

Economic Analysis of Business Model for Delivering Mobile Value Added Services in Thailand

Puree Sirasontorn

Abstract:

In Thailand mobile penetration rate has dramatically increased at the faster rate than computer and internet penetration rate. A two-fold increase in number of mobile users within five years has confirmed that there is a voice and non-voice market potential for mobile operators and service providers. High market potential for mobile internet has attracted mobile operators and content providers into this market. The objective of this study is to gain understanding of what business model works in Thailand and what the explanatory factors determining success of the model together with barriers to become successful in Thailand. The scope of this study will be in the area of mobile internet. This study uses a single-case research design. The choice of BuzzCity was made based on consideration that BuzzCity is the multiple international award winner and its main customer base is from lower middle income group in developing countries.

Keywords: Mobile Advertising; Mobile Internet; Mobile Applications; Business Models

1. Introduction

In Thailand, the Mobile Internet phenomena have taken place since 2000 with the introduction of Wireless Application Protocol (WAP) technology by Advanced Info Service Plc. (AIS) and Total Access Communication Plc. (DTAC). Until 2003, technology was developed to GPRS and EDGE technology which are considered as a transition period to the new technological service, 3G, via mobile phone. Although 3G is not yet adopted in Thailand, it is predicted that the technological advancement and convergence will bring dramatic changes to the ways people communicate and create, transmit and consume information at the shortest time and to the ways mobile operators, network carriers and service providers in related industries do their businesses.

As shown in Figure 1, in Thailand mobile penetration rate has dramatically increased from 22.5 percent in 2003 to 52.8 percent in 2008 whereas internet penetration rate has increased at much slower pace from 10.4 percent to 18.2 percent. A two-fold increase in the number of mobile users within five years has reassured that there is a voice and non-voice market potential for mobile operators and service providers.

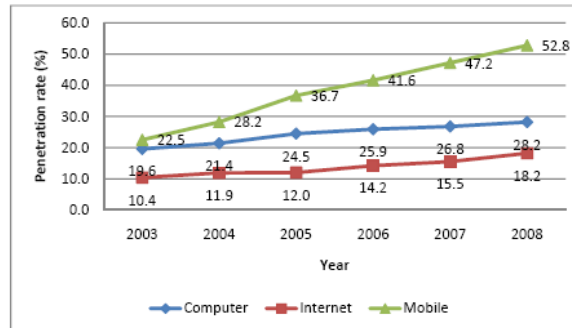


Fig. 1: Mobile, Internet and Computer Penetration Rate in Thailand During 2003-2008 (percent)
Source: National Statistical Office of Thailand

Although the number of both post-paid and pre-paid mobile subscribers have been increasing, as shown in Figure 2, average revenues per customer (ARPU) of major mobile operators¹⁹, namely AIS, DTAC, Hutchison and True Move, from both post-paid and pre-paid services have shown decreasing trend, as shown in Figure 3 and 4. Therefore the value-added services (VAS) over the mobile are drawing increasing attention from operators and content providers. The former believe that this provides a way out of predicament of decreasing ARPU. The latter see this as a potentially powerful distribution medium, in light of the increasing likelihood that the mobile will become the primary method of accessing the internet for a majority of the population.

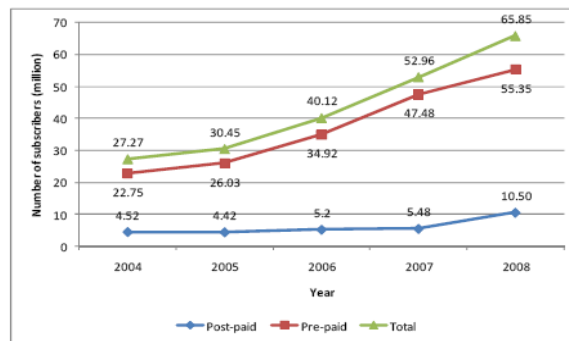


Fig. 2: Mobile Subscribers in Thailand During 2004-2008 (Million Subscribers)
Source: The National Telecommunications Commission

¹⁹ Currently there are six mobile operators in Thailand, namely AIS, DTAC, TrueMove, Hutch, DPC and Thaimobile.

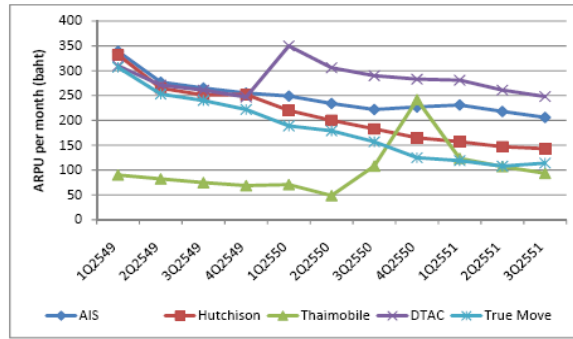


Fig. 3: Average Revenue per User: Pre-Paid Service (Baht per Month)
Source: The National Telecommunications Commission

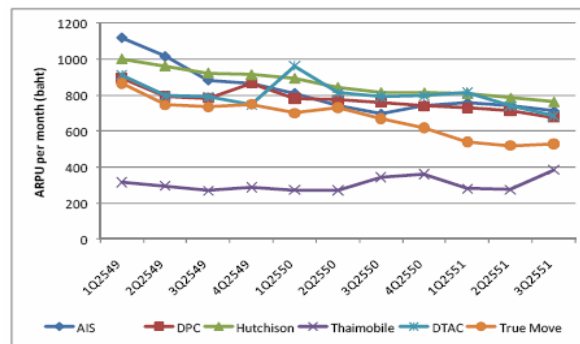


Figure 4: Average Revenue per User: Post-Paid Service (Baht per Month)
Source: The National Telecommunications Commission

Moreover, Figure 5 has revealed that market for mobile handset in Thailand has expanded from 54 billion baht in 2007 to 58 billion baht in 2009. In this market, although conventional mobile handset has highest proportion in this market, its market growth slowed down due to the price effect from Chinese mobile handsets, which is expected to drop significantly even the number of handsets has increased. On the contrary, the smart phone and PDA phone market has shown promising growth, particularly those handsets that support 3G.

