two-tail	0.000000
t Critical two-tail	1.984216952

Table 34 : t-Test: One Sample Analysis for hypothesis 4 (Source: Field study data 2018)

The result of the one-way sample t-test showed that:

1. The Mean of the test (3.63) is more than the hypothetical Mean (3.0)
2. t Stat (4.508488709) is more than t Critical (1.660391156)
3. P value (0.000000) is less than 0.05
4. $t [99] = 4.508488709, p < 0.05$

Therefore, there is a significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App. Accordingly, the null hypothesis can be rejected.

The results matched Di Rienzo et al. (2016) study as the retailers prefer switching to online-only stores because of the benefits of customers' location and seasonal sales. Customers from all around the world could reach the product through the smartphone app and the retailer could get benefit from the seasonal sales according to the countries occasions around the world.

Additionally, and according to Pantano (2014), retailers prefer switching to online-only stores would decrease the training cost of the employees and free them from time barriers.

4.4 Review of the Findings

After analyzing the study's survey questionnaire and hypotheses, the researcher reached to the following findings:

4.4.1 Survey Questionnaire Findings

1. Most of the retailers that owned a smartphone app were males. This conclusion was matched with Mollick podcast over Knowledge@whaton (2015) which indicated that males are more initiative to become an entrepreneur than females. Males in Bahrain tend to work double job to cover their families' expenses. This reason may also justify the high percentage of male participants.
2. The high percentage of respondents that launched their smartphone app for less than one year, reflected the high awareness of the importance of the e-commerce among the retailers. Moreover, the easy access to network and the variety of smartphone devices may also encourage more retailers to launch their retail store smartphone apps. In addition to the global orientation towards technology in general and towards smartphone apps in specific, where smartphone app can accomplish different organizations' tasks such as banks and physical retail stores.
3. The results presented that Android operating system was used more than the IOS operating system. This outcome supported the study accomplished by Mobile OS market share 2017- Statista (2018) that stated that the Android users are exceeding IOS users. This outcome may relate to the price difference between Android devices and IOS devices as IOS devices are more expensive than Android devices, moreover, the accessibility through Android devices is easier than IOS devices. IOS devices are ruled by high protection regulations.
4. Most of the smartphone apps were created privately by the retailers themselves. This mostly due to the low cost of creation as it previously mentioned by Zhang et al. (2014) that the approximate cost of creating a smartphone app using the smartphone app creator is almost BD2.700. The smartphone apps' creators take form of easy to access online software or easy to understand smartphone app creator apps

that simply could be downloaded on any smart device. The creation instructions can be easily followed even if the creator is not considered as information technology expert.

5. When investigating the impact on revenues after activating smartphone app, it concluded that the total percentage of respondents who agreed and the percentage of those who strongly agreed were 80 percent of the respondents. This showed that the revenues of the respondents increased after activating the smartphone app in the business. This outcome supported Ogden (2015) study that exhibited a 42 percent growth in retailer's revenues after activating the smartphone app. The revenues increase may link with the increase in sales level as any increase in sales level will lead to an increase in revenues if everything remaining constant.
6. The 80 percent that represented the strongly agreed and agreed respondents indicated that sales level increased after activating the smartphone app. Lobaugh (2012) study aligned with this result as Lobaugh stated that smartphone app influenced the purchasing habit of the customer, which accordingly influenced the sales of the retail business and increased it. The availability of the retail store virtually as a smartphone app on the customers' smart devices increases the chances of the customers' shopping as the customers find the retail store reachable at any time and under any circumstances, therefore, the sales level will increase.

Besides, the easiness and fastness of sharing the information through the social media, help the customers' in sharing certain online retail store product details with family and friends, which lead to increase the shopping chances through these retail store smartphone apps and accordingly will increase the sales level of these retail store smartphone apps.

An interesting view is given by the previous two points, point 5 and point 6, the researcher can link their results with the TAM principles, where trust is playing a critical role. The increase of both the sales level and the revenues indicated that the users pay a great trust to these smartphone app, from one side and perceived educational compatibility plays an effective role in building and supporting this trust, where people tend to use the smartphone app because they believe that it could make their job done.

7. The interesting results about the expenses decreased after activating the retail store smartphone app can be linked to reality through the fact that said although the retailers activated smartphone app, their physical stores are still active and therefore they cannot get rid of the physical store expenses. The result may plot differently if the retailers were switching entirely to online-only store. Furthermore, these expenses may include the cost of establishing the smartphone app, the maintenance and update cost. The

retailer can avoid these expenses if the retail store smartphone app is established by the retailer, which gives the retailer the chance to save the maintenance and update cost.

8. Elmorshidy et al. (2015) study agreed with the above results about communication with the customer quickly and clarified the channels that may use to communicate with customers such as LSC, blogs and emails. The retailer should choose the best suitable communication channel that suits the business style and the customers' need. The more effective channel in use, the more the customers attracted to the business.
9. Total percentage of 63 percent of respondents that represent strongly agreed and agreed supported Elmorshidy et al. (2015) findings that specified that if retailers implement the suitable communication channels while communicating with customers, the problem of the customers will be solved easy and fast. The more intelligence the communication channel, the more effective in solving the online customers' problem, for example, using LSC to communicate and solve online customers is better than using emails as the communication through email is dealing with visual intelligence and linguistic intelligence (written only) but communication through LSC will deal with linguistic-verbal intelligence and interpersonal intelligence in addition to the previous intelligences, where interacting with customers increase the chance to understand the customers' problems.

Recalling the MAT principles, the trust presented in customer believes is overly shown while analyzing these points merged with perceived usefulness as the smartphone App has accomplished the communication job needed in quick communication with the customer and solving their problems as well.

10. The outcome of 83 percent that represented the strongly agreed and the agree percentage reflected the importance of providing a variety of ways of payments through their smartphone App. This outcome support Hendrickson (2017) study that customers preferred the retailers with several payment options to choose among them. The new payment methods in Bahrain are more flexible and attainable as these methods do not need any complicated procedures to list them in business such as *bwallet* and *Viva cash*, where external app plays a role of a credit/ debit card as the money can be dropped in and spent any time. Another active payment method is *Benefitpay* app, where bank ATM (Automated Teller Machine) card can be scanned and necessary access information filled up, so the customer through the app can scan the barcode to pay without using the physical ATM card. All those previously mentioned methods and more are offered with competitive offers and add-ons to attract more customers and retailers.
11. The high percentage of agreement supported Eroglu et al. (2003) results as customers are attracted to the retailers that take attention to their opinions. Furthermore, the results supported kim et al. (2013) when they stated that implementing customers' feedback helps the retailer to sustained for a longer period in the market.

Here, the perceived enjoyment, obviously applied. Different payment options demanded by the customers and offered by the retailers plus undertaking customers' opinions in developing the smartphone App will certainly attain the principle that believes in acquiring a technology is depend on the users' preference and how they find it comfortable and achieve their enjoyment.

12. Total of 72 percent of the respondents supported Sumita & Yoshii (2010) results that retail store smartphone app interface must be user-friendly. It should be easy to use and understand. The customers are from a different academic background and their ability to use technology is different, too. So, when developing a retail store smartphone app, the retailer must consider the individual differences between the customers. Besides, the easiness and clearness of the smartphone app interface will avoid inquiry calls from customers asking about some missing or hidden products.

13. The respondent's decision related to the display of their products' description and characteristics on their smartphone App supported Hufford (2017) analysis results that indicated that 88 percent of his study respondents considered the product characteristics as extremely important. This feature will help customers while shopping through the retail store smartphone app to choose among a variety of products in a short time and less effort. Furthermore, the availability of the product characteristics and description give the online retail store the ability to enter a global competition as the retail store products' features will be compared with other competitor products' features. The availability of the product description and characteristics main eliminate the customer desire to visit the physical Store. As the online characteristics give the customer a real description. Specially, when the retailer uses an innovative way to describe the product such as videotapes, 3D display and virtual reality movie service.

14. The results of investigating having description and characteristics of the products on retailers' smartphone app help customers while they are shopping in their physical shop supported (Hufford,2017; Moes & Vliet, 2017) findings of the importance of the availability of products characteristics on smartphone app in helping customers while shopping in-store. Providing products characteristics and description on the retail store smartphone app will help the customers before they visit the physical Store. The customers can choose among products, compare between them, choose the best and list them on the wishing list until the next visit to the physical Store from the comfort of their homes during their spare time. Additionally, online shopping through the retail store smartphone app will attract the customers to visit the physical Store to discover more products that maybe not listed on the retail store smartphone app.

The TAM comes again under these two points, point 12 and point 13, to support the perceived trust and risk. The retailers' initiative to display their products' characteristics will form a solid base in their relationship with their customers. As retailers are transparent with their customers, it will help a lot in

attracting those customers to the e-store. Moreover, the retail store smartphone app is considered as a marketing tool for the physical Store, where the customers will surf the products to see their characteristics and have an overall view of the retail store's type of products.

15. The easiness of the maintenance and update process the retailer smartphone app can be linked with the 6th question from the demographic section, where retailers were asked about their smartphone app creator. The percentage of the app created by the retailers themselves was 49 percent, this percentage almost equal the 46 percent, which represent the total respondents of both strongly agreed and agreed respondents that indicated that the process of maintenance and update of smartphone app is easy. While the neutral respondents of 54 percent were almost equal the total percentage of 51 percent, which represents the app created by others. Logically, the app created by the retailers themselves would be easy maintenance and update by the retailers.
16. According to Moore (2018), the high percentage of respondents that agreed that the maintenance and update is costly may refer to the cost associated with hiring someone to do the maintenance and update, the researchers may either lack knowledge or time limitation. This literature matched with the results reached while investigating the respondent's opinion about the cost of maintenance and update smartphone App.

Going back to TAM, the model concepts and principles are glowingly clear here within these points, point 14 and point 15. As the easiness of maintenance and update the smartphone App scoring a high rate, this indicated that the perceived usefulness and the perceived ease of use are conquered. The maintenance and update are fulfilling the retailers need and make the smartphone App is something can retailers easily deal with it to reach their need for presenting products and offers.

17. The results reflected the high degree of retailers' awareness of the importance of smartphone app update role and if they can do it thoroughly, it will help in tracking customers rapidly demand from one side and to control cost on other side. The results came to support the thought that says that the retail store should always be upon the customer's request. As users and dealers with the retail store smartphone app, the customers can clearly audit this app and their ideas play a great role in modifying the retail store smartphone app.
18. The total percentage of acceptance, about 63 percent of respondents, remarked the benefits that may carry to the business such as personalization, high competition and cost-cutting. However, the remaining percentage of respondents that rejected the idea of switching to an online-only store may refer to two issued. The first issue is that although technology made people life easy, still many customers like to touch and feel the product before purchasing them. This idea is highly matched with Doherty & Ellis-Chadwick (2010). The second issue behind rejection may refer to the early stages of the technology revolution phase that the world goes through and this supported Amit & Zott (2012) study. The self-

marketing issue may play a great role here, as the showcase of the physical retail store at any mall can easily market that retail store products and attract the walk-in customers, while retail store smartphone app needs an effective marketing campaign to introduce the retail store and the products available. To get over this issue, the retailers should focus on marketing by considering different methods and channels to attract as many customers as possible.

19. The major acceptance to switch to online-only stores reflected the effectiveness of the retail smartphone app regardless of the obstacles that may the retailers face while acquiring it.

Although switching to online-only retail store is considered as a great challenge to many retailers. The decision is considered an indefinite fateful decision.

Perceived enjoyment, trust and risk can link this point with the TAM. Enjoyment reflected in retailers' desire to feel free and enjoy their life at the same time working on their e-store from a comfort of their homes. While trust is reflected in retailers believes that the smartphone app can replace the physical stores and still make the same outcome. However, the risk is imitated in the retailers' forward step in closing their physical stores and depending on their e-stores.

4.4.2 Hypotheses Findings

1. The first hypothesis studied the relationship between sales level and utilizing the smartphone app. One sample t-test analysis was conducted, and the results showed a significant relationship between sales level and utilizing the smartphone app. As the results gave a Mean (3.96) above the hypothetical Mean (3.0) and p-value less than 0.05. The first hypothesis results showed that the sales level increased while utilizing the retail store smartphone app. This increase may vary from one retailer to another depending on the type of the business and the market demand.

The results supported Duch-Brown et al. (2017) study as it indicated that the smartphone app increased the sales level as customers find the products affordable and easy to approach. Orendorff (2017) came to reinforce Duch-Brown et al. (2017) findings, that e-commerce helps to increase sales level. Taking the retail stores to the customers' houses is considered a great aid that motivate the customers to buy more regardless delimitation of time and distance. A combination of 24/7 retail store smartphone app encourages the customers to buy more, moreover, overcoming the distance problem along with the customer's desire will contribute to increasing the sales level.

The TAM principles are implemented within this hypothesis, where the increase of sales reflects customers' perceived usefulness, perceived ease of use and perceived enjoyment. Customers believe that adopting and using the smartphone App is a very useful way to shop online as it accomplishes the needed job with easy and flexible process within their favorable time. In addition, and for the customers who find their enjoyment in the shopping, but certain barriers prevent them to do so such as time and distance, shopping through smartphone App would be a great attraction for them and will incline them to patronize the technology more and faster.

The analytical results of this hypothesis meet the first research objective. The results showed that the utilizing retail store smartphone app would increase the sales level of the business. Therefore, the Bahraini retailers are recommended to utilize a retail store smartphone app to increase their sales level and accordingly would increase their business revenues despite to the slight increase in expenses that may occur during the smartphone app's building up phase.

2. The second hypothesis studied the relationship between communication with customers and utilizing a retail shop smartphone app under two levels: The first level is communicating with the online customer quickly, and the second level is the ability to solve the online customers' problems. The one-way ANOVA showed that there is a significant difference between the level of the variables, so a Post hoc test was a must. The results showed that the null hypothesis cannot be rejected.

The second hypothesis outcome came to support the fifth question's analysis and the findings of Elmorshidy et al. (2015) study as activating effective communication channels between retailers and customers play a major help while dealing with customers' online problems and may solve all the costumers' online problems. High level of communication such as LSC and Hotlines would be easy and fast ways to solve any customer's online problems.

