User Satisfaction on Mobile Apps: An Analytical Study on Omani Business Environment

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Abstract
Currently numerous mobile apps are available to promote the business activities to the consumers. These mobile apps are developed to reach the customers easily through advanced provisions and technology. This study was conducted to measure the user's satisfaction on those mobile apps in Omani business environment. Irrespective of business activities, mobile apps shall be developed and used in daily business activities. The study revealed that the respondents were highly satisfied with the mobile apps as they provide sufficient timely information about various business activities to the customers. The organizations should motivate the customers to use the mobile apps by removing the business boundaries.

INTRODUCTION

Mobile apps have become integral part of the business activities in day – to – day business processes. The organizations develop mobile apps with respect to their business activities and promote their business by reaching the customers. The technological development have made the business activities to think in different perspectives to promote their business activities to the customers. The business people have made to develop various promotional activities to maintain the customer's relationship. The customer's expectations on the business activities and their involvement plays a vital role in achieving business motives.

The organizations use different mediums to reach the customers. One such latest approach is mobile apps. The mobile companies provide opportunities to download and install various mobile apps. The mobile phones with more options and apps are highly preferred by the customers. As the customers prefer to use the easy technology to complete their tasks or know about business processes, the organizations have made to utilize the technology to provide such necessary apps.

Sultanate of Oman is a developing nation with such business activities and processes. The mobile apps are used widely in various business activities. Though various studies were conducted with respect to mobile apps in business processes and impacts, a very few literature could be found with respect to Omani business environment. This study was conducted to identify the user's satisfaction on using mobile apps in business activities.

LITERATURE REVIEW

Various studies were conducted by Tsang et al (2004), Leppaniemi&Karjaluoto (2005), Drossos et al (2007), Park et al (2008), Mir (2011) with respect to mobile applications and mobile advertisements.

Mort &Drennan (2007) said that the new mobile digital communication technologies increased the opportunities for capitalizing the relationship with customers through enhanced mobile information services. They argued that the customer's involvement in using mobile services depend on personal attributes, innovativeness and self-efficacy.

As Rajan (2009) said, the ultimate objective of business intelligence is to provide quality and timely information which position the company in the market and changes the customer behaviour. Customer's preferences and supply chain operations need to be improved through enhanced communication.

Al-Lonzi and Iss (2011) identified that the trust on the M-Commerce services have significant impacts on the acceptance by the people. Their study also identified that the security and privacy are the significant factors in adaptation of mobile business. Their study recommends that the specialized culture and customized services such as considering religious beliefs and adaptation of Arabic languages will increase the acceptance.

Usman and Mohammed (2012) studied the impact of mobile advertisement and communication. They suggested that the mobile communication and advertisements interact with the customers individually. Apart from that, the relationship between the customers and the organizations shall be improved through such mobile advertisements. Thus the mobile apps have become a medium in marketing mix.

Kosner (2013) said that the profusion of personal mobile devices have changed the customers' expectations. According to him, the most successful apps are the product of continuous exploration and improvement. He said that the apps give opportunities to present the products and solutions to the customers.

Though various studies were conducted with respect to mobile communication, advertisements and applications, a very few literature could be found in Middle East, in particular, Sultanate of Oman. Thus, we have studied the user's satisfaction of users on mobile applications in Omani business environment.

RESEARCH METHODOLOGY

To identify the user's satisfactions on mobile apps in their business processes, a questionnaire was prepared and distributed to respondents. The questionnaire was prepared in bilingual (both English and Arabic) to reach the targeted users. The respondents were clearly intimated about the study and given amble of time to fill the questionnaire correctly. Quota sampling was used to select the users. The questionnaire was distributed to 175 users. 150 responses were collected back. Due to improper fillings and other reasons, 10 responses were not considered for the study. The Cronbach's Alpha reliability analysis showed that reliabilities as: demography (0.985, 5 items), nature (0.957, 3 items) and responses (0.905, 15 items).
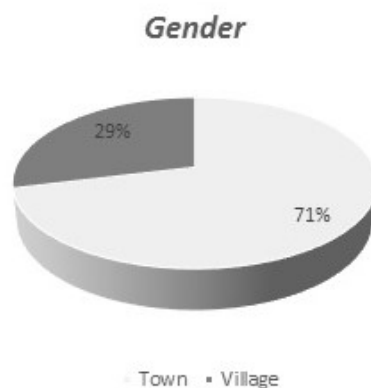
DEMOGRAPHIC ANALYSIS

The respondents were analysed for their demographic profile in 5 different factors. Table 1 shows the age group of the respondents.

Table 1: Age Group of the Respondents

Age Group	No of Respondents
Below 20	20
21 – 30	56
31 – 40	42
41 – 50	16
Above 50	4
Total	140

**Fig 1 shows the "Gender" of the respondents**

Fig 1: Gender Analysis of the Respondents

Table 2 shows the highest qualification of the respondents. The qualification of the respondents was studied to understand their knowledge in using mobile apps.

