A Study of Mobile TV Business Model

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Abstract The spread of mobile phones across the developing world is one of the most remarkable technology stories of the past decade. Today is high-speed wireless mobile network times. The main information terminal of mobile phone is becoming the new media. However, Successful operation of mobile TV is decided by many factors. Therefore commercial development depends on the choice of mode. Yet relatively little scholarly research explores the mobile TV business model. This paper calls attention to this gap in the research the network integration mode of mobile TV. By analyzing from paying mode, mobile television content requirements, innovative services and technology standards, construct a mobile TV commercial development mode based on innovative products, services and network integration.
Key words Mobile TV; Business model; Potential demand; Business strategy

1 Introduction

Mobile TV has created quite a stir in the technology and communications community with a promise of grandeur. This promise is easy to understand in that mobile TV combines the greatest communications trend in the last 20 years, mobility, with the people's love of TV.Around the globe, Japanese and south Korean mobile TV industry in the leading position, Europe, United States and China mobile TV industry development level basically the same . After 3G expectations are targeted towards 3.5Gs such as HSDPA and 4G. HSDPA will enable data rates as high as 14.4 Mbps; mobile services development has followed technological development. Rautio (2004) has defined the Mobile TV innovation as "an innovation that combines two existing products: a mobile telephone and a television. It brings television and other broadcasting services to a mobile phone" (Rautio 2004).. It is a service innovation that is provided by combining two existing products: a mobile telephone and a television. It brings television and other broadcasting services to a mobile phone over a public network. According to the Gallouj's (2002) innovation object categorization, Mobile TV services have characteristics of both product or service-product innovations and process innovations. Mobile TV includes innovation of totally new service products but also innovations to the service delivery process.

Foreign scholars' research focuses on the following aspects: Streaming media key technology and standards. Content operation, business models development, influence and strategy. In addition, researchers also figured to establish the regulatory system for industrial development in view of mobile TV rapid extension. China mobile TV audience of scholars to study most concentrated in quantitative analysis. Zhang et al. (2002) argue that there will not be a single killer application among mobile services but rather special niche markets with different applications. The paper analyses on user demand for mobile TV content innovation and industrial building provides relevant datum. Challenges for value adding mobile services today include the small capacity of devices and thus poor quality of content, inefficient service delivery resulting in high prices, and finally difficult usability. In mobile TV media era, mobile phone users in subsection tend to young and at ages 18-30.The users at that age lean to enjoy high quality life, pursue simple and novel of entertainment. Meantime, they are 3G service main users.

2 Overview of Mobile TV

Mobile TV has been one of the most appealing mobile services according to several user pilots all over the world. Mobile TV integrates the major mass medium – TV, and the most personal medium – the mobile phone. This combination could at its best enable much more than just an additional portable TV set. Today, mobile TV service was considered to have potential future. Development of innovative mobile TV services is a challenge for operator. Requirements for mobile TV adoption included handset usability and acceptance, technical performance and reliability, usability of mobile. Mobile TV had to provide advantages to consumers in order for it to be adopted.

2.1 Mobile TV technology

A variety of standards exists, the terminal market and service market become scattered. The transmission technology is an important factor determines whether large-scale mobile television

commercial market. Mobile TV technology basically means two kinds. First, use cellular mobile network. Second, use floor or satellite digital radio. Directly receive digital TV signals through equipped with digital TV receiving module. The key technology of mobile TV, such as multimedia decoding, bandwidth, adaptation and congestion control, error-controlling, terminal adapter, mobile streaming media content distribution network (CDN network and P2P networks), streaming media transfer protocol (RSVP RTCP, RTSP, and your RTP, mobile IP, SIP), DRM etc.

There is a fragmentation of standards for digital mobile TV broadcasting. In digital mobile TV broadcasting, several standards are being used, each mainly in one country, and that situation is likely to continue in the future. Examples are Media FLO in the US, CMMB in China, and T-DMB in South Korea. However technology and interfaces standardization was considered a prerequisite for supply and commercialization of Mobile TV services and thus market development.

