Mobile Apps or Mobile Websites based customer preferences, their characteristics and influence on customer's awareness

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ABSTRACT

This paper is specially designed to know how the usage of mobile apps and mobile websites behave in different situations with various services. With the help of various surveys conducted for experiment it will be easy to identify the customer's preferences differ for different services for mobile apps and mobile websites. A model is specially designed for this purpose. Different properties of different service categories were allocated different values by customers. For example, for services like Audience Reach and Better User Experience   prefers mobile apps. By contrast, for services like better performance, Better User Experience customers prefer mobile websites

Keywords- mobile apps, mobile websites, customer's preferences, awareness

1. INTRODUCTION

Within the wake of Mobile's exponential growth, there are many advantages and some perceived disadvantages of Mobile Website as compared to Mobile Apps in the globalization age of commerce have become obvious. Among the advantages are rapid and extensive display of information, and ease of comparison between the services of different service categories. On the other hand, giving cost effectiveness SEO and brand visibility realized as perceived disadvantages. We recommend that the relative advantages and disadvantages of mobile website and mobile apps will play out differently for different types of services, as per consumer thinking. The relative salience of such favorable and unfavorable features when comparing mobile websites and mobile apps options undoubtedly varies across services, customers, and situations. The present paper expands this theme by comparing customer's perceptions of mobile website versus mobile apps for different properties at different stages. We consider that customer's needs for mobile website and mobile apps services vary predictably across services that emphasize different characteristics such better performance, better user experience, brand awareness, audience reach, accessibility, compatibility, cost-effectiveness etc.

In this paper we develop specific hypotheses that focus on mobile apps characteristics that have an effect on usage preferences for different services and reactions to strategies that attempt to enhance on complementary characteristics.

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2. SPECIFIC RESEARCH OBJECTIVES

This study has two main objectives for understanding Mobile Apps/Mobile Websites complementarities:

1) To determine the factors that lead to differential preferences for mobile websites and mobile apps usage for different service categories and services under these categories.

2) To determine the relationship between the service properties and service usage preferences by the customers.

In experiment participants were asked to specify their preferences for mobile websites and mobile apps sources for different services categories. They were also asked to rate the significance of different services for each services categories, such as Accessibility, Compatibility and Cost-effectiveness Games, Value added services and they were asked to indicate the extent to which each services for each services categories is better provided by mobile websites or by mobile apps. After getting results, we will used these data to develop a model for describing mobile websites/mobile apps preferences at the characteristics level.

We used a series of surveys in experiment to develop and test a simple model of the information integration process, so that get a better understanding of the process linking the perceptions of individual characteristics to overall mobile apps and mobile websites preferences The model is based on Anderson's (1981) averaging model of information integration and states that the overall tendency to prefer mobile websites or mobile apps for a given services categories is a weighted average of the values of the individual attributes comprising the services categories, as shown by following equation:

$$R_{\text{mwebsites/mapps service}} = \Sigma \ w_i \ \text{x} \ v_{is}/\Sigma w_i$$

Here, $R_{\text{mwebsites/mapps s}}$: is the overall extent to which using mobile websites instrument

or mobile apps instrument is preferred for service s,

w_i : is the importance of service.

and v_{is} : is the rating of service s on the rating scale ranging from "Using

service of mobile apps much better" to " Using service of

mobile websites is much better."

This model is tested separately for different services of the services categories. Models of this form have been useful in describing customers' evaluation of product bundles (Gaeth, Levin, Chakraborty, & Levin, 1990) as well as other forms of customer's behavior (Troutman & Shanteau, 1976). The gist of this model as applied to mobile websites and mobile apps preferences is that such preferences are driven by customer perceptions of whether important characteristics of the their experiences are better delivered mobile websites or mobile apps for a particular services categories.

3. METHOD

1) A multi-part survey was administered to a sample of 2000 persons in NCR who uses either mobile websites or mobile apps or both for their services.

2) Suitable services have been preferred for to this group and to represent a range of mobile websites and mobile apps services: like Information seeking, gaming, messaging, chatting, purchasing etc.

