Digital Content System Development with a Reality Program Format to Enhance Learning Achievements in Digital Media Technology

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***Abstract*—Technology has advanced so fast and communication media is also rapidly adapting. Previously, people read publications from newspapers, magazines, documents, books. But when the technology has changed, the media was changed as well. There are more chances to get access to media that have more content, such as Google, YouTube, Facebook, Line, and Twitter. So, the changes have led to content on digital media to be adjusted to meet the needs of media users. Content on digital media will attract people's attention for easy access to information. Content on digital media is very important for the understanding of media readers. If the content on digital media is good, easy to read, beautiful, interesting, it will be better to get the reader's understanding. Therefore, the purposes of this research were: 1) Use synthesize documents and international research to design architecture digital content system with a reality program format to enhance learning achievements in digital media technology, by using content analysis techniques to draw conclusions and using diagram software and flowchart maker in architectural design; 2) Develop a digital content system with a reality program format to enhance learning achievements in digital media technology, with the Systems Development Lifecycle (SDLC) development model and evaluate the efficiency of the system in the form of black box testing. The research results showed that the developed architecture was at the highest level of suitability and the system black box testing results showed that the system performance was at the highest level.**

***Index Terms*—Digital content, reality program, media, technology**

I. Introduction

Thailand currently shows a high level of digital readiness in terms of a high penetration rate with regard to internet usage and social media engagement. Currently, Thailand has a population of more than 70 million people. It has been found that there are 95.6 million mobile phones or 136.5% of the Thai population. And it is interesting that the number of Thai people who use social media—a total of 56.85 million people or 81.2% of the population. In addition, in 2022, the proportion of the online population using the internet for longer than 22 minutes There was a 4.2% increase from 2021 found that Thai people make time online an average of 9 hours. In addition, the percentage of Thai population watching TV increased to 15.2%, which is counted as 1 minute, up to 32 minutes. TV viewing time for the Thai population is more than 4 hours higher in 2022 than in 2021. In terms of the online use of the internet, the top 15 uses for the Thai population are: 1) Finding information 67.6%; 2) Following news updates 64.1%; 3) Watching videos or movies 60.8%; 4) Finding new ideas for work 60.4%; 5) Finding information to do something successfully 59.2%; 6) Listening to music 53.9%; 7) Contacting friends or family members 52.1%; 8) Playing games 48.1%; 9) Playing to kill time 46.1%; 10) Finding things of interest about brands 45%; 11) Managing money 43.7%; 12). Finding health information 42.9%; 13) Finding information about business 37.9%; 14) Learning 37.1%; 15) Finding new friends 36% [1]. From the statistics, it can be seen that the top 2 areas where Thai population spend time on the internet is searching for information and following news updates. Therefore, digital content is essential when it comes to helping the Thai population find information and to access the news more easily when digital content is interesting. In addition to digital content, the content will help to learn easily. And digital content will also be helping to create value in various companies. Between 2020 and 2021, the digital content industry in Thailand saw a growth rate of 7%, worth 42,065 million baht. It is expected that the digital content market in Thailand will be worth 46,961 million baht in 2022 and will continue growing up to 53,729 million baht and 62,435 million baht in 2023 and 2024 respectively. From the data, it was found that digital content list related to gameplay has the best growth rate [2]. At present, the use of digital media technology in Thailand has a very high proportion from the information shown above. But in contrast to the production, creating digital media content in the form of reality shows is not an easy task because digital media in the form of reality shows requires a lot of expertise in that field. To produce digital media content in a format that is attractive and interesting to viewers of that digital content media.

Therefore, this research has the importance of digital media content in the form of reality programs to develop to enhance students' learning in media technology. This study has two main objectives: 1) Study, analysis, synthesis of documents and research related to Digital Content, Reality Program, Learning Media Technology and Digital Content in order to bring the results obtained to design the system architecture for

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further development. 2) Apply the designed system architecture to develop digital content system development with a reality program format to enhance learning achievements in digital media technology. By developing digital content in this way, students are able to learn various aspects of media technology. This help students learn to produce realistic programs in conjunction with digital content technology with plans and interesting. In addition, with the use of online videos on digital content it helps to maintain local arts and culture that tends to be lost.