2.2 Service content and concepts

According to the Chinese user study results, most users considered Mobile TV service contents are one of the key requirements for Mobile TV service use. Television broadcasting services usage is dependent on having interesting content every minute and this was said to apply to Mobile TV as well. The current familiar television channels, programmers and brands are necessary for Mobile TV service adoption. Existing television broadcasting content was sufficient and only some modifications were needed such as creating new prime times. But also that Mobile TV tailored service concepts including special programs and channel formats, as well as interactive services, in order for the consumers to feel that Mobile TV is a value-adding service.

The role of traditional television programs would be big in the beginning and later on the role of mobile tailored content and concepts would grow. Mobile TV content is consumed in new use situations that in the beginning, the current programmer formats are fine, but mobile tailoring is needed in the future. The need is build new prime times, such as waiting time. In order to create a need for Mobile TV usage, interesting programs should be available during new prime time. A different kind of content is suitable for Mobile TV broadcasting, as the services are used in different use situations. It was also argued that the production cost of the mobile tailored programmers should not increase too greatly so that the service price would remain reasonable.

2.3 Potential demand analysis and relative advantage

The main advantage of Mobile TV services for consumers was considered to be the ability to watch TV independent of time and place. This allows consumers to keep up with news or to be entertained whenever and wherever they wish. Time independency here refers to the fact that the time when consumers are able to follow TV programs is broadened with Mobile TV innovation, in contrast to traditional television, the viewing of which is dependent on the time when you are at a certain place.
Mobile TV broadcasting services were seen thought to be slight different from Mobile video streaming or downloading services. However, the services were not seen as competitors, but rather complementary services. It was argued that broadcasting services are not necessarily very optimized or personalized as video streaming or downloading services could be.

Short and easy to follow content was preferred for break time such as before going to sleep. Mobile TV usage was more spontaneous than normal TV viewing. People seemed to use different content types in different locations. News, entertainment and information services becomes strong attraction were used everywhere throughout the day, and the mobile phone was considered as a valuable channel especially when something newsworthy suddenly happened. Live broadcasts of sports were watched anywhere if there was no conventional TV available .But considering sports programmers, the mobile TV was a better option than mere radio but the video quality was not sufficient for fast sports such as football. Mobile TV was often viewed during the daytime, which differs from the peak viewing times of traditional television. National channels were preferred due to the familiar content.

In addition, studies have shown that at present, in the city to take public transportation time for 1-2 hours, at this time, people usually listen to music and reading used to kill time. And, the mobile phone television programs will be another way to kill time. So Specialized in production of mobile TV programs have strong market.

2.4 Pricing model

Media consumption in general is growing. People were also seen to be more and more willing to pay for media services. In relation to normal television services, Mobile TV services were expected to cost more per person. Price level, pricing model, products packaging and convenient paying were considered important. Larger trends were also seen to affect the change in consumer behavior and support of Mobile TV usage. The functions of work and home were argued to be changing. There are

three alternative pricing models; fixed fee, pay per view and bundling with another service or product with a fee or no fee. In the United States, the method of monetization for 3G mobile TV is typically subscription fees. Monthly subscription fees range from a few dollars per month to over $15 per month, depending on the number of channels offered and the service pricing for the region. Some operators offer hourly, daily, and weekly options to encourage usage as well. Additional services such as interactive mobile services via the 3G network would cost extra the no-fee model refers to a model in which advertisement revenue is the main revenue source. Hybrid models of these were also considered possible.

Price level was considered an important affecter of long term usage in particular. In addition to price level, value for money was an important affecter. Product packaging was mentioned as an important factor as well. A good model would be a basic package, with only few channels for a relatively low price, and then additional service packages on top of that. It was also mentioned that paying for the service had to be convenient and simple. Price level must be reasonable and understandable to consumers for the overall user experience is more important. The pricing model is affected by existing industry models both options have been made available to viewers. Negotiating new pricing models with various broadcasting companies was seen as a challenge.

