

The Study on Growth Factor Analysis and Plan for the Activation of E-book Market in South Korea

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Abstract

The digital revolution is occurring in the publishing market due to the development of IT industry. This environmental change is highly influencing on the changes of publishing market and the culture as well as on the consumption and reading patterns of consumers.

Apparently the sentimental old-media “paper book” is rapidly being replaced by the e-book which is the digital new-media. Despite the many useful features of the e-book, the current situation shows that it has stopped from developing to the mature stage due to the disincentive factors occurring during the process of embracement. Therefore, the aim for this thesis is to suggest strategic direction for the stable substructure while approaching to the fundamental problem that occurs during the introduction of e-book in an overall perspective of the publication. As a result, the activation and the stable settlement of a local e-book market will take in place.

Keywords: *e-book, Activation, Contents, DRM, Platform, ePub, Self- Publishing, Media*

1. Introduction

The language and characters used along the human history have been, and will continuously be delivering knowledge, philosophy, culture and thoughts on to the posterity through the diverse range of mediums (clay tablet, bamboo pole, papyrus, parchment, paper and etc). The book is a media that delivers not only the contexts, but as well as the emotions. In other words, it consists of texture and smell of the paper, weight, the touch of the page flips and etc. Despite the changes in times and environment, there will be no changes to the essential purpose of books. However, the form of the medium containing the history along the stream of time is being changed from tangible paper based book to the intangible digital based book or it is evolving to the 3rd type of form.

Recently, the majority of industries started being converged through the rapid development of the ITC (Information and Communication Technology) infrastructure and environment. The outcomes (new services and contents) created as a result, implies that the knowledge industry is becoming actualized. The change is coming for the publication industry also, and as the book being utilized with technology, it started reforming through the various media. It is an advent of the e-book.

While most of analog based businesses turn to the digital, the reason being that the progress for the book market is relatively slow, the book provides the lyrical feeling which is its distinctiveness. As the users are still habituated in physically flipping pages using their fingers, it is not easy to turn away from this familiarity. But as the time and generations flow, the progress of the e-book will grow rapidly.

The e-book is a of publication’s digitized form, it means formless contents distribution on online through network. The e-book in initial stage was simply convert

paper book to digitizing it was the most. Recently, self-publishing environment; irrelevant to paper book publication is activating that anyone can create their own story occur increase the high quality white color contents. Moreover, e-book formats like ePub3 that support various multi-media elements appeared and it harden foundation for activation of e-book market. [1]

It has been 20 years since the introduction of e-book concept to South Korea. The most certain reason for the biggest change on the digital publication market is probably the introduction of an iPhone by apple in 2009. The never experienced, sensational and convenient UI/UX started fascinating the users. Also, the firm platform, abundant contents, applications in various form were sufficient to lead the new e-book generation.

The more progress to the technology of new generation, the more newness demanded by the consumers. But the number of issues arises upon the service providers as they approach to lead the e-book market without understanding this consumer needs. As time goes by, the dissatisfaction and inconvenience increase, and the growth disorder to the e-book market is likely to continue.

Therefore, this thesis suggests the provisions to face the rapidly changing media environment and analysis of growth factors in order to activate the local e-book market that is currently inactive. This thesis consists of the following; Chapter 2: The current state of the global publication market and the changes of the media/distribution paradigm, Chapter 3: Suggestion of plans to resolve the issues and activate the digital publication market, Chapter 4: The conclusion.

2. The Status and the Trend of the Publication Market on Transition

2.1. The Change of Media/Distribution Paradigm

The current generation shows that people are living the days surrounded by the diverse range of smart medias and networking environment linked to the internet regardless of the location. The media that consists of 3 fundamental elements, *i.e.* Communication, Content and Community, is being evolved through the social network environment.

Figure 1 shows the visual presentation of evolution stage of various media that are changing in accordance with the stream of time. The Media 1.0 on the era prior to year 2000 is expressed as 'Lean back' Media as the users listen to the specific information 'One Way, No Feedback' while leaning on the sofa, it includes newspaper, magazine, radio and TV. From the beginning of the year 2000, era of Media 2.0 begins at the time of internet development, which led users to take some form of an action that shows the response in real time. The media on this era is called "Lean forward" media, because it's used after got up from the sofa facing the media (website, blog, etc). However, the current era is getting into the Media 3.0 after the application of social network environment and cognitive technologies. It is the era that media communicates one to another that falls into 'Lean on' media. Therefore, current 'Interactive, Real-Time Feedback' environment is set on the fundamental of join and share.

