

Exploitation of Works Derived from Indigenous Traditional Cultural Expressions Through a License-to-Read Model on the Digital Book Platform.

An Aspect under the Taiwan Copyright Act

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Abstract

Taiwan inherits the cultural traditions from various indigenous people who have inhabited here for thousands years. For exploiting such the cultural benefits, the Taiwan government has launched several research projects to collect indigenous traditional cultural expressions (TCEs) created by native Taiwanese people. As many databases have been formed, it is very important to further create some business models to add economic value to the databases. This article provides one model. That is, use digital books with a "license to read" contract. A "digital book" can work with a form of software protection to prevent unlicensed uses, willful copyright infringement, or unwanted content dissemination. This article began with an analysis of copyrightability of TCEs in Part II. Part III discusses ideas of digital books as a way to exploit and protect TCEs at the same time, and it also analyzes the legal framework of copyright protection of digital books under the Taiwan Copyright Act. Finally, Part VI provides a project plan about how to implement the idea. Briefly, the idea of using digital books is based on the trend of some commercial electronic products, such as Apple's i-Pad, smart phones, or tablets. These products create a platform of digital contents. Customers can read digital contents through Apple's i-Pad, for example. It is very convenient to do so while the customers are sitting in any place. In terms of copyright protection, TCEs might not be a protected subject, because artistic parts of TCEs might have been within the public domain. However, by using a digital book format, TCEs might be transformed into a new copyrightable subject matter. Moreover, by some software technology and the copyright law of anti-circumvention, copyright owners of digital books could prevent their properties from freely dissemination throughout the Internet. For example, a digital book file could be embedded with a code. The code could be read by certain software which is installed into those digital platforms. So, customers can only access to copyrighted digital

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book. Also, the digital format might add some interactive features into TCEs which cannot be executed in a paper format. Such the features could be more attractive to customers. The product benefit further inhibits physical dissemination of printed digital books. In conclusion, to further exploit works of indigenous traditional cultural expressions, digital books could be a best way in terms of copyright protection.

Keywords: Traditional cultural expressions, digital book, copyright, edited work

Resumen

Taiwan heredó las tradiciones culturales de diversos pueblos indígenas que han habitado aquí durante miles de años. Para aprovechar las ventajas culturales, el gobierno de Taiwán puso en marcha varios proyectos de investigación para recoger las expresiones culturales tradicionales indígenas (ECT) creadas por los taiwaneses nativos. Como se han formado muchas bases de datos, es muy importante la creación de algunos modelos de negocio para agregar valor económico a estas bases de datos. Este artículo proporciona un modelo: usar los libros digitales como un contrato de "licencia para leer". Un "libro digital" puede trabajar como una forma de software de protección que evita usos no autorizados, deliberadas infracciones de derechos de autor, o difusión de contenido no deseado. Este artículo, en la Parte II, comienza con un análisis de copyrightability de ECT. En la Parte III se analizan las ideas de los libros digitales como una manera de explotar y proteger las expresiones culturales tradicionales y también analiza el marco jurídico de protección de los derechos de autor de los libros digitales, en virtud de la Ley de Propiedad Intelectual de Taiwán. Por último, la Parte VI ofrece un plan de proyecto sobre cómo implementar la idea. En pocas palabras, la idea de usar los libros digitales se basa en la tendencia de algunos productos electrónicos comerciales, tales como iPad de Apple, teléfonos inteligentes o tabletas. Estos productos crean una plataforma de contenido digital que facilita la lectura a los clientes. En cuanto a la protección del derecho de autor, las ECT no pueden ser objeto de protección, ya que las piezas artísticas de las ECT son de dominio público. Sin embargo, mediante el uso de un formato de libro digital, las ECT pueden ser transformadas en un nuevo tema de derechos de autor. Por otra parte, mediante una tecnología de software y la ley de derechos de autor, los propietarios de derechos de autor de los libros digitales pueden evitar que sus propiedades sean de libre difusión en Internet. Por ejemplo, un archivo de libro digital podría ser incrustado con un código, el cual sería leído por un determinado software que se instalaría en esas plataformas digitales. Así, sólo los clientes pueden acceder a los libros digitales con derechos de autor. Además, el formato digital puede agregar algunas características interactivas en las ECT que no se pueden ejecutar en un formato de papel, las cuales pueden resultar más atractivas para los clientes. El beneficio del producto inhibe una mayor difusión que la de los libros digitales impresos. En conclusión, los libros digitales se presentan como una mejor manera para explotar las

obras de las expresiones culturales tradicionales indígenas en términos de protección de los derechos de autor.