2.5 Increased advertising revenue

Advertising budgets are increasingly being diverted from traditional media and instead spent on advertisements in new media, such as the Mobile phone . Mobile TV services provide a new advertisement opportunity in an appealing new media format. While providing advertisers with a new forum to market their goods and services, it also enables broadcasters to increase their advertisement revenue. With a return channel, advertising can be tailored for a specific audience. Advertisers will be able to locate the user, better understand user behavior and benefit from viewer interaction. Also, an electronic service guide can be used for advertising purposes. With user identification, personalized advertisement and micro-segmentation also become a possibility. Not only will this be advantageous for advertisers, but also permit broadcasters to receive higher tariffs for air-time.

3 Possible Business Models

Both broadcasters and telecom operators have long and successful relationships with their respective viewers and customers there are over 100 mobile TV operators offering mobile TV in every region of the world. Some of the 3G mobile TV services have been launched recently, while others have been available for several years. Mobile operators who plan to begin commercial deployment of 3G services in 2010 and beyond, but may have initial difficulties in finding a business model. Revenue distribution among Mobile TV service value network participants was seen as a challenge. Naturally, companies each wanted to maximize their revenue share and the revenue sharing model was dependent on the aggressiveness and co-operation of value network companies. The next few paragraphs describe a variety of possible business models.

The issue of managing consumer relationships is fundamental. Alternatively, mobile telecom operators could take the leading role by aggregating the content, encrypting the programmers, offering the service and maintaining the networks, and marketing television as an extra feature of their handsets. But, telecom operators must recognize the proven capability of broadcasters to define attractive service bouquets that meet the demands of the viewing audience. Based on long experience, broadcasters have been able to successfully combine a variety of content into appealing packages. Bringing these powerful brands to a new platform provides a strong advantage. Broadcasters, on the other hand, must recognize that telecom operators have developed a large existing customer base, which has formed a network effect occupation of mobile television market. the A pattern of subsidizing user terminals against future subscription income is well established. Without the mobile telecom operators, it may be difficult to attain high user penetration of Mobile TV programs.

3.1 Broadcast operator -led approach

In this model, broadcasters manage the end-relationship with the consumer is responsible for service provisions, marketing and customer care. The broadcaster receives payments for the use of the service, from consumers, or subscription, or through payments made via the telecoms network operator. A variation on this could be broadcast funding from advertising revenue. As this is not an integrated service proposal, consumers may need to pay more than one service provider to obtain the different services. The involvement of the mobile telecom operator may be limited except for linked telecom services.

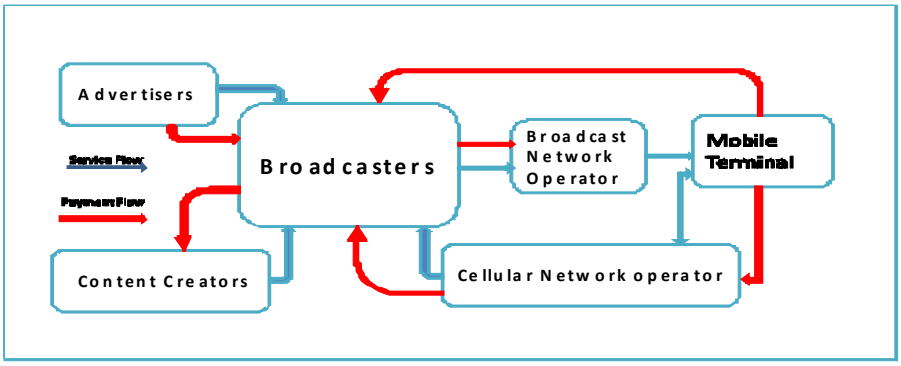

Figure 1 Broadcaster-led Approach Model

3.2 Mobile telecom operator-led approach

In this model, mobile telecom operators manage the end-relationship with consumers and are responsible for service provisions, marketing and customer care. In addition, mobile telecom operators will need to purchase spectrum and content from broadcasters and other content providers. Consumers have access to an integrated service proposition which means that a complete package will be offered by one service provider. As a variation, mobile telecom operators could directly handle advertisements. While mobile telecom operators would be responsible for general marketing, it could be possible for broadcasters to market individual television programmers. For programmers that generate revenue, for example using tele-voting, broadcasters would be responsible for marketing the programmers while the mobile telecom operator would be responsible for the billing. Revenue would be shared.