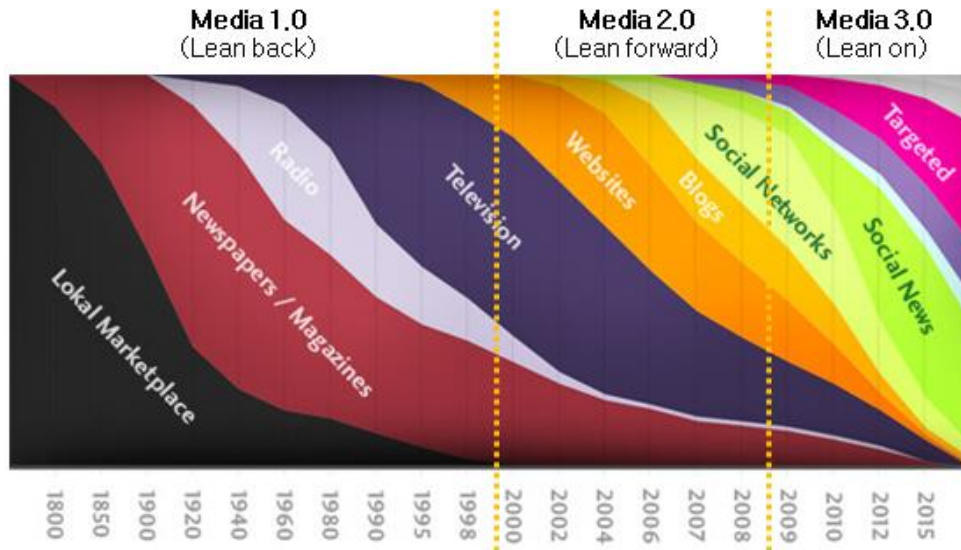


Figure 1. Progress of Media Evolution

Thus, the rapid development of technology, changes in the media and shift to the e-books have brought significant change to the distribution of publications. When traditional paper books are produced by the author or the publisher, it is published as a book through the process of printing and distribution, and then it was sold to the consumer through the distributor. On the other hand, the e-book is published as a digital book by the distributors by producing the digital contents (currently the percentage of the publisher producing the e-book is increasing), and then the distributors sell it to the users through the PC, tablet or the phone.

As the publishing company and distributor holds the power for the paper book sales, the barrier of the publication for the authors is exceedingly high. However, after the introduction of e-book in the market, the power of publishing companies and distributors has gone down, and the authors who are the origin of contents creation are gaining more power. This is because of the influence of the internet and various platforms that provide easy registration and sales for the intangible digital contents.

The consistent development of ICT will continue to evolve the echo system of publication market. However the possession will be given to contents and the different form of media that delivers the contents.

2.2. The Status Global Publication Market

Generally, as the books are paper based and they are being operated based on the offline store. From the middle of year 2000 as internet concept has spread, online based book distribution showed gradual changes. However, the majority of book being sold is still the paper book. But, the various smart devices (smart phone, tabletPC, e-ink device, *etc.*) became popular from middle of year 2000 and the interest in replacing the paper book with e-book is increasing and there are significant changes occurring towards the target consumer.

According to the PwC (PricewaterhouseCoopers), the market research institution, the size of the global publishing market, as shown in Table 1 is expected to grow slightly. The e-book market is still showing a high level growth rate and it is pursuing the paper book market rapidly. As the modest growth in the size of overall market, size of the paper book market is currently decreasing.

Table 1. Status and Prospect Data of the World Publishing Market (Book Division)

(unit: \$ million)

Book Category		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2012-17 CAGR
General	Digital	922	1,794	3,069	4,568	6,659	8,969	11,356	13,643	15,819	17,738	21.6%
	Paper	64,368	62,893	61,446	59,543	57,404	55,363	53,292	51,340	49,441	47,760	-3.6%
	Sub T	65,290	64,687	64,515	64,111	64,063	64,332	64,648	64,983	65,260	65,498	0.4%
Educational	Digital	258	559	845	1,415	1,996	2,589	3,189	3,793	4,370	4,971	20.0%
	Paper	36,121	35,608	35,082	36,101	35,573	35,313	34,960	34,597	34,251	33,861	-1.0%
	Sub T	36,379	36,167	35,927	37,516	37,569	37,902	38,149	38,390	38,621	38,832	0.7%
Grand Total		101,669	100,854	100,442	101,627	101,632	102,234	102,797	103,373	103,881	104,330	0.5%

