E1-E2 (EB)

Chapter 11

New Business

11. New Business

Telecom industry is witnessing huge growth as compared to other sectors in India. Tariff for telecom services is reducing day by day and telecom operators are facing problem of lesser ARPU. Hence Telecom operators are searching new ways to increase revenues. Few sources of additional revenue are as follows:

- Mobile Commerce
- Sharing of infrastructure
- Mobile Virtual Network Operator (MVNO)

11.1 Mobile Commerce

Mobile commerce was born in 1997 when the first two mobile phone enabled Coca Cola vending machines were installed in the Helsinki area in Finland. They used SMS text messages to send the payment to the vending machines. In 1997 also the first mobile phone based banking service was launched by Merita bank of Finland also using SMS.

In 1998, the first digital content sales were made possible as downloads to mobile phones when the first commercial downloadable ringing tones were launched in Finland by Radionlinja (now part of Elisa)

In 1999, two major national commercial platforms for m-commerce were launched with the introduction of a national m-payments system by Smart as Smart Money in the Philippines and the launch of the first mobile internet platform by NTT DoCoMo in Japan, called I-Mode. I-Mode was revolutionary also in offering a revenue-sharing deal where NTT DoCoMo only kept 9% of the content payment and returned 91% to the content owner.

Mobile commerce related services spread rapidly in early 2000 from Norway launching mobile parking, Austria offering mobile tickets to trains, and Japan offering mobile purchases of airline tickets.

PDAs and cellular phones have become so popular that many businesses are beginning to use m-commerce as a more efficient method of reaching and communicating with their customers. Although technological trends and advances are concentrated in Asia and in Europe, Canada and the United States are also beginning to experiment with early-stage m-commerce.

The less price sensitive early adopters from the 13-25 age group could drive the initial growth. Growth in mobile products such as ringtones, games, and graphics may displace spending on many traditional youth products such as music, clothing, and

movies. This would radically change the dynamics of all visual entertainment and product-service distribution worldwide so marketers could target end-users with diverse youth mind sets. The youth market has historically shown rapid viral growth which later gains acceptance in the mass market. While emerging markets are proving to be the ideal solution for sustaining revenues in the face of falling ARPU, analysts say the rapid commercialization of 3G services is likely to open up new opportunities in developed markets.

In order to exploit the m-commerce market potential, handset manufacturers such as Nokia, Ericsson, Motorola, and Qualcomm are working with carriers such as AT&T Wireless and Sprint to develop WAP-enabled smart phones and ways to reach them. Using Bluetooth technology, smart phones offer fax, e-mail, and phone capabilities.

11.2 Products And Services Available

Mobile Ticketing

Tickets can be sent to mobile phones using a variety of technologies. Users are then able to use their tickets immediately by presenting their phones at the venue.

Tickets can be booked and cancelled on the mobile with the help of simple application downloads or by accessing WAP portals of various Travel agents or direct service providers.

Mobile Vouchers, Coupons And Loyalty Cards

Mobile ticketing technology can also be used for the distribution of vouchers, coupons and loyalty cards. The voucher, coupon, or loyalty card is represented by a virtual token that is sent to the mobile phone. Presenting a mobile phone with one of these tokens at the point of sale allows the customer to receive the same benefits as another customer who has a loyalty card or other paper coupon/voucher. Coupons may be sent to a customer utilizing location based services when he is in a certain physical proximity (e.g. passing by the store). Mobile delivery enables:

- Economy of scale
- Quicker and easier delivery
- Effective target marketing
- Privacy-friendly data mining on consumer behaviour
- Environment-friendly and resources-saving efficacy

Content Purchase And Delivery

Currently, mobile content purchase and delivery mainly consists of the sale of ring-tones, wallpapers, and games for mobile phones. The convergence of mobile phones,

mp3 players and video players into a single device will result in an increase in the purchase and delivery of full-length music tracks and video. Download speeds, if increased to 4G levels, will make it possible to buy a movie on a mobile device in a couple of seconds, while on the go.