Palabras clave: Expresiones culturales tradicionales, libro digital, derechos de autor, obra editada

Summary

I. Introduction. **II.** Unstable Copyrightability of TCEs. **A.** Doctrines of Copyrightability. **B.** TCEs as a Copyrightable Subject Matter. **III.** Protection and Exploitation of TCEs Through Digital Books. **A.** Strengths and Weaknesses of Digital Documentation as a Tool of Exploitation. **B.** Digital Books as a Solution in the Digital Era. **C.** Copyright Protection of Digital Books. **VI.** A Proposed Project. **A.** Ownership. **B.** Licensing Model. **C.** Proper Indexing. **D.** Pricing. **V.** Conclusion.

I. Introduction

Taiwan inherits the cultural traditions from various indigenous people who have inhabited here for thousands years.¹ For exploiting such the cultural benefits, the Taiwan Government has launched several research projects to collect indigenous traditional cultural expressions (TCEs) created by native Taiwanese people. As many databases have been developed, it is very important to further create some business models to add economic value to the databases.

According to the World Intellectual Property Office (WIPO), TCEs include "music, art, designs, names, signs and symbols, performances, architectural forms, handicrafts and narratives."² TCEs are an intellectual creation made in a way related to indigenous, cultural inputs or participations.³ Most of TCEs can be protected by intellectual property (IP) laws.⁴ For example, Signs and symbols could be protected by trademark law, while works made within the traditional, cultural context could be treated as copyrightable subject matters.⁵ However, some TCEs, such as oral stories, instrumental music, and lyrical songs, are unlikely protected under copyright law if fixation is required, because are disseminated through oral communications.⁶ Even in some cases where the law does

1 See Elana Brief, Jennifer Mackie, & Judy Illes, *Incidental Findings in Genetic Research: A Vexing Challenge for Community Consent*, 13 MINN. J.L. SCI. & TECH. 541, 547-48 (2012).

2 World Intellectual Property Office, <http://www.wipo.int/tk/en/folklore/>.

3 See Stephanie Spangler, *When Indigenous Communities Go Digital: Protecting Traditional Cultural Expressions through Integration of IP and Customary Law*, 27 CARDOZO ARTS & ENT. L.J. 709, 710 (2010).

4 See *id.* at 720.

5 See *id.*

6 See *id.*; see also Stuart Schüssel, Note, *Copyright Protection's Challenges and Alaska Natives' Cultural Property*, 29 ALASKA L. REV. 313, 325 (2012).

not require fixation,⁷ because those TCEs are not fixed in certain medium, it is usually hard to identify authorship or ownership.⁸

To ensure IP protection for TCEs, digital documentation has been a useful tool suggested by the WIPO.⁹ In Taiwan, one example of digital documentation is the "Formosa Aborigines Collections" (台灣原住民服飾, *luan-zhu-min shu-wei dian-cang*) run by the National Taiwan Museum under the National Taiwan Museum Digitizing Project.¹⁰ There, a lot of pictures showing indigenous people and goods are collected in a digital format.¹¹ Another case is the "Textile and Ornaments of the Aboriginal People in Taiwan" (原住民公仔, *tai-wan yuan-zhu-min fu-shi*) documentation which is run by the National Digital Archives Program, Taiwan.¹² There, the documentation collects pictures covering patterns of textile or ornaments adopted by Taiwan's aboriginal tribes.

This article proposes one model for exploitation of those collections. That is, use digital books with a "license to read" contract. A "digital book" can work with a form of software protection to prevent unlicensed uses, willful copyright infringement, or unwanted content dissemination. The idea is based on the Taiwan Copyright Act and one rarely-seen decision issued by the Taiwan Intellectual Property Court.

This article began with an analysis of copyrightability of TCEs in Part II. Part III discusses ideas of digital books as a way to exploit and protect TCEs at the same time. Besides, Part III analyzes the legal framework of copyright protection of digital books under the Taiwan Copyright Act. While Taiwan passed a Protection Act for the Traditional Intellectual Creations of Indigenous Peoples in 2007,¹³ the law has not been fully enforced since then because of lack of supplementary administrative regulations. The main law governing IP protection on TCEs is still the Copyright Act. So, this article focuses on an aspect from the Copyright Act.¹⁴ Finally, Part VI provides a project plan about how to implement the idea.