Table 2: Qualification of the Respondents

Qualification	No of Respondent
High School	5
Foundation Level	13
Diploma	22
Bachelor	83
Master	11
Ph.D	3
No Education	1
Others	2

**Fig 2 shows the place of living of the respondents**
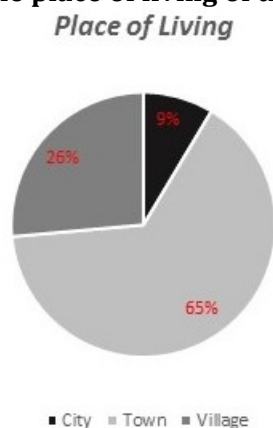
Fig 2: Place of Living

The respondents were analysed for occupation and in which department they are working. This was studied to understand the original use of the mobile apps in their day – to – day work and business processes. Also, the respondents were also asked to mention what type of mobile communications they use. Table 3 shows the respondents' details.

Table 3: Respondents Nature

Nature of Use of Mobile Communication	Receiver (Consumer) (70); Sender (Business Users) (40); Both (30)
Occupation	Student only (19); Government Sector (45); Private Sector (69); Own Business (5)
Department	Admin (18); Management (5); Education (25); Technology (21); Marketing (10); Sales (7); Service (6); Production (5); Technical (13); Non Technical (8); Owner (5); Others (19)

As the study needs to know the usage statistics, the respondents were asked to provide information on their regular usage of mobile apps. Fig 3 shows the usage statistics of the mobile apps in respondents' regular uses.
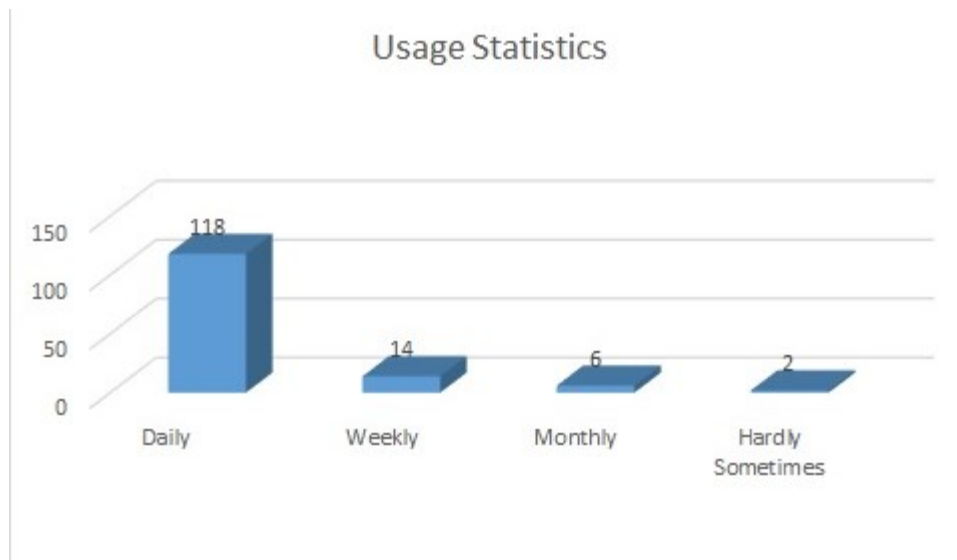
Fig 3: Usage Statistics

TYPE OF DEVICE

The respondents were asked to select the type of mobile they use. This analysis was conducted to know the types of apps the customers shall use in their mobile communication. Table 4 shows the type of devices the respondents were holding and using.

Table 4: Types of Devices

Type of Device	*Number of Respondents*
Smartphone	90
Tablets	42
Other	8

Purpose of Use

The customers were asked to choose the purposes for which they use these mobile apps. They have been told to opt various suggested options. 88 respondents said that they use mobile apps

for leaning purposes. 115 respondents had selected "Chatting with Friends" option. 40 respondents were using mobile apps to "Check Emails". 36 respondents said that they were using mobile apps to "Read Newspaper". 72 respondents selected "General Information Seeking" option. 25 respondents said that they were using for "Video Calling". 69 respondents said that they are using mobile apps for sending "SMS". 22 respondents found to use mobile apps for "Location Mapping". 53 respondents said that they were using mobile apps for "Playing Games". 66 respondents were using "Social Networking" mobile apps. 36 respondents were using "Media Players". 47 respondents opted "Teaching Purposes" option. 35 respondents were using mobile apps for "Business Purposes". 22 respondents selected "Consumer Apps". 13 respondents were using mobile apps for "Ticket Booking". 25 respondents found to use mobile apps for "Online Shopping". 13 respondents selected "Utility Payment" and 14 respondents found to use mobile apps for "Bank Transactions".

Reason for Using Mobile Apps

71 respondents said that they prefer mobile apps because of the cost effectiveness. 65 respondents said that they use mobile apps due to its utility purposes. 48 respondents were found to use because of the innovativeness. 29 respondents said that they use mobile apps for sensation. 47 respondents said that they prefer the mobile apps due to self-efficacy. 55 respondents said that they are using mobile apps due to involvement.