Location-Based Services

Unlike a home PC, the location of the mobile phone user is an important piece of information used during mobile commerce transactions. Knowing the location of the user allows for location based services such as:

- Local maps
- Local offers
- Local weather
- People tracking and monitoring
- Information services

A wide variety of information services can be delivered to mobile phone users in much the same way as it is delivered to PCs. These services include:

- News services
- Stock data
- Sports results
- Financial records
- Traffic data and information

Particularly, more customized traffic information, based on users' travel patterns, will be multicast on a differentiated basis, instead of broadcasting the same news and data to all Users. This type of multicasting will be suited for more bandwidth-intensive mobile equipment.

Mobile Banking

Banks and other financial institutions are exploring the use of mobile commerce to allow their customers to not only access account information, but also make transactions, e.g. purchasing stocks, remitting money, via mobile phones and other mobile equipment. This service is often referred to as Mobile Banking or M-Banking.

Mobile Brokerage

Stock market services offered via mobile devices have also become more popular and are known as Mobile Brokerage. They allow the subscriber to react to market developments in a timely fashion and irrespective of their physical location.

Auctions

Over the past three years mobile reverse auction solutions have grown in popularity. Unlike traditional auctions, the reverse auction (or low-bid auction) bills the consumer's phone each time they place a bid. Many mobile PSMS commerce solutions rely on a one-time purchase or one-time subscription; however, reverse auctions are high return applications as they allow the consumer to transact over a long period of time.

Mobile Purchase

Mobile purchase allows customers to shop online at any time in any location. Customers can browse and order products while using a cheap, secure payment method. Instead of using paper catalogues, retailers can send customers a list of products that the customer would be interested in, directly to their mobile device or consumers can visit a mobile version of a retailers ecommerce site. Additionally, retailers will also be able to track customers at all times and notify them of discounts at local stores that the customer would be interested in.

Mobile Marketing And Advertising

Mobile marketing is an emerging concept, but the speed with which it's growing its roots is remarkable. Mobile marketing is highly responsive sort of marketing campaign, especially from brands' experience point of view. And almost all brands are getting higher campaign response rates . Corporations are now using m-commerce to expand everything from services to marketing and advertisement. Although there are currently very few regulations on the use and abuses of mobile commerce, this will change in the next few years. With the increased use of m-commerce comes increased security. Cell phone companies are now spending more money to protect their customers and their information from online intrusions and hackers.

11.3 Sharing Of Infrastructure

Wireless:

The growth in wireless mobile subscribers in last one year has been phenomenal and over 7 million new mobile customers are being added every month. Due to intensive growth, intra-site distance of base units are reducing drastically and the formation of such cluster of base units opens a new opportunity of sharing the infrastructure which could be passive as well as active.

The benefits or pay off are listed as under-

- To reduce the capital expenditure.
- Quick rollout of the network and thereby inflow of revenue.
- To reduce the operating cost.
- To improve the city skyline.

- Optimum utilization of national resources and hence improved economic efficiency.

11.4 Regulatory and Industry Initiatives:

The TRAI has not only considered the issue of passive infrastructure sharing but has given the recommendation regarding active infrastructure sharing and backhaul on a suo- motu basis in April 2007.

The Authority also took into consideration of prevailing international practices and has opted for co-operative efforts amongst telecom service providers with least regulatory intervention. TRAI has made it clear that it does not prefer any mandated passive infrastructure sharing but has required that the entire process should be transparent and non-discriminatory. The licencees should be required to announce on their website the details of existing as well as future infrastructure installations available for sharing by the other service providers.

Infrastructure sharing may be new to India, but it is a standard practice, globally. Though tower sharing has not been very successful in most European and Asian countries, experts believe India will do a US, because no other country in the world has 12 operators. Currently, there are 1.1 lakh towers in the country. To meet the government's target of providing 500 million telephones by 2010, nearly 3.3 lakh towers will be required in the next three years. Moreover, 3G will also require denser coverage.

