The Impact and Challenges of M-Commerce Adoption on Vijayapur city in Karnataka state INDIA (using online Grocery stores app)

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Abstract— This study investigates the impact and challenges of the adoption of M-Commerence by Vijapur city in the Karnataka State. A sample size of 50 Local Kirana Store(Grocery), 25 Customers(male) and 25 Customers(female) aged between 20 to 45 were selected in each Street(area) using stratified sampling techniques with the aid of well-structured questionnaires. Googleforms was used to capture the data while frequency and percentage distributions were used to analyze it. In all, 1, 000 copies of the questionnaire were administered to the ten (10) Street area in the different part of Vijayapur city while 890 copies were returned which represents a respondent rate of 89.1%. The result of the findings revealed that the adoption of M- Commerce has a significant impact on cost effectiveness, enhanced availability, low environmental impact, reduced IT complexities, mobility, scalability, increased operability and reduced investment in physical asset However, the major challenges confronting the adoption of M-commerce are data insecurity of Mobile Payments, lack of awareness of online transaction, lack of development of local m-commerce localization apps, even lots of customers spending money on transactions that are somehow related to their mobile devices. This paper concludes by recommending strategies to manage the identified challenges in the study area.

Index Terms— M- Commerce; M-Commerce adoption; Smartcities; Vijayapur M-commerce, Grocery stores app,

1 INTRODUCTION

-commerce is a term that describes online sales transac-Litions that use wireless electronic devices such as handheld computers, mobile phones or laptops."Or, as a normal person might put it: M-commerce is buying stuff with your smartphone. Even more broadly, m-commerce is connecting businesses with their clients on their mobile devices.Techopedia offers this definition, M-commerce is huge; everyday it's becoming a larger slice of total sales recorded. You can find wealth of very interesting stats, but the takeaway is that lots of consumers are spending money on transactions that are somehow related to their mobile devices in a city of vijayapur, Adoption of Information and Communication Technology (ICT) will ensure efficient use of resources, socioeconomic development, and help transform India into a country of digitally connected cities. Supporting the Smart Cities vision and Digital India program, Smart IT and communications is the nerve center for smart cities to improve the lives of citizens in urban and rural areas by means of sustainable integrated solutions. vijayapur is one of all 100 upcoming smart cities of India.

2 LITERATURE REVIEW

2.1 Review Stage

As per the google on vijayapur city only some small scale IT companies claim e commerce website Development and some website like mytrip allows to book online or through E-coupon and some websites allows only to send mail or call using phone there is no m-commerce related apps available on playstore to help tourist to using m-commerce apps[13] google.com.

2.2 Conceptual Underpinings

As per http://indiansmartcities.in and www.bijapur.nic.in/ www.bijapurcity.gov.inThe Union Cabinet Approved the 100 Smart City Projects and vijayapur is one of them and making A smart city (also smarter city) uses digital technologies or information and communication technologies (ICT) to enhance quality and performance of urban services, to reduce costs and resource consumption, and to engage more effectively and actively with its citizens.[12]As per times of india A city equipped with basic infrastructure to give a decent quality of life, a clean and sustainable environment through application

423

of some smart solutions .smarter e-governance may help m-commerce to boost.

As per Wikipedia perhaps the 9th biggest city in Karnataka. Vijayapur, the land of five rivers and the domain of different cultures, is an ancient city with five taluks viz. Basavan Bagevadi, Vijayapur, Indi, Muddebihal and Sindagi. The city was established in the 10th-11th centuries by the Kalyani Chalukvas and was known as Vijavapura (City of victory) Emerging Attractions city for Tourism and The place is an important tourist place in the country, In Vijayapur district agriculture forms the important source of livelihood for the most of the people with deep black soil" (or yeari bhoomi), which is good for the crops like jawar, wheat, pulses, sunflower, etc. The major portion of the district consists of this kind of soil which has a great moisture-holding capacity. Second one is red soil" (or masari bhoomi), which is generally poor, good for irrigation and horticulture. There is no e-commerce or m-commerce apps used in Agriculture, Transport, Education or in Tourism [11].

