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The e-book business model of the mobile phone services in Taiwan

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# The 19th ITS Biennial Conference 2012

# "Moving Forward with Future Technologies: Opening a Platform for All"

18 - 21 November 2012, Thailand

The e-book business model of the mobile phone services in Taiwan

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#### **Abstract**

As the development of the e-book devices, such as Kindle, iPad, smart phones and tablet notebook, and the appearance of aggregators, such as Amazon, Barnes & Nobel, and iBook store, there are substainable business models for the publishing industry to begin making profits. However, the e-book market is still in the early stage in Taiwan. The publishers question the e-book profit opportunity and whether the oversea business model would be able to apply to Taiwan. This study will foucs on the cost and profit structures among the publishers and the mobile content aggregators to find out the possible e-book business model in Taiwan.

There were 20 book publishers and aggregators interviewd in Taiwan's e-book market. We found that the lack of the popular translated fictions was the major reason that readers do not buy the e-books. Unlike the popularity of Kindle or Nook in the U.S., the Taiwanese readers usually read the e-books from the computer or mobile phone. However, recently the publishers begin to own the Chinese more e-book copyrights of the popular translated fictions. Readers can buy those e-books later in many website or APP store through the mobile phone, tablet PC and iPad. We can expect that the e-book market will grow soon in a couple years. However, for the sustainable business model, the publishers and mobile aggregators still need to have other aggregissive marketing strategies to attract e-book buying.

**Key words:**e-book, business model, mobile phone, marketing strategy

#### I. Introduction:

As the development of the e-book devices, such as kindle, iPad, smart phone and table notbook (Siegenthaler, Wurtz, & Groner,2010), and the aggregators, such as Amazon, Barnes & Nobel, and iBook store, there is appearing the new opportunity of business model for the publishing industry (Carreiro, 2010; Chevalier & Goolsbee, 2003). Although most of the e-book devices are assembled from Taiwan's companies, the e-book market is still in the early stage here. The academics and industry question the future profit possibility and whether the oversea business model can be applied to Taiwan (Chen, 2009).

The purpose of this study is to analyze the sustainable "business model" of e-books in the mobile phone services in Taiwan by applying the framework of Osterwalder & Pigneur's *Business Model Generation* (2010). It contains nine blocks: value propositions, customer segments, customer relationships, channels, revenue streams, key activities, partners, resources and cost structure. By examining those blocks in the contexts of e-book industry in Taiwan, this study tries to calculate whether the possible revenues can compensate the loss of print copy and the costs of digitalization.

Over 20 book publishers and mobile aggregators were interviewed and the e-books production cost, revenues and copyright licenses data were analyzed from the three major mobile phone companies in Taiwan. The results showed that book publishers were afraid that the low e-book prices may ruin their printed book markets and refused to release more popular e-books to the mobile companies. However, the high e-book prices, few choices and low values of the e-books discouraged the readers to buy. With the small book market scale and without the aggregators to integrated most of the book publishers in Taiwan, it will still take longer time to promote the e-book business model.

# II. Literature Review and Analysis Framework

1. The emergence of the e-book industry

The sale of the e-book was over that of the hard-copy in the Amazon book store in 2011 year. There are more and more people reading from the e-book devices, instead of the printed book because of the convenience and cheapter price (Vasileiou, Hartley & Rowley, 2009). Chen (2009) developed a game theory model to examine the competition between SER (smart phone reader, like iPhone) and SPR

(special equipment reader, like Kindle) retailers. Their results suggest that reduced cost due to inconvenience of reading e-books over iPhone lowers equilibrium prices.

Except for the smart phone devices, more and more competition come from the table PC, like iPad. Even Amazon released new multimedia tablet, the Fire to satisfy the various needs of customers.

Carreiro (2010) explored the effect that these digital devices and other new technologies had on the publishing industry. The digital revolution has forever changed the face of publishing, e-books could actually revitalize the industry. No one knows what the future of e-publishing will hold, but developments affect publishing houses, authors, and consumers alike.

Before the e-books begin to become popular recently, many researches foucs on the online printed books competition. Some argues that all Internet retailers will charge the same low price for mass produced goods. The other says that Internet retailers will differentiate to avoid intense price com- petition. Clay, Krishanan, Wolf & Fernandes (2002) using data collected in April 1999 on the prices of 107 books in thirteen online and two physical bookstores, they found similar

average prices online and in physical stores and substantial price dispersion online.

The substantial premium charged by Amazon provides indirect evidence of product differentiation.