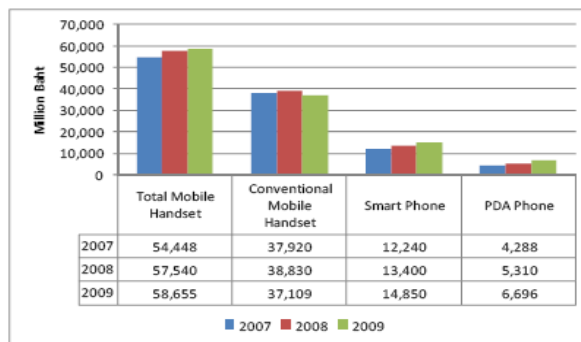


Fig. 5: Market Value of Mobile Handset in Thailand During 2007-2009 (Million Baht)
Source: Thailand ICT Market 2008 and Outlook 2009, Software Industry Promotion Agency

As shown in Table 1, in 2008 mobile voice service in Thailand was worth 163 billion baht with 3.7 percent rate of growth whereas mobile non-voice service was worth only 16 billion baht but with high growth rate at 16.6 percent. The significant driving forces for the mobile non-voice communication service market are Short Message Service (SMS) and Multimedia Messaging Service (MMS) services. This evidence was confirmed by Internet User Profile of Thailand (NECTEC, 2007). In 2007 the survey has revealed that the most popular mobile activities of Thai mobile users are SMS, playing games, downloading pictures and ringtones, visiting websites, MMS, reading news and articles, exchanging photos, and checking and sending emails, as shown in Figure 6. NECTEC (2007) has conducted survey of Thai mobile internet users and found that the major factors of using mobile internet are convenience, novelty and modernity, and cheap mobile internet service.

Communication Services	Value (Million Baht)			Year to Year Growth (%)	
	2007	2008	2009	07/08	08/09
Mobile Voice	154,484	163,135	169,150	5.6	3.7
Mobile Non voice	14,197	16,213	18,904	14.2	16.6

Table 1: Mobile Communication Market in Thailand during 2007-2009

Source: Thailand ICT Market 2008 and Outlook 2009, Software Industry Promotion Agency

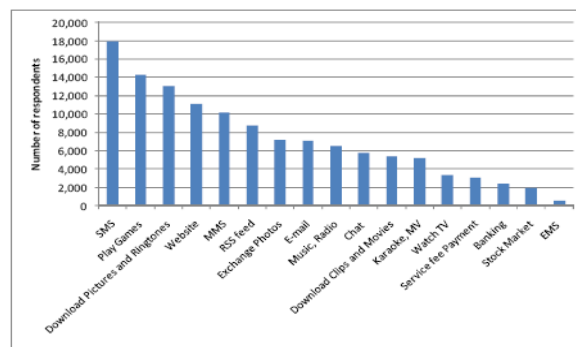


Fig. 6: Mobile Activities of Thai Users in 2007

Source: Internet User Profile of Thailand 2007, NECTEC

High market potential for mobile internet has attracted mobile operators and content providers into this market. Four of mobile operators in Thailand, namely AIS, DTAC, HUTCH and True Move, provide mobile internet services. Most of services are SMS/MMS, information, infotainment, and downloading services. Through their own portal, mobile operators provide mobile contents to their customers. Due to their dominant power over the network, Thai small and medium content providers could not survive in the content provision business by receiving small and unfair revenue sharing. Most of local content providers exit the market. Some survive. Some of business models for content providers have emerged to overcome these market dominances in Thailand. However, empirical evidence in Thailand on the analysis and development of mobile internet business models still lags behind those studies in the other developing countries. This study attempts to fill this gap.

The objective of this study is to gain understanding of what business model works and what the explanatory factors determining success and failure of the model in Thailand. The scope of this study will be in the area of mobile internet. The single case research design will be employed. The choice of BuzzCity as a single case study was based on the consideration that BuzzCity's main customer base is in developing countries.

In the next section, this paper will provide review of literatures on mobile contents, mobile internet and business models. In Section 3, research questions will be set and research methodology employed in this study will be explained. Next, BuzzCity business models will be explored and analyzed. The last section will conclude the paper.

2. Review of literatures

In literatures focusing on online and mobile content services, a 'business model' is defined as the method of doing business by which a company can generate revenue (Rappa, 2007) or as the strategy used to generate revenue by specifying markets, products, customers and the position of the business in the value networks (Yunos et al., 2003). It can be defined as the description of an organization or network of organizations involved in creating and capturing value from technological innovation (Reuver and Haaker, 2009). Shafer et al. (2005) attempted to parse the term 'business model' as 'business is fundamentally concerned with creating value and capturing returns from the value, and a model is simply a representation of reality'. By this definition, components of business model are value creation, strategic choices, value capturing and value network.

Alt and Zimmermann (2001), Afuah and Tucci (2003), and Osterwalder and Pigneur (2002) suggest different sets of elements that constitute an online business model. Although they are categorized differently, when applying with mobile business models, these elements can be clustered into four domains: service domain, technological domain, organizational domain and financial domain (Bouwman et al., 2008).

The design choices in business model components have to be considered together and should be balanced in order to develop viable business model. Reuver and Haaker (2009) have derived the generic mobile business model from Bouwman et al. (2008). Within the service domain, targeting, value-creating elements, branding and customer retention are key design issues. Security, quality of service, system integration, accessibility of customers and management of user profiles are major components in technological domain. Partner selection, network openness and governance are major design elements of the organizational domain. Lastly in the financial domain, pricing of a service, division of investments, costs and revenues, and valuing the contributions and benefits are key components. These design variables are important to investigate the viability and sustainability of any business model.