In relation with TAM, the perceived social norms are clearly notified in this hypothesis. As communication through smartphone app between customers and retailers in favour to solve any problems may appear considered as a very useful way to smooth the shopping process and satisfied the two parties. Through time and by regular use of smartphone app, the obstacles will eliminate and both, customer and retailer, will persuade with the importance of accepting the technology.

The analytical results of this hypothesis meet the second research objective. The communication channels through the retail store smartphone app can solve the customer's online problems successfully and the

retailers can count on them to reach customers easier and faster. Nevertheless, the retailers should choose the most effective communication channels. Thus, the Bahraini retailers are recommended to utilize a retail store smartphone app to manage any problems that may occur to their customers during shopping through the smartphone app.

3. The third hypothesis studied the relationship between providing products' characteristics on the smartphone app and utilizing the retail store smartphone app through one sample t-test analysis. The results indicated that the Mean (4.55) is above the hypothetical Mean (3.0) with a p-value less than 0.05. The third hypothesis outcome supported Hufford (2017) findings that the products' characteristics are very important to be provided online. Providing product characteristics on the retail store smartphone app saves customers time and efforts that may consume while driving to the physical store. This feature gives the customers the ability to compare product characteristics from different online stores regardless the time or the place factors.

On other hands, the previous studies (Gallino & Moreno, 2012; Moes & Vliet, 2017) showed that there is a positive relationship between providing products' characteristics on retail store smartphone app and in-store sales. Accordingly, a correlation test conducted to test the strength of the relationship between providing products' characteristics on retail store smartphone app and in-store sales and the result showed a very strong relationship (0.71).

Through providing the products' characteristics on the retail smartphone app, the in-store shopping effectively processed. As customers preferred to scan the retail store products online through the retailer smartphone app before visiting the retailer's physical store (in-store), moreover, the customers may surf among the smartphone app while they are shopping in-store to compare the prizes and other features (Lobaugh, 2012).

Linking these results with TAM can obviously show in customers' satisfactory in having the product characteristics available on the smartphone app, which indeed accomplish the principle of perceived enjoyment and trust as they find it very comfortable and time-saving having the product characteristics online to choose among the products and make the final decision before in-store shopping.

The analytical results of this hypothesis meet the third hypothesis objective. Providing the product's characteristics on the retail store smartphone app increases both online sales and in-store sales as well. Hence, the Bahraini retailers are recommended to utilize a smartphone app and provide the product's

characteristics on the smartphone app to increase sales and to reduce the time consumed on answering the customers' inquiries about the products.

4. The fourth hypothesis studied the relationship between the decision of switching to an online-only retailer and utilizing the retail store smartphone app using one sample t-test analysis. The results show a significant relationship between the decision of switching to an online-only retailer and utilizing the retail store smartphone app as analysis Mean (3.63) was above the hypothetical Mean (3.0) and a p-value less than 0.05.

5. The fourth hypothesis results were unexpected, despite the respondents admitted that the cost of maintenance and update was very high still the retailers have a willingness to go online-only retail stores. This designated that the retailers are highly motivated to step forward in technology world.

This fact comes to reinforce the TAM perceives: perceived social norms and perceived educational compatibility, where customer and retailer find the smartphone App is a need for them, and to deal with people around.

Furthermore, it is considered a great and dependable method that facilitate their life and save their time. The analytical results of this hypothesis meet the fourth research objective. The retailers prefer to switch to online-only by utilizing a retail store smartphone app. The online-only store would cut down some expenses and give the retailers a piece of freedom. Then, the Bahraini retailers are recommended to switch to online-only retailers to get the advantage of cost reduction and time freedom.

No	Objectives	Research Question	Hypothesis	Finding	Discussions
			Null		
H1	To investigate the relationship between the increase in sales level and utilizing a retail store	What is the relationship between the increase in sales level and utilizing a retail store	There is no significant relationship between the increase in sales level and utilizing a	There is a significant relationship between the increase in sales level and utilizing a retail	The first hypothesis studied the relationship between sales level and utilizing the smartphone app. One sample t-test analysis was conducted, and the results showed a significant relationship between sales level and utilizing the smartphone app. As the

	smartphone App.	smartphone App?	retail store smartphone App	store smartphone app. Therefore, the null hypothesis can be rejected. $t [99] = 15.95529469, p < 0.05$	<p>results gave a Mean (3.96) above the hypothetical Mean (3.0) and p-value less than 0.05. The first hypothesis results showed that the sales level increased while utilizing the retail store smartphone app. This increase may vary from one retailer to another depending on the type of the business and the market demand.</p> <p>The results supported Duch-Brown et al. (2017) study as it indicated that the smartphone app increased the sales level as customers find the products affordable and easy to approach. Orendorff (2017) came to reinforce Duch-Brown et al. (2017) findings, that e-commerce helps to increase sales level. Taking the retail stores to the customers' houses is considered a great aid that motivate the customers to buy more regardless delimitation of time and distance. A combination of 24/7 retail store smartphone app encourages the customers to buy more, moreover, overcoming the distance problem along with the customer's desire will contribute to increasing the sales level.</p>
H2	To study the difference between communicating	What is the difference	There is no significant difference between	There is no significant difference between	The second hypothesis studied the relationship between communication with customers and utilizing a retail shop smartphone app under two

	quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App	between communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App?	communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone App.	communicating quickly with customers online and the ability to solve customers' online problems while utilizing a retail store smartphone app. Therefore, the null hypothesis cannot be rejected.	levels: The first level is communicating with the online customer quickly, and the second level is the ability to solve the online customers' problems. The one-way ANOVA showed that there is a significant difference between the level of the variables, so a Post hoc test was a must. The results showed that the null hypothesis cannot be rejected. The second hypothesis outcome came to support the fifth question's analysis and the findings of Elmorshidy et al. (2015) study as activating effective communication channels between retailers and customers play a major help while dealing with customers' online problems and may solve all the costumers' online problems. High level of communication such as LSC and Hotlines would be easy and fast ways to solve any customer's online problems.
H3	To examine the importance of providing product characteristics on a smartphone app.	What is the relationship between providing product characteristics on a smartphone	There is no significant relationship between providing product characteristics on a	There is a significant relationship between providing product characteristics on a smartphone	The third hypothesis studied the relationship between providing products' characteristics on the smartphone app and utilizing the retail store smartphone app through one sample t-test analysis. The results indicated that the Mean (4.55) is above the hypothetical Mean (3.0)

		<p>app and utilizing a retail store smartphone App?</p>	<p>smartphone app and utilizing a retail store smartphone App</p>	<p>app and utilizing a retail store smartphone app. Consequently, the null hypothesis can be rejected. $t [99] = 31, p < 0.05$</p>	<p>with a p-value less than 0.05. The third hypothesis outcome supported Hufford (2017) findings that the products' characteristics are very important to be provided online. Providing product characteristics on the retail store smartphone app saves customers time and efforts that may consume while driving to the physical store. This feature gives the customers the ability to compare product characteristics from different online stores regardless the time or the place factors.</p> <p>On other hands, the previous studies (Gallino & Moreno, 2012; Moes & Vliet, 2017) showed that there is a positive relationship between providing products' characteristics on retail store smartphone app and in-store sales. Accordingly, a correlation test conducted to test the strength of the relationship between providing products' characteristics on retail store smartphone app and in-store sales and the result showed a very strong relationship (0.71).</p> <p>Through providing the products' characteristics on the retail smartphone app, the in-store shopping effectively processed. As customers preferred to scan the retail store products online through the</p>
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					retailer smartphone app before visiting the retailer’s physical store (in-store), moreover, the customers may surf among the smartphone app while they are shopping in-store to compare the prizes and other features (Lobaugh, 2012).
H4	To evaluate the decision of switching to an online-only retailer through utilizing a retail store smartphone App.	What is the relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App?	There is no significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App	There is a significant relationship between the decision of switching to an online-only retailer and utilizing a retail store smartphone App. Accordingly, the null hypothesis can be rejected. $t [99] = 4.508488709, p < 0.05$	The fourth hypothesis studied the relationship between the decision of switching to an online-only retailer and utilizing the retail store smartphone app using one sample t-test analysis. The results show a significant relationship between the decision of switching to an online-only retailer and utilizing the retail store smartphone app as analysis Mean (3.63) was above the hypothetical Mean (3.0) and a p-value less than 0.05. The fourth hypothesis results were unexpected, despite the respondents admitted that the cost of maintenance and update was very high still the retailers have a willingness to go online-only retail stores. This designated that the retailers are highly motivated to step forward in technology world.

Table 35:- Table of research objectives, questions, null hypothesis, findings and discussions

CHAPTER FIVE

CASE STUDY AND IMPLICATIONS

5.1 Introduction

To emphasize the results and the findings of the research, a practical implementation would be a great prove to the findings and results degree of accuracy.

The implementation took a form of case study to one of the small businesses, a stationery, for the three months before launching the smartphone app and three months after launching the smartphone app.

This field implementation would enrich the finding with a real-life evidence and may pursue to the existing and future retailers to acquire a retail shop smartphone app.

The aim of this chapter is to apply the research findings on one of the stationeries in Bahrain and then compare the findings of this case study with the research findings on chapter four.

The stationery owned by a Bahraini retailer. It is in Hamala. The stationery classified as a small business and its located in Bahrain for less than one year, since 26 August 2017. The retailer considered as a new retailer in the market. The retailer was so excited about improving the store and to make it a reachable place for everyone, especially that the location of the store is in Hamala, which considered as a very faraway place from the city centre. Accordingly, for less than a year, the retailer decided to launch the stationery's smartphone app in February 2018. The retailer believes that technology solutions improve the business. Stationery smartphone app is available for both iOS and Android operating systems. As the retailer tried to satisfy customers as much as possible. The retailer has a technology passion. The retailer made the stationery smartphone app and it cost around BD 500. The cost amount counted for the online space booked and features to run the stationery smartphone app.

5.2 Case Study Design

The research findings were as follows:

Part 1: Survey Questionnaire Findings:

1. The high percentage of respondents that launched their smartphone app for less than one year, reflected the high awareness of the importance of the e-commerce among the retailers. Moreover, the easy access to network and the variety of smartphone devices may also encourage more retailers to launch their retail store smartphone apps. In addition to the global orientation towards technology in general and towards

smartphone apps in specific, where smartphone app can accomplish different organizations' tasks such as banks and physical retail stores.

2. The results presented that Android operating system was used more than the IOS operating system. This outcome supported the study accomplished by Mobile OS market share 2017- Statista (2018) that stated that the Android users are exceeding IOS users. This outcome may relate to the price difference between Android devices and IOS devices as IOS devices are more expensive than Android devices, moreover, the accessibility through Android devices is easier than IOS devices. IOS devices are ruled by high protection regulations.

3. Most of the smartphone apps were created privately by the retailers themselves. This mostly due to the low cost of creation as it previously mentioned by Zhang et al. (2014) that the approximate cost of creating a smartphone app using the smartphone app creator is almost BD2.700. The smartphone apps' creators take form of easy to access online software or easy to understand smartphone app creator apps that simply could be downloaded on any smart device. The creation instructions can be easily followed even if the creator is not considered as information technology expert.

4. When investigating the impact on revenues after activating smartphone app, it concluded that the total percentage of respondents who agreed and the percentage of those who strongly agreed were 80 percent of the respondents. This showed that the revenues of the respondents increased after activating the smartphone app in the business. This outcome supported Ogden (2015) study that exhibited a 42 percent growth in retailer's revenues after activating the smartphone app. The revenues increase may link with the increase in sales level as any increase in sales level will lead to an increase in revenues if everything remaining constant.

5. The 80 percent that represented the strongly agreed and agreed respondents indicated that sales level increased after activating the smartphone app. Lobaugh (2012) study aligned with this result as Lobaugh stated that smartphone app influenced the purchasing habit of the customer, which accordingly influenced the sales of the retail business and increased it. The availability of the retail store virtually as a smartphone app on the customers' smart devices increases the chances of the customers' shopping as the customers find the retail store reachable at any time and under any circumstances, therefore, the sales level will increase. Besides, the easiness and fastness of sharing the information through the social media, help the customers' in sharing certain online retail store product details with family and friends, which lead to increase the shopping chances through these retail store smartphone apps and accordingly will increase the sales level of these retail store smartphone apps.

An interesting view is given by the previous two points, point 5 and point 6, the researcher can link their results with the TAM principles, where trust is playing a critical role. The increase of both the sales level

and the revenues indicated that the users pay a great trust to these smartphone app, from one side and perceived educational compatibility plays an effective role in building and supporting this trust, where people tend to use the smartphone app because they believe that it could make their job done.

6. The interesting results about the expenses decreased after activating the retail store smartphone app can be linked to reality through the fact that said although the retailers activated smartphone app, their physical stores are still active and therefore they cannot get rid of the physical store expenses. The result may plot differently if the retailers were switching entirely to online-only store. Furthermore, these expenses may include the cost of establishing the smartphone app, the maintenance and update cost. The retailer can avoid these expenses if the retail store smartphone app is established by the retailer, which gives the retailer the chance to save the maintenance and update cost.

7. Elmorshidy et al. (2015) study agreed with the above results about communication with the customer quickly and clarified the channels that may use to communicate with customers such as LSC, blogs and emails. The retailer should choose the best suitable communication channel that suits the business style and the customers' need. The more effective channel in use, the more the customers attracted to the business.

8. Total percentage of 63 percent of respondents that represent strongly agreed and agreed supported Elmorshidy et al. (2015) findings that specified that if retailers implement the suitable communication channels while communicating with customers, the problem of the customers will be solved easy and fast. The more intelligence the communication channel, the more effective in solving the online customers' problem, for example, using LSC to communicate and solve online customers is better than using emails as the communication through email is dealing with visual intelligence and linguistic intelligence (written only) but communication through LSC will deal with linguistic-verbal intelligence and interpersonal intelligence in addition to the previous intelligences, where interacting with customers increase the chance to understand the customers' problems.

Recalling the MAT principles, the trust presented in customer believes is overly shown while analyzing these points merged with perceived usefulness as the smartphone App has accomplished the communication job needed in quick communication with the customer and solving their problems as well.

