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## The dilemma of electronic books in the mobile age in Taiwan

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# The 24th European Regional Conference of the International Telecommunication Society

“Technology, Investment and Uncertainty”

Florence, Italy

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**“The Dilemma of Electronic Books in the Mobile Age in Taiwan”**

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## **Abstract**

As the voice profits of the mobile phone companies continuously decline in Taiwan, they need to find other revenues from the digital contents to survive in the mobile age. The mobile phone companies had created several online platforms to sell digital video, music and books. Especially in the past two years, as more and more customers had the big screens of portable tablet PC or smart phones, the sale of the e-books becomes the major marketing strategy to promote the penetration of smart phones in Taiwan.

However, few e-books were available in the mobile online platforms in the past few years, so this study conducted the survey of the book publishing industry to understand the major factors. The results show: first, few copyrights of the popular oversea books are available; second, only the book conglomerate are willing to take the risk to launch the e-book services; third, currently the sales of the e-books are not able to compensate the costs; fourth, there is no such a platform to let all kind of e-books available in Taiwan.

**Key words:** e-book, digital book, business model, industry survey, mobile device

## **I. Introduction**

As the voice profits of the mobile phone companies continuously decline globally, firms need to find other revenues from the data services to grow in the mobile age. The mobile phone companies expect to have more cash streams from the digital contents, such as music, game, video and e-books. They invested or cooperated with many media firms to provide consumers those information and entertainment services. As the development of the new e-book devices, such as Kindle, iPad, smart phone and tablet PC (Chen, 2009; Siegenthaler, Wurtz, & Groner, 2010), and the platforms, such as Amazon, Apple iBook and Google e-book store, the new business model is gradually appeared in the digital publishing industry (Carreiro, 2010; Chevalier & Goolsbee, 2003).

As the Taiwan's government announced the digital book policy to promote the e-book market in 2007 year, some of the book publishers began to design and create different kinds of electronic books. There are over 40,000 new books published every year in Taiwan and the scale of book industry is over \$800 million US dollars. However, the e-book revenue was still less than 1% of the total publishing industry in 2012 (Tseng, 2012).

There is still no sustainable business model for the publishing industry to begin making profits in Taiwan. The publishers question the e-book profit opportunity and whether the overseas business model would be able to apply to Taiwan. 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. Therefore, this study will survey the publishing industry to know what are the major factors to discourage them to join in the e-book services.

## **II. Literatures Review**

### **1. The e-book industry for the mobile devices**

Early mobile phones only provided voice transmission for a fee. They have now evolved into voice and online data portals for providing additional services through 3<sup>rd</sup> party vendors. The Internet and mobile service have become important revenue drivers for the worldwide telecommunications industry growth. The online mobile services offered may include e-mail, games, video, music, and books (Chakravarty & Werner, 2011). However, many users still do not satisfy those

services. For example, Leem, Suh and Kim (2004) found that 200 mobile heavy users were questioned on the mobile service-related issues. At the time of 2004 year, the overall level of current B2C mobile business model turned out to be unsatisfactory, especially on the level of bandwidth, interface and content.

However, more and more new technologies, such as the touch screen, the voice control and the new APP software, are applied to the portable tablet PC and smart phones. Like the digital MP3 music and BT video popular in the 10 years, there could be more electronic books available to read in the mobile devices later.

Carreiro (2010) explored the effect that digital devices and other new technologies had on the publishing industry. While it is true that the world is undergoing a digital revolution, publishers today have not been left in the dust, because these firms have embraced electronic publishing.

Currently the Amazon and the Kindle is the best business model in the e-book publishing industry. Compared to competitors' products such as the Sony Reader, Amazon's differentiation in Kindle 2 lies in the new business model, implying a direct connection between hardware sales (eReader) and eBook content delivery. Access to Kindle Shop with its more than 400,000 eBooks is free of charge via the integrated

Whispernet mobile data connection. In contrast to its competitor Sony, which relies on cooperation with experienced book sellers, Amazon forces Kindle 2 users to purchase eBooks exclusively via the Kindle store. It thus fosters its vertically integrated, proprietary system via its eBook format AZW, which is only usable with the Kindle hardware and software (Loebbecke et. al, 2010).

Using the example of Amazon's Kindle 2 launch, Loebbecke's et. al(2010) exploratory case study research investigates an emerging mobile business model in the eBook market that closely connects an innovative device with access to content. Amazon's incremental convergence of hardware sales and content delivery using a proprietary system may be a precursor of innovative, emerging business models. For some time, the proprietary offerings may enhance customer loyalty.