There are various categories of business models on the web as summarized by Rappa (2007). These include brokerage, advertising, infomediary, merchant, manufacturer, affiliate, community, subscription and utility models. In each model, it is implemented in diverse ways. A firm can combine several different models as part of its overall internet business strategy. For example, community or social networking sites can generate, create and capture value using different types of business models.

Enders et al., (2008) study two German social networking sites – StayFriends and XING and found that suitable revenue models for social networking sites are advertising, subscription and transaction models. Their key revenue drivers are the number of users, the creation of high levels of unique customer value, and a critical mass of users, respectively.

Feijóo et al. (2009) and Tsalgatidou and Pitoura (2001) found that from perspective of mobile operators, mobile businesses have been characterized by the dominant role of

mobile operators in ecosystem. As a result, from perspective of mobile content and applications, mobile business model is 'walled garden' or 'on-portal', where content and application revenues are generated by operators within their own value structure and where users are guided to stay within this structure as much as possible. While a business model for mobile carriers has evolved, demand for unrestricted and wide choice of content and application has been increasing. Mobile operators become mere providers of connectivity. In this connectivity model, revenues for mobile content accrue to content providers, enablers and brokers.

The choice of business model that various actors in mobile business, ranging from device manufacturers, equipment vendors, content providers, application vendors, payment agents, mobile network operators to regulatory authorities and users adopt, relies on economic characteristics underlying the mobile business: mobility, network externalities and exclusive control over network assets (Camponovo and Pigneur, 2003).

These characteristics draw attention from the marketers. Mobile marketing use the mobile network and its link to subscribers for consumer acquisition, sales promotions, customer interaction, m-commerce and awareness or loyalty campaigns whereas mobile advertising is used in combination with other marketing campaigns and channel activity in order to influence purchasing perceptions and also behavior (Sharmar and Wildman, 2009).

User behavior and attitude are important factors to determine success of mobile internet services (Taylor et al., 2008; Haghirian et al., 2008). The study of mobile internet motivations and behaviors of early U.S. mobile internet adopters revealed that awareness and desire to kill time or alleviate boredom were the most frequent motivation. They used their phone frequently even when a computer or laptop was available because of comfort and convenience. Since people used mobile internet in non-mobile settings, more value added mobile internet services can be targeted to stationary settings.

There are very limited literatures on online and mobile internet in Thailand. The only literature found focuses on consumer behavior and acceptance of mobile internet in Thailand. Phuangthong and Malisuwan (2008) examined the factors affecting the user acceptance of Multimedia Mobile Internet in Thailand by employing technology acceptance model incorporating with diffusion of innovation model. They found that entertainment service and application is the most popular applications for both students and employees. Compatibility, usefulness, ease of use and result demonstrability are important factors affecting behavioral intention to use mobile internet.

Since there is a lack of empirical study on business model of mobile internet services in Thailand, this study will fill this gap.

3. Research questions and methodology

The research question will be addressed in this study is what the mobile internet business models work in Thailand. Moreover, this study attempts to explore the economic explanatory factors explaining why the models become dominant.

Single-case research design will be employed in this study. The case studies are epistemologically justifiable when research questions focus on reasons behind observed phenomena, when behavioral events are not controlled and when the emphasis is on contemporary events (Yin, 1989). Moreover, case method is appropriate and essential

where either theory does not yet exist or is unlikely to apply or where theory exists but the environmental context is different (Stuart et al., 2002). This study satisfies these criteria. Research on mobile internet is in an early stage of theoretical development especially in the developing countries. The generalizability of research conducted in the developed countries is questionable in context of developing countries.

In this study, the case of BuzzCity was chosen based on the consideration that BuzzCity is a multiple international award winner and its main customer base is in developing countries. It can serve well as the best practices model for a case research methodology (Eisenhardt, 1989).

BuzzCity was established in 1999 in Singapore as a web portal. BuzzCity is a multi-award winner. In 2008, BuzzCity's myGamma mobile advertising network was awarded the Most Innovative Infocomm Product/Service by National Infocomm Awards in Singapore. In the same year, BuzzCity won a Silver Medal for contribution to Web 2.0 in the Future Mobile Awards and myGamma was awarded the "Best Mobile Social Networking service" by the Mobile World Congress.

To collect secondary data, BuzzCity web site, press articles and internal company documents will be examined to identify the underlying business models. To answer research questions, this study will employ the secondary data to study the key features of BuzzCity's business.

The primary data gathering methodology through semi-structured interviews with experts and top management members of company will be used to capture the knowledge of practitioners and experts. The survey was performed within six-month period in 2009. Apparently within short period of time BuzzCity has changed focus from merchant business to advertising business, therefore the evolution of BuzzCity's business models in Thailand will be examined.

The interviews will focus on exploring the nature of BuzzCity's business models and economic explanatory factors explaining why the models become dominant. Referring to Bouwman et al. (2008)'s design issues, these factors determining choice and success of business models includes of such factors as technology, service targeting, market structure, pricing and revenue sharing models.

4. BuzzCity business models

BuzzCity manages advertising-funded mobile community called myGamma. Through myGamma they market and distribute mobile content directly to consumers in Asia, Europe and the United States, serving more than 19.5 billion ads across the entire network in 2008. BuzzCity's growth rate is 48 percent quarter-on-quarter growth in the last quarter in 2008.

The company has two groups of targets for its mobile social networking services: the blue-collar workers in developed countries and the newly connected middle class across emerging markets. These unwired consumers are able to use the internet on their mobile phones.

As shown in Figure 7, comparing with other countries, Thailand was ranked as the sixth

largest myGamma members, following India, South Africa, Malaysia, China and Indonesia. Growth rate of myGamma members in Thailand, on average, was 4.07 percent in 2008 and declined to 2.64 percent in 2009. The most common reason for using myGamma in Thailand is to communicate with friends and to extend their social networks in order to gain social acceptance.