9. The outcome of 83 percent that represented the strongly agreed and the agree percentage reflected the importance of providing a variety of ways of payments through their smartphone App. This outcome support Hendrickson (2017) study that customers preferred the retailers with several payment options to choose among them. The new payment methods in Bahrain are more flexible and attainable as these methods do not need any complicated procedures to list them in business such as *bwallet* and *Viva cash*, where external app plays a role of a credit/ debit card as the money can be dropped in and spent any time. Another active payment method is *Benefitpay* app, where bank ATM (Automated Teller Machine) card can be scanned and necessary access information filled up, so the customer through the app can scan the barcode

to pay without using the physical ATM card. All those previously mentioned methods and more are offered with competitive offers and add-ons to attract more customers and retailers.

10. The high percentage of agreement supported Eroglu et al. (2003) results as customers are attracted to the retailers that take attention to their opinions. Furthermore, the results supported kim et al. (2013) when they stated that implementing customers' feedback helps the retailer to sustained for a longer period in the market.

Here, the perceived enjoyment, obviously applied. Different payment options demanded by the customers and offered by the retailers plus undertaking customers' opinions in developing the smartphone App will certainly attain the principle that believes in acquiring a technology is depend on the users' preference and how they find it comfortable and achieve their enjoyment.

11. Total of 72 percent of the respondents supported Sumita & Yoshii (2010) results that retail store smartphone app interface must be user-friendly. It should be easy to use and understand. The customers are from a different academic background and their ability to use technology is different, too. So, when developing a retail store smartphone app, the retailer must consider the individual differences between the customers. Besides, the easiness and clearness of the smartphone app interface will avoid inquiry calls from customers asking about some missing or hidden products.

12. The respondent's decision related to the display of their products' description and characteristics on their smartphone App supported Hufford (2017) analysis results that indicated that 88 percent of his study respondents considered the product characteristics as extremely important. This feature will help customers while shopping through the retail store smartphone app to choose among a variety of products in a short time and less effort. Furthermore, the availability of the product characteristics and description give the online retail store the ability to enter a global competition as the retail store products' features will be compared with other competitor products' features. The availability of the product description and characteristics main eliminate the customer desire to visit the physical Store. As the online characteristics give the customer a real description. Specially, when the retailer uses an innovative way to describe the product such as videotapes, 3D display and virtual reality movie service.

13. The results of investigating having description and characteristics of the products on retailers' smartphone app help customers while they are shopping in their physical shop supported (Hufford,2017; Moes & Vliet, 2017) findings of the importance of the availability of products characteristics on smartphone app in helping customers while shopping in-store. Providing products characteristics and description on the retail store smartphone app will help the customers before they visit the physical Store. The customers can choose among products, compare between them, choose the best and list them on the wishing list until the

next visit to the physical Store from the comfort of their homes during their spare time. Additionally, online shopping through the retail store smartphone app will attract the customers to visit the physical Store to discover more products that maybe not listed on the retail store smartphone app.

The TAM comes again under these two points, point 12 and point 13, to support the perceived trust and risk. The retailers' initiative to display their products' characteristics will form a solid base in their relationship with their customers. As retailers are transparent with their customers, it will help a lot in attracting those customers to the e-store. Moreover, the retail store smartphone app is considered as a marketing tool for the physical Store, where the customers will surf the products to see their characteristics and have an overall view of the retail store's type of products.

14. The easiness of the maintenance and update process the retailer smartphone app can be linked with the 6th question from the demographic section, where retailers were asked about their smartphone app creator. The percentage of the app created by the retailers themselves was 49 percent, this percentage almost equal the 46 percent, which represent the total respondents of both strongly agreed and agreed respondents that indicated that the process of maintenance and update of smartphone app is easy. While the neutral respondents of 54 percent were almost equal the total percentage of 51 percent, which represents the app created by others. Logically, the app created by the retailers themselves would be easy maintenance and update by the retailers.

15. According to Moore (2018), the high percentage of respondents that agreed that the maintenance and update is costly may refer to the cost associated with hiring someone to do the maintenance and update, the researchers may either lack knowledge or time limitation. This literature matched with the results reached while investigating the respondent's opinion about the cost of maintenance and update smartphone App.

Going back to TAM, the model concepts and principles are glowingly clear here within these points, point 14 and point 15. As the easiness of maintenance and update the smartphone App scoring a high rate, this indicated that the perceived usefulness and the perceived ease of use are conquered. The maintenance and update are fulfilling the retailers need and make the smartphone App is something can retailers easily deal with it to reach their need for presenting products and offers.

16. The results reflected the high degree of retailers' awareness of the importance of smartphone app update role and if they can do it thoroughly, it will help in tracking customers rapidly demand from one side and to control cost on other side. The results came to support the thought that says that the retail store should always be upon the customer's request. As users and dealers with the retail store smartphone app, the customers can clearly audit this app and their ideas play a great role in modifying the retail store smartphone app.

17. The total percentage of acceptance, about 63 percent of respondents, remarked the benefits that may carry to the business such as personalization, high competition and cost-cutting. However, the remaining

percentage of respondents that rejected the idea of switching to an online-only store may refer to two issues. The first issue is that although technology made people life easy, still many customers like to touch and feel the product before purchasing them. This idea is highly matched with Doherty & Ellis-Chadwick (2010). The second issue behind rejection may refer to the early stages of the technology revolution phase that the world goes through and this supported Amit & Zott (2012) study. The self-marketing issue may play a great role here, as the showcase of the physical retail store at any mall can easily market that retail store products and attract the walk-in customers, while retail store smartphone app needs an effective marketing campaign to introduce the retail store and the products available. To get over this issue, the retailers should focus on marketing by considering different methods and channels to attract as many customers as possible.

18. The major acceptance to switch to online-only stores reflected the effectiveness of the retail smartphone app regardless of the obstacles that may the retailers face while acquiring it.

Although switching to online-only retail store is considered as a great challenge to many retailers. The decision is considered an indefinite fateful decision.

Perceived enjoyment, trust and risk can link this point with the TAM. Enjoyment reflected in retailers' desire to feel free and enjoy their life at the same time working on their e-store from a comfort of their homes. While trust is reflected in retailers believes that the smartphone app can replace the physical stores and still make the same outcome. However, the risk is imitated in the retailers' forward step in closing their physical stores and depending on their e-stores.

Part 2: Hypotheses Findings:

1. The first hypothesis studied the relationship between sales level and utilizing the smartphone app. One sample t-test analysis was conducted, and the results showed a significant relationship between sales level and utilizing the smartphone app. As the results gave a Mean (3.96) above the hypothetical Mean (3.0) and p-value less than 0.05. The first hypothesis results showed that the sales level increased while utilizing the retail store smartphone app. This increase may vary from one retailer to another depending on the type of the business and the market demand.

The results supported Duch-Brown et al. (2017) study as it indicated that the smartphone app increased the sales level as customers find the products affordable and easy to approach. Orendorff (2017) came to reinforce Duch-Brown et al. (2017) findings, that e-commerce helps to increase sales level. Taking the retail stores to the customers' houses is considered a great aid that motivate the customers to buy more regardless delimitation of time and distance. A combination of 24/7 retail store smartphone app encourages the customers to buy more, moreover, overcoming the distance problem along with the customer's desire will contribute to increasing the sales level.

The TAM principles are implemented within this hypothesis, where the increase of sales reflects customers' perceived usefulness, perceived ease of use and perceived enjoyment. Customers believe that adopting and using the smartphone App is a very useful way to shop online as it accomplishes the needed job with easy and flexible process within their favorable time. In addition, and for the customers who find their enjoyment in the shopping, but certain barriers prevent them to do so such as time and distance, shopping through smartphone App would be a great attraction for them and will incline them to patronize the technology more and faster.

The analytical results of this hypothesis meet the first research objective. The results showed that the utilizing retail store smartphone app would increase the sales level of the business. Therefore, the Bahraini retailers are recommended to utilize a retail store smartphone app to increase their sales level and accordingly would increase their business revenues despite to the slight increase in expenses that may occur during the smartphone app's building up phase.

2. The second hypothesis studied the relationship between communication with customers and utilizing a retail shop smartphone app under two levels: The first level is communicating with the online customer quickly, and the second level is the ability to solve the online customers' problems. The one-way ANOVA showed that there is a significant difference between the level of the variables, so a Post hoc test was a must. The results showed that the null hypothesis cannot be rejected.

The second hypothesis outcome came to support the fifth question's analysis and the findings of Elmorshidy et al. (2015) study as activating effective communication channels between retailers and customers play a major help while dealing with customers' online problems and may solve all the costumers' online problems. High level of communication such as LSC and Hotlines would be easy and fast ways to solve any customer's online problems.

In relation with TAM, the perceived social norms are clearly notified in this hypothesis. As communication through smartphone App between customers and retailers in favor to solve any problems may appear considered as a very useful way to smooth the shopping process and satisfied the two parties. Through time and by regular use of smartphone App, the obstacles will eliminate and both, customer and retailer, will persuade with the importance of accepting the technology.

The analytical results of this hypothesis meet the second research objective. The communication channels through the retail store smartphone app can solve the customer's online problems successfully and the

retailers can count on them to reach customers easier and faster. Nevertheless, the retailers should choose the most effective communication channels. Thus, the Bahraini retailers are recommended to utilize a retail store smartphone app to manage any problems that may occur to their customers during shopping through the smartphone app.

3. The third hypothesis studied the relationship between providing products' characteristics on the smartphone app and utilizing the retail store smartphone app through one sample t-test analysis. The results indicated that the Mean (4.55) is above the hypothetical Mean (3.0) with a p-value less than 0.05. The third hypothesis outcome supported Hufford (2017) findings that the products' characteristics are very important to be provided online. Providing product characteristics on the retail store smartphone app saves customers time and efforts that may consume while driving to the physical store. This feature gives the customers the ability to compare product characteristics from different online stores regardless the time or the place factors.

On other hands, the previous studies (Gallino & Moreno, 2012; Moes & Vliet, 2017) showed that there is a positive relationship between providing products' characteristics on retail store smartphone app and in-store sales. Accordingly, a correlation test conducted to test the strength of the relationship between providing products' characteristics on retail store smartphone app and in-store sales and the result showed a very strong relationship (0.71).

Through providing the products' characteristics on the retail smartphone app, the in-store shopping effectively processed. As customers preferred to scan the retail store products online through the retailer smartphone app before visiting the retailer's physical store (in-store), moreover, the customers may surf among the smartphone app while they are shopping in-store to compare the prizes and other features (Lobaugh, 2012).

Linking these results with TAM can obviously show in customers' satisfactory in having the product characteristics available on the smartphone app, which indeed accomplish the principle of perceived enjoyment and trust as they find it very comfortable and time-saving having the product characteristics online to choose among the products and make the final decision before in-store shopping.

The analytical results of this hypothesis meet the third hypothesis objective. Providing the product's characteristics on the retail store smartphone app increases both online sales and in-store sales as well. Hence, the Bahraini retailers are recommended to utilize a smartphone app and provide the product's

characteristics on the smartphone app to increase sales and to reduce the time consumed on answering the customers' inquiries about the products.

4. The fourth hypothesis studied the relationship between the decision of switching to an online-only retailer and utilizing the retail store smartphone app using one sample t-test analysis. The results show a significant relationship between the decision of switching to an online-only retailer and utilizing the retail store smartphone app as analysis Mean (3.63) was above the hypothetical Mean (3.0) and a p-value less than 0.05.

The fourth hypothesis results were unexpected, despite the respondents admitted that the cost of maintenance and update was very high still the retailers have a willingness to go online-only retail stores. This designated that the retailers are highly motivated to step forward in technology world.

This fact comes to reinforce the TAM perceives: perceived social norms and perceived educational compatibility, where customer and retailer find the smartphone App is a need for them, and to deal with people around.

Furthermore, it is considered a great and dependable method that facilitate their life and save their time. The analytical results of this hypothesis meet the fourth research objective. The retailers prefer to switch to online-only by utilizing a retail store smartphone app. The online-only store would cut down some expenses and give the retailers a piece of freedom. Then, the Bahraini retailers are recommended to switch to online-only retailers to get the advantage of cost reduction and time freedom.

Based on the research findings, the researcher conducted an interview with the owner (retailer). The interview took a form of two groups of questions asked to the retailer and the responses were recorded. The first group was a set of structured questions taken from the questionnaire and the second group was a set of semi-structured questions formed from the hypotheses. The researcher works through the interview questions and following them by a discussion of the responses from the retailer. It is followed by a comparison between the case study findings and chapter four findings. At the end, the researcher summarizes the overall findings from this interview.

5.3 Analysis of data collected

5.3.1 The Questions Analysis for The Interview

Question 1: *Have the business revenues increased after launching the stationery smartphone app?*

Response from retailer:

The retailer replied happily that the revenues increased by 70 percent and that considered as a good motivation to concentrate more on the online business and to give it more attention.

The retailer response indicated that stationery smartphone app is affected positively on the business revenues.

Question 2: *Have the business sales level increased after launching the stationery smartphone app?*

Response from retailer:

The retailer was strongly agreed that utilizing the smartphone app increased the sales level of the business by almost 40 percent.

The retailer response highlights the effectiveness of the stationery smartphone on increasing the business sales level and with a good percentage.

Question 3: *Have the business expenses decreased after launching the stationery smartphone app?*

Response from retailer:

The retailer was agreed that the expenses decreased by 30 percent and when further calculations have done, it has been found that the retailer can increase this percentage by depending more on the smartphone app through making the in-store is a secondary option to run the business.

The retailer response indicated that a reduction in expenses can be occurred if the retail stores utilized a retail store smartphone app and by depending more on the app rather than being online sometimes and in-store other time.

Question 4: *Can you communicate with your customers more quickly through your stationery smartphone app?*

Response from retailer:

The retailer agreed that the communication is quickly and smoothly with the online customers as the retailer communicates with them through different channels such as emails and hotlines.

The retailer response showed that communication with the online customers is quickly and smoothly by using effective channels.

Question 5: *Can you handle the problems of your customers in related to purchases through your stationery smartphone app quickly?*

Response from retailer:

The retailer was strongly agreed that online customers problems can easily and quickly solve. The retailer referred this ability to the effective communication channels that has been used. The retailer communicates with online customers through emails and hotlines, moreover, the retailer is planning to add more effective channels such as live chat.