CAGR (Compound Annual Growth Rate) refers to the average annual growth. When looked into the CAGR of global publishing market during the 2012~2017, book (0.5%) sector appears slightly higher than the magazine (0.3%) and newspapers (0.0%), but the market itself seems to be a stalemate. Also, as the trend shows that there is a high cannibalization between paper book and e-book in the book market, it is highly required to prepare to face the era of e-book.

In North America, sales of the e-book have already surpassed the paper book, and for amazon, starting from April 2011, e-book is being sold higher than the sum of hard-cover and soft-cover. England also sold more e-books than paper books, and some of the large publishers have dominated the most of the market share. Recently in the case of Japan, the number of e-book users is increasing due to the rapid growth of the e-book-only terminal as well as the smart phones and tabletPC. In addition, the center of the publishing market is being moved towards electronic publishing and recently, the copyright amendment allowing the publication rights of internet based e-book has been approved and it is about to be implemented as of January 2015.

By looking at the domestic e-book market in 2013, existing e-book service providers as well as the press agencies, venture business operators and distributors etc. have been participating, and the era of 100 billion won sales through the contents have been started. Target for 2014 is expected 50% more than the previous year. In fact, the growth of B2B appears to be slightly higher compared to the growth of B2C, and sales volume of books out of genre/fantasy based sales, which occupies the most of e-book market share, is being increased.

However, the users are still craving for the fresh contents and appealing the complaints for the inconvenience of the current functions of viewer, the random environment of solutions on each different service providers and its policy. Thus, consistent preparation and efforts are expected in order to overcome these inconvenient elements and revitalize the e-book market.

3. E-book Growth Factor Analysis and Revitalization Plan

There are growing concern towards the e-book due to the influence of the variety of smart phone distribution and social environment. But, Korean e-book market in the entire publishing sector occupies about 2.5% of the share (based on 2013) which is insufficient compared to the size of global market.

The e-book has variety of advantages such as independency of time and location, convenience of search and share and accessibility in accordance with personal taste and environment. Nevertheless, the e-book is in the situation where it does not get activated well

enough. In this chapter, activation plans for the e-book will be suggested after drawing a solution to the growth factor by analyzing the problems of the existing e-book services.

3.1. Excavation of Service in Consumption Pattern

The purchasing pattern of e-book shows that it is very close to the purchasing pattern of paper book. Early day where there are not much of contents, most case will be paying for the full price for the permanent possession, but due to the sudden growth of contents (growing 2~3 times each year) and broad range of options to select from, users tend to move on quickly to the ‘access and consume’ type of pattern which they subscribe certain period of time at an affordable price.

According to the result of survey conducted by Trendmonitor of Macromillembrian, the professional market research institution, targeting 1,000 male/female in the age group between 19~59 nationwide, regarding the usage of e-book and paper book, the majority of the reasons for the sales being insufficient are related with the price and contents as seen on Figure 2.