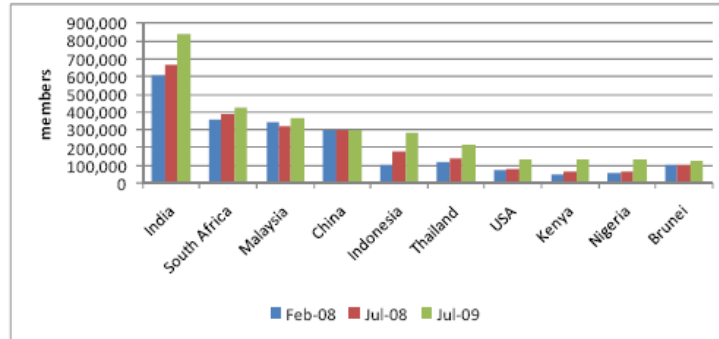


Figure 7: The Number of MyGamma Members in Top Ten Countries (Members)
Source: BuzzCity

In Thailand, advertiser banners served across the BuzzCity mobile internet advertising network has increased by 59 percent from 41 million in the last quarter in 2008 to 65.8 million in the first quarter in 2009. Although Thailand was ranked the eighteenth among top 20 countries in term of ad banners served, the growth rate is relatively high when comparing with other countries, as shown in Table 2.

Ranking		Country	Quarter 4 2008	Quarter 1 2009	Quarter on Quarter Growth
	Q1'09				
1	1	Indonesia	3,564,832,448	4,378,945,983	23%
2	2	India	726,935,723	841,620,420	16%
4	3	United States	382,450,258	527,622,153	38%
3	4	South Africa	465,312,929	427,839,867	-8%
6	5	Egypt	150,393,150	162,183,711	8%
7	6	Romania	135,501,235	161,369,084	19%
12	7	China	77,857,151	129,649,411	67%
9	8	Philippines	115,524,851	125,078,495	8%
14	9	United Kingdom	73,601,656	113,369,462	54%
8	10	Bangladesh	134,627,619	112,814,133	-16%
16	11	Nigeria	70,690,190	90,917,538	29%
10	12	Libya	100,801,729	86,307,837	-14%
11	13	Tanzania	97,661,460	83,765,354	-14%
5	14	Kenya	241,106,915	80,404,957	-67%
13	15	Malaysia	75,414,933	79,887,471	6%
17	16	Canada	65,115,586	75,565,080	16%
15	17	Brunei	73,466,562	73,019,631	-1%
21	18	Thailand	41,350,200	65,813,320	59%
25	19	Saudi Arabia	33,630,687	56,586,799	68%
22	20	Pakistan	40,102,760	46,374,608	16%
Banners served on Top 20 Countries			6,666,378,042	7,719,135,314	14%
Banners served across the network			7,546,469,278	8,523,586,447	11%
Top 20 countries represent 91% of all banners served					

Table 2: Ad Banners Served: BuzzCity Mobile Internet Advertising Network

As shown in Figure 8, in Thailand, ad inventory sold experienced fluctuating trend. The external publishers has more important role. Ad inventory sold via the external publishers has increased continuously since June 2008 and surpassed ad inventory sold via myGamma.

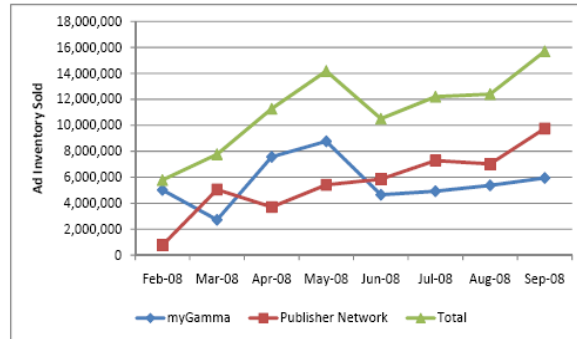


Fig 8: Ad Inventory Sold through myGamma and Publisher Network in Thailand
Source: BuzzCity

4.1 Key players and ecosystem

There are a number of players in the mobile business value chain ranging from technology platform vendors, infrastructure and equipment vendors to content providers and mobile service providers. Regarding the participating entities in a mobile internet transaction, they depend on the underlying business model.

BuzzCity primarily deals with advertisers, publishers, content providers or content aggregators and mobile operators or carriers including of access providers. BuzzCity also works with advertising agencies and media houses or broadcasters to persuade more advertisers to join BuzzCity mobile advertising network; and with service providers dealing with billing and mobile internet site building and hosting. In the ecosystem, BuzzCity serves as middleman to match advertisers with publishers in mobile advertising business. It should be noted that business actors and their roles refer to the various activities that have to be performed in order to create value in mobile internet. The activities are also connected to the technology used. Some actors may perform more than one activity, thus reducing the number of actors in the ecosystem.

In the case of BuzzCity, the following entities are the main participants in an ecosystem.

- Mobile operators or carriers. The roles of mobile operators can vary from simple and passive mobile network providers to a very active and dynamic by being strategically positioned between customers and content providers or aggregators and offer portal or trusted third party services. They can play roles of an intermediary, portal or publishers, advertisers or content aggregators.
- Publishers or web portal who own sites offer personalized and localized services to consumers. BuzzCity offer web portal or publishers which have their own sites both cost

per click and cost per impression models²⁰ in order that BuzzCity can place both graphical and text advertisement or banners on their network. Through BuzzCity's earning report, publishers can monitor their earning with detail such as number of exposure and click, click through rate, and cost per impression. This information assists publishers to maximize their monetization of their traffic. On average, BuzzCity offer publishers 65 percent of revenue received from advertisers whereas the rest belongs to BuzzCity.