7 See Spangler, *supra* note 3, at 720; *see also* Art. 2(2) of the Berne Convention for the Protection of Literary and Artistic Works ("It shall, however, be a matter for legislation in the countries of the Union to prescribe that works in general or any specified categories of works shall not be protected unless they have been fixed in some material form.").

8 See Daniella Fischetti, Note, Lost in Transcription: The Impact of Copyright Legislation on Female Folk Musicians of the Twentieth Century, 33 WOMEN'S RTS. L. REP. 285, 306-07 (2012).

9 See Spangler, *supra* note 3, at 722.

10 This digital documentation can be found at <http://117.56.50.37/aborigine/index.html#/page7a/>.

11 National Taiwan Museum, <http://117.56.50.37/aborigine/index.html#/page1b/>.

12 This digital documentation can be found at <http://digitalarchives.tw/Theme/Aboriginal/TeXorna/index.jsp>.

13 See Chih-Chieh Yang, *A Comparative Study of the Models Employed to Protect Indigenous Traditional Cultural Expressions*, 11 ASIAN-PAC. L. & POL'Y J. 49, 50 (2010).

14 For the aspect of IP protection on traditional knowledge, please *see* Sophia F. Espinosa, *Patent Law and the Protection of Traditional Knowledge*, 1 NTUT J. OF INTELL. PROP. L. & MGMT. 159 (2012).

II. Unstable Copyrightability of TCEs

A. Doctrines of Copyrightability

To acquire copyright protection, a work has to be original and be expressed in a form of words, languages, images, or other media.¹⁵ A “work” protected under the Taiwan Copyright Act has to be a spiritual work created by an author. A spiritual work should have thoughtful or emotional expressions, a certain expression format, and originality.¹⁶ The key element is “originality” which does not need to meet a higher standard of novelty as required by the patent law.¹⁷ Without copying or imitating other’s work, an author can create a work of originality if she imports spiritual elements into her work to show her characteristics and uniqueness.¹⁸ Besides, an original work has to be created independently.¹⁹

A TCE work is partially composed of some traditional, cultural elements which have existed prior to the TCE work.²⁰ The copyrightable features of a TCE work might be limited to an “original” combination of those elements. That makes the copyright protection of TCEs very “thin.”²¹ So, an author has to refine traditional, cultural elements to make a TCE work meet the originality requirement. For example, performing an indigenous, traditional song can make such the performance an original work, which provides copyright protection for the performer against infringement of direct copying.²²

B. TCEs as a Copyrightable Subject Matter

The Taiwan Intellectual Property Court in the Civil Judgment (98) Min Zhe Su Zi No.13 (2009) addressed a copyright issue regarding small dolls of native Taiwanese people (卑南族, *yuan zhu min gong zai*). The plaintiff sold a small doll product named “Yuli Taki,” as shown in Figure 1. The alleged infringer also sold small dolls of native Taiwanese people. The court held no copyright infringement primarily because the plaintiff could not prove that the defendant had ever been aware of “Yuli Taki” prior to the defendant’s sale.²³

15 See Taiwan Intellectual Property Court Civil Judgment (98) Min Zhe Su Zi No.13 (2009)

16 See *id.*

17 See *id.*

18 See *id.*

19 See *id.*

20 See Molly Torsen, *Intellectual Property and Traditional Cultural Expressions: A Synopsis of Current Issues*, 3 INTERCULTURAL HUM. RTS. L. REV. 199, 203-04 (2008).

21 See ROBERT P. MERGES, PETER S. MENELL, & MARK A. LEMLEY, *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 404 (Aspen Publishers 4th ed. 2006).

22 See Yang, *supra* note 13, at 83.

23 See Taiwan Intellectual Property Court Civil Judgment (98) Min Zhe Su Zi No.13 (2009).



Figure 1 Small dolls of Taiwan indigenous people. (Source: http://www.twicg.com/Templates/p_Lien_Mei_Hui.html.)