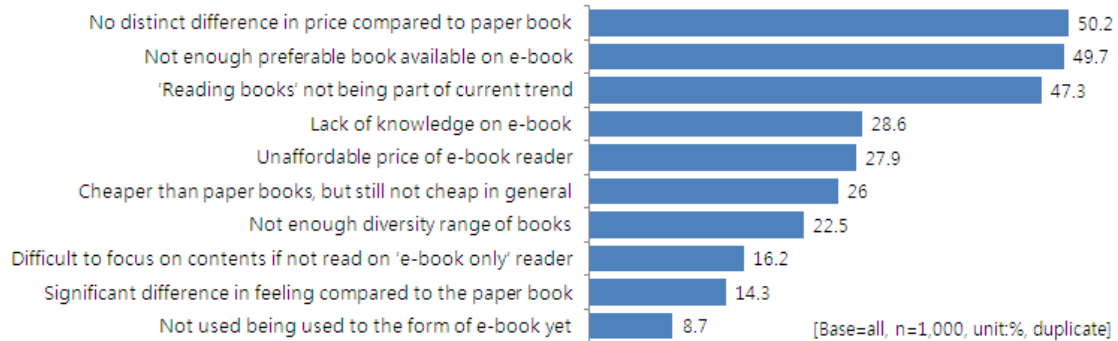


Figure 2. Reasons of Insufficient Sales of E-book

In general perspective of price, there are 2 major types of methods for the e-book distribution. Firstly, there is ‘wholesale model’, that the retail price is determined by the distributor. It is the method mainly used by amazon, suggesting the price of best-seller and new book on e-book at \$9.99 in order to expand the base through the sales increase of kindle (a reader dedicated for e-book) and the e-book contents. The change to ‘agency model’ is being reviewed as apple has entered the e-book market recently. Secondly, there is ‘agency model’, which the method that the decision of retail price is determined by publisher/author. This method is mainly used by apple, ensuring the profit of the publisher to the certain level and authorizing them to set the retail price. 30% of commission is being taken generally.

The ‘agency model’ method is being followed in South Korea as well, and publishers are setting the retail price of e-book at the 60~70% of the price of paper book in average. As a result, the price of e-book against the paper book is competitive, however it does not become attractive at a user’s perspective.

The rental based service or the subscription based service that provide wide range of options to users to select the contents, is gaining attention as a new business model. The below Table 2, shows the list of variety range of subscription services found local/abroad.

Table 2. Major Subscription Services in Local/Abroad

Service Name (Country)	Open date	Number of contents	Service features
24symbols (Spain)	2011.6	1,000(Classical Literature) (as of 2011.6)	<ul style="list-style-type: none"> * First implementation of 'Freemium model' on e-book * Month/Quarter/Year based unlimited membership service (9.99eur/mth, 19.99eur/qtr, 59.99eur/yr) * Cloud reading * Fee charged based on the actual page read by the reader
sam (Korea)	2013.2	50,000 (as of 2014.4)	<ul style="list-style-type: none"> * Monthly plan fee commensurate with number of books (1 year contract, 3 books: 9,900krw, 5 books: 15,000krw, 7 books: 21,000krw, 12 books: 32,000krw) * sam device combined subscription service (2 year contract) * Contents available up to 6months from the initial download * Reading note and curation service provided * Platform: iOS, Android, PC, sam device
eReatha (US)	2013.9	80,000 (as of 2013.11)	<ul style="list-style-type: none"> * Monthly plan fee commensurate with number of books (2 books: \$16.99, 3 books: \$25.5, 4 books: \$33.5) * Permanent possession from the selected books * Platform: iOS, Android
Oyster (US)	2013.9	100,000 (as of 2013.11)	<ul style="list-style-type: none"> * \$ 9.95/month unlimited service plan * Store/read up to 10 books on the reader * Fee charged based on the actual page read by the reader * Platform: iOS (Android under development)
Scribd (US)	2013.10	Confidential	<ul style="list-style-type: none"> * \$8.99/month unlimited service plan * Estimated percentage of contents retained to be 8~10% of US book sales * Up to 80million existing member of document sharing service with high level of recognition * Store/read up to 10 books on the reader * Fee charged based on the actual page read by the reader * Platform: iOS, Android, PC, Kindle Fire
Speakboos (US)	-	150 (as of 2013.11)	<ul style="list-style-type: none"> * Production/distribution of e-book for kids * \$5/month, \$45/yr Unlimited service plan * Platform: PC, iOS

The users are expecting for the e-book to be available with more affordable price as a same manner of subscription model for the music, movie and magazine *etc.* However, the publishers are set on the position where their profit is affected by the reduction in sales volume of paper books due to the subscription service, therefore it is important for them to create the environment that can satisfy all the users, publishers/authors and service providers.

There should be consistent research and study for securing more contents/services, recommending users with the contents that are tailored to their tendency, allowing variety of contents to be sold so that the publishers/authors are ensured with more profitable tools and virtuous cycle.

3.2. Quantitative/Qualitative/Territorial Expansion of E-book Contents

The current number of e-book contents and preferred new-book/best-seller contents are still insufficient. Even the number of the e-book contents retained by the Korea's biggest

book distributor ‘KyoboBook Centre’ is only about 200,000 counted as of 1st quarter of 2014. It is never enough compared to overseas, and the most of the e-book contents consisted based on the paper books that are already published. The books within a very few category that are contracted the copyrights/rights-of-transmission with publishers, are being converted to an e-book format for service.