The retailer response indicated that online customers' problems can easily and quickly solve as long as the retailer would use effective communication channels.

Question 6: *Do you provide several payment methods on your stationery smartphone app?*

Response from retailer:

Regarding payment methods available abroad all the stationary smartphone app, the retailer strongly agreed to provide different ways of payments as the following methods are available on the smartphone app: Cash, debit and credit cards and b-wallet.

The retailer believes in the variety of the payment options and how the availability of different methods could attract more customers. Accordingly, the retailer is planning to add more methods to the payment options.

Regarding the best way of payment that pressure by the customers, the retailer said that "pay cash on delivery" is the most preferred by the customers.

The retailer response showed that the availability of several payment methods on the retail store smartphone app is very important as it attract more customers.

Question 7: *Do you take your clients' opinions seriously and develop your smartphone app based on their advice?*

Response from retailer:

The retailer strongly agrees to take in consideration the customers' opinions to improve the stationery smartphone app, as this step will attract more customers and gain more chances to get loyal customers.

The retailer response pointed to the importance of the customers' opinion as this step makes the customers repeated customers as long as they find their opinions are very important and applied as they wish.

Question 8: *Do you think that your stationery smartphone app interface must be easy to understand and use?*

Response from retailer:

"The interface of the smartphone app is very critical thing" the retailer replied, "it must be so simple, easy to use and understand, attractive and the categories are easily reachable".

The retailer response showed that the retail smartphone app interface is very important to be easy to understand and use to suite different people technological abilities.

Question 9: *Are you interested in displaying the description and characteristics of your products on your stationery smartphone app?*

Response from retailer:

About the product descriptions and characteristics, the trailer emphasizes and strongly agrees that providing descriptions and characteristics of the stationery's products on the smartphone app is very important, useful and may save the time that may be consumed in answering the customers' questions about the products. The retailer is planning to add more sensible features to show the products such Virtual Reality (VR) feature, where customers can view the product from multi angles. Customers can shop at a virtual reality (VR) shop. The customers can wander around the virtual reality shop by a virtual cart, where the customer can pick up virtual products that placed on the virtual shelves as well as the customer can review the product characteristics by flipping the product, moreover, a virtual price tag can clearly express the price of the product. After the virtual shopping process, the customer will be headed to a virtual cashier, where the customer can choose among a list of payment methods to pay and enter a delivery address to deliver the desired products.

The retailer response presented the effectiveness of providing the products' description and characteristics on retail store smartphone app in helping the customers to take a useful purchasing decision quickly.

Question 10: *Do you think that having description and characteristics of your products on your stationery smartphone app would help your customers while they are shopping in your physical shop (in-store)?*

Response from retailer:

The retailer strongly agreed that the availability of the stationery products' descriptions and characteristics help lots of customers when shopping in-store. The retailer said that the stationery smartphone app helps the customers prior to their shopping in-store and while the customers are shopping in store to surf through the products and compare between their characteristics and prices.

The retailer response highlighted that providing the products' description and characteristic on the retail store smartphone app would increase in-store shopping as the customer will review the products before and while shopping in-store.

Question 11: *Do you think that the maintenance and update process of your stationery smartphone app is easy?*

Response from retailer:

The retailer was strongly agreed that maintenance and update process to the stationery smartphone app was considered very easy according to the retailer, as the app was created by the retailer.

The retailer response showed that retail store smartphone app maintenance and update process is easy and specially if the app was established by the retailer.

Question 12: *Do you think that your stationery smartphone app maintenance and update are costly?*

Response from retailer:

The retailer declared that the smartphone app maintenance and update were not costly, and the only cost needed while update was the cost of additional space needed to add more products online.

The retailer response pointed out that retail store smartphone app maintenance and update are not costly and specially if the app is established by the retailer.

Question 13: *Do you believe that it is important to be aware of how to update your stationery smartphone app to do it yourself?*

Response from retailer:

The retailer was strongly agreed that it is so important to be aware of how to update the stationery smartphone app, so the retailer can do it himself. This step would save money and time to the retailer. As hiring a specialist person to do this process would increase the retailers' expenses, moreover, it gives the retailer the freedom to add or modify the smartphone app any time without waiting for someone else.

The retailer response indicated that being aware of how to update a retail store smartphone app is very important in saving retailer time and money.

Question 14: *Are you looking forward to switching your business entirely to online-only retail store?***Response from retailer:**

The retailer was so excited in switching to online-only retailer as this step would reduce the expenses and increased the time the retailer can spend with family.

The retailer response showed that switching to online-only retailer is a desire of many retailers that took the step and experienced a retail store smartphone app. Those retailers enjoyed the expenses reduction and more time with their families.

Fortunately, while the researcher was writing the dissertation, the retailer decided to shift totally to online-only retailer by November 01, 2018 as the retailer found this decision is a great opportunity to decrease the operating cost.

5.3.2 The Hypotheses Related Questions Analysis

Question 1: *How far is utilizing a smartphone app enhance the sales level of your stationery? If the smartphone app increased your stationery sales level, how much was the increase?*

Response from retailer:

The retailer replied that the utilization of the smartphone app increased the store sales as the increase was about 40 percent. The retailer expects that this percentage will be increase in future time as the customers use the app and recommend others to use it as well.

Question 2: *Communicating with online customers quickly is highly related with solving those customers problems through the smartphone app. How far is that true based on your personal experience with smartphone app?*

Response from retailer:

The retailer commentated that the statement is true. The retailer said that communicating with online customers quickly is so related to solving those customers problems through the smartphone app. It is highly related to the type of communicating channels that the retailer would choose to communicate with customers and solve their problems. The retailer cited that through the stationery smartphone app two channels of communication were activated with online customers; first: Through email. Second: Through the hotline and it is the most effective way of communication. Most of the customers' issues were solved through this channel. In addition, the retailer in process to establish a live chat as a third communication channel with the online customer through their stationery smartphone app.

Question 3: *What are the benefits behind providing products' characteristics on your stationery smartphone app?*

Response from retailer:

The retailer responded that the benefits behind the availability of the product's characteristics online are:

- Avoiding customers' enquiry calls about the products' characteristics;
- Give the customers the overall view about the product and make them so convenient;
- Give the customers the chance to compare between the products to choose the best for themselves;
- Attract more customers to use the app and purchase online;
- Play marketing role, as new products and services are uploaded to the app, the customer will receive notification alert about the new and up to date product, services, offers and discount options;
- Facilitate the customers' in-store purchase.

The retailer is planning to add a 3D display option for most of the products- as the retailer is currently providing the product's picture and written characteristics only- to give the customers the feeling of the in-store shopping and attract them to the smartphone app.

Question 4: *Is there a relationship between providing products' characteristics on your stationery smartphone app and the in-store sales level within your stationery?*

Response from retailer:

The retailer said that providing products' characteristics on the stationery smartphone app boosted the in-store sales to 70 percent. As the customers found their needed products while surfing through the smartphone app in a comfort of their homes. This feature gives the customers to spend more time in shopping and lets them view the details of the products. Based on this, the customers will have a long list of chosen products to purchase them in-store. Likewise, this feature also shortens the time that the customer spent in-store. It saved the customers time and reduced the store crowd.

Question 5: *Do you prefer to switch to online-only stationery in future? If yes, why and when?*

Response from retailer:

The retailer will switch to online-only stationery as soon as possible. As the retailer enjoyed some of the benefits for the online-store after launching the stationery smartphone app. The retailer expressed the reasons through these points:

- The retailer can run his business while joining family their special occasions at any time;
- The retailer is free to travel for several days and still the business is running smoothly;
- The retailer saves some variable expenses, for example, utilities expenses.

The retailer commented that for future time the cost reduction will be more. As the retailer will save more through these points:

- The retailer will get rid of the rent expense as the shop will not be needed and goods could be kept in a small warehouse or even at home;
- The retailer will eliminate the expenses related to staff salary, utilities, transportation expense and even food expenses as the retailer would have some meals while working in the shop;
- The retailer will save time -opportunity cost- as this extra time would be useful to perform another activity.

The retailer raised a very important point in related to the decision to switch online-only store. The retailer advised the other retailers to adopt a strong communicating channel with customers to manage any future problems.

While the researcher modifying the dissertation, the retailer decided to be totally online as online-only store starting from November 01, 2018. The retailer said that this decision based on the great operation cost reduction that would occur after that, where rent expense, salaries expense and utilities expense are eliminated.

5.4 Comparison between Research Findings and Case Study Findings

The findings of the case study are generally aligned with the research findings.

5.4.1 The Questionnaire's Findings compared with Case Study Findings

- The case study findings agreed with the research findings related to the effect of smartphone app on revenues. The retailer strongly agreed with 34 percent of the respondents that the activation of smartphone App increased their revenues. The retailer joined the 16 percent of the agreed respondents that their revenues increased by more than 50 percent.
- The case study findings agreed with the research findings in related to the effect of smartphone app on sales level. This outcome matched the research findings, where 16 percent of the respondents strongly agreed that their sales level increased after activating the smartphone App. 28 percent of the respondents shared the retailer his sales level increase range from 10 to 50 percent.
- The case findings agreed with the research findings in related to the effect of smartphone app on expenses. This conclusion supported the research findings, where 28 percent of the respondents agreed that their expenses decreased after activating the smartphone app. Regarding to the range of reduction,

the retailer shared 11 percent of the agreed respondents that their expenses decreased from 10 to 50 percent.

- The case findings agreed with the research findings in related to the retailer ability to communicate with his online customers more quickly. This result aligned with 80 percent of the respondents that agreed the retailer idea.
- Based on the results of the case study, the retailer supported the 36 percent of the respondents that were strongly agreed that they can solve the problems of their online customers quickly as they have effective communication channels. Accordingly, the case study findings strongly agreed with the research findings.
- Through retailer's opinion in providing a variety of payment method through his smartphone app, he supported the 72 percent of the research respondents that strongly agreed this idea.
- The case findings agreed with the research findings that the retailers must consider their customers opinion in developing their retail store smartphone app. Relatively, the retailer share the 52 percent of the respondents that strongly agreed that the customers' opinion is very valuable.
- The case findings agreed with the research findings that the retail store smartphone app interface must be easy to understand and use. Accordingly, the retailer shared the 72 percent of the respondents that were strongly agree that the smartphone app interface is so critical and important to be easy to understand and use.
- Based on the case study result, the retailer supported the 55 percent of the respondents that strongly agreed on the importance of displaying the description and characteristics of the products on the retail store smartphone app. This step may save customers and retailers time.
- The case findings agreed with the research findings that the availability of the retail store products' descriptions and characteristics on the retail store smartphone app helps lots of customers when they are shopping in-store. Through this idea, the retailer supported 71 percent of the respondents that strongly agreed.
- The case findings agreed with the research findings, where the retailer supported 35 percent of the respondents that were strongly agreed on the easiness of the maintenance and update process of the retail store smartphone app and specially if it developed by the retailer himself.
- The case findings agreed with the research findings that the maintenance and update process was not costly, thereby, 65 percent of the respondents were agreed and shared the retailer his opinion.
- The case findings agreed with the research findings that it is important to be aware of how to update your retail store smartphone app, so you can do it yourself. The case study outcome matched 34 percent of the respondents that were strongly agreed this idea.

- The case findings agreed with the research findings that the retailers after utilizing their retail store smartphone app would switch entirely to online-only retailers. The case study outcome matched 34 percent of the respondents that were strongly agreed this idea.

5.4.2 The Hypotheses Findings compared with Case Study Findings

- The case study findings agreed with the research findings in related to the impact of utilizing the smartphone app on sales level. As the sales level is increased after launching the retail store smartphone app. As the research findings through one-sample t-test analysis showed a Mean equal to 3.96 and p value less than 0.05 to approve a positive relationship between sales level and utilizing the retail store smartphone app.
- The case study findings agreed with the research findings in related to relationship between the quick online communications with customers and the ability to solve their online problems. As the case study findings concluded that there is a strong relationship between communicating online quickly with customers and the ability to solve their online problems with a condition to have a highly effective communication channel. During the case study investigations, the retailer pointed out that choosing the right and effective communication channels is the key point. The hotline communicating method was so effective for the retailer. As he quickly communicates with his customers and accordingly can solve their online problems.

The research finding, through one-way ANOVA showed Means of 3.8 and 3.45 for communicating with online customer quickly and the ability to solve the customers online respectively with a p value less than 0.05 that means no difference between communicating online with customers quickly and the ability to solve their online problems while utilizing smartphone app to support the retailer point of view.

- The case study findings agreed with the research findings in related to the importance of providing the products' characteristics online through the retail store smartphone app and its positive effect on in-store sales as they were positively correlated (0.71) as per an outcome from the research correlation test. Providing the products' characteristics online participated in attracting more customers that they like to save time and effort. Furthermore, the availability of the products' characteristics online helps the customers in searching and comparing between products before visiting the physical store.