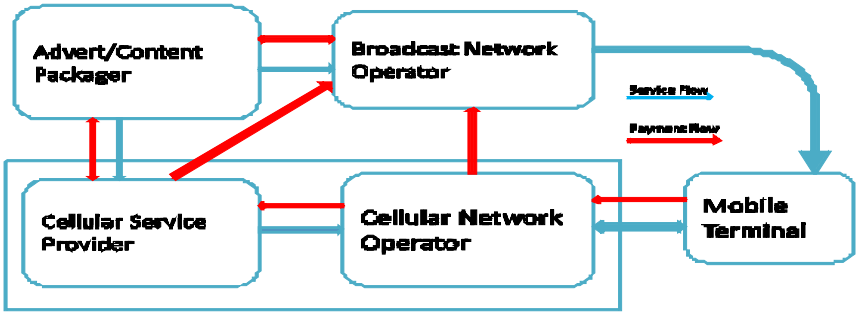

Figure 2 Mobile Telecom Operator-led Model

3.3 cooperation approach

One approach to constructing a total end-to-end broadcasters system making use of mobile telecoms network for the subscription billing is shown below. Broadcast services can be delivered by broadcasters system without the need for an interaction channel, or in the configuration shown, an interaction channel can easily be provided by the use of a cellular network such as the TD-SCDMA network. Methods of providing payment for services can be built upon a proprietary encryption and payment solution or in conjunction with the telecoms network's inherent service statistics collection and billing functions.

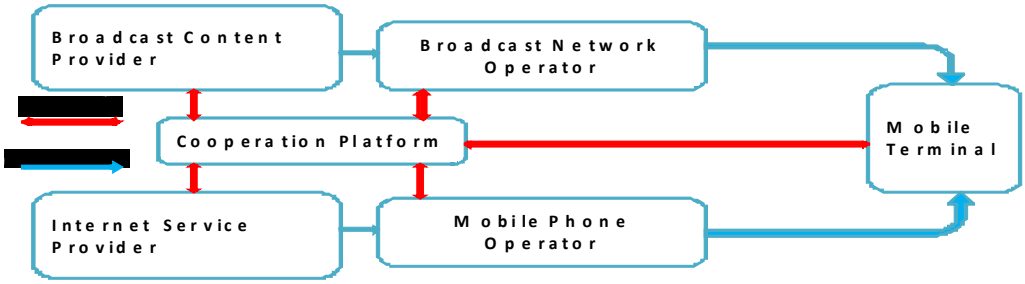

Figure 3 Model of System Architecture for Collaboration

4 Conclusions

From the supply-side factors, the complementary products and services factor was mobile industry specific since not all industries are so dependent on complements. Supply of mobile services is dependent on its complements' supply, quality and interoperability, and the continuous development of these. Standardization is also critical in the mobile service industry. Mobile TV is a long-term business. At present, mobile TV technology, standard and postage still many obstacles. Technology development is another mobile industry specific factor. In the mobile industry, technological innovations are often the fundamental innovations that enable new services and new ways of content delivery and packaging, and this creates uncertainty about the future in the market.

Today, information and entertainment is available on different media. The broadcast content is already becoming interested and attractive to the users. In the future, web content will be increasingly integrated to TV media .mobile phones provide good platforms for this kind of service. Due to the global mobile television in infancy, several mobile TV commercial modes impossible for more analysis and contrast simply on several business model for respective disadvantages and advantages .The paper identifies that it difficult to choose just one of these business model establish industry chain, terminals, technology, postage, profitable way, According to the national conditions, the operability way for business model which combine joint venture with separate operation. Only in this way mobile TV industry gets healthy and stable development.

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