11.5 Mobile Virtual Network Operator (MVNO)

A mobile virtual network operator (MVNO) is a company that provides mobile phone service but does not have its own licensed frequency allocation of radio spectrum, nor does it necessarily have all of the infrastructure required to provide mobile telephone service. A company that does have frequency allocation(s) and all the required infrastructure to run an independent mobile network is known simply as a Mobile Network Operator (MNO). MVNOs are roughly equivalent to the "switchless resellers" of the traditional landline telephone market. Switchless resellers buy minutes wholesale from the large long distance companies and retail them to their customers.

An MNO that does not have a frequency spectrum allocation in a particular geographical region may operate as an MVNO in that region. MVNOs can operate using any of the mobile technologies MNOs use, such as IS-95 (CDMA), GSM and the Universal Mobile Telecommunications System (UMTS).

The first commercially successful MVNO in the UK was Virgin Mobile UK, launched in the United Kingdom in 1999 and now has over 4 million customers in the

UK. Its success was replicated in the US, but ventures in Australia have not been so successful, and failed in Singapore, albeit with a different strategy. Initially, Virgin ran using a service provider model—essentially reselling capacity on T-Mobile.

The first MVNO using the full definition was created by Tele2 in Denmark, and subsequently rolled out in several European markets. This model formed the basis between the co-operation between Tele2 in Sweden and Telia, created when Telia failed to obtain a 3G license in their home market

An MVNO's roles and relationship to the MNO vary by market, country and the individual situations of the MNO and MVNO. In general, an MVNO is an entity or company that works independently of the mobile network operator and can set its own pricing structures, subject to the rates agreed with the MNO. Usually, the MVNO does not own any GSM, CDMA or other core mobile network related infrastructure, such as mobile switching centers (MSCs), or a radio access network. Some may own their own Home Location Register, or HLR, which allows more flexibility and ownership of the subscriber's mobile phone number (MSISDN)—in this case, the MVNO appears as a roaming partner to other networks abroad, and as a network within its own region. Some MVNOs run their own Billing and Customer Care solutions known as Business Support Systems (BSS). Many use an MVNE. MVNO's are typically well known, well positioned companies, also successful MVNO's will also be those that have ample financial resources and sufficient agreements with existing operators to provide a good service coverage area.

There is a distinction between MVNOs and service providers. MVNOs refer to mobile operators who are not licensed radio frequency holders and lease radio frequency from MNOs in order to set up their mobile virtual networks. These virtual networks act in a similar way to genuine MNOs in the sense that they can have their own SIM cards which are different from the SIM cards of the MNOs who lease those frequencies and they can also conclude interconnection agreements with MNOs or MVNOs. Based on their virtual networks they can either provide wholesale services to their retail arms, or sell wholesale services to mobile service providers. By contrast, service providers are companies that purchase wholesale mobile minutes and resell to

end-users. Normally they do not have their own SIM-cards that are provided by their hosting MNOs or MVNOs. The services provided by service providers depend on the services of the hosting MNOs or MVNOs. In addition, interconnection of service providers is carried out by their hosting MNOs or MVNOs.

11.6 Legislation

Presently many companies and regulatory bodies are strongly in favour of MVNOs. For example, in 2003, the European Commission issued a recommendation to national telecom regulators (NRAs) to examine the competitiveness of the market for wholesale access and call origination on public mobile telephone networks. The study resulted in new legislation from NRAs in countries like Ireland and France forcing operators to open up their network to MVNOs. In Middle East region, Jordan TRA has issued 1st MVNO regulations in 2008 facilitating the entrance of the 1st MVNO

in the Middle East. In India the process of finalizing MVNO related regulation is still in progress.

Short Subjective Questions:

Q.1 Why Telecom operators are searching for new business?

Q.2 Name few sources of new business.

Q.3 What is mobile Commerce?

Q.4 Name few products and services of m-commerce.

Q.5 What are the benefits of sharing of infrastructure?

Q.6 What is m-banking?

Q.7 What are the advantages of mobile delivery of vouchers,coupons,etc.?

Q.8 How m-commerce is different from e-commerce?

Q.9 What is MVNO?

Q.10 What are the difference between MNO and MVNO?

xxxx