In addition, the court discussed the creation of traditional clothing of native Taiwanese. It stated that the clothing of each tribe has its own styles, colors, patterns, and feather crafts, so without using these clothing elements, you could not create such a traditional cloth that may be a work of originality.²⁴ Therefore, in terms of traditional clothing, the court did not think that any different clothes made from traditional elements of one tribe could be distinguishably different.²⁵ That is, similarity among different clothing works is a normal phenomenon.

The Civil Judgment (98) Min Zhe Su Zi No.13 (2009) suggests that different expressions, however within the same concept of traditional clothing of one tribe, can make it conclusive that no copyright infringement can be found. For example, in comparing the buffs of the plaintiff's and defendant's works, the court looked to white spots affixed to the buffs and found that the defendant used a different technique to affix the white spots.²⁶ As for the hats used in the plaintiff's and defendant's dolls, the court found the difference in terms of how a hat was attached to a head.²⁷ These two findings were part of the grounds of non-infringement.

Although the case law is not an absolute, legal doctrine under the Taiwan legal norm, the risk of a court's more likely holding non-infringement exists when a TCE copyright owner seeks for protection. So, there has to be some alternative approach to eliminate the weak part of TCEs in terms of copyright protection.

24 *See id.*

25 *See id.*

26 *See id.*

27 *See id.*

III. Protection and Exploitation of TCEs Through Digital Books

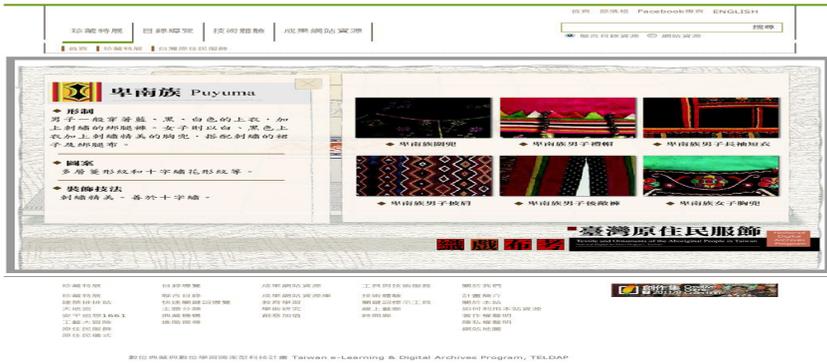
A. Strengths and Weaknesses of Digital Documentation as a Tool of Exploitation

Digital documentation can make a TCE work more copyrightable because it can provide identifiable authorship and fixation.²⁸ The maker of digital documentation can acquire copyright ownership by successfully getting title transfer from documentation editors which can be identifiable because the maker should know who edits the digital documentation or where the contents come from.

Copyright protection of digital documentation is stronger than a single TCE, because the judgment will be based not on a single TCE but on the collection of various TCEs as a whole. The originality of arrangement of TCEs in a collection will support stronger copyrightability. A single TCE might be too weak because the copyrightable features might be so thin that any slight change between such the single TCE and an infringing work might cause impossibility of infringement. However, a collection format can strengthen copyright protection because an editorial aspect of such the collection can transform several single TCEs into one copyrightable work. If the infringement of digital documentation is adjudicated in a court and the infringer challenges copyrightability, the key issue will relate less likely to each TCE but more likely to the originality of arrangement. Because the focus is not on traditional elements, lack of copyrightable elements can be easily avoided.

But, in terms of exploitation, digital documentation is not good enough. Digital documentation is a form of database without entertaining functions. For example, the "Textile and Ornaments of the Aboriginal People in Taiwan" documentation has a picture collection about clothing of different tribes. In the Puyuma (卑南族, *bei nan zu*) tribe section, six clothing patterns are shown separately in six pictures, as shown in Figure 2. For each clothing pattern, the database presents one picture and a short description of the pattern, as shown in Figure 3. The information is comprehensive, but the expression is not attractive. So, there should be some approach to exploit digital documentation operated by the governmental funds.

28 See Spangler, *supra* note 3, at 722-23. Although "fixation" is not a statutory requirement for copyright protection under the Taiwan Copyright Act, some work has to be fixed in order to be protected, such as books and literatures.