<p>The case study findings agreed with the research findings in related to the decision of switching to an online-only retailer. As the retailers after experiencing some of the retail store smartphone app’s benefits, they are looking forward enjoying a fully freedom from the physical store. The research findings, through one sample t-test, approve the great positivity of the decision of switching to an online-only retailer could be found from the Mean of 3.36 and <i>p</i> value less than 0.05. Source</p>	<p>The Interview Questions</p>	<p>Research Findings</p>	<p>Case Study Findings</p>
<p>The Questionnaire’s Questions</p>	<p>Have the business revenues increased after launching the stationery smartphone app?</p>	<p>When investigating the impact on revenues after activating smartphone App, it concluded that the total percentage of respondents who agreed and the percentage of those who strongly agreed were 80 percent of the respondents. This showed that the</p>	<p>The retailer replied happily that the revenues increased by 70 percent and that considered as a good motivation to concentrate more on the online business and to give it more attention. The retailer</p>

		<p>revenues of the vast majority of the respondents increased after activating the smartphone App in the business. This outcome supported Ogden (2015) study that exhibited a 42 percent growth in retailer’s revenues after activating the smartphone App.</p>	<p>response indicated that stationery smartphone app is affected positively on the business revenues.</p>
	<p>Have the business sales level increased after launching the stationery smartphone app?</p>	<p>The 80 percent that represented the strongly agreed and agreed respondents indicated that sales level increased after activating the smartphone App. Lobaugh (2012) study aligned the research results as Lobaugh stated that smartphone App influenced the purchasing habit of the customer, which accordingly influenced the sales of the retail business and increased it.</p>	<p>The retailer was strongly agreed that utilizing the smartphone app increased the sales level of the business by almost 40 percent. The retailer response highlights the effectiveness of the stationery smartphone on increasing the business sales level and with a good percentage.</p>

	<p>Have the business expenses decreased after launching the stationery smartphone app?</p>	<p>The interesting results about the expenses decreased after activating the retail store smartphone App can be linked to reality through the fact that said although the retailers activated smartphone App, the in-store are still activating and therefore they cannot get rid of the in-store expenses. The result may plot differently if the retailers were switching entirely to online-only store.</p>	<p>The retailer was agreed that the expenses decreased by 30 percent and when further calculations have done, it has been found that the retailer can increase this percentage by depending more on the smartphone app through making the in-store is a secondary option to run the business. The retailer response indicated that a reduction in expenses can be occurred if the retail stores utilized a retail store smartphone app and by depending more on the app rather than being online</p>
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			sometimes and in-store other time.
	Can you communicate with your customers more quickly through your stationery smartphone app?	Elmorshidy et al. (2015) study agreed with the above results about communication with the customer quickly and classified the channels may use to communicate with customers such as LSC, blogs and emails.	The retailer agreed that the communication is quickly and smoothly with the online customers as the retailer communicates with them through different channels such as emails and hotlines. The retailer response showed that communication with the online customers is quickly and smoothly by using effective channels.
	Can you handle the problems of your customers in related to purchases through your stationery smartphone app	Total percentage of 63 percent of respondents that represent strongly agreed and agreed supported Elmorshidy	The retailer was strongly agreed that online customers problems can

	<p>quickly?</p>	<p>et al. (2015) findings that specified that if retailers implement the suitable communication channels while communicating with customers, the problem of the customers will be solved easy and fast.</p>	<p>easily and quickly solve. The retailer referred this ability to the effective communication channels that has been used. The retailer communicates with online customers through emails and hotlines, moreover, the retailer is planning to add more effective channels such as live chat. The retailer response indicated that online customers' problems can easily and quickly solve as long as the retailer would use effective communication channels.</p>
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	<p>Do you provide several payment methods on your stationery smartphone app?</p>	<p>The outcome of 83 percent that represented the strongly agreed and the agree percentage reflected the importance of providing a variety of ways of payments through their smartphone App. This outcome support Hendrickson (2017) study that customers preferred the retailers with several payment options to choose among them.</p>	<p>Regarding payment methods available abroad all the stationary smartphone app, the retailer strongly agreed to provide different ways of payments as the following methods are available on the smartphone app: Cash, debit and credit cards and b-wallet. The retailer believes in the variety of the payment options and how the availability of different methods could attract more customers. Accordingly, the retailer is planning to add more methods to the payment options. Regarding the</p>
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			<p>best way of payment that pressure by the customers, the retailer said that "pay cash on delivery" is the most preferred by the customers.</p> <p>The retailer response showed that the availability of several payment methods on the retail store smartphone app is very important as it attract more customers.</p>
	<p>Do you take your clients' opinions seriously and develop your smartphone app based on their advice?</p>	<p>The high percentage of agreement supported Eroglu et al. (2003) results as customers are attracted to the retailers that take attracted to the retailers that take attention to their opinions.</p> <p>Furthermore, the results supported kim et al. (2013) when they stated that</p>	<p>The retailer strongly agrees to take in consideration the customers' opinions to improve the stationery smartphone app, as this step will attract more customers and gain more</p>

		<p>implementing customers' feedback helps the retailer to sustained for a longer period in the market. Here, the perceived enjoyment, obviously applied. Different payment options demanded by the customers and offered by the retailers plus undertaking customers' opinions in developing the smartphone App will certainly attain the principle that believes in acquiring a technology is depend on the users' preference and how they find it comfortable and achieve their enjoyment.</p>	<p>chances to get loyal customers. The retailer response pointed to the importance of the customers' opinion as this step makes the customers repeated customers as long as they find their opinions are very important and applied as they wish.</p>
	<p>Do you think that your stationery smartphone app interface must be easy to understand and use?</p>	<p>Total of 72 percent of the respondents supported Sumita & Yoshii (2010) results that retail store smartphone app interface must be user-friendly. It should be</p>	<p>"The interface of the smartphone app is very critical thing" the retailer replied, "it must be so simple, easy to use and</p>

		<p>easy to use and understand.</p>	<p>understand, attractive and the categories are easily reachable". The retailer response showed that the retail smartphone app interface is very important to be easy to understand and use to suite different people technological abilities.</p>
	<p>Are you interested in displaying the description and characteristics of your products on your stationery smartphone app?</p>	<p>The respondent's decision related to the display of their products' description and characteristics on their smartphone App supported Hufford (2017) analysis results that indicated that 88 percent of his study respondents considered the product characteristics as extremely important.</p>	<p>About the product descriptions and characteristics, the trailer emphasizes and strongly agrees that providing descriptions and characteristics of the stationery's products on the smartphone app is very important, useful and may save the time that may be</p>

			<p>consumed in answering the customers' questions about the products. The retailer is planning to add more sensible features to show the products such Virtual Reality (VR) feature, where customers can view the product from multi angles. The retailer response presented the effectiveness of providing the products' description and characteristics on retail store smartphone app in helping the customers to take a useful purchasing decision quickly.</p>
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	<p>Do you think that having description and characteristics of your products on your stationery smartphone app would help your customers while they are shopping in your physical shop (in-store)?</p>	<p>The results of investigating having description and characteristics of the products on retailers' smartphone App help customers while they are shopping in their physical shop supported (Hufford,2017; Moes & Vliet, 2017) findings of the importance of the availability of products characteristics on smartphone App in helping customers while shopping in-store.</p>	<p>The retailer strongly agreed that the availability of the stationery products' descriptions and characteristics help lots of customers when shopping in-store. The retailer said that the stationery smartphone app helps the customers prior to their shopping in-store and while the customers are shopping in store to surf through the products and compare between their characteristics and prices. The retailer response highlighted that providing the products'</p>
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			<p>description and characteristic on the retail store smartphone app would increase in-store shopping as the customer will review the products before and while shopping in-store.</p>
	<p>Do you think that the maintenance and update process of your stationery smartphone app is easy?</p>	<p>The easiness of maintenance and update and update the retailer smartphone App can be linked with the 6th question from the demographic section, where retailers were asked about their smartphone App creator. The percentage of the App created by the retailers themselves was 49 percent, this percentage almost equal the 46 percent, which represent the total respondents of both strongly agreed and agreed respondents that signposted that the</p>	<p>The retailer was strongly agreed that maintenance and update process to the stationery smartphone app was considered very easy according to the retailer, as the app was created by the retailer. The retailer response showed that retail store smartphone app maintenance and update process is easy and specially if the</p>

		<p>process of maintenance and update of smartphone App is easy. While the neutral respondents of 54 percent were almost equal the total percentage of 51 percent, which represents the App created by others. Logically, the App created by the retailers themselves would be easy maintenance and update by the retailers.</p>	<p>app was established by the retailer.</p>
	<p>Do you think that your stationery smartphone app maintenance and update are costly?</p>	<p>According to Moore (2018), the high percentage of respondents that agreed that the maintenance and update is costly may refer to the cost associated with hiring someone to do the maintenance and update, the researchers may either lack knowledge or time limitation. This literature matched with the results reached while investigating the</p>	<p>The retailer declared that the smartphone app maintenance and update were not costly, and the only cost needed while update was the cost of additional space needed to add more products online. The retailer response pointed out that retail store smartphone</p>

		<p>respondent’s opinion about the cost of maintenance and update smartphone App.</p>	<p>app maintenance and update are not costly and specially if the app is established by the retailer.</p>
	<p>Do you believe that it is important to be aware of how to update your stationery smartphone app to do it yourself?</p>	<p>The results reflected the high degree of retailers’ awareness of the importance of smartphone App update role and if they can do it through, it will help in tracking customers rapidly demand from one side and to control cost on other side.</p>	<p>The retailer was strongly agreed that it is so important to be aware of how to update the stationery smartphone app, so the retailer can do it himself. This step would save money and time to the retailer. As hiring a specialist person to do this process would increase the retailers’ expenses, moreover, it gives the retailer the freedom to add or modify the smartphone app any time without waiting for</p>

			<p>someone else. The retailer response indicated that being aware of how to update a retail store smartphone app is very important in saving retailer time and money.</p>
	<p>Are you looking forward to switching your business entirely to online-only retail store?</p>	<p>The total percentage of acceptance, about 63 percent of respondents, remarked the benefits that may carry to the business such as personalization, high competition and cost-cutting. However, the remaining percentage of respondents that rejected the idea of switching to an online-only store may refer to two issued. The first issue is that although technology made people life easy, still many customers like to touch and feel the product before purchasing them. This</p>	<p>The retailer was so excited in switching to online-only retailer as this step would reduce the expenses and increased the time the retailer can spend with family. Fortunately, while the researcher was writing the dissertation, the retailer decided to shift totally to online-only retailer by November 01,</p>

		<p>idea is highly matched with Doherty & Ellis-Chadwick (2010). The second issue behind rejection may refer to the early stages of the technology revolution phase that the world goes through and this supported Amit & Zott (2012) study.</p>	<p>2018 as the retailer found this decision is a great opportunity to decrease the operating cost. The retailer response showed that switching to online-only retailer is a desire of many retailers that took the step and experienced a retail store smartphone app. Those retailers enjoyed the expenses reduction and more time with their families.</p>
<p>The Hypotheses Related Questions</p>	<p>How far is utilizing a smartphone app enhance the sales level of your stationery? If the smartphone app increased your stationery sales level, how much was the increase?</p>	<p>The first hypothesis studied the relationship between sales level and utilizing the smartphone app. One sample t-test analysis was conducted, and the results showed a significant relationship between sales level and</p>	<p>The retailer replied that the utilization of the smartphone app increased the store sales as the increase was about 40 percent. The retailer expects that this</p>

		<p>utilizing the smartphone app. As the results gave a Mean (3.96) above the hypothetical Mean (3.0) and p-value less than 0.05. The first hypothesis results showed that the sales level increased while utilizing the retail store smartphone app. This increase may vary from one retailer to another depending on the type of the business and the market demand.</p> <p>The results supported Duch-Brown et al. (2017) study as it indicated that the smartphone app increased the sales level as customers find the products affordable and easy to approach. Orendorff (2017) came to reinforce Duch-Brown et al. (2017) findings, that e-commerce helps to increase sales level.</p>	<p>percentage will be increase in future time as the customers use the app and recommend others to use it as well.</p>
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		<p>Taking the retail stores to the customers' houses is considered a great aid that motivate the customers to buy more regardless delimitation of time and distance. A combination of 24/7 retail store smartphone app encourages the customers to buy more, moreover, overcoming the distance problem along with the customer's desire will contribute to increasing the sales level.</p>	
	<p>Communicating with online customers quickly is so different than solving those customers problems through the smartphone app. How far is that true based on your personal experience with smartphone app?</p>	<p>The second hypothesis studied the relationship between communication with customers and utilizing a retail shop smartphone app under two levels: The first level is communicating with the online customer quickly, and the second level is the ability to solve the online customers' problems. The one-</p>	<p>The retailer commentated that the statement is wrong. The retailer said that communicating with online customers quickly is so related to solving those customers problems through the smartphone app. It is highly related to the type</p>

		<p>way ANOVA showed that there is a significant difference between the level of the variables, so a Post hoc test was a must. The results showed that the null hypothesis cannot be rejected. The second hypothesis outcome came to support the fifth question’s analysis and the findings of Elmorshidy et al. (2015) study as activating effective communication channels between retailers and customers play a major help while dealing with customers’ online problems and may solve all the costumers’ online problems. High level of communication such as LSC and Hotlines would be easy and fast ways to solve any customer’s online problems.</p>	<p>of communicating channels that the retailer would choose to communicate with customers and solve their problems. The retailer cited that through the stationery smartphone app two channels of communication were activated with online customers; first: Through email. Second: Through the hotline and it is the most effective way of communication. Most of the customers' issues were solved through this channel. In addition, the retailer in process to establish a live chat as a third</p>
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			<p>communication channel with the online customer through their stationery smartphone app.</p>
	<p>What are the benefits behind providing products' characteristics on your stationery smartphone app?</p>	<p>The third hypothesis studied the relationship between providing products' characteristics on the smartphone app and utilizing the retail store smartphone app through one sample t-test analysis. The results indicated that the Mean (4.55) is above the hypothetical Mean (3.0) with a p-value less than 0.05. The third hypothesis outcome supported Hufford (2017) findings that the products' characteristics are very important to be provided online. Providing product characteristics on the retail store smartphone app saves customers</p>	<p>The retailer responded that the benefits behind the availability of the product's characteristics online are:</p> <ul style="list-style-type: none"> • Avoiding customers' enquiry calls about the products' characteristics; • Give the customers the overall view about the product and make them so convenient; • Give the customers the chance to compare between the products to

		<p>time and efforts that may consume while driving to the physical store. This feature gives the customers the ability to compare product characteristics from different online stores regardless the time or the place factors.</p> <p>On other hands, the previous studies (Gallino & Moreno, 2012; Moes & Vliet, 2017) showed that there is a positive relationship between providing products' characteristics on retail store smartphone app and in-store sales. Accordingly, a correlation test conducted to test the strength of the relationship between providing products' characteristics on retail store smartphone app and in-store sales and the result showed a very strong</p>	<p>choose the best for themselves;</p> <ul style="list-style-type: none"> • Attract more customers to use the app and purchase online; • Play marketing role, as new products and services are uploaded to the app, the customer will receive notification alert about the new and up to date product, services, offers and discount options; • Facilitate the customers' in-store purchase. The retailer is planning to add a 3D display option for most of the products- as the retailer is currently providing the
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		<p>relationship (0.71). Through providing the products' characteristics on the retail smartphone app, the in-store shopping effectively processed. As customers preferred to scan the retail store products online through the retailer smartphone app before visiting the retailer's physical store (in-store), moreover, the customers may surf among the smartphone app while they are shopping in-store to compare the prizes and other features (Lobaugh, 2012).</p>	<p>product's picture and written characteristics only- to give the customers the feeling of the in-store shopping and attract them to the smartphone app.</p>
	<p>Is there a relationship between providing products' characteristics on your stationery smartphone app and the in-store sales level within your stationery?</p>	<p>The analytical results of this hypothesis meet the third hypothesis objective. Providing the product's characteristics on the retail store smartphone app increases both online sales and in-store sales as well. Hence, the Bahraini</p>	<p>The retailer said that providing products' characteristics on the stationery smartphone app boosted the in-store sales to 70 percent. As the customers found their needed</p>