II. Theoretical Background

A. Digital Content

Currently, information and digital content technology is widely popular and reaches people of all levels and at all ages. Therefore, we have developed details of learning performance based on professional standards and professional qualifications. This allows professionals and those interested to study by themselves through the use of electronic media and digital content. In this way, we will upgrade the quality of digital content in such a way as to support the needs of the country. This will help to reduce inequality in Thai society and increase the nation's competitiveness in terms of modern digital content [3]. The digital content market is continuously growing with the quality of digital content resources increasingly growing. Given the appropriate quality and the variety of forms available, good digital content has a great effect on the profits of manufacturers and digital content resource providers. Therefore, an analysis of the factors that affect the price strategy of digital content resource providers and the desired results has a great effect on promoting resource transactions with regard to digital content. This helps guarantee that digital content will help generate income for that industry because the traditional price determination strategy cannot be used at present, Therefore, it is essential to explore the important factors that affect the price of digital content [4]. For this reason, the method of evaluating digital content for maximum efficiency with regard to users, in which the theory of information processing in the design of digital content in learning the text design is a tool that helps to assess digital content, resulting in the use of information processing methods for digital content design. The results showed that the digital content was at a good level [5]. Digital content affects efficiency, marketing is very in various dimensions as follows: Digital marketing database as for social media platforms relating to digital content dissemination; Digital content price and digital content advertisements; In the dimension of sustainable ness in the production of digital content including Customer loyalty; Customer's digital content; digital content is attractive to new customers [6].

Therefore, we can summarize information related to digital content by stating that good digital content that is attractive and reliable can help upgrade learning with regard to digital media, according to the needs of those interested in digital content. The digital content market is continuously growing at present because this is in an era in which digital information technology involves very advanced technology. Therefore, with technology progressing a great deal, it is also necessary to develop more digital content. This can be done with the use of various methods such as the invention of digital content assessment methods in conjunction with the theory of information processing in digital content design. Digital content must create dimensions from another way such as with regard to digital marketing databases. As for social media platforms, there is a need for digital content dissemination dealing with digital content price and digital content advertisements. In addition, the digital content so developed must create customer loyalty, customer satisfaction, and digital content is attractive to new customers to ensure sustainability in the production of digital content when it comes to meeting the demand for growth in different dimensions such as income, capacity, etc.

Currently, digital content has been implemented in various research forms. For example, in the case of Tonn *et al*. [7], they used digital content analysis to measure depression and undertake an emotional health assessment. In this research, the assessment was undertaken using digital content, using the words describing the emotions of patients, both with and without depression. There were 292 test participants from 163 samples. The analysis found that 19 people (11.7%) had severe depression, while 88 participants (53.9%) had a small to medium level of depression. Davidavicius and Limba [8] have researched the perception of digital content for inbound marketing solutions. This was a study of user behavior. The research showed that attractive digital content has a huge impact on the decision-making of consumers. In addition, Yaghtin *et al*. [9] undertook a study of the literature about digital content of business operations in uncertain situations, unable to control the research using a sample of 52 participants were involved. The research showed that in terms of digital content in the uncertain situation resulting from Covid-19, the business must focus on digital content in industrial environmental awareness. The general public should focus on digital content in order to create emotional awareness during the crisis resulting from the epidemic. Finally, in the research conducted by Nicoli *et al*. [10], dealing with the use of digital stories to create positive digital content, it was shown that digital storytelling in a short form will be very effective as a digital content design strategy to match the target audience more.

B. Reality Program

Reality programs involve creating a program in the form of proceeds in the direction of the actual situation without writing scripts in advance. The program is in the form of realistic transactions which are necessary to prioritize needs of those who receive the real-life program systematically and have a reason [11]. Most reality programs are designed to accommodate this group in terms of learning, understanding and developing themselves in various forms [12, 13]. In addition, reality programs also help the learners to know the flaws as an example to point out their own defects [14]. There are many reality programs such as documentary reality programs Realism list Legal Competitive reality list Lifestyle reality list Reality program, travel Reality list, change, self-development and reality social testing, etc. [15]. Therefore, we can conclude that the aim of a realistic list is to

create or develop content in the form of real-life or virtual situations, the program format will be in the form of real events. This will be done without writing scripts, and there is no pre-display in advance. They are ones in which realism must focus on the analysis of the needs of those who receive the realistic program systematically, and have a good reason to make the program look interesting. This is because the reality list will help users to learn to understand, until it can be used to develop themselves in various fields. In addition, reality programs can also make it easier to recognize their defects.