The Osterwalder & Pigneur's *Business Model Generation* (2010) is the suitable framework to analyze the cost and profit structures among the publishers and the platforms. It contains nine blocks: value propositions, customer segments, customer relationships, channels, revenue streams, key activities, partners, resources and cost structure (Table 1). 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.

Table 1, the nine blocks of Osterwalder & Pigneur’s Business Model Generation

<b>Key Partners</b> Telecom Corp. Platforms	<b>Key Activities</b> Digital Content Providers	<b>Value Proposition</b> Easy pushing book information Reading Datamining	<b>Customer Relationships</b> Online profiles, recommendations	<b>Customer Segments</b> Heavy readers, light readers
	<b>Key Resources</b> Customer usage information		<b>Channels</b> Smart phone, tablet PC	
<b>Cost Structure</b> Cost of e-book digitization, platform, copyright marketing			<b>Revenue Streams</b> e-books sale, renting fee, and advertising	

## 2. The demand side of e-book business model

To understand the customer’s demand and resistance is the first step to construct the business model. When an e-book is acquired, it must meet customers’ needs, providing not only the content that is wanted, but also making sure that it can be made available where and when it is required, and at a price which provides best value for money. The growing popularity of e-book reader devices is driving a rapid increase in the number of titles available in e-formats, and new suppliers and business models are challenging the established economics of the publishing market (Grigson, 2011).



Lee (2010) examines what factors lead to the adoption of the mobile e-book in South Korea. Research results showed that individual innovativeness has a significant influence on perceived usefulness and perceived ease of use. It also revealed that both of perceived usefulness and perceived ease of use affect not only intention to use but also the innovation resistance.

Richardson & Mahmood (2012) conduct a comprehensive evaluation of user satisfaction and usability concerns related to five of the leading eBook. This study is based on a survey of 81 information studies graduate students, who responded about their ownership of specific readers, their likes and dislikes as well as perceived issues. Additionally, interested respondents were asked to volunteer for an ethnographic journaling study which allowed eight prospective users to live with each of the five eBook readers for a weekend or longer.

They found that the Kindle is the most popular, but regardless of reader the respondents disliked the poor navigation and inability to loan titles in their collection. In addition, the respondents also liked the portability of the readers as well as the ability to have multiple books on a single reader. However, they also identified a

major issue: notably, the licensing of titles versus outright ownership.

*Hypothesis 1: The more the publishers can recognize the value-added of the e-books and e-reader devices from the customers, the more they will be willing to invest the resources in the digital publishing.*

### **3. The supply side of e-book business model**

The sale figures for e-books have been disappointing, due in large part to digital rights management barriers that have adversely affected available content.

Publishers seem reluctant to develop a viable e-book business model whose success could undermine the traditional, paper-based publishing industry (Burk, 2001).

Although publishers may feel they have learned a lesson from the Napster/music industry and are protecting themselves by placing consumer unfriendly levels of encryption on their intellectual content, they may in fact have missed the more important lesson. If the music industry itself had provided a system as cheap and easy to use as Napster to begin with, they would very possibly have avoided the turmoil and cost of the past year (Burk, 2001).

In the walled garden business model, the mobile network operator runs the service portal as well, and his customers may access service vendors only on this

portal. However, the mobile network operator incurs a cost in setting up and running an in-house portal. Additional effort is required in marketing the portal so that a sufficient number of service vendors may join. An alternative would be to permit the phone subscribers to purchase services from an independent portal through pre-determined URLs, and get them delivered to his own network (Chakravarty & Werner, 2011).

While the mobile network operator's profit with a walled garden model is larger than with open access, he incurs additional costs in building and running the portal. He stands to gain substantially by controlling the flow of revenue. Ownership of both mobile phone service and the portal enables the mobile network operator to channel all revenues from customers (Chakravarty & Werner, 2011).

*Question 1: Whether the publishers should run their own e-books platforms, or they should cooperate with the mobile phone companies, depends on their costs and resources available?*

*Question 2: What is the reasonable revenue ratio between the publishers and the mobile platforms?*

The prevalence of e-books has prompted many publishers to reconsider their

distribution channels for new titles. They need to decide whether to sell the e-book version of new titles. Dual channel means that the manufacturer sells its products to customers through retailers and sells to end customers directly through the Internet. Hua et. al (2011) derive the conditions under which a publisher should sell only printed books (p-books), only e-books, and both of them simultaneously. Only if wholesale price of p-book is high and reader acceptance of e-book is low should the publisher sell only p-books; otherwise, he should sell e-books, even when reader acceptance of e-book is low.

