The Wisdom Digital Archive : Local Healing Process by Lan Na Traditional Healer[*]

คลังภูมิปัญญาดิจิทัล : กระบวนการรักษาแบบพื้นบ้านโดยหมอพื้นบ้านล้านนา

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Abstract

This research is a development research project by the survey, study and collects knowledge and wisdom of local healing process by Lan Na traditional healer, then developed by digital technology to the wisdom digital archive. The key informants were Lan Na traditional healers and the target group is persons who visit the wisdom digital archive. Data were collected by questionnaire, interviews, photographic - video equipment and the wisdom digital archive. Knowledge of wisdom were analyzed by content analysis and data of the wisdom digital archive using were analyzed by means and standard deviation, the research found that:

The survey, study and collect knowledge and wisdom of local healing process by Lan Na traditional healer, including ritual healing were 4 therapies and 4 videos, physical

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[*] To survey, study and collect knowledge and wisdom of local healing by Lan Na traditional healer (2) to develop local healing wisdom to digital data and (3) to develop the wisdom digital archive of local healing process by the traditional healer in Lan Na

เพื่อสำรวจ ศึกษา รวบรวมข้อมูลความรู้ภูมิปัญญาในด้านการรักษาพื้นบ้านโดยหมอพื้นบ้านล้านนา (2) เพื่อพัฒนาภูมิปัญญาการรักษาพื้นบ้านให้เป็นข้อมูลรูปแบบดิจิทัล และ (3) เพื่อพัฒนาคลังภูมิปัญญาดิจิทัลกระบวนการรักษาโดยหมอพื้นบ้านล้านนา

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healing were 3 therapies and 3 video, herbs food healing were 3 therapies and 2 video. The wisdom digital archive of the local healing process by traditional Lan Na healer consist of 4 archives by province dividing and present on the responsive website, the searching systems were category searching and province searching. In addition, the promotion and access to the wisdom digital archive were e-book and application development.

Assessment of the wisdom digital archive of the local healing process by the traditional Lan Na healer show that: overall of design and formatting were appropriate at the high level with an average of 4.35, items in the top three were the beauty and interest of the wisdom digital archive, the use of multimedia content appropriate for content and the proportion of content and illustrations were appropriate, respectively. Overall of the content is appropriate at the high level with an average of 4.33. The top three items were content categorization easy for searching and learning, easy to link data within the data archive, the content classification was a process and continuous, respectively.

Keyword: Digital Archive, Wisdom, Local Healing Process, Lan Na traditional healer

บทคัดย่อ

การวิจัยเป็นโครงการวิจัยเชิงพัฒนา โดยการสำรวจ ศึกษา รวบรวมข้อมูลความรู้ภูมิปัญญาในด้านการรักษาพื้นบ้านโดยหมอพื้นบ้านล้านนา แล้วนำมาพัฒนาด้วยดิจิทัลเทคโนโลยี เป็นคลังภูมิปัญญาดิจิทัล ผู้ให้ข้อมูลหลัก ได้แก่ หมอพื้นบ้านล้านนา กลุ่มเป้าหมาย คือ บุคคลที่สนใจเข้าเยี่ยมชมคลังภูมิปัญญาดิจิทัล เก็บรวบรวมข้อมูลโดยใช้ แบบสอบถาม แบบสัมภาษณ์ ชุดอุปกรณ์ถ่ายภาพและถ่ายวิดีทัศน์ ข้อมูลความรู้ภูมิปัญญาการวิเคราะห์โดยใช้การวิเคราะห์เนื้อหา ข้อมูลการใช้คลังภูมิปัญญาดิจิทัล วิเคราะห์โดยการหาค่าเฉลี่ยและส่วนเบี่ยงเบนมาตรฐาน ผลการวิจัยพบว่า