Nowadays, there are many researchers use reality programs to develop programs to help with many things to study, such as: reality show, competitive reality, lifestyle reality, travel reality etc. Currently, reality programs have many researchers to help bring about these realistic programs. Their job is to help the program identify many things that must be studied, such as SEON-Min's research [16]. They have conducted research on the use of virtual programs such as how to alleviate the behavior and mind of patients with dementia. The research shows that the virtual programs that have been developed help patients develop better behavior and mind. In addition, Zhu *et al*. [17] undertook research involving developing virtual programs to increase enthusiasm and increase learning about security in biochemical laboratories. The research showed that the developed programs can help learners to be more secure and to improve learning. The developed programs can also be used as a model for operating classroom designs around the world. Similarly, Shen *et al*. [18] have conducted research and have developed virtual programs for cyber security studies relating to Firewall, Steganography, and Phishing. The study results that developing virtual reality programs will help to enhances the understanding of the test group very much.

C. Learning Media Technology

Technology has changes which various technologies to be adjusted. Which the learning technology It is one aspect of technology that has been very greatly affected because the behavior of media consumption has changed, causing media technology to changes accordingly. Currently, there must be a number of modifications for the media to reach the target audience. These will determine whether or not media learning is effective, resulting in the development of media being able to communicate correctly. This process is very important [19]. Therefore, future learning models are increasing online in various forms such as Blended Learning, Flipped Classrooms or Hybrid, these patterns are inevitable in the future. Therefore, the study of the concept of digital media and the behavior response of students to learning models is increasingly important [20]. Digital media and the presentation of this form of media should be seen positively, such that digital media readers do not negatively affect the bully in terms of the media that has been developed [21]. In that the media technology will affect learning a great deal in helping learners to understand more. This indicates higher efficiency [22]. Consequently, we can summarize learning technology as a changing technology that can be used to develop digital media. This requires it to be more interesting, and a technology which must develop in such a way as to be able to communicate correctly in order to help learners have more understanding. In addition, the digital media produced should not cause the bully in society.

Murdiyanto *et al*. [23] researched the development of social media on social media technology through a website they developed for Grade VII Junior High School students. The research showed that 85.32% of the developed media has an average testing of various groups at a very good level. In addition, Chaochu and Duangkanong [24] identified factors affecting students' satisfaction with integrated teaching relating to basic image design courses in digital formats for students majoring in animation. The research showed that the factors included in the test can help students learn more about animation technology in the future. In addition, Numberatin *et al*. [25] researched the use of online learning technology on Google Classroom during the Covid-19 outbreak. The results indicated that Google Classroom was able to help increase the understanding of the students effectively and to add students' activities with regard to learning. In addition, Widayanto *et al*. [26] conducted research on evaluating the success of training program implementation and making recommendations for further training programs. Using the CIPPO model (context, input, process, product, and outcome), 180 trainees and 19 teachers were trained to design the most efficient model. The results of the research revealed that definitely produce graduates or products. In addition, Mutohhari *et al*. [27] have conducted research on the application of 21st century knowledge, competence and skills in vocational learning. There were 178 participants in the project, consisting of two public vocational schools and two private vocational schools. The respondents were divided into groups of 155 students and 23 teachers. analytical thinking, problem solving, communication, collaboration and digital knowledge or information and communication technology, 50 questions. The results showed that all the skills were rendered in an easy-to-understand manner. But the communication skills found teachers and students are different. In addition, Astuti *et al*. [28] has done research on the maturity level of digital technology competence in vocational education. The objective was to analyze the maturity level of teachers and vocational students. from the total sample of 233 people, from public and private schools to vocational schools in Yogyakarta Indonesia. The maturity assessment results of vocational education teachers got a low score of 13.16–23.68 and vocational students got a low score of 12.98–22.12 as well. Therefore, it can be concluded that Teachers and vocational students need to be conscious of developing their digital capabilities at a technology accessible level. In addition, Rabiman *et al*. [29] research on the design and development of e-learning systems by learning management systems at the vocational level. It was tested with micro-teaching in a mechanical engineering education class. The method of data collection was using questionnaires and observations. The results showed that Developing e-learning based on Learning Management System (LMS) allows students to learn and repeat easily, suitable for such systems to be used.