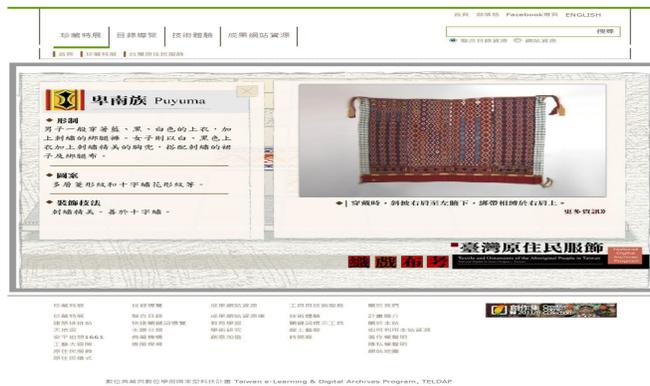
http://digitalarchives.tw/Theme/Aboriginal/Texoma/index.jsp

2011/9/30

Figure 2 Puyuma (卑南族, *bei nan zu*) tribe section in the "Textile and Ornaments of the Aboriginal People in Taiwan" documentation.

台灣原住民服飾-數位典藏與數位學習國家型科技計畫成果入口網

頁 1 / 1



http://digitalarchives.tw/Theme/Aboriginal/Texoma/index.jsp

2011/9/30

Figure 3 One example of the Puyuma (卑南族, *bei nan zu*) tribe section.

B. Digital Books as a Solution in the Digital Era

A digital book format is chosen for exploiting digital documentation because of the trend of some commercial electronic products, such as Apple's i-Pad, Amazon's Kindle, smart phones, or tablets.²⁹ Besides, several software platforms, such as Adobe Reader, Microsoft Reader, Palm Reader and Mobipocket, have been used in personal computers or laptops.³⁰ These products create a new platform or forum of distribution of digital contents. Customers can read digital contents through Apple's i-Pad, for example. It is very convenient to do so while the customers are sitting in any place.

Additionally, an era of digital books has also brought a new commercial channel for publication distribution. A book author can publish his works without using wholesalers and reach readers through on-line bookstores.³¹ A book publisher can use a print-on-demand system to manage its inventory or create a new market.³²

In view of customers, Roberta Burk has mentioned the following eight advantages:³³

- Readers can customize the type font and size of the content of a digital book.
- A digital book can easily be purchased through on-line services.
- Readers can quickly find their reading focuses by using the search function that a digital book tool could provide.
- A digital book can be linked to a dictionary or other database, so a reader can check the meaning or definition of a term he is reading.
- A digital book tool might provide a function of annotation, so a reader can highlight or mark the lines he is reading.
- A digital book device might provide a backlight, so a reader can be in a comfortable environment while reading the content.
- A digital book device can store many digital books and is portable or movable, so a reader can easily take the device out instead of carrying a bunch of heavy books.

29 See, e.g., Andrew Weinstein, *A Look at Global Expansion for e-Books*, 26 PUBL'G. RES. Q. 11, 11-12 (2010); Ezra Klein, *The Future of Reading*, 47 COLUM. JOURNALISM REV. 35, 35-37 (2008).

30 See Gemma Towle, James A. Dearnley, & Cliff McKnight, *Electronic Books in the 2003–2005 Period: Some Reflections on Their Apparent Potential and Actual Development*, 23 PUBL'G. RES. Q. 95, 99 (2007).

31 See Ted Treanor, *Amazon: Love Them? Hate Them? Let's Follow the Money*, 26 PUBL'G. RES. Q. 119, 126-27 (2010).

32 See Xuemei Tian & Bill Martin, *Digital Technologies for Book Publishing*, 26 PUBL'G. RES. Q. 151, 152-53 (2010).

33 See Roberta Burk, *E-book Devices and the Marketplace: In Search of Customers*, 19 LIBRARY HI TECH 325, 326-27 (2001).

Furthermore, several technical solutions, for instance, Electronic Book Exchange (EBX) and Adobe ePaper Solutions, have been available to copyright protection of a digital book.³⁴ The basic technology is encryption.³⁵ The content of a digital book can be encrypted, and then the encrypted content can be further associated with security measures that are offered by those copyright protection technologies.³⁶

Therefore, a digital book can be a solution for further exploiting digital documentation of TCEs. For commercial purposes and copyright purposes, digital books are the most favorable tool in the digital world.

