

# IMPLICATION OF VAS IN GROWTH OF INDIAN TELECOM INDUSTRIES

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#### **ABSTRACT**

Value Added Services (VASs) have become one of the major revenue generators in the telecom industry. Most of the telecom subscribers have started using VAS and it has become an important service for the customers. The objective of the project is to evaluate and analyses the need for value added services in India. The report begins with a discussion of existing VAS provided by 2G wide area cellular technologies and how these will change with the introduction of 3G technology. Then a method to analyses VAS is discussed, followed by method of analyzing the ring back tones with respect to a company is provided followed by the method to analyses the importance of the content providers in the value chain. The analysis results are very important in the modern telecommunication industry as VAS plays a major role in generating huge revenue and currently many industries are focusing on to provide mobile commerce services to its customers. These VASs are becoming very useful to all types of subscribers. The entire sub categories of VASs that are provided under the umbrella of mobile commerce are very useful, highly effective services for same set of subscribers.

**KEYWORDS**: VAS, M-Commerce, 2G, 3G, Value chain, telecommunication,

## INTRODUCTION

India's mobile telephony subscriber base is growing at a faster rate than any other field in India. The total number of mobile subscribers in India as of July 2009 was 325.7 million. By July 2010, the subscriber base had increased to 688.38 million, and currently, at the end of February 2011, there are nearly 752 million mobile subscribers. This is a drastic increase in a course of 10 years, when compared to the roughly 5 million subscribers in 2001. It is projected that India will have around 1.559 billion mobile subscribers in 2014. It is predicted that India will surpass China in the total number of mobile subscribers during 2015.

#### **DEFINITIONS**

- a) Value added Services are those extra services which are provided to the customers apart from the basic voice services and mostly based on Data.
- b) 2G Second-generation wireless digital technology, primarily focused on Voice service
- c) 3G Third-Generation Wireless digital technology, primarily focused on packet switched data
- d) Average Revenue per User (ARPU) the revenue generated by a single customer, typically on a monthly basis

### **OBJECTIVE OF THE STUDY**

- The study examined the technological innovation for Value added services in Telecom sector and an exclusive growth to the Telecom Industry.
- People awareness about value added services.
- New trends in telecom sector to enhance value added services in mobile devices and market trend.



## **REVIEW OF LITERATURE**

Initially mobile telephony only provided voice based service, although even this caused a revolution in the field of telecommunications. After a period of time, service providers began to transmit data on the same channel as voice, hence better exploiting the available channel resources. As a result any additional non-voice service is called a Value Added Service (VAS). More formally value added services refers to non-core services which are offered to the customers apart from the core or basic services being offered, such as voice calls and fax transmission. MVASs are constantly evolving with the introduction of new mobile applications beyond the basic services, i.e., voice and text messaging (short message service- SMS). In India's Department of Telecommunications, Unified Access Services License (UASL), VAS is defined as follows- "Value Added Services are enhanced services which add value to the basic teleservices and bearer services for which separate license are issued". MVAS are mainly based on three different delivery platforms: SMS, interactive voice response (IVR), and Wireless Application Protocol (WAP) Portals. Each VAS has its own characteristics and relates to other services in a unique way. The components of VAS are (1) A content/application owner who develops and owns the original copyrighted contents and applications that are provided to the customers as VASs,

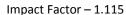
- (2) Aggregators aggregate contents and aggregate the application from the owners (or smaller boutiques) and distribute an application adapted to suit the customer's needs while also managing IVR, quality control, billing, and accounting for the aggregated contents and applications,
- (3) Software developers develop the applications (including in-house quality checks and integration with third party developers for parts of the complete process), and

## HOW IMPORTANT ARE VALUE ADDED SERVICES IN INDIA?

The Indian telecommunication sector is one of the important sectors for Indian economic reforms. The telecommunication sector in India is considered to be the fastest growing Telecommunication market in the world with a 17% compound annual growth (CAGR). India has the third largest telecommunication network and the second largest wireless network in the world. The total contribution of the communications sector is around 3% of India's gross domestic product (GDP). At the time of the introduction of mobile telecom service, in 2001, the person to person voice call rates were around Rupees (Rs) 24 per minute. This has decreased drastically over a period of time to around 1 paisa (1/110 of a rupee) per three seconds for a local call and 1 paisa per two seconds for subscriber trunk dialing (STD) call. The VAS market in India is estimated at around Rs 5400 Crore (Cr), and it is likely to exceed Rs 12000 Cr by the end of 2015, with the new opportunities available for VAS after 3G is rolled out in the market.

Following Figures shows India's population in Millions and the wireless mobile penetration in India according to Gartner's statistics up to April 2015.