- Advertisers who advertise their products or contents through myGamma and publishers. They can freely set advertising campaign and target worldwide. BuzzCity's ad management allows the advertisers to take full control and flexibility to set effective and productive targeted campaigns. Advertisers can work on their campaign budget through bidding system. They can bid anything higher than the minimum price of USD 0.01 per click. The higher they bid, the more frequent their advertisement will appear. BuzzCity's proprietary ad management system will allow targeting and up to the minute reporting to efficiently manage advertisers' budget.
- Content providers or owners who provide specific contents to a customer through myGamma and publishers. The contents are developed from the large or small and medium companies. Individuals also develop some user-generated contents and offer or sell it through myGamma. These contents are subsequently offered to mobile users.
- Content aggregators who aggregate contents and provide contents to consumers through myGamma and publishers. Contents can be distributed in the same ways as those distributed by content providers.
- Content providers or aggregators integrate the Gamma Wallet onto their sites in order to charge their visitors and reach the community of myGamma members, who have Gamma Dollar (G\$) to spend on their contents. Contents include tones, games, pictures, news, byte-size content, discount coupons, horoscopes, fortune-telling, passes to premium areas, movies, mp3 and others. The most popular applications in myGamma are HugMe, Tarot card application and virtual gifting. They can monitor their site's transactions from the earning reports.
- Consumers who is online and/or mobile. Consumer will pay for internet or air time to mobile operator and/or purchase items or pay for downloading contents to BuzzCity.

Depending on the way the participating entities are related to each other, the different BuzzCity's business models dealing with different entities are developed. The service and money flow of BuzzCity business models are shown in Figure 9 and 10, respectively.

²⁰ Cost per click is related to cost per thousand impressions. For example, if CPC is 15 US cent and click through rate is 1 percent, thousand impression will result in 10 clicks. Therefore CPM is USD 1.5.

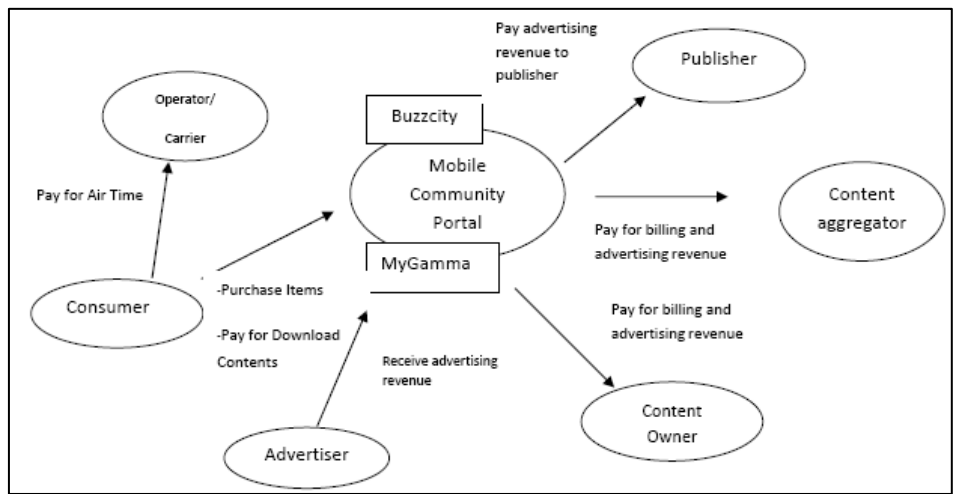


Figure 9: BuzzCity in Ecosystem: Money Flow

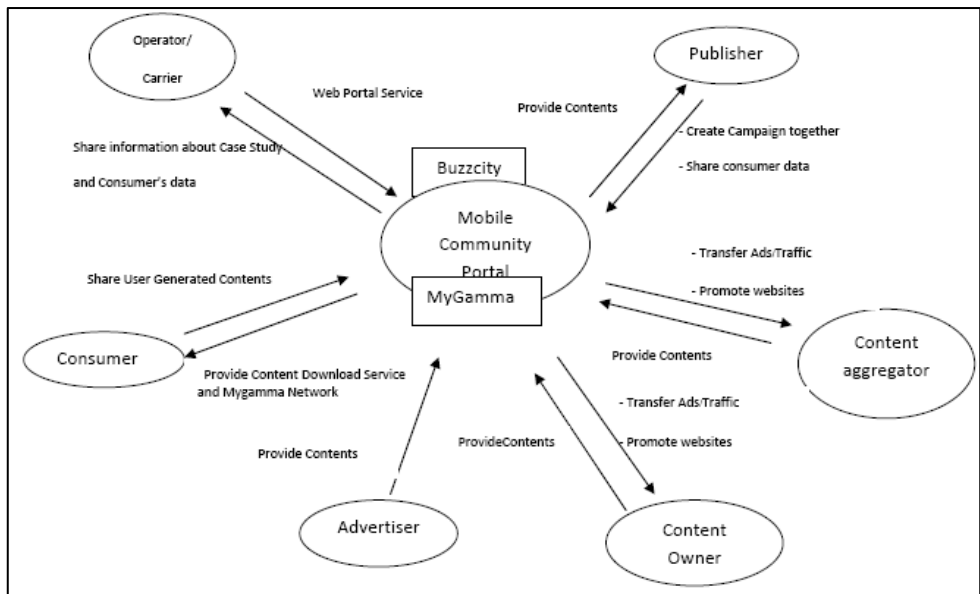


Figure 10: BuzzCity in Ecosystem: Service and Information Flow

5. Business model analysis in Thailand: Case of BuzzCity

BuzzCity's business model is a combination of community, advertising, and affiliation model. BuzzCity has its own social networking portal, as one of publisher, together with more than 2,000 publishers or affiliates. Business model of BuzzCity in Thailand is similar to BuzzCity in other countries. In this section, the factors determining the potential success of business model in Thailand will be analyzed as following.

5.1 Technology

One of the factors determining the success of BuzzCity's business model is its in-house technology. With the wide range of technologies, BuzzCity has developed simple platform for developers to create networking applications and has created mobile ad and international billing network. Standardization processes and open interfaces are seen as essential for an effective and fast development of mobile content services.