C. Copyright Protection of Digital Books

In terms of copyright protection, TCEs might not be a strong, protected subject, because artistic parts of TCEs might have been within the public domain. However, by using a digital book format, TCEs can be transformed into a new copyrightable subject matter. Then, TCEs can enjoy higher copyright protection through a digital book, although we still have a lot to do to attack internet piracy.³⁷

Two protection measures are provided for digital books under the Taiwan Copyright Act: ordinary copyrights and a right of anti-circumvention. A digital book might be a combination of an "oral and literary work," "artistic work," "photographic work," and "pictorial and graphical work" defined in Article 5 of the Taiwan Copyright Act. Alternatively, a digital book might be a compilation work that includes various TCEs. In this way, a digital book is an edited work. Thus, a digital book can definitely enjoy the ordinary copyright protection of those economic rights. A commercial scale of copying activities can cause infringers to be charged of criminal offenses.

Since a digital book is digital and functioning by some software technology, it can also enjoy the copyright law of anti-circumvention. That is, copyright owners of digital books can prevent their properties from freely dissemination throughout the Internet.

In terms of software technology, a digital book can be equipped with "electronic rights management information"³⁸ and "technological protection measures."³⁹

34 See Erin Carreiro, *Electronic Books: How Digital Devices and Supplementary New Technologies are Changing the Face of the Publishing Industry*, 26 PUBL'G. RES. Q. 219, 224-26 (2010).

35 See *id.* at 226.

36 See Carreiro, *supra* note 34, at 226.

37 See, e.g., Charles W L Hill, *Digital Piracy: Causes, Consequences, and Strategic Responses*, 24 ASIA PACIFIC J. OF MGMT. 9, 23-24 (2007); Mark Van Hoorebeek, *Napster Clones Turn Their Attention to Academic e-Books*, 104 NEW LIBRARY WORLD 142, 144-45 (2003).

38 Under Article 3 of the Taiwan Copyright Act, "electronic rights management information" means "electronic information presented on the original or copies of a work, or at the time of communication of content of a work to the public, sufficient to identify the work, the name of the work, the author, the economic rights holder or person licensed thereby, and the period or conditions of exploitation of the work, including numbers or symbols that represent such information."

39 Under Article 3 of the Taiwan Copyright Act, "technological protection measures" means "equipment, devices, components, technology or other technological means employed by copy-

These two approaches are called "Digital Rights Management" (DRM).⁴⁰ DRM is an umbrella term covering various concepts.⁴¹ DRM includes digital content protection (DCP) that is a cryptographic technique for protecting data, where the protected data can be read through trusted software on the user site.⁴² DRM includes trusted software available to users, and the trusted software can control accessibility to the protected data and prevent unauthorized access.⁴³

The Taiwan Copyright Act bans acts of breaking DRM systems. A person who removes or alters "electronic rights management information" from a digital book without authorization will be held civilly or criminally liable.⁴⁴ A person who distributes, intends to distribute, imports, or possesses unlawfully-acquired digital book will also be held civilly or criminally liable.⁴⁵

Additionally, a person who disarms, destroys, or by any other means circumvents "technological protection measures" without authorization will be held civilly liable.⁴⁶ The Taiwan Copyright Act also prohibits acts of manufacturing, importing, offering to the public for use, or offering in services to the public, "[a]ny equipment, device, component, technology or information for disarming, destroying, or circumventing technological protection measures."⁴⁷ A person who does those acts will be held civilly or criminally liable.⁴⁸

VI. A Proposed Project

The advantages of using a digital book as a tool for exploiting digital documentation of TCEs have been described. The following idea provides a framework of exploitation. The idea is based on a "license to read" model which includes limited authorization granted to readers when the readers purchase a digital book. Four aspects, such as ownership, licensing model, indexing, and pricing are further elaborated.

A. Ownership

It is necessary to acquire full ownership from original authors of TCEs collected in digital documentation or editors of a digital book. An operator of digital documentation can assert copyright infringement against infringers more easily because he has full ownership. Without full ownership, the operator might

right owners to effectively prohibit or restrict others from accessing or exploiting works without authorization."

40 See E John Sebes & Mark Stamp, *Solvable Problems in Enterprise Digital Rights Management*, 15 INFO. MGMT. & COMPUTER SEC. 33, 33-34 (2007).