In Part 2, for each step of each characteristic, the participants were asked to indicate whether they would prefer to complete that step by mobile websites or by mobile apps.

In Part 3,Participants were asked to rate each of a set of key service characteristic on a scale of 1 to 10 where 1 corresponds to " Service usage through mobile websites is much better" and 10 corresponds to "Service usage through mobile apps is much better." The characteristics such as "immediacy", "download", "FAQ", "Information Seeking", "Entertainment", online Shopping", Other Services" etc.

4. RESULTS AND DISCUSSION

Table 1:   mobile websites / mobile apps **usage preferences for each service category and the services in these categories are shown below:**

(Data are % who prefer mobile apps **/** mobile websites **for using these service categories)**

		Mobile Apps	Mobile Website
Communication	SMS / MMS	1800	200
	E-Mail	1700	300
	Chatting	1800	200
	Video Conferencing	500	1500
Information Seeking	News	1700	300
	Cricket Score	1800	200
	Traffic & Weather	1900	100
	Corporate Information	900	1100
	Market Data	1200	800
Entertainment	Music	1500	500
	Games	1800	200
	Graphics	600	1400
	Video	800	1200
Transaction	Banking	300	1700
	Shopping	900	1100
	Booking & Reservation	1100	900
	Order Fulfillment & Inventory Management	200	1800
	Payment Management	1200	800
Download Data Sheets	Games	800	1200
	Software	700	1300
	Files (PDF, Doc etc)	600	1400
	Video	700	1300

	Songs	1100	900
Frequently Asked Questions	Knowledge Base	600	1200
	Product or Infr. Base	700	1300
Online Support	Customer Service	500	1500
	Product Support	700	1300
Other Services	Search & Investigation	800	1200
	Value Added Services	900	1100

The graphical representation of Computer/Mobile usage preferences for each service category and the services in these categories are given below:

Communication ⟶	SMS/MMS	E-Mail	Chatting	Video Conferencing
Mobile Apps	90%	85%	90%	25%
Mobile Website	10%	15%	10%	75%
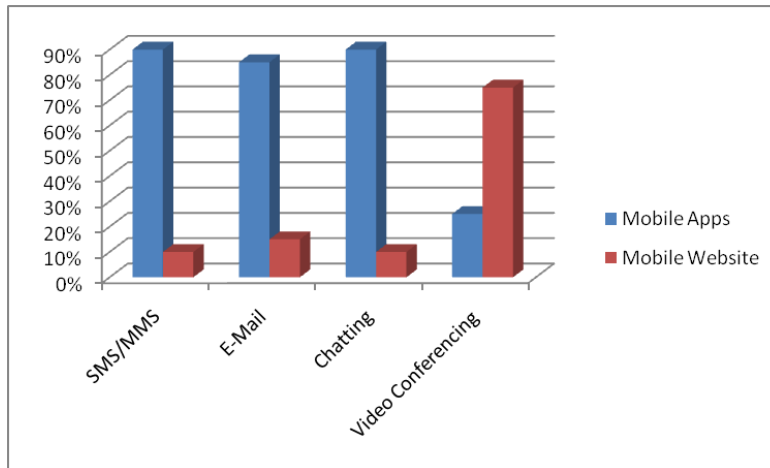
Figure 1: Communication

Information Seeking ⟶	News	Cricket Score	Traffic and Weather	Corporation Information	Market Data
Mobile Apps	85%	90%	95%	45%	60%
Mobile Website	15%	10%	5%	55%	40%
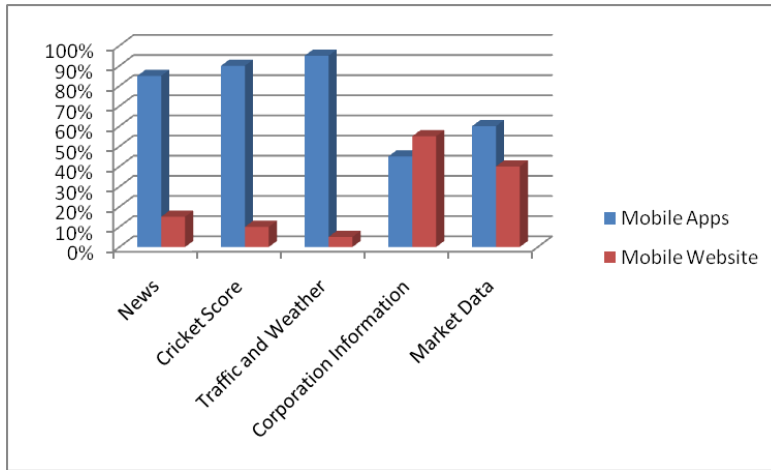
Figure 2: Information Seeking