Learning media technology can be summarized in this research as. It is the use of media technology to help create learning that can be extended to deliver digital content

production. The learning model can be studied in digital content learning architecture with digital content in the form of a reality program as shown in Fig. 1. From the study of the above research, it was found that students, teachers should develop themselves in learning media technology to keep pace with the 21st century to the present at the vocational and higher education levels. This is because a good learning technology makes content easy to understand and allows students to generate creative digital media ideas. A good learning technology includes: 1) Media that enhances skills and knowledge in work; 2) Media that enhances life skills; 3) Media that helps analytical thinking skills; 4) Media that increase knowledge in daily life, examples of modern learning materials include Blog, Facebook, YouTube, Twitter, E-book, Podcasts and Digital Game-Based Learning [30]. In this research, a digital content system with a reality program format to enhance learning achievements in digital media technology was developed. To create digital media learning in a slender form and use system development technology to help create learning and benefit students and teachers.

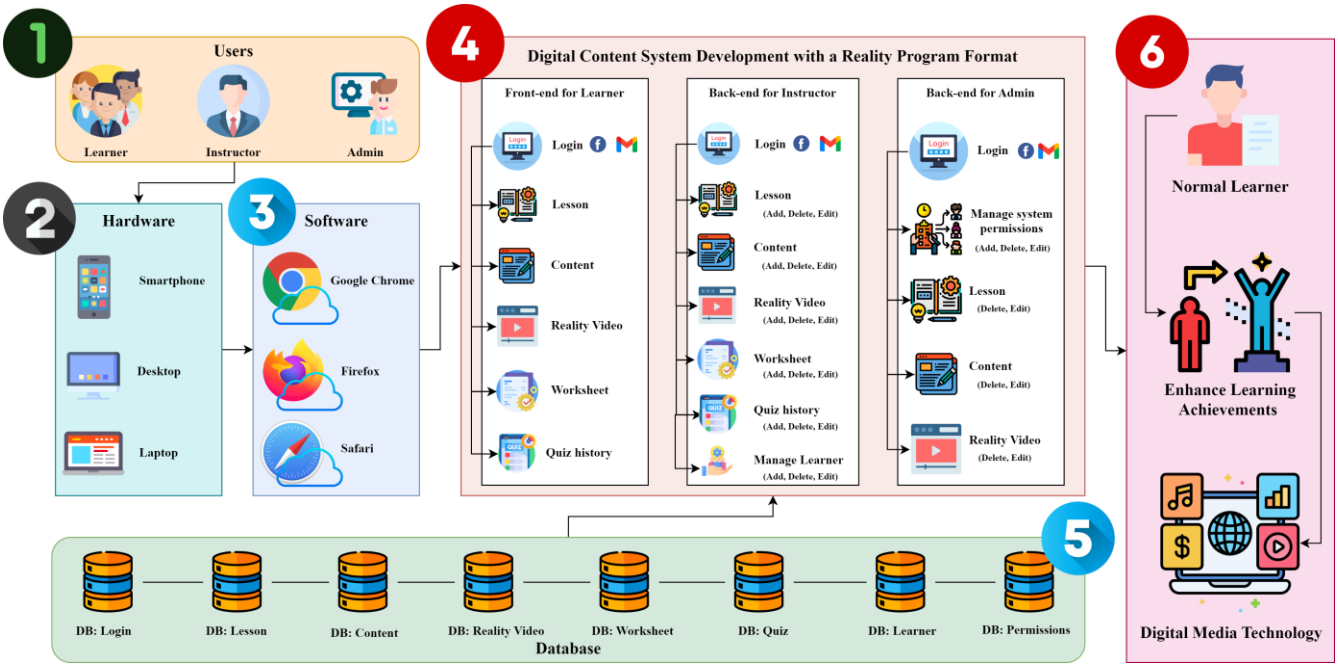

Fig. 1. System architecture digital content system development with a reality program format.