Ad optimization technology was developed to optimize click-through rate and frequency of banner appearance. This technology helps to enhance a bidding system. The higher advertisers bid for cost per click or cost per thousand impressions, the more frequent their advertisement will appear. Moreover, ad targeting technology will target ads to appropriate publishers. Both ad optimization and targeting technology will be run every 15-30 minutes to search for the optimized click-through rate and frequency of banner appearance and for appropriate publishers.

Based on this technology, Buzzcity maximize revenue. The advertising platform needs to estimate the click-through rate for the bid and to allocate ad to bidders to maximize BuzzCity's revenue. The programs will balance the value of each bid of cost per click with their frequency in order that not only the highest-bid ad will appear on the screen all the time but the appropriate mixture of ads with various values of bid will also sequentially appear on the screen.

In addition, technological advancement of mobile devices also support the marketing message oriented functionalities in order to provide various mobile advertising campaigns offering links between consumers and advertisers with the various response mechanisms such as click to call, click to competition, click to survey, click for sample, and mobile WAP sites with a combination of text links, graphical banners (Sharma and Wildman, 2009). Markets for mobile phones in Thailand are broadened, selling and buying wide range of mobile phone from simple, old-fashioned mobile phones, to smart phones and PDA. Moreover the price of mobile has drastically decreased. However Thailand still lags behind most of developing countries, particularly in infrastructure like 3G which has not been fully functioning in Thailand.

5.2 Service Targeting

BuzzCity targets its services to the advertisers. In Thailand the number of mobile advertisers is limited because they do not have the knowhow, time or resources to

learn how to use new technology efficiently. Very few numbers of Thai advertisers reflects that slow adoption of mobile internet as new media. BuzzCity is aware of this limitation and provides advertisers assistance to create the mobile ads, insert the mobile ads into the system and set up the target criteria for the advertiser so that the advertiser only needs to follow the reports on the number of consumers that have been receiving the company's message. This service is offered to small advertisers who may lack in advertising knowledge and of an Internet connection so they can use mobile advertising as a new advertising channel. At the same time, large advertisers may use mobile advertising as a way to communicate with their loyal customers by using their own instead of the application provider's customer data bases.

Consumer attitude toward advertisements is considered a significant explanatory variable in measuring advertising response. Lee et al. (2006) stipulate that there is a strong relationship between the intention to receive mobile advertising messages and the attitude toward them. Leppaniemi and Karjaluoto (2005) found that consumers' willingness to accept mobile advertising messages is based on the design of the message and the related technology. For mobile advertisement to be successful, the key factors are the role of the mobile medium in the marketing mix, the development of technology, individualization and a regulatory framework.

In case of Thailand, Thai consumers' attitude toward SMS or MMS as mobile advertisement is not so positive. They found that these SMS are annoying and not relevant to their need and behavior and so tends to ignore or not read them. BuzzCity realized these problems and assist the advertisers to design the advertising campaign targeting the specific group of consumers, based on their user profile. Moreover BuzzCity provides services to the advertisers to make message more attractive. Advertisers should make sure that their mobile advertising messages contain information that is useful to the recipients (Haghirian et al., 2008).

However in Thailand, recently the advertising industry has been shrinking due to economic slowdown, as shown in Figure 11. Moreover, mobile advertising is very new and there is very few advertising agencies in Thailand who actively encourage their clients to advertise through this media. The examples of Thai advertising agencies who engage in mobile advertising are Set Digital, Media Connect and Group M. The advertising budget on online and mobile media is negligible comparing to television, as shown in Figure 12. Most of advertisements are on television since they are clear and understandable for consumers. Even in Thai agencies, there is no media buyer who is responsible for mobile advertising.

As of December 2009, there are 35 Thai advertisers who are using BuzzCity services and 15 foreign advertisers targeting Thai users. Most of them are mobile content providers. They are in content provision business such as N-content and Mobafone; fast moving consumer goods such as drinks, mobile accessories, contact lens; and small and medium enterprises such as massage chairs. Since small and medium enterprises do not have large marketing and advertising budget but aim to venture global, advertising through BuzzCity ad network can fulfill their goals.

In mobile advertising business in Thailand, the potential BuzzCity competitor is Mycombar, new ad network providing the mobile advertising services. Mycombar was introduced by cooperation of DTAC and BEC World (television media) in Thailand. However currently the price of cost per impression charged by Mycombar is 2,000 baht per CPM which is a lot higher than the rate that Buzzcity charges at 90 baht per CPM.

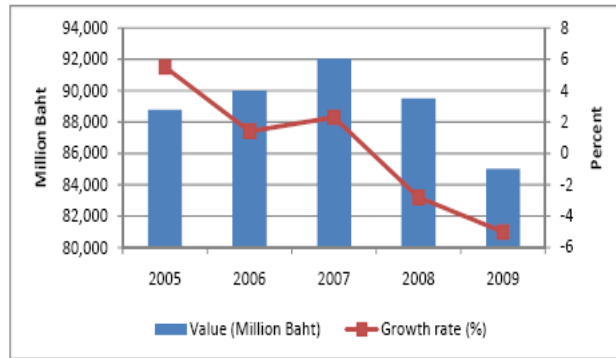


Figure 11: Market Value and Growth Rate of Advertising Industry in Thailand

Source: Nielsen Media Research

Note: 2009 data is from Kasikorn Bank Research Centre

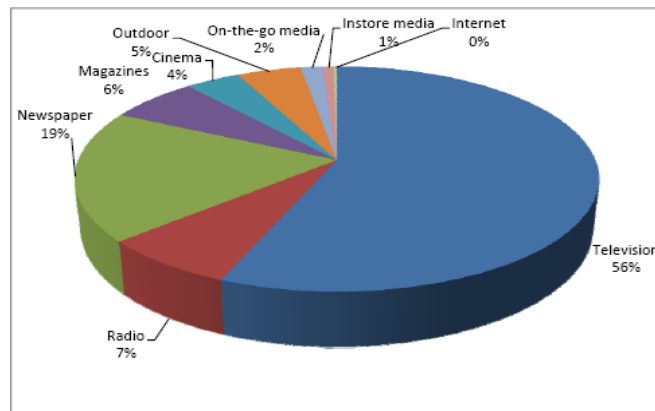


Figure 12: Proportion of Advertising Budget Classified by Types of Media in Thailand in March 2009