Entertainment →	Music	Games	Graphics	Video
Mobile Apps	75%	90%	30%	40%
Mobile Webiste	25%	10%	70%	60%
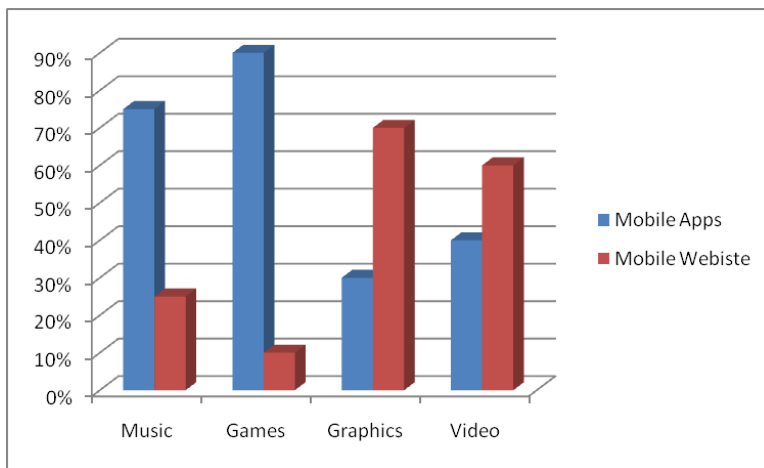
Figure 3: Entertainment

Transaction →	Banking	Shopping	Booking & Serv.	O.F	P.M.
Mobile Apps	15%	45%	55%	10%	60%
Mobile Website	85%	55%	45%	90%	40%
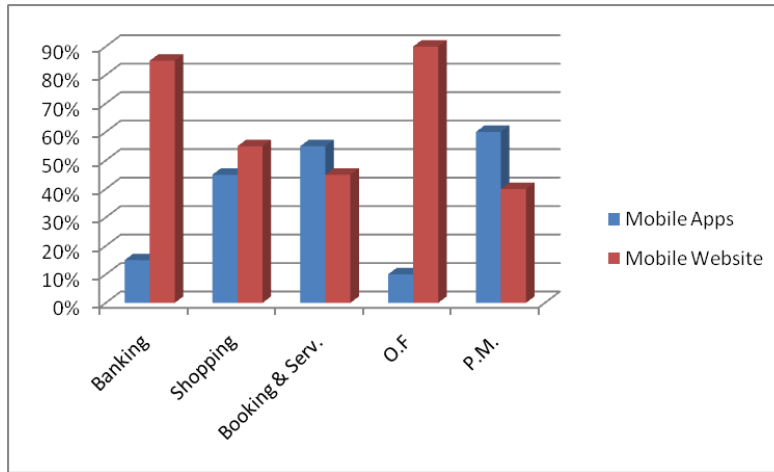
Figure 4: Transaction