III. Methodology

Phase 1: Study, analysis, synthesis, documents and research nationally and internationally related to digital content, reality program, learning media technology and digital content system development with the following processes:

- Using a selective research model, various research papers, national and internationally recognized databases. Domestic documents are selected from the TCI 1 database in Thailand. The international papers are selected from the Scopus database, Google Scholar, ResearchGate, etc., and additional information can be found on national and international websites. There are 31 documents and research, divided to 1 copy TCI 1 research in Thailand, 26 international journals and 4 websites. as follows: 2017—1 copy, 2018—1 copy, 2019—1 website, 2020—1 copy, 2021—4 copies, 2022—16 copies, 2 websites, 2023—4 copies, 1 website. This gives weight to the selection of papers and research in 2021–2023 as they are the most current in data analysis. After all relevant documents and researches have been selected, data synthesis and analysis are performed using Content Analysis techniques to summarize the results of the analysis and synthesis of data from 31 documents and related researches.
- Then, the data from the analysis are summarized by designing a system architecture of digital content system development with a reality program format to enhance learning achievements in digital media technology as shown in Fig. 1.
- When the design is complete, the architecture of the system is completed as shown in Fig. 1. Then assess the suitability of the system architecture. before developing the system to reduce errors from system development. In assessing the suitability of the system architecture, seven experts are used to assess the system architecture who have knowledge, competency and expertise related to this research with expertise in computers, information technology, computer engineering and system architecture with experience and expertise of not less than five years, in which all seven experts are not in the same university as the researcher on this subject. Assessment is based on Rating Scale at five levels (5—Excellent, 4—Good, 3—Average, 2—Poor, 1—Very Poor).

Phase 2: System development: digital content system with a reality program format to enhance learning achievements in digital media technology

- The development of this system uses the system development model in an international format. The Software Development Life Cycle (SDLC) [31] system development consists of six steps: 1) Planning and analysis of system requirements; 2) Specifying system

conditions; 3) System design; 4) System development; 5) System testing; and 6) System installation.

- After that, the developed system is used to evaluate the efficiency of the system by performing Blackbox Testing in five aspects: 1) Functional Requirement Test; 2) Functional Test; 3) Output Validation Test; 4) Usability Test; and 5) Security Test. The Blackbox Testing of the system will evaluate the efficiency of the system by using nine experts with at least five years of experience and expertise in computer expertise, information technology, computer engineering and system architecture. All nine experts are not in the same university as the people working on this research, and the experts are not duplicating of the Phase 1 research and evaluation of Blackbox Testing using Rating Scale 5 level (5—Excellent, 4—Good, 3—Average, 2—Poor, 1—Very Poor).

IV. Results

A. The Results of the Design the Architecture

The architectural design results of the development of a digital content system involving a reality program format to enhance learning achievements in digital media technology are as shown in Fig. 1. And the assessment of the suitability of the architectural design is as shown as Table I.

From Fig. 1, we can explain the architecture of the system as follows:

Section 1 refers to those who will use the system. The developed system has three levels of user, namely learners, teachers and system administrators.

Section 2 refers to the hardware users will use to access that the system. The system allows the use of Smartphones, Tablets, Desktop PCs and Laptops.

Section 3 refers to the software used to access system information.

Section 4 refers to the digital content system development involving a reality program format to enhance learning achievement in terms of digital media technology. This is divided into three parts which work together. The left-hand column details the part of the learner. 1) The first step the learner follows is to login. The learners can then learn the digital content in the form of the program, then the learner can then study the learning content. They can then learn the digital content in the form of a reality program using the video created for this purpose. The learners can then complete various worksheets that the teacher has prepared to promote digital media technology. The final menu will be the menu for storing the history of the exam or the worksheet completed by that learner. 2) The central column details the part of the teacher in terms of preparing various types of information for students to help them learn digital media technology through digital content in the form of a realistic program. The teachers will be able to add or delete or edit lessons and video content, and can manage learners. 3) In the Admin section, all users can be managed. And can edit and delete on the lesson, content and video.

Section 5 refers to the various database parts used in the system. These consist of Database (DB): Login, Lesson, Content, Reality Video, Worksheet, Quiz, Learner, and Permissions databases. All of these the system to work efficiently.

Section 6 refers to the part showing that from the beginning of a general student who has knowledge in digital media technology at the beginning. When learning with Digital Content System Development with a Reality Program, it helps to increase the level of digital media learning.