41 See *id.* at 34.

42 See *id.*

43 See *id.*

44 See Art. 80-1, Para. 1 and Art. 96-1 of the Taiwan Copyright Act.

45 See Art. 80-1, Para. 2 of the Taiwan Copyright Act.

46 See Art. 80-2, Para. 1 of the Taiwan Copyright Act.

47 See Art. 80-2, Para. 2 of the Taiwan Copyright Act.

48 See Art. 80-2, Para. 2 and Art. 96-1 of the Taiwan Copyright Act.

worry about whether infringers will ask for licensing from the original owners/authors (or editors). Exclusive licensing is not an option because infringers might challenge the licensing scope in the court. When the court finds any defects in the exclusive license contract at dispute, the operator as a licensee might lose the standing to sue.

If the operator fails to acquire full ownership, the original owners/authors (or editors) might license their works to another operator. So, an undesired competition will be created. Holding full ownership supports the operator to offer a license-to-read contract with digital book purchasers. The uncertainty of other licensing sources that consequently causes competition of the same digital book can be reduced.

To establish full ownership, the operator not only has to enter into an ownership transfer contract with the original owners/authors (or editors), but also needs to conduct ownership investigation to make sure that the to-be-transferred ownership is clear. Sometimes, there might be two or more authors for a single TCE work, so the operator has to figure exact owners. Left-over authors might cause a problem because they still own part of a TCE work. Infringers or other competitors might get a license from them.

In a case where authors (or editors) are employed by the operator, the operator might acquire ownership by law.⁴⁹ However, since the operator might not be a real human being and cannot create a TCE or digital book, the operator must prepare contract documents to demonstrate that he has ownership. In the employment case, the operator needs to prove that the author was his employee when the TCE or digital book was made and that the TCE or digital book was a work for hire (or, a work within the scope of employment). The second element is not easy to prove when the TCE or digital book was made during off-work time. The key issue is what means "a work within the scope of employment." An author or editor might have created a TCE or digital book before she enters into the "scope of employment." Because of such the legal uncertainty, acquiring full ownership through employment relationships is not recommended. It is better to have a title transfer contract for each TCE or digital book.

Contract documentation of ownership transfer contracts is a difficult challenge. Each contract must be labeled with the author and digital book (or TCE). Each contract might be certificated by public certificate services. The documentation has to include the record of each author. The record should have personal identification numbers, so the copyright term of each TCE or digital book can be calculated.⁵⁰

49 See Art. 11 of the Taiwan Copyright Act.

50 Under Article 30 of the Taiwan Copyright Act, "economic rights endure for the life of the author and fifty years after the author's death."

B. Licensing Model

A proposed project for exploiting digital documentation of TCEs is to create a "license-to-read" business model. The concept is that a customer is only licensed to read, and he is not allowed to possess the digital book as his own. Since he is licensed, he is also temporarily licensed to keep the file in his e-book device or computer with an e-book reader tool.

The licensing scope can have the following aspects: time, device (or software), and file format.⁵¹ A license to read might be time period-based. A download tool or on-line book store will mark a digital book with an expiration date.⁵² After the expiration date, no device can read the digital book previously downloaded. The renewal fee could be low, so there is a fair deal. With that, the license model can show a full control over the downloaded digital book. In addition, the person who renews the expiration date might be limited to the same user. That could be more restrict in terms of controlling the client-site behavior.

Secondly, customers may be licensed to read a digital book through one type of device. For example, a digital book file could be embedded with digital codes. There are at least three layers of codes. The first layer is identification of a digital book. Either the "International Standard Book Number (ISBN)" or "Digital Object Identifier (DOI)" could be applied.⁵³ The second layer is a software or device code which helps the downloaded digital book be associated with its designated, reading device or software. The third layer is a code of the expiration date. The codes could be read by certain software which is installed into those digital devices. So, customers can only access to copyrighted digital book in a specific device for a limited time period.

Thirdly, a license to read should be a format-by-format basis, where different formats include MOBI, ePub, and Adobe.⁵⁴ That is, a license to read is for one single digital forum or digital book device. If a license is granted only for i-Pad users, the licensed users cannot transmit the digital book file to another tool to read.

Also, for each digital format, some interactive features might be added, while these features cannot be executed in a paper format.⁵⁵ For instance, an audio sound of TCEs could be played while a read is reading one chapter that relates to the audio sound. Such the features could be more attractive to customers. This product benefit further inhibits physical dissemination of printed digital books.