		<p>retailers are recommended to utilize a smartphone app and provide the product’s characteristics on the smartphone app to increase sales and to reduce the time consumed on answering the customers’ inquiries about the products.</p>	<p>products while surfing through the smartphone app in a comfort of their homes. This feature gives the customers to spend more time in shopping and lets them view the details of the products. Based on this, the customers will have a long list of chosen products to purchase them in-store. Likewise, this feature also shortens the time that the customer spent in-store. It saved the customers time and reduced the store crowd.</p>
	<p>Do you prefer to switch to online-only stationery in future? If yes, why and when?</p>	<p>The fourth hypothesis studied the relationship between the decision of switching to an online-only retailer and utilizing the retail store</p>	<p>The retailer will switch to online-only stationery as soon as possible. As the retailer enjoyed some of</p>

		<p>smartphone app using one sample t-test analysis. The results show a significant relationship between the decision of switching to an online-only retailer and utilizing the retail store smartphone app as analysis Mean (3.63) was above the hypothetical Mean (3.0) and a p-value less than 0.05.</p> <p>The fourth hypothesis results were unexpected, despite the respondents admitted that the cost of maintenance and update was very high still the retailers have a willingness to go online-only retail stores. This designated that the retailers are highly motivated to step forward in technology world.</p>	<p>the benefits for the online-store after launching the stationery smartphone app.</p> <p>The retailer expressed the reasons through these points:</p> <ul style="list-style-type: none"> • The retailer can run his business while joining family their special occasions at any time; • The retailer is free to travel for several days and still the business is running smoothly; • The retailer saves some variable expenses, for example, utilities expenses. <p>The retailer commentated that for future</p>
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			<p>time the cost reduction will be more. As the retailer will save more through these points:</p> <ul style="list-style-type: none"> • The retailer will get rid of the rent expense as the shop will not be needed and goods could be kept in a small warehouse or even at home; • The retailer will eliminate the expenses related to staff salary, utilities, transportation expense and even food expenses as the retailer would have some meals while working in the shop; • The retailer will save time -
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			<p>opportunity cost- as this extra time would be useful to perform another activity.</p> <p>The retailer raised a very important point in related to the decision to switch online-only store. The retailer advised the other retailers to adopt a strong communicating channel with customers to manage any future problems.</p>
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Table 36 Comparison between Research Findings and Case Study Findings

5.5 Summary and Implications

In summary, the case study findings matched the research findings in related to the ability of the retail store smartphone app in increase the business revenues and the sales level, moreover, it has the ability to decrease the expenses such as rent expense and utilities expense.

Additionally, the case study findings agreed the research findings that the retailers through the retail store smartphone app can quickly communicate with their online customers and they can solve their online problems quickly and easily as well.

Besides, the case study findings and the research findings were aligned that the retailers must take the customers' opinion in their consideration and try to display the smartphone app on easy to understand and use manner.

Furthermore, the case study findings and the research findings agreed that providing the products' description and characteristics on the retail store smartphone app would save the customers' and the retailers' time and efforts plus it will support the in-store purchasing process.

In addition, the case study findings and the research findings agreed on that the retail store smartphone app maintenance and update process is easy, not costly and can be done by the retailers themselves to save money and time. This step will lead the businesses to shift to entirely online-only retailers to enjoy the expenses reduction and more time to spend with their families.

The case study findings met the findings of the research in term of the impact of the retail store smartphone app on increasing the sales level, the importance of providing the products' characteristics online to save customers time and effort as it accordingly increases the in-store sales. Additionally, the case study findings and the research findings agreed that switching to online-only store is a desire of any retailer that lived the experience of the retail store smartphone app and planning to make major cost reduction combined with a piece of freedom. However, the case study findings objected the research findings, as the retailer believes that the type of the communication channels have a strong ability to draw the frame of the relations between communicating online quickly with customers and solving their online problems.

CHAPTER SIX

SUMMARY AND IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

6.1 Introduction

This chapter summarizes the research starting with a review of research objectives, followed by the results and findings implications. The chapter concludes with research action results and recommendations for further future research.

6.2 Summary

Based on the research objectives stated in chapter one, research studied the effect of smartphone app on business transactions flow of retail business in Bahrain using qualitative method to interpret the data gathered from questionnaires and interview with retail store smartphone app owner.

The primary objective of this research was to ensure efficiency of utilizing a smartphone app for the retailers in Bahrain. According to the results of the data analysis, different business transactions such as sales level, revenues, expenses, payments, communicating with customers, solving customers problems, project characteristics, maintenance and update are all influenced positively while utilizing the retail store smartphone app.

Furthermore, the secondary objectives were converted to hypotheses after formulated through Technology Acceptance Model (TAM) theory. Then, those hypotheses were tested by different statistical tests as follows:

- The relationship between the increase in sales level and utilizing a retail store smartphone app was tested by one sample t-test and the results reflected a positive relationship between the increase of sales and utilizing a retail store smartphone app as it showed a Mean of 3.96 more than the hypothetical Mean of 3.00 and p -value less than 0.05.
- The difference between communicating quickly with customers online and the ability to solve customers' online problems while utilizing retail store Smartphone app was tested by one way ANOVA test and results stated that there is no difference between communicating quickly with customers and solving the customers online problems as the test showed Means (3.8 and 3.45 for communicating quickly with online customers and solving online customers problems respectively) above the hypothetical Mean of 3.00 and p -value less than 0.05. Moreover, a Post hoc test conducted, and the results showed a q stat (2.730289) less than q crit (2.800). So, the null hypothesis cannot be rejected.

- The importance of providing the product characteristics on a smartphone app was evaluated by one-way sample t-test and the results revealed a positive impact of product characteristics on smartphone app on the business as the test showed Mean of 4.55 more than the hypothetical Mean of 3.00 and a P-value less than 0.05.
- The decision of switching to online-only retailer through utilizing a retail store smartphone app was evaluated by one-way sample t-test to reflect a positive relationship between utilizing a smartphone app and the decision of a switching to online-only retailer as the test showed a Mean of 3.63 which it was more than the hypothetical Mean of 3.00 and a P-value less than 0.05.

6.2 Limitations of the Study

The first limitation of this study is that the retailers were so defensive, as they hardly filled up the questionnaire and specially the questions related to the amount of their sales, revenues and expenses.

The second limitation is that the smartphone shopping app is considered as a new method to display and sell products to Bahrain market and the number of the retailers using this option is very limited.

The third limitation of this study was during case study phase, as it was so hard to find a retailer with retail shop smartphone app that agrees to share his / her monetary situation with the researcher. All the retailers, especially in Bahrain culture, believe that business monetary terms are top secret and non-shareable object.

6.3 Implications of the Study

After reviewing the findings of this research:

6.3.1 Bahraini Retailers Should

- Take a forward step to utilize a smartphone app for their retail stores as they will benefit from the increase in sales level and revenues, as well as, the reduction in retail store expense.
- Utilize effective communication channels such as hotlines and LSC to quickly reach online customers and easily solve their problems. Hotlines and LSC showed their power in quickly communication with customers.
- Open the door for more new payment options on their smartphone app such as b-wallet, Viva cash and benefitpay. Specially, these options are easy to reach by customers and they are totally free for both the customer and the retailer.
- Take in consideration the retail store smartphone app interface, as it should be user-friendly. If the retail store smartphone app is easy to use and understand, it will attract the customers and encourage them to repeat the shopping process again.

- Pay more attention to online product's characteristics and description to attract more customers and gain their confidence such idea could be by adding 3D pictures and video shooting for the target product to help customers imagine it and taste it with their sense.
- Be aware of how to update the retail store smartphone app by the retailer himself, as this feature will help in many areas. This feature will reduce the update cost as the retailer will do the update without a need to hire a specialist, moreover, the retailer can rapidly track the updates that interest the customers to attract them to the retail store smartphone app.
- Take advantage of online-only retail store option and try to cut-down their cost and allocate them among their existing business transactions.
- Search for new attractive retail store smartphone app layouts such virtual reality shop.

6.3.2 Government Presenters Should

- Regulate the prices of building up retail shop smartphone apps, so the retailers can afford it and take advantage of prices stability to manage their business and map up their future plans.
- Establish rules to be followed when retailers desire to acquire a smartphone app. These rules guarantee that the final outcome of the smartphone app will be successful for the retailer and will meet the customer satisfaction as well. So, the retailer would be more comfortable in taking a step forward in acquiring a smartphone app.
- Advertise for acquiring smartphone app and encourage retailers to go through the experience. This step will help lots of Bahraini to engage in e-commerce and will help in minimizing unemployment in Bahrain as the cost of running and managing the e-store through the smartphone app will be affordable for the Bahraini citizen.

6.4 Conclusion

The research results proved the efficiency of the smartphone app on business transactions flow of retail business in Bahrain. Based on the research findings that were strongly agreed the case study findings and totally supported the literature review of the research, the retail store smartphone app effect on business transactions as follows:

- Increase the revenues: As 80 percent of the respondents were strongly agreed and this result supported Ogden (2015) study that exhibited a 42 percent growth in retailer's revenues after activating the smartphone app.
- Increase the sales level: Where a total of 80 percent of the respondents were strongly agreed and agreed. Lobaugh (2012) study aligned these results as Lobaugh stated that smartphone app influenced the

purchasing habit of the customer, which accordingly influenced the sales of the retail business and increased it.

- Decrease the expenses: The retailers could reduce a small percentage of the expenses because the existing of in-store still cost the retailers a lot, however, the result may plot differently if the retailers switching entirely to online-only store.
- Communicating with the online customers quickly: Elmorshidy et al. (2015) study agreed 80 percent of the respondents in related to the communication with the customer quickly as long as the way of the communication is an effective way such as hotline.
- The ability to solve online customers' problems: As 63 percent of respondents that represent strongly agreed and agreed supported Elmorshidy et al. (2015) outcome as the online customers' problems can be easily solved if the retailer choose the effective channels of communication.
- Several payment methods: A great technique to attract more customers is to provide a variety of payment methods. A total of 83 percent of the respondent supported Hendrickson (2017) study that pointed that customers preferred the retailers with several payment options to choose among them.
- Retail store smartphone app development upon customers' opinion: 52 percent of the respondents were strongly agreed and supported Eroglu et al. (2003) results as customers are attracted to the retailers that interactive positively with their opinions. Furthermore, the results supported kim et al. (2013) when they stated that implementing customers' feedback helps the retailer to sustained for a longer period in the market.
- Customers and app interface: The retail store smartphone app interface should be easy to use and understand as agreed by 72 percent of the respondents and supported Sumita & Yoshii (2010) results.
- Providing products' characteristics on the retail store smartphone app and in-store sales: 71 percent of the respondents that were strongly agreed that providing products' characteristics online and 55 percent of the respondents that were strongly agreed that this feature will increase the in-store sales. These results supported Hufford (2017) findings that pointed to the time and efforts saving if the products' characteristics are provided.
- Retail store smartphone app maintenance and update: The maintenance and update are so easy and cheap if it conducted by the retailer himself. Otherwise, it is costly and complicated as the retailer must hire a specialist to accomplish this job. This outcome supported Moore (2018) study.
- Running online-only retail store: A 63 percent that represented the strongly agreed and agreed respondents that matched Doherty & Ellis-Chadwick (2010) stated that being online-only retailer can gain lots of benefits such as personalization, high competition and major cost-cutting.

6.5 Recommendations

Based on the research findings, the following recommendations would be so helpful for seeking better results:

- A study of customer satisfaction regarding the same issues mentioned in the questionnaire distributed among the retailers. The customers will ask about:
 - The operating system they use that this may help the retailer during the build-up phase to choose among them or just select them all.
 - The payment options that they prefer to make sure that they are available on broad within the smartphone app. The customers may be asked to suggest new payment options that may help the retailers to gain these customers attention.
 - The best communication channels they thrust and prefer to solve the problems that may face them when they are shopping through the retail store smartphone app. So, the retailers keep in mind the best choice through many communication channels.
 - The importance of the product's characteristics and description on retail store smartphone app and its implication on their choices. Customers will be asked to provide new ways to present products online.
- Accomplish more research to fill up the literature review gap in related to the cost of the retail store smartphone app registration in Bahrain's Ministry of Information and their policy and regulations towards the retail store smartphone app.
- To fill the time gap between the customer and the online retailers through creative and clever methods to gain the customers' satisfaction and trust. Examples of creative methods: Provide a live video call option to show the customer the product's characteristics and details in real time and let the customer make the best shopping experience. Another create message could be true take advantage of virtual reality and let the customer go through an imaginary journey to select products from an imaginary in-store.

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APPENDIX 1

Office use:	Reference Number	Date Received	L1 <input type="checkbox"/>	L2 <input type="checkbox"/>	L3 <input type="checkbox"/>
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**Human Research Ethics Committee
Ethics Approval for Research Involving Humans
INITIAL APPLICATION - EXPEDITED REVIEW**

PART A – ELIGIBILITY FOR EXPEDITED ETHICAL REVIEW

Does your research involve the following?