The Reason for the publishers apply the holding period of 1~3 months for the new book and best-sellers to be published, is because the relatively inexpensive e-books affect adversely to the sales and profit of the paper books. Thus, the vicious cycle of insufficiency of user satisfaction on demand for the preferred contents continues. Even though there are self-publishing contents discovering for the creative contents that fail to pass the barrier of publisher, the effect on the registration and sales is very weak as it takes considerable examination for the selection of good contents that are free from the copyrights.

On the other hand, the complaints from the existing users are being resolved by introduction of app-book which provides multi-functional features, fun and educational effect as an application form containing interactive multimedia elements (video, sound and animation *etc.*) that are not compatible on the existing e-book system. However, it requires considerable production cost, and there is a disadvantage in terms of profit structure as 30% commission to the platform provider is required in order to register and activate the sales through the mobile platform.

Furthermore, by using ePub format which is established by IDPF in September 2007 as an open type e-book technology standard for the compatible interaction being used frequently around the world, substantial contribution on procuring the preferred contents is expected by occupying diverse range of multimedia elements, major book/textbook/study books requiring interactive elements that were unable to be occupied previously. (provided that, available from ePub3 version) Thus, the area of occupancy is fairly expanded even just by using existing ePub format which is used primarily.

However, the reality of the current e-book is that the 65~75% of e-book sales fall into genre/martial-arts based contents, so that the e-book is being recognized as ‘genre’. Therefore, in order for the e-book market to grow even higher, a long-term contents strategic direction is essential as seen on Figure 3.



Figure 3. Direction of Content Strategy

First, the environment to convert and occupy the paper based books, comics and textbooks in e-book format is essential. Also, diverse range of contents must be created through the professional approach to contents expansion by focusing on professional contents of ‘white

color’ based on e-book instead of paper book. Finally, preparation is required to face the era of losing the barrier between the consumer and the supplier. In other words, platforms like amazon’s fan-fiction where users could participate to create new contents, and platforms that can create the collaborated work while copyright issue is resolved are essentially required.

A quantitative possession towards the contents is required, however the qualitative satisfaction to users towards the contents must be highly considered. From now on, editing and design considering the e-book should be fulfilled at the initial stage of paper book production. Also, the expressivity of e-book viewer must support in accordance with the purpose of the editors.

3.3. Provision of Reading Culture through Change of Educational Approach

In Korea, 30% out of whole adults are found to be non-reading people that explain the seriousness of reduction in nation’s reading volume. The main reason for this is because the reading has not become habituated, due to the economic recession requiring more time of preparation for qualification/employment, as well as because of the highly increased smart device penetration rate.

According to the statistics <2013 National Survey of Reading Status> of reading rate researched by Ministry of Culture, Sports and Tourism, targeted on 2,000 adults over 18 and 3,000 students under higher education, adult’s reading rates on annual average is 9.2, adult’s reading time average is 23.5mins during weekdays, 25.8mins during the weekend. (Note, ‘reading’ on this survey means the action of reading including both paper and e-book).

“Annual average of reading rate” refers to the percentage/rate of persons belong to the nation who read at least 1 book per annum, as seen on Table 3, Korean’s annual reading rate is slightly higher than 28 EU countries, but still lot of gap exists between the advanced reading counties in Europe.

Table 3. Korea/EU Annual Average of Reading Rate

Country	Rate	Country	Rate	Country	Rate
Sweden	90	Finland	75	EU average	68
Netherland	86	Ireland	74	Slovakia	68
Denmark	82	Austria	73	Slovenia	67
England	80	France	73	Lithuania	66
Germany	79	Korea	73	Belgium	65
Estonia	78	Latvia	72	Spain	60
Luxembourg	76	Czech	71		

By reducing the resistance on reading books and providing the cognition for necessity of reading, one’s developing thought should be expanded. In this way, number ways of creating reading culture and environment will be suggested.

First, prepare an environment at home/residential space where the books can be accessed. The most influential environment during the infant period is home environment. In this period, the children physically learn the interest and environment of reading though the parents reading the book for them. Therefore, the children will possess the ability to grow as mature cultural citizens while discovering themselves through the knowledge gained by preferable reading habit.