การสำรวจ ศึกษา รวบรวมข้อมูลความรู้ภูมิปัญญาในด้านการรักษาพื้นบ้านโดยหมอพื้นบ้านล้านนา ได้แก่ การรักษาด้วยพิธีกรรม มี 4 ข้อมูล วิดีทัศน์ 4 เรื่อง การรักษาด้วยกายบำบัด มี 3 ข้อมูล วิดีทัศน์ 3 เรื่อง และการรักษาด้วยอาหารและสมุนไพร มี 3 ข้อมูล วิดีทัศน์ 2 เรื่อง ด้านคลังภูมิปัญญาดิจิทัลกระบวนการรักษาพื้นบ้านโดยหมอพื้นบ้านล้านนา ประกอบด้วยคลังข้อมูลจำนวน 4 คลัง แยกตามจังหวัด นำเสนอในรูปแบบเว็บไซต์ (Responsive Website) มีระบบการค้นหา คือ ระบบค้นหาตามหมวดและระบบค้นหาตามพื้นที่ รวมถึงได้มีการพัฒนาหนังสืออิเล็กทรอนิกส์ และแอพพลิเคชั่น สำหรับการเผยแพร่และเข้าถึงคลังภูมิปัญญาดิจิทัล

การประเมินการใช้คลังภูมิปัญญาดิจิทัลกระบวนการรักษาโดยหมอพื้นบ้านล้านนา ด้านการออกแบบและจัดรูปแบบ โดยภาพรวมมีความเหมาะสมในระดับมาก ค่าเฉลี่ย 4.35 ประเด็นที่มีค่าเฉลี่ยมากใน 3 อันดับแรก คือ ความสวยงามและน่าสนใจของคลังภูมิปัญญาดิจิทัล รองลงมาคือ การเลือกใช้สื่อมัลติมิเดียเหมาะสมกับเนื้อหา และการจัดสัดส่วนของเนื้อหาและภาพประกอบมีความเหมาะสม สำหรับด้านเนื้อหาโดยภาพรวมมีความ

เหมาะสมในระดับมาก ค่าเฉลี่ย 4.33 ประเด็นที่มีค่าเฉลี่ยมากใน 3 อันดับแรก คือ การจัดหมวดหมู่เนื้อหาง่ายต่อการค้นหาและเรียนรู้ รองลงมาคือ ความสะดวกในการเชื่อมโยงข้อมูลภายในคลังข้อมูล และการจัดลำดับเนื้อหาเป็นขั้นตอน มีความต่อเนื่อง

คำสำคัญ: คลังข้อมูลดิจิทัล ภูมิปัญญา กระบวนการรักษา หมอพื้นบ้านล้านนา

Introduction

Lan Na or northern provinces of Thailand, including Chiang Mai, Lamphun, Lampang, Chiang Rai, Phayao, Phrae Nan and Mae Hong Son. This area was a long history because, in the past, it was part of the Lan Na kingdom. Lan Na composed of several ethnic groups such as Tai Yuan, Tai Lue, Tai Kheun, Tai Yai, Lua, Karen, etc. Each group has its own identity: arts, culture, traditions Including lifestyle, faith, ritual, etc.

Local healing process by Lan Na traditional healer that is the local wisdom which based on a variety of knowledge such as physical, mental and social relationship and takes a long time for inherited and applied from generation to generation. The wisdom of local healing consists of treatment and care by herbs - food (as shown in figure 1), massage (as shown in figure 2) or the use of rituals (as shown in figure 3). However, In the current Thailand has advanced in various fields of medicine include modern healing technology such as the laser, grafting, 3D scanning, Irradiation, chemotherapy, physiotherapy, vitamin supplements etc., it also promotes and disseminates knowledge about health and policies that help people access to drugs and treatment easier. So, the wisdom of local healing is going to be lost and oblivious.