		<i>(insert X in box)</i>		
A1	A focus on illegal activity or highly likely to discover illegal activity	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A2	Access to personally identifiable information/records without specific consent from the individuals to whom the information/records relate	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A3	A focus on Roma or minority peoples, groups, communities or issues	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A4	A focus on women who are pregnant, and/or research involving the human foetus	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A5	An innovation or intervention which is not standard practice in the study population	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A6	A focus on people with a cognitive impairment, an intellectual disability, or a mental illness	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A7	People highly dependent on medical care who may be unable to give consent, eg unconscious or too ill	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A8	Access to human tissue samples without specific consent from the individuals from whom the tissue was collected (this includes cell lines other than those acquired commercially)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A9	Human genetic studies	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A10	Human stem cells	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A11	Use of drugs; alternative/complementary therapies or care; or surgical or other therapeutic or diagnostic procedures and devices	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>
A12	Exposing participants to ionising radiation	Yes <input type="checkbox"/>	No <input type="checkbox"/>	X <input type="checkbox"/>

If you have answered YES to any of the above do not continue completing this form. Your research is not eligible for expedited review and must be submitted for L3 review. Please go direct to the NEAF application form.

If you have answered NO to all of A1 – A12, proceed to PART B. Please note, depending on your answers to the following sections you may still be directed to L3 review.

PART B1 – PROJECT

Project Title	The effect of smartphone apps. On business transactions flow of retail business- A scene from Bahrain
Project Summary	The research expected to study the efficiency of utilizing smartphone apps for the retailers in Bahrain

PART B2 – CHIEF INVESTIGATOR or PROJECT SUPERVISOR if student research

Name (Title / given name / family name)	CHIEMELA F. ANYANWU, PHD
Qualifications	PHD
SBS ID or Organisation if external School & Faculty / Division	Al Tareeqah Management Studies FZE SBS
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PART C – IDENTIFICATION OF ETHICAL ISSUES

C1	Will participants be identifiable, either directly or indirectly, in reporting of the research?	Yes Go to D1	No Go to C2	<input checked="" type="checkbox"/>
C2	Are adult participants who will not be competent to give consent expected to be recruited? N\$2.2.12	Yes Go to D2	No Go to C3	<input checked="" type="checkbox"/>
C3	Will the research involve children, or young people < 18 years who are not higher education students? N\$4.2	Yes Go to D3	No Go to C4	<input checked="" type="checkbox"/>
C4	Are the potential participants in an unequal relationship? N\$4.3	Yes Go to D4	No Go to C5	<input checked="" type="checkbox"/>
C5	Will existing data sets, databanks or human tissue banks be accessed for the research? N\$3.2	Yes Go to D5	No Go to C6	<input checked="" type="checkbox"/>
C6	Does the research involve physically invasive procedures? N\$2.1	Yes Go to D13 then C7	No Go to C7	<input checked="" type="checkbox"/>
C7	Does the research involve collection, extraction or use of human tissue (including cell lines), blood or other body fluids? N\$3.4	Yes Go to D13 then C8	No Go to C8	<input checked="" type="checkbox"/>
C8	Is there a risk of physical injury to participants? N\$2.1	Yes Go to D8	No Go to C9	<input checked="" type="checkbox"/>
C9	Might the research involve pain or discomfort for participants? N\$2.1	Yes Go to D9	No Go to C10	<input checked="" type="checkbox"/>

C10	Might the research cause participants psychological or emotional stress?	Yes Go to D10	No Go to C11	X
C11	Could the research expose participants to civil, criminal or other proceedings	Yes Go to D11	No Go to C12	X
C12	Does the research involve the collection of sensitive personal information?	Yes Go to D12	No Go to C13	X
C13	Could the research expose participants to economic loss or damage to their reputation?	Yes Go to D13	No Go to C14	X
C14	Could the research have a negative impact on personal relationships?	Yes Go to D14	No Go to C15	X
C15	Will potential participants be offered inducements that could be considered coercive?	Yes Go to D15 then C16	No Go to C16	X
C16	Does the research involve covert observation?	Yes Go to D16	No Go to C17	X
C17	Does the research involve deception or limited disclosure to participants?	Yes Go to D17	No Go to C18	X
C18	Will the research be conducted in an overseas setting?	Yes Go to D18	No Go to C19	X

C19 If you answered **No** to all C1-18, the project appears to qualify for Expedited Review L1. Proceed to **Part E**.

If you answered **Yes** to one or more C1-18 but were not advised that an L3 application was required by the corresponding questions in Part D, then your project appears to qualify for Expedited Review L2. Proceed to **Part E**.

PART D – ELIGIBILITY FOR EXPEDITED REVIEW L2

Only complete the questions in this part if instructed to do so on the basis of a response to a question in Part C.

D1	D1a	Is proper warning given to potential participants that they may be identifiable (either directly or indirectly)?	Yes Go to D1b	No Go to D21
	D1b	Will specific consent for use of identifying or potentially identifying information be obtained?	Yes Go to D1c	No Go to D21
	D1c	Are there strategies for participants to confirm their consent?	Yes Go to C2	No Go to D21
D2	D2a	Will consent be sought from a 'person responsible'?	Yes Go to C3	No Go to D19 then C3
D3	D3a	Will parental / carer consent be sought?	Yes Go to D3b	No Go to D19 then D3b
	D3b	Will the consent or assent of the children / young people be sought?	Yes Go to D3c	No Go to D19 then D3c
	D3c	Are children / young people a focus of the research?	Yes Go to D3d	No Go to D3d
	D3d	Is the research contrary to the best interests of the children / young people?	Yes Go to D21	No Go to C4

D4	D4a	Will the recruitment process address the issues with respect to the dependent relationship?	Yes Go to D4b	No Go to D21
	D4b	Is recruitment of people in the dependent relationship essential for the purposes of the research?	Yes Go to D4c	No Go to D19 Then D4c
	D4c	Is it a captive relationship?	Yes Go to D21	No Go to C5
D5	D5a	Is the data/tissue held in identifiable or potentially re-identifiable form?	Yes Go to D5b	No Go to C6
	D5b	Is there existing consent from the individuals that covers this research?	Yes Go to C6	No Go to D21
D8	D8a	Is prior warning given to potential participants?	Yes Go to D8b	No Go to D21
	D8b	Will there be appropriate screening of potential participants to identify those at higher risk?	Yes Go to D8c	No Go to D21
	D8c	Will procedures be conducted by experienced and appropriately licensed/accredited person(s)?	Yes Go to D8d	No Go to D21
	D8d	Will there be compliance with relevant safety procedures?	Yes Go to D19 then C9	No Go to D21
D9	D9a	Is prior warning given to potential participants?	Yes Go to D9b	No Go to D21
	D9b	Will there be appropriate screening of potential participants to identify those at higher risk?	Yes Go to D9c	No Go to D21
	D9c	Is the exposure likely to have a significant impact on participants or be potentially life threatening?	Yes Go to D21	No Go to D19 then C10
D10	D10a	Is prior warning given to potential participants?	Yes Go to D10b	No Go to D21
	D10b	Will there be appropriate screening of potential participants to identify those at higher risk?	Yes Go to D10c	No Go to D21
	D10c	Is the exposure likely to have a significant impact on participants or be potentially life threatening?	Yes Go to D21	No Go to D19 then C11
D11	D11a	Is prior warning given to potential participants?	Yes Go to D11b	No Go to D21
	D11b	Will researchers have a duty of disclosure?	Yes Go to D19 then C12	No Go to C12
D12	D12a	Is prior warning given to potential participants?	Yes Go to D12b	No Go to D21
	D12b	Will the information be identified or re-identifiable?	Yes Go to D19 then C13	No Go to C13
D13	D13a	Is prior warning given to potential participants?	Yes Go to C14	No Go to D19 then C14
D14	D14a	Is prior warning given to potential participants?	Yes Go to C15	No Go to D19 then C15
D16	D16a	Is the observed activity something which generally occurs in public?	Yes Go to D16b	No Go to D19 then D16b

D16b	Will 'participants' be identifiable?	Yes Go to D19 then C17	No Go to C17
------	--------------------------------------	--	---------------------------------

D17	D17a	Is the deception or limited disclosure likely to harm participants or compound the risks associated with the research?	Yes Go to D21	No Go to D17b
	D17b	Have alternatives involving full disclosure been considered?	Yes Go to D17c	No Go to D21
	D17c	Will participants be given full and prompt disclosure and debriefing after their participation?	Yes Go to D17d	No Go to D21
	D17d	Will participants have the option of withdrawing their data once the deception is disclosed?	Yes Go to D17e	No Go to D21
	D17e	Following debriefing are participants likely to regard the research as justified and acceptable conduct?	Yes Go to D19 then C18	No Go to D21

D18	D18a	Are there ethics or other approval processes in the overseas country?	Yes Go to D18b	No Go to D18b
	D18b	Will co-researchers be recruited in the overseas country?	Yes Go to D18c	No Go to D18c
	D18c	Are the proposed recruitment and consent methods, and remuneration (where used) acceptable to the local culture and its beliefs and practices?	Yes Go to D18d	No Go to D21
	D18d	Are there social, educational or <u>others</u> factors that may compromise free and informed consent?	Yes Go to D19 then D18e	No Go to D18e
	D18e	Will participants be given a local contact for questions or complaints?	Yes Go to D20	No Go to D19 (then D20)

D19	Can the risks be easily negated, minimised or managed?	Yes Continue	No Go to D21
-----	--	-----------------	---------------------------------

Details **Question [insert number]:**

Provide details for each Part C or Part D question that directed you to D19. Then return to that question and continue. (max 500 words)

Question [insert number]:

(max 500 words)

Click on the question to return to: [C6](#), [C7](#), [C15](#), [D2](#), [D3](#), [D6](#), [D9](#), [D10](#), [D11](#), [D13](#), [D14](#), [D16](#), [D17](#), [D18](#)

D20 If you have completed questions in Part D but were not advised that an L3 application was required then your project appears to qualify for Expedited Review L2. Proceed to **Part E**.

D21 Your project requires full L3 ethical review. You should stop completing this form and go to **Swiss Ethics**

PART E – PROJECT DETAILS – Answer all questions

E1	Brief 'plain English' description of project NS1	
	<p>Details (Max 1,000 words)</p>	<p><i>Purpose:</i> In the era of the information technology, where online competition has contributed to the success of many businesses. The Bahraini retailers should be initiated and go ahead to roll in this field to expand their businesses and raise the ceiling of profits. This dissertation investigated the effects of utilising retail store smartphone app on the sales level, revenues, expenses, online communication with customers, solving customers' online problems, and increasing the in-store sales.</p> <p><i>Design/methodology/approach:</i> The researcher used quantitative research method to study the objectives, where questionnaire distributed among several Bahraini retailers that own smartphone app for their retail stores.</p> <p><i>Findings:</i> The findings of utilising the retail store smartphone app were as follow: First, there is a positive relationship between sales level, revenues and expenses. Second, there is a positive relationship between online communication through smartphone app with customers and solving their online problem. Third, shopping in-store is positively affected by the availability of the product's characteristics on the retail store smartphone app. Fourth, the decision of switching to online-only Store is negatively related to smartphone app's maintenance cost.</p> <p><i>Implications:</i> The Bahraini retailers implicate the research while applying smartphone app through, for example, acquiring new payment options, add more creative product characteristics such as 3D pictures and by switching to online-only stores and allocate the expenses among the business transactions.</p> <p><i>Conclusion:</i> As a result of utilising the retail store smartphone at the sales level increase together with everyone use and expenses, and to control the expenses increasing switching to an online-only retailer is the best idea. Another benefit of utilising the retail store smartphone app is increasing in-store sale, where the smartphone app is considered as a great environment to surf among products' characteristics and communication channel with customers to answer the urgent questions or to solve their online problems.</p>

E2	Experience and skills of researchers NS1.1	
	<p>Details (Max 100 words per researcher)</p>	<p>I can build a simple smartphone app. And I have a good Microsoft Excel skill </p>

E3	Participants
-----------	---------------------

E3.1	The participants being sought for this research are: <u>(X all that apply)</u>																																								
	<table border="1" style="width: 100%;"> <tr><td>Adults ≥ 18 years of age</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Children or young people < 18 years</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>The general public</td><td style="text-align: center;"><input checked="" type="checkbox"/></td></tr> <tr><td>Students or staff of SBS</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Students or staff of other universities / colleges</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>School children, ie, recruited through schools</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Volunteer registers or databases</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Members of particular community groups / organisations</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Employees of particular organisations</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Clients / patients of health service providers</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Hospital in-patients</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Clients of organisations / community services</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Prisoners or those held in detention</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>People who have a sight or hearing impairment</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>People with a specific health condition</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>People in a dependent or unequal relationship with the researchers</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Records/information about people without contact with those people</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Human tissue collections without contact with the donors</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>Other (please specify in no more than 50 words)</td><td style="text-align: center;"><input checked="" type="checkbox"/></td></tr> <tr><td>Bahraini retailers utilizing retail store smartphone apps.</td><td style="text-align: center;"><input type="checkbox"/></td></tr> </table>	Adults ≥ 18 years of age	<input type="checkbox"/>	Children or young people < 18 years	<input type="checkbox"/>	The general public	<input checked="" type="checkbox"/>	Students or staff of SBS	<input type="checkbox"/>	Students or staff of other universities / colleges	<input type="checkbox"/>	School children, ie, recruited through schools	<input type="checkbox"/>	Volunteer registers or databases	<input type="checkbox"/>	Members of particular community groups / organisations	<input type="checkbox"/>	Employees of particular organisations	<input type="checkbox"/>	Clients / patients of health service providers	<input type="checkbox"/>	Hospital in-patients	<input type="checkbox"/>	Clients of organisations / community services	<input type="checkbox"/>	Prisoners or those held in detention	<input type="checkbox"/>	People who have a sight or hearing impairment	<input type="checkbox"/>	People with a specific health condition	<input type="checkbox"/>	People in a dependent or unequal relationship with the researchers	<input type="checkbox"/>	Records/information about people without contact with those people	<input type="checkbox"/>	Human tissue collections without contact with the donors	<input type="checkbox"/>	Other (please specify in no more than 50 words)	<input checked="" type="checkbox"/>	Bahraini retailers utilizing retail store smartphone apps.	<input type="checkbox"/>
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E3.2	Identify the research sites, ie, the communities / schools / hospitals / organisations etc from which participants will be sourced.
	Research site(s)
	Bahraini traders

E3.3	How, and by whom, will potential participants be selected, and (a) initially contacted, and (b) recruited? NS1.4; NS3.1		
	<table border="1" style="width: 100%;"> <tr> <td style="width: 20%;">Details (Max 300 words)</td> <td>Bahraini retailers utilizing retail store smartphone apps. A questionnaire built up using google form will be send to them as a link threw social media</td> </tr> </table>	Details (Max 300 words)	Bahraini retailers utilizing retail store smartphone apps. A questionnaire built up using google form will be send to them as a link threw social media
Details (Max 300 words)	Bahraini retailers utilizing retail store smartphone apps. A questionnaire built up using google form will be send to them as a link threw social media		

E3.4	How many participants will be recruited and what is the rationale for that number?				
	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Total number covered by this application:</td> <td>100 participants</td> </tr> <tr> <td>Rationale: (Max 300 words)</td> <td>The number of Bahraini retailers that utilizing the smartphone apps, is very small.</td> </tr> </table>	Total number covered by this application:	100 participants	Rationale: (Max 300 words)	The number of Bahraini retailers that utilizing the smartphone apps, is very small.
Total number covered by this application:	100 participants				
Rationale: (Max 300 words)	The number of Bahraini retailers that utilizing the smartphone apps, is very small.				