Second, enforce the school education with self-directed learning method. The current educational method of Korea from elementary to the tertiary, enforce the cramming method of teaching. In other words, learners take contents given by the teacher as an unilateral method, practice nothing but memorization of books in order to receive higher recognition. As a result, the books are being avoided due to the natural repulsion when became an adult. On the other hand, majority of education in western countries respects student's personality. From the point where their ego gets formed, they share and discuss their opinions freely, or bring objections on the table, gaining new knowledge for themselves by reading the book, so that this pattern reforms the virtuous cycle of educational method.

Third, expand the reading environment for the disadvantaged people. Every year, the usage of public library by adults decreases, and the major reason is because they are 'busy for work or study', 'not used to reading books', 'busy for other leisure activity' etc. in order to overcome this issue, the tool that enables adults as well as disadvantaged group of people to participate by spreading the education/seminar program based on the theme that the adults could find interest by providing fun and excitement.

This change may bring active function to the digital publication markets that keep people closer to the books and develop the reading culture even more mature.

3.4. The Spread of Optimized E-book Reader

As the recording media transforms into e-book, smart devices containing digital contents keep being launched. It is definitely the smart phone and tablePC that enabled the recognition and accessibility of e-book at an initial stages spreading fast enough.

Out of these devices, e-ink based e-book reader provided the most similar reading environment as the paper books. The long lifetime of the battery with only on charge compared to the tabletPC and smart phones is one of the advantages. Also, unlike the LCD display, e-ink is optimized for people to concentrate for long enough on reading without the eye fatigue because of its display quality. But, it supports the limited color and still has deficiency in order to support the video elements. Nevertheless, propagation of e-book readers seem to be essential as an alternative solution to vitalize the digital publication market.

Table 4. Major Local/Global E-book Reader Status

Supplier (Country)	Device name	Main feature
KYOBO Book (Korea)	sam	* 6inch, 202g, 149,000krw (released on 2013.2) * touch screen, 1700mAh, 1024x758
	Mirasol	* Capacitive touch screen, color e-ink (released on 2011.11)
YES24 (Korea)	Crema Shine	* 6inch, 185g, 149,000krw (released on 2013.8)
	Crema Touch	* 6inch, 600x800, 215g (released on 2012.8)
Amazon (US)	Kindle	* 6inch, 600x800 (released on 2007.11) * AZW format, CDMA, For local use only
	Kindle 2	* CPU can be used as freestyle * Released on 2009.2(US), 2009.10(Local)
	Kindle DX	* Supports PDF, Wi-fi external only. (released on 2010.7)
	Kindle keyboard	* Pearl based, optimized legibility. (released on 2010.8)
	Kindle 4	* Reduced the size relatively (released on 2011.9) * Exceptional Price: \$79(Advertisement), \$109(Genuine)
	Kindle touch	* full-touch system. (released on 2011.9)
	Kindle 5	* Optimized page loading speed (released on 2012.9) * Black color, No advertisement: \$89

	Kindle paperwhite	* White LCD color, Clear display. (released on 2012.9)
SONY (Japan)	PRS 950SC	* 6inch, 600x800, 167g
	PRS T1	* 7inch, 1024x600, 272g
Rakuten (Japan)	Kobo aura HD	* 6.8inch, pearl, 1440x1080 (released on 2013.4)
	Kobo touch	* 185g (released on 2012.7)
Barnes&noble (US)	Nook	* Lower part UI feature, \$259 (released on 2009.12)
	Nook	* 6inch, 800x600, 212g. (released on 2011.5)
	Simple touch	* Supports Wi-Fi & Touch screen, \$139
	Nook GlowLight	* Supports backlight (released on 2012.4)

Table 4, shows the list of information on the e-ink based e-book readers out on the local/global market.

Most of the e-book readers released recently are produced and operated based on non-disabled people. Utilization of high technology and useful functions of e-book readers will allow e-book service to disabled people as well as the opportunities to broaden their prospect of new connection point to the world, can be provided through reading.

Recently, the development of smart phone considering the visually impaired people is gaining attention. In 2012, <OwnFone> which is developed based on customer order method braille phone, it gained attention once more as the 3D printing technology has been adopted additionally. Also, the similar braille smart phone is under development in India which will be commercialized within the first half of the 2015. This kind of efforts for disabled people will have to continue in the future.