Satisfaction Level on Mobile Communication Services

The major purpose of this study is to identify the customer's satisfaction on these mobile communication services in their daily business activities. The respondents were asked to provide their opinion using 5 Point Likert scale with 5 for Strongly Agree and 1 for Strongly Disagree. The respondents were asked to provide their opinion for 15 closed end statements related to mobile communication services facilities. Table 5 shows the mean values and the standard deviation of the responses with respect to each statement.

Table 5: Descriptive Analysis on Responses

Statement	Mean	SD
Provide sufficient timely information about the business activities to the customers	4.02	0.95
Direct marketing tool to reach the business activities to the customers	3.89	0.96
Shall be modified according to the customers personal profile and interest	3.71	0.99
Motivate the customers towards the business activities	3.75	1.03
Improve the brand image of the business	3.73	0.94
Will increase the reputation of the business	3.85	0.88
Help to achieve maximum returns / profits	3.81	0.94
Remove business boundaries	3.66	1.00
Facilitate interaction with remote customers	3.94	0.96
Help the customers about their utility payments, recurring income	3.94	1.04
It motivates the customers to bring new customers	3.72	1.05
Customer relationship shall be maintained.	3.89	1.09
Service oriented business intelligence shall be developed	3.84	0.98
It increases the company's position in the market.	3.75	0.98
The mobile communication services changes the intention and behavior of the customers.	3.83	1.07

FINDINGS

From the above analysis, it is evident that 50% of the respondents were consumers. They receive various advertisements and other promotional messages through the mobile apps. 29% of the respondents were found to use mobile apps to send their company's promotional advertisement to the consumers. Even though they are the senders, they receives various business advertisement through the apps they use. Remaining 21% of the respondents were both receivers and senders.

27% of the receivers were students. This shows that they receive various SMS, information and promotional advertisements from the college they study. 17% of the both senders and receivers were doing own business. Nearly 63% of the senders were working in government sector. 57% of the private sector respondents were consumers.

All the students fall into "Others" in department classifications. All respondents opted "Education" were from "Private Sector". The 50% of the marketing respondents were from "Government Sector". The respondents with "No Education" and "Others" found to be from private sector non-technical department. Also 2 respondents found to use mobile apps "Hardly Sometimes" and one was using "Monthly". 5 student respondents have found to use mobile apps "Monthly". All these 8 respondents found to use "Other" type of mobiles.

The customer's satisfaction analysis shows that the respondents were highly satisfied with the mobile apps as they provide sufficient timely information about various business activities to the customers. The primary objective of the business advertisements and promotional materials are to reach the customer on time. Reaching out the customers support the business activities to reach the organizational goals and objectives.

The respondents feel that the mobile apps facilitate interaction with the customers and also help the customers to make their utility payments. All the business respondents have strongly agreed on these two points. As the business motives revolves around the customer relation, most of the respondents agreed that the mobile apps help as a direct marketing tool to reach the customer with the business activities. Apart from that the customer relationship shall be maintained. The CRM is the important factor for business successes. Hence these two factors have third position.

The respondents have given the least ranks to the factors such as motivating the customers to bring new customers, shall be modified according to customers interest and removes business boundaries. Though these factors were given least ranks, none of them have scored less than 3.5 average (More than 70% out of 5 point Likert scale). The standard deviations showed that the responses were not much deviated from the mean values.

To identify the customers overall satisfaction, the respondents were asked to provide their overall satisfaction the mobile apps they use. 20% of the respondents highly satisfied with the current mobile apps. 60% of the respondents were satisfied with the services provided by the mobile apps. 8.5% of the respondents were not interested to provide any information in this regard. 7.2% and 4.3%of the respondents either dissatisfied or highly dissatisfied with the current mobile apps. The study showed that the respondents with "Other" mobile phones were mostly either dissatisfied or highly dissatisfied with the mobile apps. 86% of the tab users were satisfied with the mobile apps.25% of the smartphone users were found to be highly satisfied with the mobile apps in their daily activities.

CONCLUSION

To identify the relationship between the factors selected and the overall satisfaction, multiple regression analysis was conducted which showed that all the selected variables have impacts on the customer satisfaction with $R^2 = 0.996$, $p < 0.001$. The regression analysis showed that the company's position in the market and developing service oriented business intelligence have close relationship with the customer's satisfaction. The business people should think to increase these satisfaction among the customers.

The above study shows that the mobile apps became important tool in day – to – day business activities. Irrespective of the business processes, the organizations have made to promote their activities through various modes and reach the customers. The mobile apps are the best communication medium to reach the customers easily. Currently most of the apps are available to reach the customers. As Sultanate of Oman has different economic set up, some apps such as taxi bookings, transport booking, online shopping etc are not much introduced and the respondents were not much required those apps.

The organizations and business processes should be developed in such a way that the business boundaries shall be eliminated through these mobile apps. The customers should be motivated to use the mobile apps effectively. The programmers should develop mobile apps even for non-smartphones which will benefit the companies to reach out all the customers.

FUTURE SCOPE

The study has been conducted by considering the some essential factors. The study may also be further intensively studied with reference to various risks involved in using mobile apps. The study may also be conducted separately for receivers and senders perspectives.

ACKNOWLEDGEMENT

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