TABLE I: Results of Suitability Assessment in System Architecture

System Architecture	Level of Appropriateness		
	Mean	S.D.	Meaning
1. Design: Users Overall	**4.86**	**0.18**	**Highest**
1.1 Learner	5.00	0.00	Highest
1.2 Instructor	5.00	0.00	Highest
1.3 Admin	4.57	0.53	Highest
2. Design: Hardware Overall	**4.67**	**0.47**	**Highest**
2.1 Smartphone	4.43	0.53	High
2.2 Desktop	4.86	0.38	Highest
2.3 Laptop	4.71	0.49	Highest
3. Design: Software Overall	**4.62**	**0.48**	**Highest**
3.1 Google Chrome	4.86	0.38	Highest
3.2 Firefox	4.57	0.53	Highest
3.3 Safari	4.43	0.53	High
4. Design: Digital content system development with a reality program format Overall	**4.86**	**0.29**	**Highest**
4.1 Front-End for Learner	5.00	0.00	Highest
4.2 Back-End for Instructor	4.86	0.38	Highest
4.3 Back-End for Admin	4.71	4.49	Highest
5. Design: Database Overall	**5.00**	**0.00**	**Highest**
5.1 DB: Login	5.00	0.00	Highest
5.2 DB: Lesson	5.00	0.00	Highest
5.3 DB: Content	5.00	0.00	Highest
5.4 DB: Realty Video	5.00	0.00	Highest
5.5 DB: Worksheet	5.00	0.00	Highest
5.6 DB: Quiz	5.00	0.00	Highest
5.7 DB: Learner	5.00	0.00	Highest
5.8 DB: Permissions	5.00	0.00	Highest
6. Design: Enhance learning achievements in digital media technology	**4.71**	**0.49**	**Highest**
Total Overall	**4.79**	**0.24**	**Highest**

From Table I, we can see the results of the assessment of the suitability of the architectural design of the system. These indicate that the architecture developed is appropriate at the highest level: Mean = 4.79, S.D. = 0.24. The most valuable architectural design is Design: Database with a Mean of 5.00, and a S.D. = 0.00. Next is Design: Users and Design: Digital content system development involving a reality program format with a Mean = 4.86, a S.D. = 0.18 and 0.29, respectively. Next is Design: Enhance learning achievements in digital media technology with a Mean = 4.71, and a S.D. = 0.49. Next is Design: Hardware with a Mean = 4.67, and a S.D. = 0.47. and Next is Design: Software with a Mean = 4.62, and a S.D. = 0.48.

B. Black box Testing Efficiency Evaluation Results

Evaluation results of system performance is that Black box Testing is digital content system development with a reality program format to enhance learning achievements in digital media technology from the evaluation of nine experts. The efficiency evaluation of the system Black box Testing has five sides and five items per side, 25 questions in total. The results are shown in Table II.

TABLE II: PERFORMANCE EVALUATION RESULTS

Various Fields of Use	Level of Performance		
	Mean	S.D.	Meaning
1. Functional Requirement Test	**4.82**	**0.34**	**Highest**
1.1 Able to display detailed information to meet the needs	4.67	0.50	Highest
1.2 Appropriate handling and detailing of information	4.89	0.33	Highest
1.3 Appropriateness in the use of flexible systems	4.78	0.44	Highest
1.4 suitability in terms of ease of use	4.78	0.44	Highest
1.5 Meets the goals and scope of the research	5.00	0.00	Highest
2. Functional Test	**4.64**	**0.48**	**Highest**
2.1 Accuracy in performance testing under browsers	4.67	0.50	Highest
2.2 Connecting accuracy of each page	4.44	0.53	High
2.3 The perfect compatibility of all pages	4.56	0.53	Highest
2.4 Data duplication check	4.67	0.50	Highest
2.5 Accuracy of information display and reporting	4.89	0.33	Highest
3. Output Validation Test	**4.53**	**0.50**	**Highest**
3.1 Overall program suitability	4.67	0.50	Highest
3.2 Reports are accurate and complete	4.44	0.53	High
3.3 Processing from the system has resulted in the correct conditions	4.78	0.44	Highest
3.4 The form of the report is clear and easy to understand	4.44	0.53	High
3.5 Reports are accurate and complete	4.33	0.50	High
4. Usability Test	**4.73**	**0.45**	**Highest**
4.1 The overall alignment of the system is reasonable	4.56	0.53	Highest
4.2 The division of system menus is easy to understand	4.89	0.33	Highest
4.3 Ease of use of the list system	4.78	0.44	Highest
4.4 Warning messages or error messages are easy to understand	4.67	0.50	Highest
4.5 There is a sequence of steps to explain appropriately and completely	4.78	0.44	Highest
5. Security Test	**4.62**	**0.50**	**Highest**
5.1 Appropriate and secure username and password	4.56	0.53	Highest
5.2 Appropriate and secure access to information	4.67	0.50	Highest
5.3 The system has alerts for the safety of the system	4.44	0.53	High
5.4 Suitability and security of the database	4.78	0.44	Highest
5.5 Appropriate and secure management of data access rights	4.67	0.50	Highest
Total Overall	**4.67**	**0.45**	**Highest**