3.5. Promotion of Standardization and Institutional Support

The expectation and interest on the e-book is increasing through the diversification of e-book contents and distribution of e-book readers. However, the standardization and institutional issues are yet to be resolved. As the e-book service is provided and operated by the service providers whose elements of standardization does not take in place, the users have to restrain and accept the inconvenience. There must be the plans ready to resolve this inconvenience and the institutional support is required in order to commercialize it in the industry.

Firstly, typical e-book format selection and standardized production guideline is required. Every e-book service providers may have their own existing e-book file on their own directions, it means that separate e-book reader is required in order to view the specific contents. Fortunately, as a result of the popularization of recent smart devices, ePub file format is becoming the standard e-book format. ePub file is XML based standard provided by the organization called 'IDPF(International Digital Publishing Forum)'[9], it's being used in America, Europe and Asia etc., as a defacto standard.

Even in the local, most of service providers are using ePub files. However, the standard guideline for ePub is suggested, but because the standard production guideline is missing, eBooks files are produced in a different structure according to each different interpretation. In this case, there may be the problem that same ePub file opens on one reader, but not on the other reader or the display problem. The current ePub3.0 standard version is provided to contain style sheet and various multimedia elements, and standard production guideline is essential and urgently required.

Secondly, interoperable DRM standard structure and commercialization is required. DRM (Digital Rights Management) is basically the technology being used for protecting the original version of the digital contents. Local/abroad e-book service providers are using their

own DRM and it is very inconvenient as a user's perspective. In other words, the reader and the list should be managed separately in order to see the purchased contents.

In order to resolve these issues, Korea Copyright Commission has undertaken a CT R&D project, 'International-standard ePub based e-Book DRM standard reference software technology development'[12] in 2011 and it's still being progressed after the project ended in 2013 for its commercialization and industrialization.

When this DRM standard structure as above Figure 4 is accepted, users will be able to read the e-book on one viewer and manage the list while maintaining the each DRM technology used by each service providers. In other words, the library and the viewer of each providers gains the DRM license by the protocol provided in order to gain standard protocol (key, rights information) so that the mutual reading becomes possible.

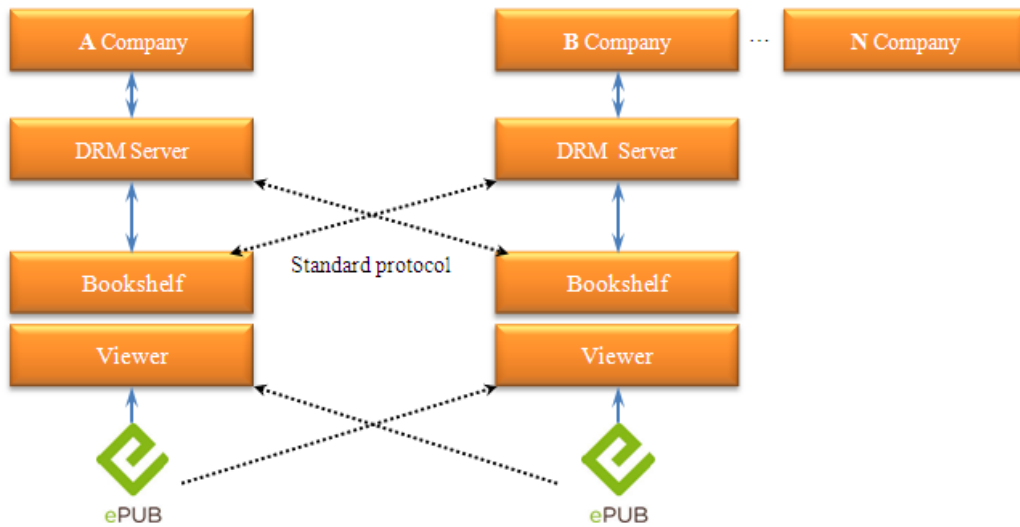


Figure 4. Flow of DRM's Standard Structure

However, participation of existing e-book service providers is not actively in progress. It is because of the platforms developed by previous investment exist already, and the duplicated investment and plan for providing new environment can be a risk. Also, as the viewer functions of each service providers are different, it may become a problem regarding the entity when customer complaint arose. Apart from this, there are still many remaining standards that are required to be resolved regarding the service policy and meta-data of each service providers.

Due to this environment, it is preferable to apply the B2B channel first in order instead of applying B2C first. It seems to require support for providing the system for activating the digital publication market by the government investing some portion of budget.