Figure 1 Treatment and careful by herbs - food

Figure 2 Treatment and careful by massage

Figure 3 Treatment and careful by rituals

Local healing process by Lan Na traditional healer that is the important local wisdom, it focuses on holistic healing, in the way of care and prevention of diseases in the community or traditional society and it is an unfortunate if such wisdom is not inherited, forgotten and lost. So, if it was digitized and stored as the digital archive, it can persist even when time passes and extract into new knowledge, integration in various fields, easy and quick access. And the result of the operation will be local wisdom conservation, learning, research, promotion, and development or extension of social and economic benefits for the local, regional, national and international.

Research Objectives

1. To survey, study and collects knowledge and wisdom of local healing process by Lan Na traditional healer

2. To digitize the wisdom of local healing process

4. To develop the wisdom digital archive of local healing process by Lan Na traditional healer

Scope of Research

The contents focused on the survey, study and collect knowledge and wisdom of local healing process by Lan Na traditional healer and developed by digital technology to the wisdom digital archive. The key informants were Lan Na traditional healers and the target group was persons who visit the wisdom digital archive. And the research areas were in Phayao, Phrae, Nan and Mae Hong Son province.

Theories and Literature Reviews

Local Healing in Northern Thai Society

This research studied the content, documents, the concept of four methods for health care of Thai people in Northern Thailand: rituals, physical therapy, herbs and food (Yingyong Thowprasert, 2003), the concept of integrating different knowledge to describe and heal illness (Shane Greene, 1998), the study of treatment patterns in northern Thai society (Anand Kanjanapan, 2012), the multiple medical and health in social and cultural dimensions (Komatra Jungsatiensap, 2006).

Data Archives System

The data archives system studied the concept of preliminary definition of data archives (Punnawich Wongwiwatananon, 2009), components of data archives and preparing data into the archives (Chonwat Srisa-aan, 2008), the feature of the data archives (Benjamas Termudom,2002), characteristics of data warehouse systems and data warehouse development (William Inmon, 2005).

Related Research

For the related literature reviews, the study of Injai Wongrattanasatian (2000) was local knowledge of traditional healers in herbal medicine and environment, the study of Manida Jansuwan (2009) in the topic of the proposed documentation for Thai musical instruments: Baan Patayakosol music school, the study of Somkiat Thaipreecha (2010) in the topic of Data warehouse development with web technologies to analyze the data online for information about the student, the study of Chetnarat Orachun and Kanokwan Yusawai (2011) in the topic of indigenous knowledge on herbal medical treatment of patients, the study of Varanyu Yarana (2013) in the topic of development of data warehousing for ready - to - eat frozen foods production using pentaho, the study of Thanaporn Panrangsri and Esther Sangiamkul. (2017) on the topic of data warehouse development, risk assessment for disaster management.
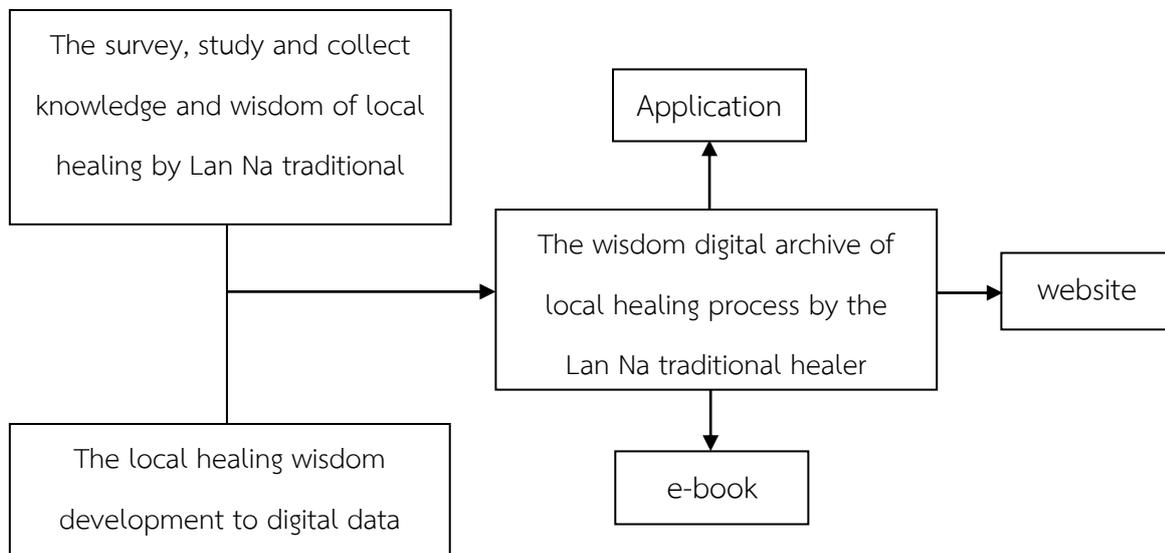
Conceptual Framework