51 See Chen Ya-ming, *Application and Development of Electronic Books in an e-Gutenberg Age*, 27 ONLINE INFO. REV. 8, 11 (2003).

52 See John Borland, *Coming to Campus: E-Books with Expiration Dates*, CNET NEWS, Aug. 9, 2005, http://news.cnet.com/2100-1025_3-5825301.html.

53 See MICHAEL HOLDSWORTH, THE IDENTIFICATION OF DIGITAL BOOK CONTENT 1-2 (2008), available at http://www.bisg.org/docs/DigitalIdentifiers_07Jan08.pdf.

54 See Anne Kostick, *The Digital Reading Experience: Learning from Interaction Design and UX-Usability Experts*, 27 PUBL'G. RES. Q. 135, 138 (2011).

55 See Raz-Kids.com, <http://www.raz-kids.com/>.

C. Proper Indexing

If part of the income will go to original authors, an indexing system should be implemented. The indexing system covers the authors of digital books (or authors' identification numbers), ISBN numbers, DOI numbers, and other pieces of information. So, when a reader downloads a digital book, the on-line bookstore that provides the digital book can use the indexing system to reward part of the payment to the author(s). The indexing should be correct, so the money can be directed to the designated authors.⁵⁶

D. Pricing

Pricing is a very important issue because it will lead to profits made by selling/licensing digital books. Four types of pricing could be selected:⁵⁷

- Local currency pricing
- Pricing in "major" currencies
- Global pricing
- Developing nation pricing

"Local currency pricing" means that pricing is based on where a digital book is downloaded.⁵⁸ For example, a reader who downloads a digital book in Taiwan will pay a price of Taiwan dollars, while a reader who downloads a digital book in the United States will pay a price of U.S. dollars. "Pricing in major currencies" means that a list of local prices is offered, where when a reader who downloads a digital book in a country not in the list will pay a specific price indicated in the list.⁵⁹ "Global pricing" means only one price offered.⁶⁰ It might be the simplest model for accounting purposes. "Developing nation price" means a special discount for users in developing countries.⁶¹

One factor of pricing might be time-based. "Limited-time subscription-based access" and "pay-per-view" are two options.⁶² The former option is normal and is associated with the "license to read" model. The latter option could be more dynamic. A reader might be charged by how many pages or chapters he wants to read. An on-line bookstore could offer the outline of a digital book. A reader could choose chapters he is interested in and pay for these chapters. The "pay-per-view" model might be good for academic users who only need part of a digital book to do research.

56 Cf. Peter Jacso, *Google Scholar Revisited*, 32 ONLINE INFO. REV. 102, 102-03 (2008) (reporting that the Google Scholar provided nonexistent author names).

57 See Weinstein, *supra* note 29, at 14.

58 See *id.*

59 See *id.*

60 See *id.*

61 See *id.*

62 See Chen Ya-ming, *Application and Development of Electronic Books in an e-Gutenberg Age*, 27 ONLINE INFO. REV. 8, 13 (2003).

Currency fluctuation is one concern when a database operator is choosing one of the four pricing strategies. The operator might lose some money if he does not manage the risk of currency fluctuation.

Moreover, pricing can be based on a variety of multi-format packages. That is, if a reader wants different licenses for different types of electronic file or for different digital book devices, he can purchase a multi-format package of an overall price that might be lower than the sum of the prices set for different file types or devices.

V. Conclusion

To further exploit works of indigenous traditional cultural expressions, digital books can be the best way in terms of copyright protection. TCEs cannot be perfectly protected because their common elements are traditional and within the public domain. Any slight change from an original TCE might cause no finding of infringement of such the original TCE. However, a digital book creates a new life of TCEs. It also offers a traditional copyright protection and anti-circumvention protection against illegal copiers.

In terms of commercial exploitation, a "license-to-read" model is proposed in this article. A database operator of digital documentation has to consider four factors: ownership, license model, indexing, and pricing. This article suggests that the operator should acquire full ownership of TCEs that are collected in digital documentation. A license to read should be time-based. A reader only buys a license to read for a limited time. In principle, the license has to be limited to one single device (or software). The license needs to be based on file format. Pricing can also be based on a time period, renewal, and multi-package option.

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