Source: Nielsen Media Research

5.3 Consumer targeting

Consumer behaviors are key factor to determine success of BuzzCity's business model in Thailand. BuzzCity targets at lower middle and middle income group in Thailand. These groups of consumers use mobile phone because of accessibility and convenience. They mostly use phones for normal activities, which are taking and receiving phone calls, and sending and receiving missed calls and text messages. With other features of the mobile phones, they use phone for checking bill and credit balance, listening to the radio and downloaded music, playing games and browsing

internet and sending or receiving or downloading or uploading other content such as ringtones, wallpapers, pictures, games and video clips.

Thai consumers are aware of non-voice services that can be accessed or obtained through either telephones or computer. Although they are aware of services, some chose not to use these services such as making or receiving payment or sending or receiving money. The major reasons for not using these services through telephone or computer are that they do not know how to use it; it is not applicable to them; and they are already satisfied with their present mode of obtaining these services. Moreover, most of consumers in lower middle income groups do not own computer. They may have heard about the internet but have not accessed it. For those who use the internet, they access the internet through computer whereas only few access through mobile phone (NECTEC,2008).

However, the evidence from study by Phuangthong and Malisawan (2008) revealed that there are market opportunities in non-voice mobile services in Thailand because Thai users are ready to accept and use mobile internet because it is convenient to access the internet when they are not be able to access the internet via computers. The major obstacle to hinder growth of this market is long period of Thai consumer technology adoption.

BuzzCity successfully target at consumers in the lower middle and middle income groups in Thailand. It can attract a large number of myGamma members in Thailand. However, BuzzCity's advertising business in Thailand has not expanded in the recent years. Thai advertising agencies and advertisers are also aware of their behaviors and doubt whether their advertisement banners will be able to reach and receive click response from audience.

Another reason of slow growth is that Thai consumers in lower middle income group prefer to consume content in Thai language and/or in Thai style. Therefore, advertisement in other language cannot attract them much. This is a major hindrance for foreign advertisers to target Thais. Moreover, Thai language is barrier for Thai advertisers to advertise their products abroad as well.

5.4 Role of mobile operators

The role of mobile operators is not clearly defined or separated. The role can vary from simple and passive to active and dynamic role by being strategically positioned between customers and content/service providers and offer portal services. Mobile operators can extend their operation to cover new roles such as content providers and/or aggregator, publishers and advertiser. Their roles can affect the billing and payment of mobile internet services. Mobile operators by nature already possess valuable information regarding their customers so they could also become important information providers. Mobile operators also already have a billing relation with most users of future services so they are expected to become powerful players within the emerging services.

Mobile operators in Thailand play dominant roles in billing business. Their revenue

sharing is at least as high as 60 percent, leaving the rest of revenue to content providers and aggregators. Therefore in recent years small and medium content providers and aggregators cannot survive with slim profit margin and finally exit the market.

In addition to facilitating transactions between customers and content providers or aggregators, Thai mobile operators also provide portal services. The operator can facilitate customers to locate appropriate service providers and at the same time enable content providers to reach customers through the mobile operators' portal. In Thailand, there are six major mobile carriers, namely AIS, DTAC, TrueMove, Hutch, DPC and Thaimobile. Currently four of them offer mobile internet service to their customers through their own web portals. AIS as a market leader provides the content services through "Mobilelife", DTAC through "Djuice", TrueMove through "Truelife" and Hutch through "Hutch". The services which are offered include a list of content and service providers with provided services, products and prices. The contents are in the area of entertainment, news, SMS, MMS, and lifestyle contents.

Owing to the dominant role of mobile operators and shrinking profit margin in billing and content services, BuzzCity have decided to shift from merchant business to mobile advertising business. Currently in Thailand mobile operators have not yet entered into this market due to lack of knowledge and specialization in advertising business. Therefore shifting to mobile advertising business will assist BuzzCity to avoid low revenue sharing from mobile operators in billing business and to retain 97 percent of revenue from mobile advertising on myGamma and 30-40 percent on external publishers. The low competition in Thai market and BuzzCity specialization in mobile advertising business worldwide are key factors for BuzzCity to enter into this business in Thailand.

5.5 Network externality

Direct network externalities exist in myGamma social networking. The utility of joining social network is positively related to the number of its members. A member joining myGamma confers a benefit to all other members because the number of potential interaction increases. Direct network effects are in the forms of being able to communicate with a larger number of other members. Moreover, the large ad network allows the advertisers to advertise in any publishers. Therefore due to the positive network externalities, BuzzCity can attract more members to join myGamma and subsequently more advertisers to join ad network and to be able to reach members in myGamma.

Communication network also show signs of indirect externalities, where users indirectly benefit from network size. For example, an additional member potentially increases the number of services available to other members. Due to the increasing demand for services, service provision become more profitable and more firms (merchants and advertisers) would be willing to offer them.

In addition, BuzzCity's long tail mobile advertising network aggregates around 2,000

smaller sites to capture value offered by the smaller sites so that advertisers are able to reach a diverse audience. Attracting few users from different sites is better than more users from the same site.

6. Conclusion

The study explores and examines the business models for delivering mobile value-added services that can be successfully employed in the developing countries. The BuzzCity case research design is employed. This study focuses on how BuzzCity's business model works in Thailand and examines the explanatory factors determining its success together with barriers to become successful.