Figure 4 Conceptual Framework of this research

Methods

Key Informants

The key informants were 8 Lan Na traditional healers and target group was 320 persons who visit the wisdom digital archive.

Research Tools

The research tools were the questionnaire, interviews, photographic - video equipment and the wisdom digital archive.

Data collection

This research was collected the data by interviews and photographic - video equipment with 8 key informants in Phayao, Phrae, Nan and Mae Hong Son province by purposive sampling, and collected the data by questionnaire and wisdom digital archive with 320 target group persons who visit the wisdom digital archive in 1 month by simple random sampling.

Data Analysis

The knowledge of wisdom data was content analysis by dividing into the categories and data of the wisdom digital archive was descriptive analysis by means and standard deviation.

Results of this research

   The survey, study and collect knowledge and wisdom of local healing process by Lan Na traditional healer showed that ritual healing is 4 therapies and 4 videos, physical healing is 3 therapies and 3 videos, herbs – food healing is 3 therapies and 2 videos. The contents are shown in Table 1.

Table 1 Description of local healing process

Local Healing Process	Therapy	Video	Province
Ritual Healing	3	4	Phayao, Nan and Mae Hong Son
Physical Healing	4	3	Phayao, Phrae, and Mae Hong Son
Herbs – Food Healing	3	2	Phrae and Nan
Total	**10**	**9**	

Note: Some healer has more than one therapy.