Download Data Sheets ➝	Games	S/W	Files	Video	Songs
Mobile Apps	40%	35%	30%	35%	55%
Mobile Website	60%	65%	70%	65%	45%
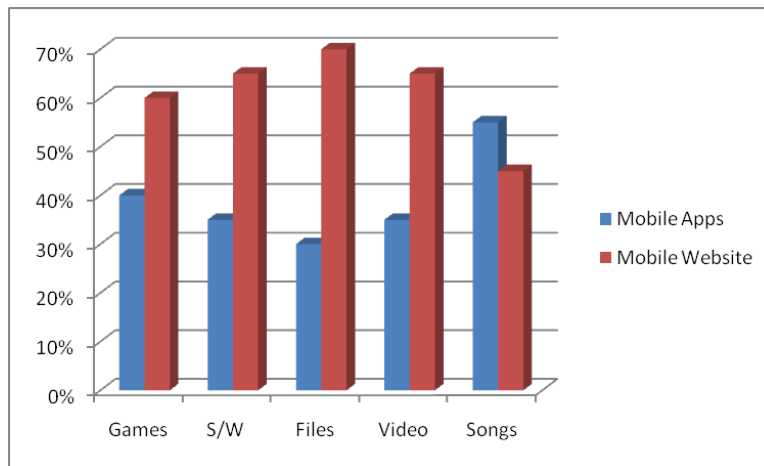
Figure 5: Download Data Sheets

FAQ ➝	Knowledge Base	Product or Information Base
Mobile Apps	30%	35%
Computer Website	70%	65%
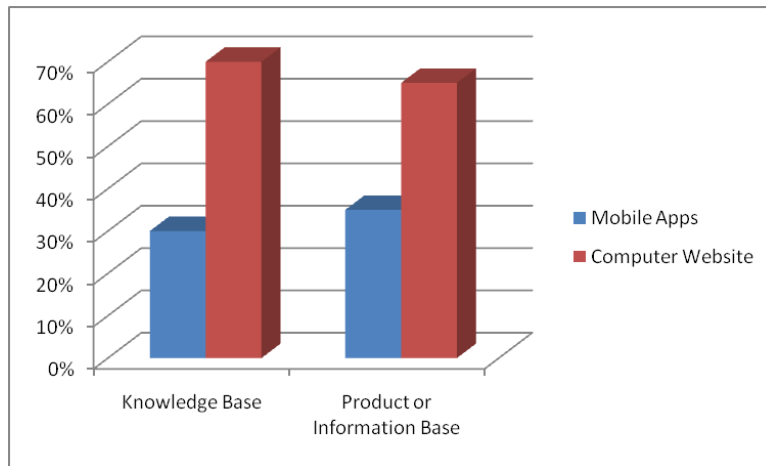
Figure 6: FAQ

Online Support ➤	Customer Service	Product Support
Mobile Apps	25%	35%
Mobile Website	75%	65%
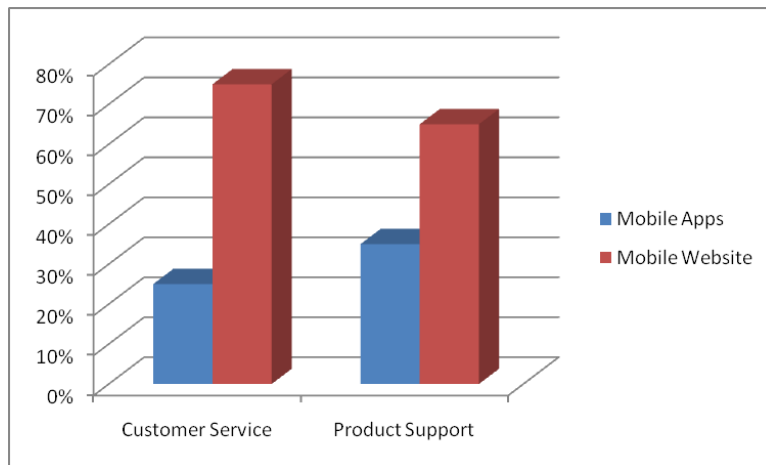
Figure 7: Online Support