From Table II, the results of the evaluation of efficiency of the system using Blackbox Testing with five sides found that the Functional Requirement Test displayed the most efficient system performance with Mean = 4.82, and a S.D. = 0.34. The secondary Usability Test Mean = 4.73, with a S.D. = 0.45. Next came the Functional Test with a Mean = 4.64 and a S.D. = 0.48. This was followed by the side Security Test, which had a score of Mean = 4.62 and a S.D. = 0.50. The last side was the Output Validation Test with a Mean = 4.53, and a S.D. = 0.50. When combining the test results to provide an overall picture of the system, the score was Mean = 4.67, and S.D. = 0.45, indicating that the system development at this time was the most highly efficient.

V. DISCUSSION

In the study of relevant documents and research, it was found that this research used a total of 31 relevant documents and research, divided into TCI 1 journals in Thailand, 26 foreign journals, and four websites. citation to the year of documents and websites as follows: 2017—1 copy, 2018—1 copy, 2019—1 copy, 2020—1 copy, 2021—4 copies, 2022—16 copies, 2 websites, 2023—4 copies, 1 website. The information that is summarized in order to build the architecture of the system found that the elements of the system architecture must consist of: 1) Hardware, machines or devices that have an internet connection to access the system; 2) Software is the software used to access the system and to develop various systems; 3) The process is the analysis of the requirements until the scope, conditions, various processes are used to develop the system; 4) Network is an Internet network to make the system comprehensively accessible to users; 5) Database is the part of the database that is used to develop the system and store information of people who use the system; 6) People is to define people and assign various privileges to users of the system to use at different privilege levels. Then use the information obtained to design the architecture of the system as shown in Fig. 1 and assess the suitability of the system architecture to help reduce system development errors. The result of the architectural design evaluation found that with an overall mean score = 4.93 and a standard deviation = 0.16, meaning that the system architecture is appropriate at the highest level. After that, the system architecture that has been evaluated will be used to develop the system with the international system development model with the six stages of the System Development Lifecycle (SDLC) model. After that, the efficiency was evaluated by using the Black box Testing method for five aspects. The system is efficient at the highest level. with a mean score = 4.82 and a standard deviation = 0.34, meaning that the developed system is highly efficient in implementation and when the efficiency of the system is at a very high level, the learners can use the system efficiently and gain knowledge effectively.

VI. CONCLUSION

The digital content system development involving a reality program format to enhance learning achievement in digital media technology has led to the development of a reasonable and effective system operating at a very high level. This system allows students to learn about digital media technology and help increase their level of learning. So that, it includes digital content in the form of a reality show that has been filmed in the form of a program in a real or a virtual situation. The format of the program based on actual events, without scripting and without being pre-staged. There is a systematic analysis of the reality show format and digital media technology in order to make the program look interesting for the students to encourage them to concentrate until learning occurs. Future research brings the developed system to practical use with samples and samples in many groups of learners to allow us to obtain more results which can

then be used to develop programs in other areas besides digital media technology.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Phisit Pornpongtechavanich studied relevant research documents, planning work, research design, conduct research, system architecture design, design research tools, contact an expert, gather information, analyze the results, criticize the result, conclusion and write main article. Randa Kanabsak studied relevant research documents, planning work, research design, conduct research, test system, gather information, analyze the results, criticize the result and co-write article. Siriruang Phatchuay studied relevant research documents, planning work, research design, conduct research, system development, test system, gather information, analyze the results, criticize the result and conclusion. Noppasak Tantisattayanon served as research advisors and co-write article. All authors had approved the final version.

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