   The wisdom digital archive of the local healing process by Lan Na traditional healer wrote by HTML, CSS, PHP, SQL and JavaScript as well as the Google Map API plugs in and uploads the images to the gallery, which stored in the database. The contents of the wisdom digital archive consisted of 4 archives by province dividing and present on the responsive website, the searching systems were category searching such as physical (physical therapy), mental (rituals therapy), food and herbs (Food and herbal therapy) and province searching such as Phayao, Phrae, Nan and Mae Hong Son province. The promotion and access to the wisdom digital archive were e-book and application development.
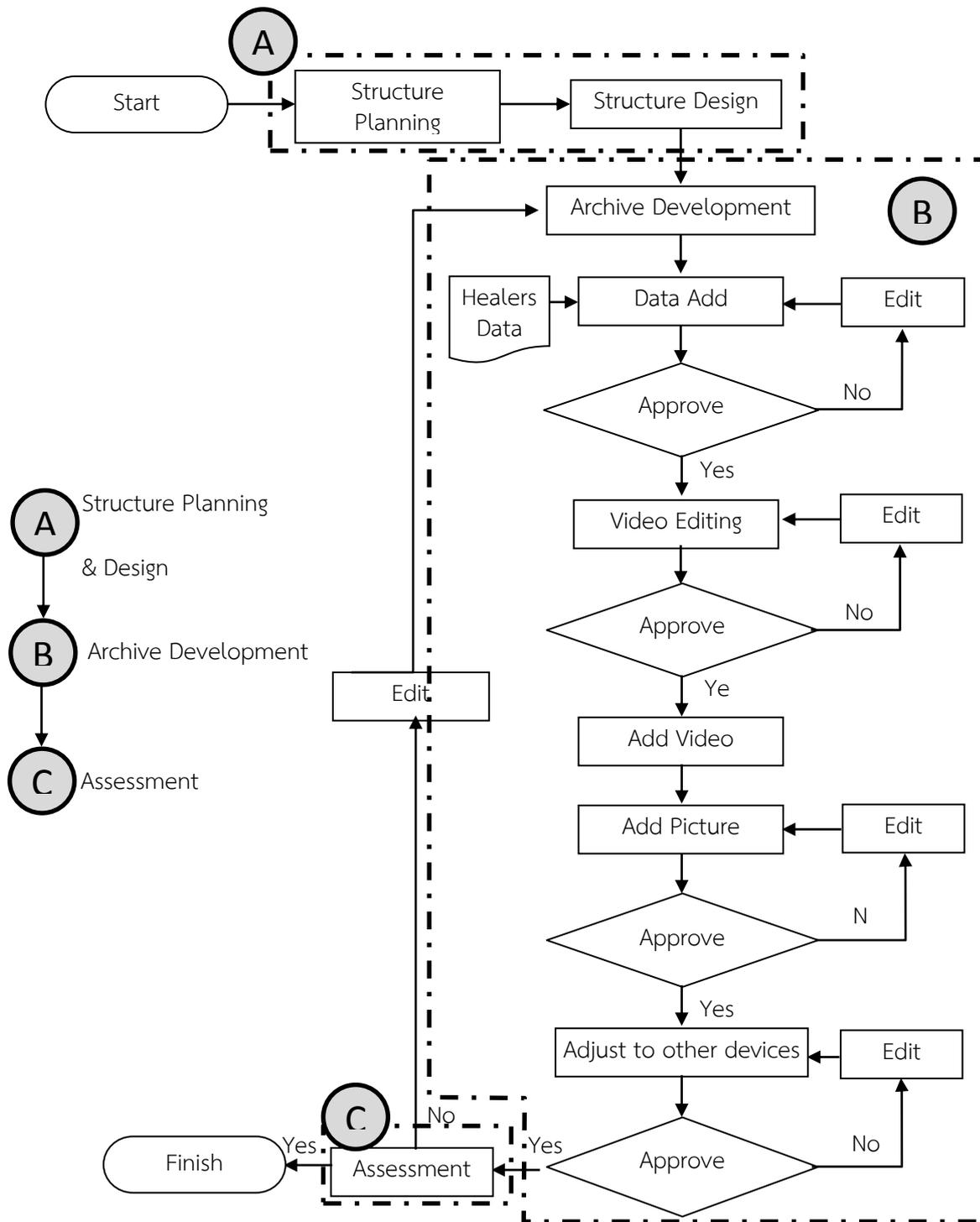
Figure 5 The development flowchart of the wisdom digital archive of the local healing process

by the Lan Na traditional healer.

The wisdom digital archive development had three core processes which consist of structure planning and design (A), archive development (B) and assessment (C), the URL of the wisdom digital archive is http://www.lanna-e-healer.com.
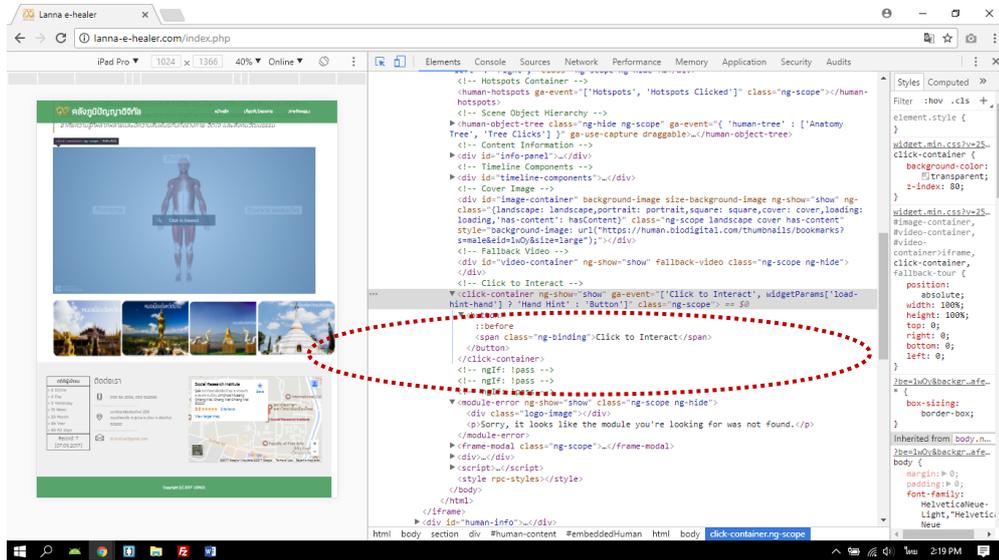