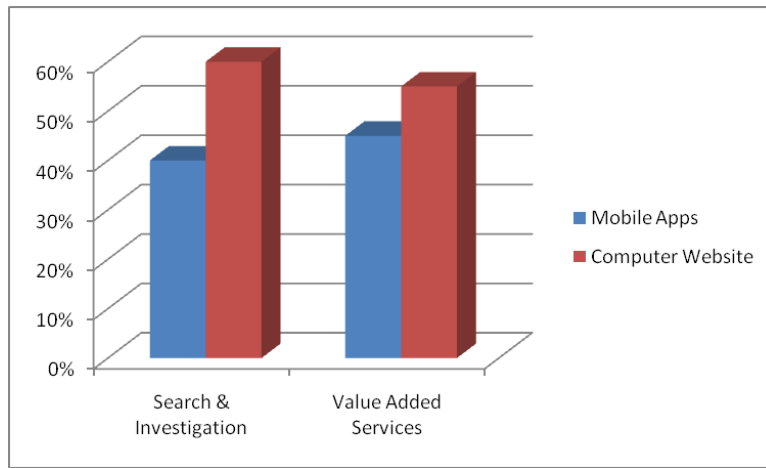| Other Services ➤	Search & Investigation	Value Added Services
Mobile Apps	40%	45%
Computer Website	60%	55%

Figure 8: Other Services

Different preference patterns emerged across products and these seemed to fall into several clusters. For SMS/MMS, E-mail, chatting attributes respondent simply use mobile apps. When respondents considered the graphics, video respondent prefer mobile websites.

In Part 3 of the survey, respondents were asked to rate the extent to which they think mobile websites or mobile apps is better on each of a number of features. **Table 2** shows that consumers see mobile apps sources as better than mobile website. In addition, mobile website was perceived to be the source for the best prices. Considering that most computer retailers use an aggressive low price strategy to draw customers to their Web sites to shop, this result shows that this strategy is working.

Table2: Mean Rating of extent to which mobile or computer is better for each Service categories.

Transaction	4.1	
Download	4.1	
FAQ	4.2	Mobile Website is Better
Online Support	4.5	
Other Services	4.5	
Communication	6.6	
Information seeking	6.2	Mobile Apps is Better
Entertainment	6.9	

Note: Data are on a (1 to 10) scale where 1 = "Mobile Website" is much better" and 10 = "Mobile Apps are much better."

 In Part 2 of the survey, respondents rated the importance of each feature for each of the different product categories.

Table 3: Mean Attribute Importance Rating (1-10 Scale) For Each Service Category

	Imme-Diacy	Connectivity	Localization	Data Portability	Ubiquity	Accessibility	Convenience	Price
Communication	5.6	7.4	6.2	5.2	5.7	5.4	6.3	6.4
Inform. Seeking	6.4	6.2	5.8	5.7	5.5	5.1	7.8	5.2
Entertainment	7.5	6.6	5.4	5.7	4.4	6.2	5.2	6.8
Transaction	4.4	4.4	4.2	4.1	4.2	4.0	4.2	4.1
Download Data Sheets	3.7	2.8	3.8	4.5	4.0	4.3	3.8	3.3
FAQ	5.1	4.3	4.0	5.1	4.5	4.8	5.4	4.7
Online Support	4.7	4.6	4.5	3.8	4.1	4.9	4.2	4.7
Other Services	5.1	4.6	4.2	4.8	4.1	5.1	4.4	4.7

Model test: For each service category the mean attribute values from **Table 2** were multiplied by the mean attribute importance weights from **Table 3** and the results were averaged across relevant attributes. The resultant values were then rank-ordered to predict the relative frequency of mobile Apps/mobile website preferences for each service category and the services in these categories.

5. CONCLUSION

This study aimed how mobile apps and mobile website usage varies across services, consumers and situations. It was determined that consumer's preferences for mobile apps and mobile website usage differ for different service categories and the services in these categories. Some features of the services under service category are seen to better by using mobile apps and some are seen to be better by using mobile website. For example service like SMS/MMS, chatting prefer by using mobile apps while service like E-mail etc prefer by using mobile website. However, this study also highlighted that mean rating of mobile apps is better for communication, information seeking, entertainment while mean rating of mobile website is better for transaction, download, FAQ, online shopping, other services. Our study reaffirmed that mean attribute (i.e. connectivity) importance rating for download datasheets service category is minimum while mean attribute (i.e. connectivity) importance rating for entertainment is maximum.

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