The key factors explaining success of BuzzCity's business model are advanced in-house technology, technological advancement of mobile devices. Due to the positive network externalities, BuzzCity can attract more members to join myGamma. Effective service targeting benefits most to the small advertisers who may lack in advertising knowledge. Shifting to advertising business, in which mobile operators lack of specialization, can safeguard BuzzCity's business.

However, there are some barriers to become successful in Thai market. Firstly, the advertising industry has been shrinking due to economic slowdown. Proportion of advertising budget on mobile and online media in the marketing mix is still negligible comparing to television and radio. Mobile advertising is not yet to be an alternative media for large advertising agencies in Thailand.

Secondly, Thai consumers' attitude toward SMS or MMS as mobile advertisement is not so positive. They found that these SMS are annoying and not relevant to their need and behavior and so tends to ignore or not read them.

Last barrier is language. Thai consumers in lower middle income group prefer to consume content in Thai language and/or in Thai style. Advertisement in other language cannot attract them much.

7. References

Afuah, A., and Tucci, C., 2003. *Internet Business Models and Strategies*, McGraw-Hill, Boston. Alt,R., and Zimmermann, H.D., 2001. 'Preface: Introduction to special section- business models', *Electronic Markets*, 11(1):3-9.

Bouwman, H., Vos, H.D. and Haaker, T., 2008. *Mobile Service Innovation and Business Models*, Springer-Verlag Berlin Heidelberg.

BuzzCity, 2008. *Who Uses the Mobile Internet? And What do they do?*, December 30. BuzzCity, 2009.

BuzzCity Global Mobile Advertising Index: Q1 2009, 2 April 2009.

Camponovo, G., and Pigneur, Y., 2003. 'Business model analysis applied to mobile business', Fifth International Conference on Enterprise Information System, Angers, France, 23-26 April.

De Silva, H. and Zainudeen, A., 2008. 'Teleuse at the Bottom of the Pyramid: Beyond universal access', *Teletronikk*, 2:25-38.

Eisenhardt, K.M., 1989. 'Building theories from case study research', *Academy of Management Review*, 14:532-550.

Enders, A., Hungenberg, H., Denker, H.P., and Mauch, S., 2008. 'The long tail of social networking: Revenue models of social networking sites', *European Management Journal*, 26:199-211.

Evans, D.S., 2008. 'The Economics of the Online Advertising Industry', *Review of Network Economics*, Vol.7(3):359-391.

Feijoo, C., Maghiros, I., Abadie, F. and Gomez-Barroso, J.L., 2009. 'Exploring a heterogeneous and fragmented digital ecosystem: Mobile content', *Telematics and Informatics*, Vol. 26:282-292.

Haghirian, P., Madlberger, M., and Inoue, A., 2008. Mobile advertising in different stages of development: A cross-country comparison of consumer attitudes, *Proceedings of the 41st Hawaii International Conference on System Sciences*.

Lee, S.F., Tsai, Y.C., and Jih, W.J., 2006. 'An empirical examination of customer perceptions of mobile advertising', *Information Resources Management Journal*, 19(4):39-55.

Leppaniemi, M. and Karjaluoto, H., 2005. 'Factors influencing consumers' willingness to accept mobile advertising: A conceptual model', *International Journal of Mobile Communications*, 3(3):1.

Li, Y.M. and Jhang-Li, J.H., 2009. 'Pricing display ads and contextual ads: Competition, acquisition, and investment', *Electronic Commerce Research and Applications*, 8:16-27.

National Electronics and Computer Technology Center (NECTEC), 2007. *Internet User Profile of Thailand 2007*.

National Electronics and Computer Technology Center (NECTEC), 2008. *Internet User Profile of Thailand 2008*.

National Statistical Office of Thailand, 2008. *Information and Communication Technology Survey on Household 2008*.

Nielsen, 2008. *Teleuse at the Bottom of the Pyramid: A Multi-Country Study (Teleuse@BOP3)*, Presented to LIRNEasia, November 28.

Osterwalder, A. and Pigneur, Y., 2002. An e-business model ontology for modeling e-business, Paper presented at 15th Bled Electronic Commerce Conference, Bled, Slovenia.

Phuangthong, D. and Malisuwan, S., 2008. 'User acceptance of multimedia mobile internet in Thailand', *International Journal of the Computer, the Internet and Management*, 16(3):22-33.

Rappa, M. 2007, *Business models on the web. Managing the digital enterprise course*. Retrieved 17 April 2009. from <http://digitalenterprise.org/models/models.html>

Reuver, M.d. and Haaker, T., 2009. 'Designing viable business models for context-aware mobile services', *Telematics and Informatics*, Vol. 26:240-248.

Shafer, S.M., Smith, H.J. and Linder, J.C., 2005. 'The power of business models', *Business Horizon*, 48:199-207.

Sharma, R.S. and Wildman, S., 2009. 'The economics of delivering digital content over mobile networks', *Journal of Media Business Studies*, Vol.6(2).

Software Industry Promotion Agency, 2009. *Thailand ICT Market 2008 and Outlook 2009*.

Stuart, I., McCutcheon, R., Handfield, R., McLachlin, R. and Samson, D., 2002. 'Effective case research in operations management: a process perspective', *Journal of Operations Management*, 20(5):419-433.

Taylor, C.A., Anicello, O., Somohano, S., Samuels, N. and Whitaker, L., 2008. A framework for understanding mobile internet motivations and behaviors, CHI 2008 Proceedings, Florence, April 5-10.

Tsalgatidou, A. and Pitoura, E., 2001. 'Business models and transactions in mobile electronic commerce: requirements and properties', *Computer Networks*, 37:221-236.

Yin, R.K., 1989. *Case Study Research: Design and Methods*, Second Edition, Sage, Newbury Park, CA.

Yunos, H., Gao, J. and Shim, S., 2003. 'Wireless advertising's challenges and opportunities', *Computer*, 36(3):30-37.