Figure 6 The using of HTML, CSS, PHP, SQL and JavaScript in the wisdom digital archive.
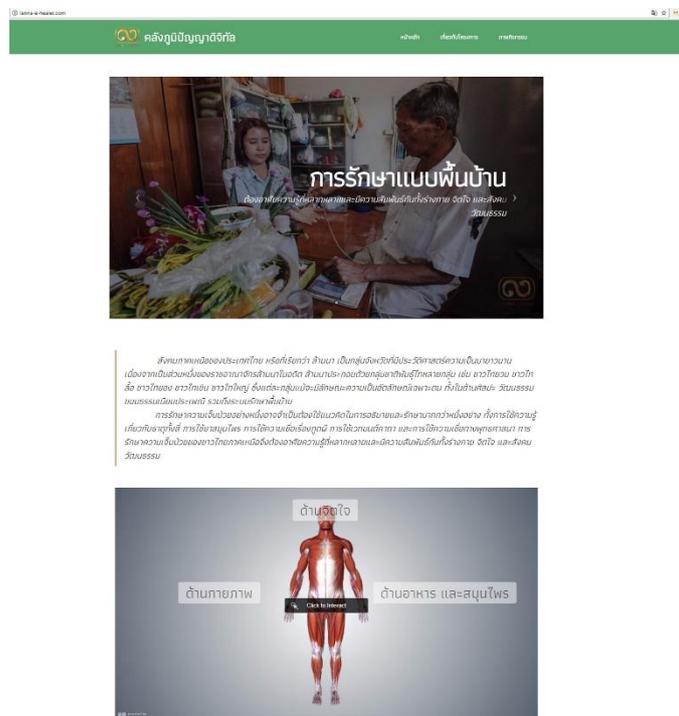

Figure 7 Homepage of the wisdom digital archive of the local healing process by the Lan Na traditional healer.

Figure 8 The videos of the wisdom digital archive of the local healing process by the Lan Na traditional healer.
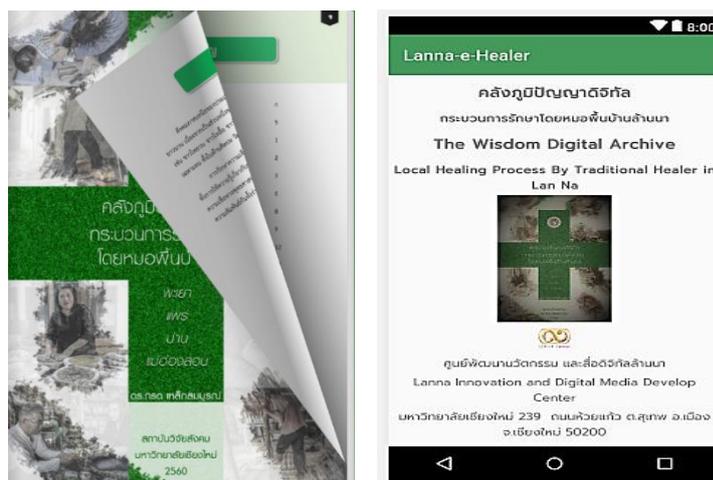

Figure 9 The e-book and application of the wisdom digital archive of the local healing process by the Lan Na traditional healer.