*Hypothesis 2: The publisher should publish both the e-books and the printed book. The less time gap between the electronic books and the printed ones, the better sale revenues generated for the e-books.*

*Hypothesis 3: The bigger scale of the publisher, the more possible to have the resources and take the risk to invest in the e-book publishing.*

#### **4. The possible business model of e-book 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-books may reduce the profit of their printed books. Let's assume the traditional printed book profit:  $R_p = (P_p - M_p) * Q_p - F_p$ , where  $P_p$ ,  $M_p$ ,  $Q_p$  and  $F_p$  as the printed book sale price, marginal cost, sale

quantity and fixed cost. Also to assume the electronic book profit:  $R_d = \{(P_d - M_d) * Q_d - F_d\} + \{(P_p - M_p) * (Q_p - Q_d) - F_p\}$ , where  $P_d$ ,  $M_d$ ,  $Q_d$  and  $F_d$  as the e-book sale price, marginal cost, sale quantity and fixed cost. The model also assumes that currently  $P_p > P_d$ , and  $M_p > M_d$ . The total consumers' demand was the same  $Q_p$  in both circumstances (Tseng, 2012).

In order to attract the publishers to produce the e-book, the revenue  $R_d$  should be larger than  $R_p$ . Therefore the condition of  $(P_d - M_d) > \{(P_p - M_p) + C_d / Q_d\}$  need to be satisfied. That is, if  $C_d / Q_d$  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  $M_d$  should be very small. So the low price strategy  $P_d$  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  $R_d$  would be larger than  $R_p$  and the publishers might have the incentive to publish e-books (Tseng, 2012).

*Question 4: What are the current e-book statuses of the publishers? What are the major factors for them to decide whether to make the e-book investment or not?*

*Question 5: What is percentage of price discount that the publishers can accept to attract the customers to buy e-books?*

### **III. Methodology**

This study applied the survey methodology to understand the e-book strategies and attitudes of the publishing industry in Taiwan. Although there are several thousands publishing companies in Taiwan, and however only around 1,000 companies regularly publish over 5 books every year. Their email addresses were collected from the database of Taiwan's National Central Library. The online questionnaires were posted since the mid August. Although three emails were pushed to remind the publishers, currently 114 companies completed the online survey.

Because many of the email addresses were customer services or contact staffs, hundred of them were expired or the managers might not receive the emails from their staffs. Therefore, this study might also mail the printed questionnaires directly to the general managers of publishers. We hope to have the extra one

hundred responses and the data of the total two hundreds publishers will be updated in the conference.

The questionnaires will focus on how many firm have published e-books; what are their major factors to decide to or not to publish e-books; what kinds of resources and staffs committed to the e-book services; how the e-books sales affect the printed book markets? There are three parts of the questionnaires. The first part is about the general information of the publishers, such as the annual revenue, the number of staffs, the number of publishing books, whether belong to the conglomerate. The second part is the e-book publishing information, such as the revenues of e-books, the number of staffs dedicating in e-books, the number of e-books published, and the costs of facilities. The third parts is the attitudes of the publishers toward the e-book strategies, such as the readers segment markets, the relationship with the Telecom corp., the costs and revenues stream.

#### **IV. Results and Discussion**

##### **1. General Information of the Survey**

There are 114 publishing companies answering the questionnaires, including CEOs 51.8%, managers 28.1% and staffs 20.1%. Most of the companies had

established for a long time, 40.4% over 21 years, 14.9% in 16-20 years, and 18.4% in 11-15 years. Most of the publishers are in the small scale and 48.2% companies had less than 10 employees. However, some of the publishers are bigger and 17.6% of them have 30-100 employees. The book conglomerates are around 15.8% and have over 100 employees.

Most of the stores (55.3%) were the independent book publishing companies. Some (28.0%) of the 2012 annual revenues were below \$10,000 US dollars. However, few conglomerates (14.9%) had generated over 10 million US dollars. In 2012 year, 25.4% companies published less than 5 books and near 70% of them published less than 50 books. Only very publishers would issue over 100 titles annually.

## **2. The schedule of publishing the e-books**

Until now, only 53.5% of the companies had published the e-books and there are near 50% still evaluating the benefit and cost. Among those who had published e-books, 62.3% established an independent office and professional staffs to organize the digital process. The others will ask e-book aggregators or platforms for helping the digital transformation.



In 2012 year, many companies (32.8%) had published less than 5 e-books, and some (21.5%) published around 6-20 e-books. However, 21.3% also published over 100 e-books. Most (66.7%) of their printed book will issue first for about 3 to 6 months early, but 25.4% of them have the E/P published at the same time.

The revenue of e-books for each company is still very small and 50.8% had less than \$3333 in 2012 year. Over 75.4% companies argued that the revenues could not make up their e-book costs. 55.7% companies complained that the revenue was only 1/10 of the investment.