2.3 Final Stage

As per the development of local Local Kirana Store Android Apps (Online Grocery) by students of Smt. Kumudben Darbar College of Commerce, Science and Management Studies Vijayapur for their academic project using google cloud computing and android authenticate user with google account conducted a survey while developing Android Apps and then host that Andriod APP to social media on trial bases for download free. Below images shows the local kirana store [14].

They review in their report that 80% of local people age between 18 to 45 are interested to download the APP just like facebook and whatapp and 70% of people are interested to order online only on COD (Cash on delivery) and 90% of local business people agree or need this kind of APP to be implement to their business because the APP cost less than 50 Rs. As per http://indiansmartcities.in and www.bijapur.nic.in/ www.bijapurcity.gov.inThe Union Cabinet Approved the 100 Smart City Projects and vijayapur is one of them and making A smart city (also smarter city) uses digital technologies or information and communication technologies (ICT) to enhance quality and performance of urban services, to reduce costs and resource consumption, and to engage more effectively and actively with its citizens.[1]As per times of india A city equipped with basic infrastructure to give a decent quality of life, a clean and sustainable environment through application of some smart solutions .smarter e-governance may help mcommerce to boost.

2.4 Local Grocery Apps



2.5 GROCERY APPS- ORDERING LIST

Make Your own	Make Your own	Make Your own
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3 MATERIALS AND METHOD

The approach and method adopted in this paper is given below the research questions are highlighted, the study area, sampled population and research techniques used are discussed.

Research Questions

What are the benefits associated with the adoption of M-Commerce by Vijayapur City in the study area?

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What is the level of adoption of M-Commerce by Vijayapur city in the study area?

What are the challenges and the constraining features to the successful adoption and use of M-commerce by Vijayapur city in the study area?

Data Source and Presentation

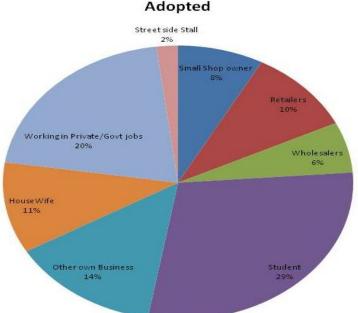
Collection of data which investigates the level of adoption, benefits and challenges of M-commerce in the city of Vijayapur is done using googleforms and googlesheets which can be well-structured questionnaire titled, "Challenges and Impact of M-Commerce on Adoption to city of Vijayapur city" with three (3) parts and device compatibility such that data survey can be done using any smart phone device, The first part provides biodata and status information about each respondent while the second part provides information on the adoption of M- commerce in the city of vijayapur. The third contain impacts of M-commerce on Vijayapur city while the fourth part investigates the challenges of using M-commerce in the study area.

A sample size of 50 Local Kirana Store(Grocery), 25 Customers(male) and 25 Customers(female) age between 20 to 45 were selected in each Street(area) of vijayapur city .Googleforms and Googlesheet was used to capture and analyze the data obtained from the duly-filled copies of questionnaire while frequency, mean and percentage distributions were the descriptive techniques used. The descriptive survey was adopted to obtain the opinion of a representative sample of the target population so as to be able to infer the perception of the entire population. In all, 1, 000 copies of the questionnaire were administered to the ten (10) Street area in the different part of Vijapur city while 890 copies were returned which represents a respondent rate of 89.1%.

4 RESULTS AND INTERPRETATION

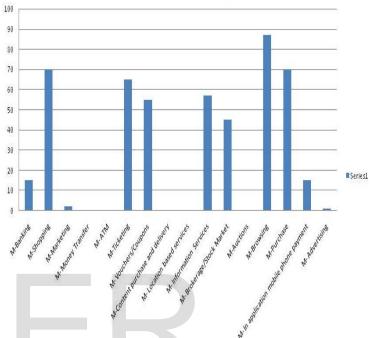
4.1 Figure

Trends of Adoption of M- Commerce by Vijayapur city in Karnataka state INDIA As shown in Figure -1



4.2 Figure

M-Commerce Services Adopted by Vijayapur City in the Study Area



sector employees other nave smart phone with different handsets and internet enabled both lack of awareness to operate or do the M-commerce related apps but if we analyzed data through google- android, we get more customer Subscribes towards M-commerce apps. Figure-2 shows the adopted Mcommerce services in vijayapur, only M-Browsing and Mpurchase (COD basis) and M-shopping are services adopted in vijayapur.