Assessment of the wisdom digital archive of the local healing process by the Lan Na traditional healer showed that: overall of design and formatting were appropriate at the high level with an average of 4.35, items in the top three were the beauty and interest of the wisdom digital archive, the use of multimedia was appropriate for content and the proportion of content and illustrations were appropriate, respectively. Overall of the content is appropriate at the high level with an average of 4.33. The top three items were content categorization easy for searching and learning, easy to data linking within the data archive and content classification was a process and continuous, respectively. The contents are shown in Table 2.

Table 2 Mean and standard deviation of the wisdom digital archive assessment

Design and Formatting	$\overline{x}$	S.D.
Beauty and interest of the wisdom digital archive	4.52	.88
Beauty and appropriate of alphabet using (pattern letters color size)	4.35	.85
Color and tone design are beautiful and appropriate for contents	4.10	.87
Design and positioning of menu, tools easy to use	4.26	.94
Proportion of content and illustrations are appropriate	4.40	.75
Illustrations using are well communication	4.33	.82
Multimedia (video, animation, audio) are appropriate for content	4.44	.80
Pattern design is easy to read and use	4.38	.84
Mean Total	*4.35*	*.84*
Contents	$\overline{x}$	S.D.
Easy to data linking within the data archive	4.47	.75
Ease to data linking outside the archives	4.30	.89
Quick download	4.38	.88
Data appropriate (quantity and quantity is on demand)	4.35	.80
Accuracy and completeness of information	4.12	.89
Content classification was a process and continuous	4.42	.85
Content categorization easy for searching and learning	4.52	.90
Language grammatical using	4.20	.88
Validity of data and content	4.25	.89
Application and use of data and content	4.25	.95
Mean Total	*4.33*	*.87*

n= 320

Discussion

The research results found that the local healing process by Lan Na traditional healer was conformed with various concepts included the local healing process were three therapies: ritual healing therapies, physical healing therapies and herbs - food healing therapies (Yingyong Thowprasert, 2003), the process of the wisdom digital archive was mixed data development: that is separation of information and determine data appropriate which research and design then came together (Inmon, 2005) and data preparing was data changing from various data to only data standard pattern for easy and quickly searching (Chonwat Srisa-aan, 2008). The wisdom digital archive of the local healing process by Lan Na traditional healer had content categorization which easy to link data within the data archive and easy for searching and learning (Manida Jansuwan, 2009), presented on the responsive website, the promotion and access to the wisdom digital archive were e-book and application development (Somkiat Thaipreecha, 2010). Assessment of the wisdom digital archive of the local healing process by the traditional Lan Na healer was appropriate at the high level (Varanyu Yarana, 2013). In conclusion, the wisdom digital archive of the local healing process by the traditional Lan Na healer can be used effectively, because of the development process is systematically planned, analysis design based on academic principles, quality content collection, and interesting presentations.

Recommendation

The Research's recommendation

1. Some Lan Na traditional healers do not use the Thai language to communicate, interpreters must need to have Lan Na language using and knowledge of traditional healers. Thus, appropriate planning and support should be provided.

2. It should provide a high-performance server to support large data storage (videos, photos, and e-books) and to be more convenient and faster.

3. Preparing a budget for long-term costs of the wisdom digital archive of local healing process by the Lan Na traditional healer.

The future research's recommendation

1. It should be studied to bring new digital technologies for the wisdom digital archive of local healing process by the Lan Na traditional healer such as Virtual Reality (VR) technology or Augmented Reality (AR) technology.

2. It should be developed to the wisdom digital archive of local healing process by the Lan Na traditional healer in another province such as Chiang Mai, Chiang Rai, Lamphun and

Lampang, including adding or expanding the scope of content to a wider, more like the traditional knowledge of herbs, local healing knowledge that is consistent with modern medical.

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