### **3. The e-book publishing platform and the mobile phone companies**

Although the scale of the publishing companies is small, 24.6% of those who publishing e-books are also established their own online stores. 33.3% of them have less than 500 e-books, and only the other 33.3% had around 10000 to 30000 e-books in the online stores. Therefore, half of them will also sell their e-books in other e-book platforms. 48.5% of the publishers sold their e-books in the online e-book stores and 32.0% in the telecommunication platforms.

Currently, most of the publishing companies can accept the sharing revenue ratio of 7:3 with the platforms, although some may expect to have the ration of 8:2 or more. The bottom line for the ratio of 5:5 is 18% and over 70% publishers hope to have least the ratio of 6:4.

Most of the publishing companies agree that there are not enough e-book titles sold in the platforms (3.82 in the 5 point scale) and the publishing contents of e-books could not attract the readers' interesting to buy (3.72). Although currently the three mobile telecommunications are the major e-book platforms in Taiwan, the publishing companies consider the telecoms will be the least e-book platforms in the future (2.91). The biggest online book store company should be the possible one (3.57), even though it still does not launch the e-book service.

#### **4. Responses to the added values of e-books**

If the publishers consider that there are the added values of e-books for the readers and the industry, they will have the bigger incentive to participate early.

Most of the companies highly agree or agree that e-books can increase the publishing extra values (3.82), change the publishing process (3.97), provide the easily reading context (3.96), and the conveniently e-book shopping experience

(3.60). However, even most of them recognize those advantages, only some agree that e-books may create new reading market (3.2) for the industry.

## **5. Customer segments and relationship**

Although most of the publishing companies consider that those buy e-books are for the convenience and cheap prices, and different from those buy printed books, they still worry the sale of e-books decreasing the revenue of the printed ones. For the different categories of e-books sales, such as comic, fiction, business or language, there is no significant difference among them.

As there are enough e-books platforms and more tablet PC or smart phones owned by the customers, the publishing companies do not consider the sale channel and reader devices as the problems. For the big data generated by the e-book reading, the publishing companies agree that they could know the customer's preferences totally (3.82), contact directly (3.71) and promote easily (3.84) to increase their sale revenues. However, how to implement those strategies, there is still a big gap between knowing and doing.

## **6. The copyright resources and cost to produce e-books**

Most of the publishers (83.2%) highly agree or agree that the e-book copyright is the most important factor to develop the industry (4.08). The new issued e-book titles are more easily to have the copyrights. However, the oversea foreign novel is still difficult to get the e-book Chinese copyright (2.72).

Except for some conglomerates, most of the publishers complain that they did not have the enough e-book knowledge (3.14), human resource (2.78), capital (2.62), and digital facility (2.76) (the less, the more complaining). Many companies agreed that they could not make enough revenues to cover their investments and costs (3.69). 23% of them worry about the risk and halt to invest the e-book.

## **7. Pricing and revenues.**

Although over 92% of the publishing companies were willing to provide part of the contents for preview, there are still over 35% of them considered the e-book only as the marketing tool for the printed books. 91% of the publishing companies were willing to lower the price of e-book than the printed ones. However, they did not consider that the lower pricing strategy would increase the e-book sales (2.97). On the other hand, they are afraid that the sale of e-book will reduce the revenue of

the printed ones. Therefore, only 19% can accept 50% discount and below, 65% still expect to limit the discount in 70% or above.

To increase the other revenue of e-books, many of them consider having the advertising embedded in the contents (3.63), or lend the e-book in a certain period of time (3.53). However, some of them (28%) still did not agree to participate in the bundle package, such as \$3 to \$5/month for the customer to read hundreds of e-books or e-magazines. Because there are many publishing companies to share the limited prices, everyone only have the tiny revenue from each customer. Without the enormous scale of markets, their total revenues are still very low.

## **V. Conclusions**

The lack of the popular translated fiction copy-rights was the major reason that few e-books were publishers before. Also, the book publishers were afraid that the low e-book prices may ruin their printed book markets and refuse to release more popular books to mobile companies. Besides, the scale of the book publishers is the major factors to publish the electronic books and now only the conglomerates have the resources to invest in the facility and staff training.

The Taiwan government and the digital publisher association should provide those smaller publishers required support to begin making more diversified e-books. As the increasing tablet PC penetration, more customers are willing to accept the interfaces of the tablet PC or mobile phone. However, more and more categories and diversification of e-books were still the major reason to attract customers to read. Finally, although there are many e-book platforms in Taiwan, including the major mobile phone companies, they do not provide enough all kinds of e-books titles for the readers to explore. We need a platform, like Amazon, to provide the completely e-book shopping and easily reading experience in Taiwan to support the publishing industry.

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