3.6. Diverse Promotion of Paper Book and E-book

An interesting phenomenon can be found in 'Consumer Attitudes Towards E-Book Reading' released by BISG on October 2013, which is a statistics of American users. It shows more than 50% of consumers who have intention of paying slightly higher cost from the existing price if there is a feature that they could contribute on e-book or re-sell. It seems quite hard to apply for a re-sell feature containing secondhand concept on an intangible e-book, however apple [13] and amazon [14] have applied for the patent relating the secondhand digital contents distribution in 2013 and there is possibility. Also, regarding the

bundle products which include both paper book and e-book together, more than 48% of customers revealed the intention to pay more than the price for paper book.

The publishing market is rapidly transforming into e-book, however it is expected to maintain as mutual supplementation as each e-book and paper book has different features and application. Recently, just like <7ans après> by Guillaume Musso, there are increasing number of publishers keeping in mind of possibility of growth in e-book market.

The effort to approach for the diverse promotions is essential in this period of time. The various numbers of approaches are required such as inducement to paper book and e-book through the city maps at a premium level, selling paper book and e-book together as a bundle product and or creating linkage with POD in order to create synergy effect between each other. Ultimately, by providing the environment for the mutual synergistic effect with paper book and e-book, publication market can be activated.

4. Conclusions

The publication industry world-wide is facing difficulties. Most of all, interest towards the reading culture and the atmosphere should be created. Also, the efforts to meet and face the changes for the e-book are essentially required.

The media in the digital era is developing consistently by linking through the contents of text, audio and video etc., various smart devices and network technology. As this kind of technology system and culture progresses, the door for the digital publication market is slowly opening.

Regardless of the field, all service providers should concern at consumers' point of view at all time and consider providing the services and solutions demanded by the consumer. However, there are still considerable amount of elements that need to be resolved in the digital publication market. In order to implement the various activation plans suggested in the chapter 3, mutual cooperation between relative service providers should be done put considerable efforts in boosting up the digital publication culture and the market size. This is to be the contribution that leads to the new golden age of the e-book by providing the reading culture to users without the resistance to e-books.

References

- [1] E.-H. Lee and Y.-S. Kim, "Electronic Book Activation Strategy Plan based on Propose Factor Analysis and Evolution Direction", Science & Engineering Research Support Society, Advanced Science and Technology Letters, Proceedings of Games and Graphics 2014, vol. 46, (2014), April 15-19, Jeju, Korea.
- [2] E.-H. Lee, "Current status of ePub3 Application and Implication", The Korea Digital Publishing Society, vol. 2, (2013), pp. 39-46.
- [3] U. S. Jeong and C. S. Park, "Standardized Direction of Digital Textbook in Smart Education Environment", Telecommunications Technology Association, (2013), pp. 84-91.
- [4] Ministry of Culture, Sports and Tourism, "2013 Research of National Reading Status", (2013), 12.
- [5] PwC(2013), "Book, Magazine Publishing, Newspaper Publishing Entertainment outlook, 2008-2017".
- [6] <http://www.baekdal.com/analysis/market-of-information>.
- [7] New York Times, "HarperCollins Joins Scribd in E-Book Subscription Plan", (2013), 10.
- [8] GigaOm, "ere's how much Smashwords authors will get paid through ebook subscription service Oyster", (2013), 10.
- [9] IDPF, <http://www.idpf.org/>.
- [10] S.-K. Yoon, M.-J. Kim and J.-H. Choi, "Effects of Digital Textbook's Interactivity on the Learning Attitude: With a focus on the Tablet PC-based Digital Textbooks of Social Studies and Science", The Korea Contents Association, vol. 14, no. 2, (2014).
- [11] BISG, "Consumer Attitudes Toward E-Book Reading", (2013), 10, <https://www.bisg.org/>.
- [12] T.-H. Kim, H.-G. Kang, Y.-H. Kim and S.-H. Cho, "A Study of License acquisition Method Supporting mutual Compatibility of EPUB-based eBook DRM", The Institute of Webcasting Internet and Telecommunication, vol. 13, no. 2, (2013), pp. 205-214.

- [13] E. C. Marcel, "Managing access to digital content items", U.S. Patent 20130060615, (2013) March 7.
[14] E. Ringwald, "Secondary market for digital objects", U.S. Patent 8364595, (2013) January 29.

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