India's Population and cellular market penetration										
India: Population and cellular market penetration 2007-2015										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Penetration (in %)	19.8	29.7	40.0	47.8	54.8	60.7	63.8	65.2	69.6	



Population	1,135.6	1,151.6	1,167.5	1,183.3	1,199.0	1,214.5	1,236.2	1243.4	1263.13
(in Millions)									

Table: India's Population and cellular market penetration

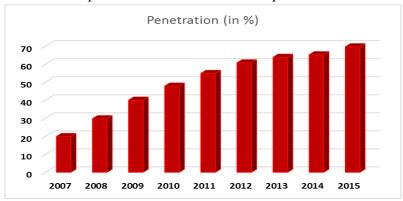


Figure: Wireless Mobile penetration in India

## VALUE ADDED SERVICES OFFERED TO CUSTOMERS

As noted earlier MVAS services that are offered to customers are mainly based on the three different delivery platforms (mainly SMS, IVR, and WAP portals). There are many value added services to be offered via all the three platforms. Some of the important areas in which value added services are offered to the customers with these three delivery platforms are entertainment, alerts and news, commerce, social VAS, and Enterprise VAS. Some of the important value added services that are currently offered to telecom customers in India are listed below. Following this each of them will be described in detail.

#### (a) Voice mail service

With a voice mail service activated the customer can receive or send voice mail. If the called customer is busy, this customer can still receive the voice of the caller customer by listening to it whenever the callee is free. The customer can also send voice mail to another customer who has activated their voice mail service.

# (b) Short Message Services

With the short message service activated, the customer can send and receive short messages up to roughly 160 characters (The exact number depends upon the alphabet that is used) to/from any other customer who has activated SMS.

# (c) Roaming (National/International)

By activating roaming, a customer can roam around within the country. Activating International roaming enables the customer to roam around the world while still maintaining the same number. Few of the mobile operators give this roaming service by default to their customers.

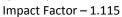
# (d) Call Forwarding

By activating the call forwarding service a customer can forward incoming calls to another number of his choice. The call can even be forwarded to a landline number.

#### (e) Call Conferencing

By activating the conferencing call service the customer can make a conference call in which the customer can include up to six contacts. However each call will be billed separately according to the usage of airtime associated with each individual user.

# (f) Call waiting and Call holding facility



The customer can activate the call waiting facility in order to receive a second call during a call. With the call holding facility activated the customer can place the current call on hold and receive the second call. The customer can also switch between the two calls, by holding one call and continuing with the other call.

# (g) WAP (Wireless Application protocol)

WAP is used for transmission and presentation of information from the World Wide Web (WWW) when using a wireless handset.

#### RESEARCH METHODOLOGY

This study is based on primary data analysis which is supported by secondary data, supporting data have been collected from various sources Government of India portal, Department of Telecom, Mobile world, voice record of India, various service provider agencies and the overview of respondents. Under the study Convenience sampling refers to the non-probability process by which statistical data can be gathered from the population. This form of selection is done based on the ease of gaining the statistical data. Rather than gathering a more accurate array of data from the population, here I will gather data from people nearby.

## IMPORTAANCE OF THE STUDY

With the advent of the technology telecom sector has emerge as a boon for society, which requires to be amalgamated with the user services. Here in the study Value added Services is must for future. Technology has given a thrust to empower India in job creation, Economic Development and Global recognition, is the reason to take up this study. Impact of political stability, Economical changes, Social factors and Technological up gradation on population.

#### MOBILE VALUE ADDED SERVICES AND NEW TRENDS

To evaluate the mobile value added service we will consider the M-Commerce VAS. This is a very useful service that is being developed and offered to the subscribers currently in India. Efforts are progressing to provide M-commerce through fast data services such as GPRS (General packet radio service) and EDGE (Enhanced data rates for GSM (Global System for Mobile communication) Evolution). According to statistics from BSNL these services are likely to have generated around \$63 billion in revenue by the year 2010. Mobile banking uses the mobile commerce service to enable various banks and financial institutions to offer their customers rich value added services such as accessing account information, making account transactions (transferring money, paying bills, or buying stocks

# **Mobile Banking**

All major banks offer mobile banking service as a value added service to their customers. For example, HDFC Bank, ICICI Bank, and State bank of India (SBI) all provide mobile banking alerting service to their customers. The mobile operators in India offer such new value added services to their subscribers in India because call charges have dropped to record low prices due to entry of new players. There is strong market competition between all these mobile operators. For mobile banking the data transfer costs are very low and there will be a fixed flat rate for the subscribers to use these services.

Impact Factor – 1.115

# **Security Concerns**

Security is essential in any service that is offered, especially for mobile commerce because here the subscribers are dealing with money. There are many security related concerns about a mobile commerce service. Mobile devices are very small and the subscriber can lose the device or it can easily be stolen from the subscriber and then misused. If any of the confidential content is sent as clear text they could easily be read and exploited. Locationaware applications are popular in the new handsets equipped with Global Positioning System (GPS).