S/N	Benefits of M-Commerce in the Study Area	% of Re- spondents
1	Flexible to Access	94.3%
2	Easy Connectivity	72.1%
3	Convenience	79.2%
4	Expansive target Audience	69.1%
5	Personalization/Localization	74.3%

4.3 TABLE I. BENEFITS OF M-COMMERCE IN VIJAYA-PUR CITY (N = 890)

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	5 0010	
6	Time Saving	94.4%
7	Increasing productivity	96.2%
8	Pro-active functionality	81.2%
9	End-user satisfaction	80.1%
10	Cost Effectiveness	92.3%

Based on the analysis of the findings obtained for the research questions Table-I shows the Benefits of M-commerce in Vijayapur city like Flexible to Access, Time Saving, Increasing productivity sell and buy products globally and Cost Effectiveness for customers and Table-2 shows a number of challenges for M-commerce to the city of vijayapur first one is Reluctance to eliminate staff positions as the city is more retails and wholesalers with more staff positions second is the Reliability Challenge as more customers in the city will not trust on the M-commerce process and negative thinking or risk about their money and safety is main concerns of people.



4.4 TABLE II. CHALLENGES OF M-COMMERCE IN THE STUDY AREA (N = 890)

S/N	Challenges of using M- Commerce	% of Respondents
1	Data insecurity	91.5%
2	Unsolicited Advertising	74.4%
3	Lock-in	65.4%
4	Reluctance to eliminate staff positions	97.2%
5	Privacy Concerns	83.1%
6	Reliability Challenge	99.4%
7	Regulatory compliance con- cerns/user control	93.5%
8	Resistance to change in	87.4%

Technology

5 CONCLUSION

Vijayapur city, formerly Bijapur, is a Attractions of Tourism and historical place with five Talukas and eighty villages the poor state of ICT in Vijayapur city has really its impact on socio-economic development, quality of seller and buyer through M-commerce outputs. People are investment amount towards smart phone and using browsing and social media APPS as main source of internet, interent user is increasing day by day with easily avalibality and low cost of data internet pack.however lack of awareness and trust towards online translation and online Products with lack of avalibility of Mcommerce apps in local language these all can be leveraged through the adoption of M-commerce to Vijayapur city.Mcommerce can actually help vijayapur city Increasing sales and Mobile Helps Even Traditional Retail Sales, Increased exposure to customers, Keep up with competitors and Opportunities to drive users into local stores, Gokak Karadant(sweet delicacy-made of edible gum mixed with dry fruits and has a chewy texture) online shop and belgaum kunda online offers a great example of this, then why not Vijayapur's famous Mirchi Bajji(chili cutlet-spicy Indian snack) Online.

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APPENDIX

Area of Vijaya- pur city	Total Number of Questionnaires Returned by Re- spondents	Total Not Re- turned
KC Market Ram Mandir Road	87	13
Adarsh Nagar Ashram Road	90	10
Adat Bazar Kirana Bazar	80	20
Ameer Talkies Road Saraf Bazar	73	27
Hudco Colony Bagalkot Road	75	25
APMC Yard Sri Siddeshwara Road	84	16
Shahpeth Industri- al Area	86	14
Athani Road	90	10
Badikaman Road Station Road	76	24
MG Road LBS Market	74	26

Serial No	Benefits	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1	Flexible to Access	827	13	35	15	0
2	Easy Connectivity	594	48	167	71	10
3	Convenience	610	195	110	85	0
4	Expansive target Audience	580	35	130	115	30
5	Personalization/Localization	458	204	198	20	10

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6	Time Saving	728	113	39	10	0
7	Increasing productivity	785	66	39	0	0
8	Pro-active functionality	455	268	137	20	10
9	End-user satisfaction	460	253	167	10	0
10	Cost Effectiveness	710	112	63	5	0

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