Chevalier & Goolsbee (2003) used publicly available data on the sales ranks of about 20,000 books to derive quantity proxies at the two leading online booksellers.

The results show significant price sensitivity at both merchants but demand at BarnesandNoble.com is much more price-elastic than is demand at Amazon.com.

Amazon.com was a clear market leader in the online book business with BN.com serving as more of a price-taking fringe.

In addition, Clay, Krishanan & Wolf (2002) found that two important differences across stores are pricing and selection. Some stores have limited selection, offering either very low prices or higher prices together with content and selection in the area of specialty such as children's books or Christian books. Stores with high prices seem to be using the web primarily as a means to advertise their store and sell to loyal customers.

Excpet for the pricing strategy, Latcovich & Smith (2001) found that consumers respond to advertising and website spending rather than low prices. Consumers are presumably concerned about price. But they also care about vertical characteristics such as reliability, security and ease of use – and advertising can signal these. Firms are not pricing competitively for most books – they set considerable lower prices for on high-demand books.

# 2. The business model of the e-book industry in Taiwan

Curretnly, there are five mobile phone companies in Taiwan and three of them provide the e-book store services (Table 2). The mobile subscribers are over the Taiwan's total population 23 millions. Except for some kids and babies, almost everyone own the mobile phones. Some of them even have more than one phone. CHT is the biggest mobile phone company. It also provides other telecommuniation, IPTV and broadband services. Its 2011 annual revenues was around \$7.3 US billion dollars.

Table 2. Three majory mobile phone companies in Taiwan (2011)

	Chunghwa Telcom	Taiwan Mobile	Far Eastone
	(CHT)	(TWM)	Telecom (FET)
Mobile subscribers	10 millions	6.7 millions	6.6 millions
Mobile revenues	\$2.46 Billions	\$2.01 Billions	\$1.9 Billions
% of mobile revenue	33%	27%	26%

Note: There are five mobile telecoms in Taiwan. The other two are APBW and VIBO.

Although most of the revenus still come from the voice service now, the mobile phone companies expect to have more profits from the digital contents, such as music, game, video and e-books. They had invested or cooperated with many media firms to provide consumers those entertainment services.

For the book publishing industry in Taiwan, there are over 10,000 book publishers and 40,000 new books published every year. More than 90% of thme published only one book in each year. The total revenue is around \$830 million US dollar in 2011 year. However, the revenue of e-books is still less than 1% of the total printed books. Almost no any book publishers or mobile phone companies could begin to make profit at this time. In addition, currently only the top ten big

publishers are willing to subsidize the cost of e-book digitization. There are still many factors discourage for the publishers and mobile phone companies to make profits.

Chen (2003) argued that critical success factors for e-books demand that the industry looks closely at technology, cost, titles, user friendliness, ownership, fair use, and privacy. More specifically, some of the most crucial points are content justification, interoperability, integration of various sources, accessibility, usage, and functionality.

Loebbecke (2010) analyzed the e-book industry putting into perspective to the music industry. The researh examined the user preferences concerning their attitude regarding copyright protected versus non-protected e-books. It showed that the book industry is not all that different from the music one. The traditional book players need to be careful not to be falter on their inability to transform themselves in response to digitization.

The innovative service changes the market structure of the book industry.

Currently, the Amazon and Kindle might be considered as the successful model.

There are continuously increasing new e-books, readers and the sale of kindle

devices. However, the Amazon-Kindle model may not be suitable to apply to other

countries. For example, the samller market scale and lower reading preference in

Taiwan will make it hard to make profits in the e-book industry.

Osterwalder & Pigneur (2010) defined that a business model describes the rationale of how an organization creates, delivers, and captures value. By applying the framework of their *Business Model Generation* (2010), this study will review the nine blocks: value propositions, customer segments, customer relationships, channels, revenue streams, key activities, partners, resources and cost structure. This study especially emphasize on analyzing the cost of digitization and pricing strategy.

Table 1, Mobiel Phone 's Nine blocks of Osterwalder & Pigneur's *Business Model Generation* 

Key Partners	Key Activities	Value		Customer	Customer
		Propos	ition	Relationships	Segments
Book publishers	Digital contents				
	providers	Easy pushing		Online profiles,	Heavy readers,
		book information		recommendations	light readers
	Key Resources			Channels	
		Reading			
	Customer usage	Datamining		Smart phone,	
	information			tablet PC	
Cost Structure			Revenue Streams		
Cost of e-book digitization, platform, copyright			e-books sale, renting fee, and advertising,		
marketing					

# 3. The Possible Business Model of e-book Digitization in Taiwan

In Taiwan, many book publishers still hesitate to join into the e-book industry.