## **Advantages of Mobile Commerce**

RESEARCH FRONT

With a mobile banking service, it is not necessary for the subscribers to go to the bank in hot weather and there is no need for them to stand in long queue in Banks for basic purposes. This service helps a lot to the old and disabled persons. With mobile ticketing service the subscriber can book tickets without travelling to ticket vending places, without standing in queues, and tickets can also be booked at the last moment.

# Disadvantages of Mobile commerce

Though there are lots of advantages of the mobile ticketing service there can be a lot of misuse of these services, as some subscribers can buy blocks of tickets through their mobile and then sell these tickets for a much higher price at the last moment. Of course this misuse can be curtailed to a large extent by demanding production of proof of identity at the venue, to ensure that only the subscriber who booked the tickets with the mobile phone can utilize the service.

# Other analysis

The other analyses that can be made of content providers are:

- 1) Are the content providers providing the right type of contents to the subscribers?
- 2) What are the improvements that can be made in the contents provided by the content Providers?
- 3) How important is the role of content providers with the introduction of the 3G services?
- 4) What new contents can be provided by the content providers for the subscribers in India?
- . The below pie chart figure, gives the pictorial representation of the percentage of users in the different range.

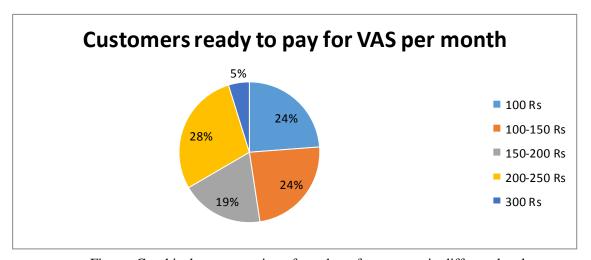


Figure: Graphical representation of number of customers in different level



Then a survey was conducted for finding out which of the mobile commerce services people are willing to use mostly out of the different services like mobile banking, mobile ticketing, mobile wallet and mobile coupons. The people responded with the following options as mentioned in the table.

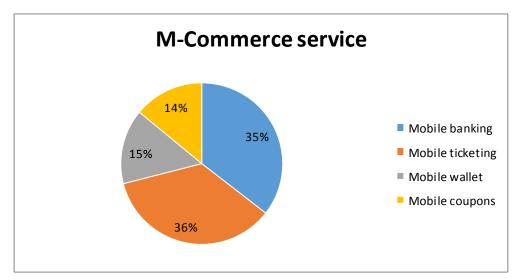


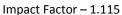
Figure: Graphical representation to total positive response for M- Commerce

From the above graph it is found that most of the customers have voted positively for the Mobile banking and the mobile ticketing services. The other two services like Mobile wallet and the mobile coupons have almost equal number of responses but very less than that of the mobile banking and ticketing service. The providers of these services have to work thoroughly in improving these services with full security measures as these services deals with money and also the service should be very helpful for the customers. Then a survey was conducted for finding which location based service is mostly used by many subscribers.

## FINDINGS AND CONCLUSION

We found that there are lots of new MVAS services are coming into the market. There is a tremendous increase in the revenue for the telecommunication sector. However in order to derive the full benefits of these services, every subscriber should have an advanced mobile handset. The new VAS that are introduced daily have a tremendous effect on the way that people use their mobile phones and the mobile phone is proving to be more like a friend. With the introduction of 3G services in India the scenario is drastically changing due to introduction of new VAS. These VASs are becoming very useful to all types of subscribers. The entire sub categories of VASs that are provided under the umbrella of mobile commerce are very useful, highly effective services for same set of subscribers. Then we have analyzed the importance of ringback tones and the different types of ringback tones service that are provided by a company OnMobile.

We have also analyzed in detail the importance of the different types of ringtones provided to the subscribers. With the advent of this new technology, the contents provided by them should aim to delight all sections of people in the targeted customers. Only if all the targeted customers get their preferred contents through MVAS more people will use these services and this in turn will increase the revenue of the mobile operators as well as the content providers. None of the contents that are created by the content providers are



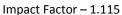
exclusively made for mobile phones, except games. From the different survey results we found how much people are willing to spend for VAS and the results gave a conclusion that most of the people are willing to spend a good amount of money for VASs.

#### SUGGESTION AND FUTURE SCOPE OF THE STUDY

In future more MVAS services should be analyzed and evaluated. The statistics of number of users using these VASs should be examined. A more detailed analysis can be made on to find out how many subscribers are subscribing for these services and can find the importance of the different VAS given to the customers. The m-commerce services can be further analyzed and to evaluate which mobile commerce services are very useful and which services are most used by subscribers in India. The role of software developers can be thoroughly examined.

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