E3.5	List the inclusion and exclusion criteria NS1.4		
	<table border="1" style="width: 100%;"> <tr> <td style="width: 20%;">Details</td> <td>Inclusion criteria: 1. males and females 2. Bahraini retailers that utilize retail store smartphone apps.</td> </tr> </table>	Details	Inclusion criteria: 1. males and females 2. Bahraini retailers that utilize retail store smartphone apps.
Details	Inclusion criteria: 1. males and females 2. Bahraini retailers that utilize retail store smartphone apps.		

E3.6	What is required of participants?				
	Details (Max 300 words)	They are required to fill the questionnaire and submit it.			
E3.7	What, if any, benefits might there be from the research for participants or others? NS1.6				
	Details (Max 300 words)	There are no benefits from researcher as the outcome is anonymity.			
E3.8	Will participants receive any reimbursements / payments / rewards? for participating in the research.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
	Details (Max 300 words)				
E3.9	Will participants be proficient in the English language? <i>if No, translations are to be attached to the application.</i>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
	Details (Max 300 words)				

E4	Research methods / techniques
-----------	--------------------------------------

E4.1	The research methods / techniques to be used in this research are: <i>(X all that apply)</i>				
	Computer based tests				
	Data linkage		<input checked="" type="checkbox"/>		
	Focus groups				
	Interview – face-to-face		<input checked="" type="checkbox"/>		
	Interview – telephone				
	Internet / web-based research				
	Observation				
	Observation - covert				
	Photographs of people				
	Physical activities / tests/ exercises				
	Placebo				
	Psychological tests				
	Questionnaire / survey / diary - anonymous				
	Questionnaire / survey / diary - identifying				
	Record / document analysis				
	Taping – audio / video				
	Case study				
	Case-control study				
	Epidemiological research				
	Intervention study				
	Qualitative research				
	Randomised controlled trial				
	Other <i>(please specify in no more than 300 words)</i>		<input checked="" type="checkbox"/>		
	Auto-form				

E4.2	If any tests or procedures to be used are on the test, please identify by the registration number and title. Otherwise, provide details and attach a copy of questionnaires / surveys / interview scripts / tests / instruments or procedures that are not on the Register?
Details (Max 300 words)	Questionnaire will be sent to respondents

E5	Analysis
Details (Max 300 words)	The questionnaire proceeds by analytical tests to come up with logic conclusion

E6	Informed consent N82.2
Consent method: <u> </u> (X all that apply)	
Written informed consent	<input type="checkbox"/>
Recorded informed consent	<input type="checkbox"/>
Parent / Guardian / Carer consent	<input type="checkbox"/>
Child's assent with parent / guardian consent	<input type="checkbox"/>
Young person 16-17 years consent	<input type="checkbox"/>
Child < 16 years consent	<input type="checkbox"/>
Implied consent	<input checked="" type="checkbox"/>
Retrospective consent	<input type="checkbox"/>
Waiver of informed consent sought	<input type="checkbox"/>
Waiver of parent / guardian consent sought	<input type="checkbox"/>
Existing consent (provide details below)	<input type="checkbox"/>
Other (please specify below)	<input type="checkbox"/>
Details of process (Max 300 words)	

E7	Communication of results/reporting N81.1; N81.3; N81.4; N82.2.6; N83.1.4; N83.1.11
Details (Max 300 words)	Will be received by google form

E8	Storage, access and disposal of data
Details (Max 300 words)	The researcher will only have the authority to access to the data. The sent data from the participants will be anonymity.

E9	Duration of data collection / human research		
From:	01/05/2017	To:	31/05/2017

E10	Has the research been approved, or is under consideration, by another Human Research Ethics Committee (HREC)? <i>If Yes, and approved, attach a copy of the approval(s).</i>	Yes Give details	<input type="checkbox"/>	No Go to E11	<input checked="" type="checkbox"/>
	Name of HREC	Reference No.	Decision	What, if any, amendments were required?	

E11	Is the research the subject of a contract / agreement, or an application for funding to an internal or external grants body, sponsor, etc? <i>If Yes, attach a copy of the contract / agreement / application(s).</i>	Yes Give details		No Go to E12	X

Organisation / Funding Body		
Project title on contract / agreement / funding application		
First named Investigator		
Administering institution		
Research Office Reference (if applicable)	GO	

Copy table and repeat for each contract / agreement / grant.

E11.1	Does the funding/support constitute a conflict of interest for either the researcher(s) or provider(s) of the support? N85.4	Yes Give details		No Go to E12	
-------	--	---------------------	--	-----------------	--

Details
(Max 300 words)

E12	Safety implications
Does the proposed research involve work on, use of, or exposure to any of the following?	
Cash reimbursements / payments to research participants	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Fieldwork / off-campus activity, eg interviews	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Recombinant DNA	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Genetically modified organisms	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Biologically hazardous micro-organisms	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Chemically hazardous materials	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Human body fluids or tissue	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Radioisotopes / unsealed sources	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Ionising radiation	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Non-ionising radiation	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Any other potential safety hazard for either participants or researchers?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If 'Yes' to any of the above, you may need to submit a Safety Clearance application to the University's Health and Safety Team. Please refer to the Safety in Research and Teaching site for more information.	

PART F1 – CO-INVESTIGATORS other than student researchers

List all co-investigators on the project who are not students conducting the research as a component of their studies. If students of the University are working on the project, eg as research assistants, but not using the research for their studies, they should be listed here.

Name (Title / given name / family name)	
Qualifications	
SBS ID	
Division	
Mailing address	
Contact phone / fax	
Email	

Name (Title / given name / family name)	
Qualifications	
SBS ID or Organization	
Division	
Mailing address	
Contact phone / fax	
Email	

Copy table and repeat for each additional co-investigator.

PART F2 – STUDENT RESEARCHERS

List all students working on the project who are conducting the research as a component of their studies.

Name (Title / given name / family name)	Budoor Hasan Abdulla Kadhem
Qualifications	DBA student
School	Swiss Business School
Mailing address	P.O. Box:65082, Manama, Bahrain
Contact phone / fax	0097339933014
Email	Budoor2@gmail.com
Name of degree program	Doctor of Business Administration (DBA)
	Undergraduate <input type="checkbox"/> Honours <input type="checkbox"/> Postgraduate Coursework <input type="checkbox"/> Postgraduate Research <input checked="" type="checkbox"/>
SBS?	Yes <input checked="" type="checkbox"/> Other (please specify):
SBS ID	4580
Principal supervisor	Dr. CHIEMELA F. ANYANWU

Copy table and repeat for each additional student.

PART G1 – DECLARATION BY APPLICANTS

All of the required signatures in this part must be provided before this application can be processed. (Refer to Special Circumstances in the Appendix – How to submit your application.) I declare that the information provided in this application is truthful and as complete as possible.

- In signing this application, I declare that the research protocol conforms to the *Swiss Ethical Standards*.
- I undertake to conduct the research in accordance with the approved protocol, the *National Statement*, relevant legislation and the policies and procedures of SBS Swiss Business School.
- Where I am the project supervisor for the research described herein which will be conducted by a student of SBS Swiss Business School, I declare that I have provided guidance to the student in the design, methodology and consideration of ethical issues of the proposed research.
- I make this application on the basis that the information it contains is confidential and will be used by SBS Swiss Business School for the purposes of ethical review and monitoring of the research project described herein, and to satisfy reporting requirements to regulatory bodies. The information will not be used for any other purpose without my prior consent.

All investigators named at **B2**, **F1** and **F2** are to sign this declaration.

	Name	Signature	Date
Chief investigator/ project supervisor	Dr. Chiemela F. Anyanwu		20.05.2018
Investigator 2	Budoor Hasan Kadhem		20.05.2018
Investigator 3			
Investigator 4			
Investigator 5			
Investigator 6			

To be completed by the Chief Investigator / Project Supervisor

Level of Review

Having completed this application, I believe that this project qualifies for (X one box):

Expedited Ethical Review Level 1 or Expedited Ethical Review Level 2

Attachments:

I have **attached** the required documents as follows: (please X)

- **Participant Information Statement(s)** N/A
- **Verified translations of Participant Information Statement(s)** N/A
- **Participant Consent Form(s)** N/A
- **All recruitment material, eg advertisements, posters** N/A
- **Surveys / questionnaires** N/A
- **Focus group / Interview schedule(s)** N/A
- **Funding application(s) / Contract / Agreement** N/A
- **Approval(s) from other HRECs** N/A

Comments

You are invited to add comments to supplement your application if you think something has not been covered, or to provide feedback on this form.

PART G2 – PEER REVIEW AND DEAN DECLARATION

STEP 1 – Peer review confirmation

The research proposal contained herein has been peer reviewed by (please tick):

The following competitive research grant body and given a positive review:

In: (year)

Appendix 2

4/24/2018 The effect of Smartphone Applications (APP) on Business Transactions flow of Retail Business: A scene from Bahrain

The effect of Smartphone Applications (APP) on Business Transactions flow of Retail Business: A scene from Bahrain

Hello!

This questionnaire is targeted you as business owner as you believe in the importance of the technology in our life, so you reflect this believe by creating a smartphone App. for your business. As part of my Applied Doctorate thesis, this questionnaire is conducted to study the effect of smartphone App. on business transactions flow of your Retail business in Bahrain. We appreciate your valuable time that you may spend on answering this questionnaire. It should take about 7 minutes of your time. Your response is very important and may inspire other business owners. Your response is voluntary and will be confidential.

If you have any question about your rights as a research subject, you may contact Budoor Kadhem on budoor.kadhem@gmail.com

Thank you

Budoor Kadhem
budoor.kadhem@gmail.com
Applied Doctorate Student in Swiss Business School (SBS)

* Required

SECTION 1: MY APP. CREATION

1. 1. Sex *

Mark only one oval

Female

Male

2. 2. My business Name is (optional)

3. 3. My business is based on the sale of: *

Mark only one oval

Food

Clothes

Electronics

Stationery

4. 4. I work in the Bahrain market under the name of my project since: *

Mark only one oval

less than a year

1 year- 5 years

6- 10 years

more than 10 years

5. I have an online store (application of smart phone / interactive website) for my commercial project since:

Mark only one oval.

- Launching my business
- Less than a year
- 1-5 years
- More than 5 years

6. My business App. is suitable for: *

Mark only one oval.

- IOS
- Android
- Both
- Other: _____

7. My business App. is: *

Mark only one oval.

- Private made by a specialist
- Private made by me
- A subscription on a platform
- Other: _____

8. The cost of build up my App. is: *

Mark only one oval.

- It cost me nothing as I build it by myself
- Less than BD100
- BD101 - BD500
- BD501- BD1000
- Above BD1000

SECTION 2: TRANSACTIONS FLOW AND BUSINESS EXPENSES

9. 1. After activating my business smartphone App., my business revenues have: *

Mark only one oval.

	1	2	3	4	5	
Strongly Agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

SECTION 2: TRANSACTIONS FLOW AND BUSINESS EXPENSES

10. If increased, the approximate increase of my Revenues is:

Mark only one oval.

- Less than 10%
- 10%- 50%
- More than 50%

Skip to question 11.

SECTION 2: TRANSACTIONS FLOW AND BUSINESS EXPENSES

11. 2. After activating my business smartphone App., my business sales level has: *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

SECTION 2: TRANSACTIONS FLOW AND BUSINESS EXPENSES

12. If increased, the approximate increase of my sales level is:

Mark only one oval.

- Less than 10%
- 10%- 50%
- More than 50%

Skip to question 13.

SECTION 2: TRANSACTIONS FLOW AND BUSINESS EXPENSES

13. 3. After activating my business smartphone App., my business expenses ..such as utilities (water and electricity), rent, worker wages.. etc. have decreased: *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

SECTION 2: TRANSACTIONS FLOW AND BUSINESS EXPENSES

14. If decrease, the approximate decrease of my business expenses is:

Mark only one oval.

- Less than 10%
- 10%- 50%
- More than 50%

SECTION 3: PRODUCT PRESENTATION AND CUSTOMER AFFAIRS

15. 4. Through my e-shop I can communicate with my customers more quickly *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

16. 5. I handle the problems of my customers related to purchases through my online shop quickly *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

17. 6. I prefer to provide a variety of ways of payments through my online shop *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

18. 7. I take my clients' opinions seriously and develop my online shop based on their advice *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

19. 8. I care that my e-store interface easy to understand and use *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

20. 9. I am interested in displaying the description and characteristics of my products on my e-shop *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

21. 10. I am sure that having a description and characteristics of my products on my e-shop helps my customers while they are shopping in my physical shop *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

22. 11. Maintenance and update process to my e-shop is easy *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

23. 12. Maintenance and update process to my e-shop is costly *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

24. 13. It is important to be aware of how to update my e-shop to do it myself *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

25. 14. I look forward to transforming my e-commerce business entirely (online-only retailer) *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

26. 15. I advise retailers to acquire e-stores *

Mark only one oval.

1 2 3 4 5

Strongly Agree Strongly disagree

27. Feedback and suggestions (optional)