Their main concern is afraid that the sale of e-book may reduce the profit of their printed books. Let's assume the traditional printed book profit: Rp = (Pp-Mp)\*Qp – Fp, where Pp, Mp, Qp and Fp as the printed book sale price, marginal cost, sale quantity and fixed cost.

Also to assume the electronic book profit:  $Rd = \{(Pd-Md)*Qd - Fd\} + \{(Pp-Mp)*(Qp-Qd) - Fp\}$ , where Pd, Md, Qd and Fd as the e-book sale price, marginal cost, sale quantity and fixed cost. The model also assumes that currently Pp>Pd,

and Mp>Md. The total consumers' demand was the same Qp in both circumstances.

In order to attract the publishers to produce the e-book, the revenue Rd should be larger than Rp. Therefore the condition of (Pd-Md) > {(Pp-Mp) + Cd/Qd} need to be satisfied. That is, if Cd/Qd was too large (the cost of digitization was too high for the publishers), or the sale of e-books is too small, the publishers will not participate in producing the electronic books.

In addition, the margin cost of e-book Md should be very small. So the low price strategy Pd can still generate enough revenue to cover the cost. Therefore, the margin profit of each e-book is larger than that of the printed book. After subtracting the cost of the digitization, the revenue Rd would be larger than Rp and the publishers might have the incentive to publish e-books.

In addition to the cost of digitization, the book publishers also afraid that those digitized e-books will be circulated by Internet and copied among customers. In the

prior business model analysis, it assumed that the total demand Qp is always the same. However, if the e-book is really a very popular one, some study showed that the sales of the printed books might increase too. Whether the e-books will affect the sale of the printed books depends on the author, the type of topics and the story. It is hard to conclude that the e-book will decrease the sale of the printed books.

# III. Research Questions and Methodology

Base on the literature review and framework, this study will ask two research questions:

- 1. What are the major factors affecting the publishers to release the e-books, for example, the costs of digitization, new revenues from e-books or the availability of the copyright? Is there any difference among the sizes or catagories of publishers in Taiwan?
- 2. What are the competitive strategies for the three mobile phone companies in Taiwan, pricing, popular e-book, markeign or friendly interface?

In this study, 20 professional managers were interviewed in Taiwan's telecommunication and publishing industry. Except for the three major mobile phone companies, the 8 various books publishers, 3 Internet e-book platforms,3 e-book association staffs, 3 other online e-book stores, 2 copyright agents and one device manufacture were included in this study.

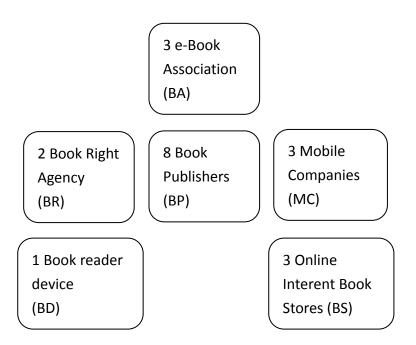


Figure 1. 20 professional managers interviewed in the book industry

# IV. Results and Discussion

1. The lack of e-book copyrights

Most of the popular books in Taiwan were the novels translated form other oversea languages. However, the publishers usually did not own the copyrights of e-books because of the availability and the released fees. In the year of 2011, there were less than 10 books with the electronic copyrights. Even though many readers would like to pay for the e-books, they could only get the printed version.

Most of the publishers could not have the electronic copyrights of the translated novels. Can you imaged that there were only 5 popular translated e-books in 2010 year?(BA 2)

The situation began to change since the end of 2011. There were more and more oversea publishers willing to lease the electron copyrights to Taiwan's publishers. (BR 1)

In order to sell the popular e-books, the mobile phone companies would pay for the e-book copyright fees, not the publishers. For example, the CHT had paid \$50,000 US dollars in advance to help the publishers to get the e-book. Therefore, the mobile phones companies will only pay for the top hit e-books and consider as the marketing fees.

In addition, the E/P (electronic/printed) version was not published at the same time. Usually there are at least 6 months lagged for the electronic version. Many readers could not wait for the long time and already bought the printed version.

For example, the e-book of "Steven Jobs" will not release until half year of the Chinese printed version published. Most of the customers alread buy the book and only few of them will spend almost the same price to buy the e-book again. (BP 5)

#### 2. The cost and know-how of e-book process

Originally most of the book publishers did not save the electronic file of the final printed book. After the contents edited, the files were sent to the printing factory where the final books were made. If the book publishers need to print more books, they will only ask for the printing factory. They never owned the files of the final printed versions, even the big book conglomerates did the same thing.

We do not keep the electron files before. If the books need to reprint, just ask for the printing factory. Therefore, the publishers will need to digitze those out-of-print books by scanning as will as editting every pages and it becomes very expensive. (BP 3)

Now we changed the book publishing process and hold the PDF or ePub file by ourselves. For the new books without the copyright problems, we can also publish the e-book soon. The cost of

digitization become very low for text e-book. Howevery, for the APP or interactive e-book, it is still very expensive and time consuming. (BP7)

At beginning, the cost of e-book process was considered as the barriers for many publishers, especially for the small ones. Recently, the e-book version became easily and the costs were down to very low. However, many small book publishers still hesitate to get into the business. There are only 2 to 4 staffs in the small publishers and they do not have resources to make it.

#### 3. The competition among the mobile phone companies

There are three major mobile phones companies in Taiwan. In order to provide more mobile value-added services, all of them sell the e-book, music, video and game online. Currently they sell around 20,000 to 30,000 e-books in their platforms. However, few of e-books are the popular ones.

Although there are around 20,000 kinds of ebooks in our platform, most of them are not the top-selling in the printed book billboard. Consumers complained that they can not find those e-books interested in. (BA 6)

CHT telecom authorized SHE (Spring House Entertainment Tech.) company to provide all of the multimedia services. There are near 200 staffs in SHE Tech. to create and maintain all kinds of music, video, game and e-book. On the other hand, for TWM telecom and FET telecom, there are only 6-8 staffs responsible to run the e-book stores but the online database and system server was maintained by their mobile conglomerate.

For the big three mobile phones companiess, even thought you did not generate enough profit, you still have to provide the value-added contet services. If the competitiors did, your mobile subscribers would expect you do too. (MC 2)

Until now, none of the three mobile phone companies generate enough revenues to cover their costs. However, compared to the revenue of their conglomerate, they consider that it is worth to invest the e-book service to attract more customers to subscribe their mobile online service.

It is impossible to generate enough money to cover the cost of platforms at this time. However, since the mobile phone companies can make profit from other telecommunication services, they are still willing to invest the platforms to attract subscribers spending time online. (MC 1)

# 4. The pricing of e-book

Although the mobile phone companies would like to lower the price to increase the e-book sale, actually the book publishers have the power to make the pricing decision. Therefore, all e-books were sold in the same prices in various platforms and mobile phone companies.

Although we want to lower the e-book prices to attract customer to buy, the book publishers were not willing to do so. They afraided that would ruin their printed book market. (MC 3)

Currently most of the e-book pricings were 20% to 30% discount of the list prices. However, customers usually can buy the printed books online at the 10% to 20% discount of the list prices. There is only 10% difference between the printed and electronic books. Therefore, the readers would rather buy the printed versions, instead of the electronic ones. Most readers expect that the popular book pricing should be at least 50% discount of the listed prices.

For the book publishers, they do not believe that low pricing strategy would increase the sale. They consider that the coefficient of elasticity is small. Those who are willing to buy will pay for the high price. Those who are not willing to buy will not pay for it, even the price is already pretty low.

I do not believe that lowering the price would increase the sale of e-books. Those who would do not read books will not buy the e-book just because the lower price. On the other hand, those who like to read will still pay for the price. (BP 5)

Instead of pricing the individual book, some e-book stores bundle the electronic magazines and books in a monthly fee. Usually the price is around \$3-5 US dollars very month. This pricing strategy attracts many light-readers to join the program because they can preview many contents and only pay for little money. Some e-book stores even take half of their total revenues.

#### V. Conclusion

There are over 40,000 new books published every year in Taiwan. However, less than 5% of them had the published the electronic version, especially for the

e-books in the platforms of the mobile phone companies. Besides, currently the prices of most e-books were less than 10% of the printed books. There is no enough incentive pricing difference to attract customers to pay for the fixed cost of the e-book machines and to buy those e-books. Unlike the popularity of Kindles in the USA, very few people in Taiwan use the e-ink devices to read. Most of them like to buy the multimedia pad for entertianment.

However, as more and more people own the tablet PC, such as iPad. They may have the chances to read some free or trial e-books. As the customers get used to the advantages and convenience in e-book reading, they could begin to buy some e-books by themselves.

Therefore, for the book publishers and the mobile phone companies, the most important thing is to request for the copyrights for more popular e-books. With the reasonable pricing strategy and the convenient user interface, there should be more customers will begin to read the e-books in two to three years.

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