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The Design and Development of Interactive Multimedia and Activities for New Normal Public Relations to Promote the Public Image of the Continuing Education Center

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ABSTRACT

This research was aimed 1) to survey the demand to design 2) to develop and to evaluate the quality of the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center 3) to evaluate the perception and 4) to evaluate the satisfaction of the sampling group in accordance with the ADDIE Model. The QR code technology was used as part of the interactive multimedia. The sampling group consisted of 30 third-year undergraduate students from the Department of Education Communications and Technology, Faculty of Industrial Education and Technology, KMUTT in the first semester of the academic year 2021. They were chosen using purposive sampling method out of the ETM 314 Professional Experiences in Educational Technology and Mass Communication. According to the survey, the demand for the multimedia and activities was at a high level ($\bar{x}$ = 4.40, S.D. = 0.65). The quality of the contents as evaluated by the experts was at a very good level ($\bar{x}$ = 4.81, S.D. = 0.24) and the quality of the media presentation was at a very good level ($\bar{x}$ = 4.56, S.D. = 0.43). The perception of the sampling group was at the highest level ($\bar{x}$ = 4.68, S.D. = 0.48) and the satisfaction of the sampling group was at the highest level ($\bar{x}$ = 4.76, S.D. = 0.44). Therefore, the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center could be put into actual use.

Type of Paper: Empirical

Keywords: Interactive, Multimedia, Activities for Public Relations, New Normal, Promote the Public Image

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1. Introduction

According to Section 58 in the Constitution of the Kingdom of Thailand B.E.2540 (1997), a person shall have the right to get access to public information in possession of a State agency, State enterprise or local government organization, unless the disclosure of such information shall affect the security of the State, public safety or interests of other persons which shall be protected as provided by law. According to Section 9 in the Official Information Act B.E.2540 (1997), each government organization, each private organization and each academic institution need to provide public information to the general public. This is a new dimension in which people have an opportunity to know their right to access to public information. Therefore, public relations play a vital role in many organizations in order to give information and explanation as well as advertising information as part of their public relations in order to inspire, explain and promote public image of the organizations for people both inside and outside the organizations (Office of the National Education Commission, 1998).

Multimedia comes from two words: 'multi' meaning a variety and 'media' meaning medium or information. Therefore, multimedia means the use of many media including materials, tools and methods in order to present information effectively and efficiently in the instruction. Multimedia has become a medium of information and nowadays computers have been used in order to produce and control many tools in order to present texts, graphic images, photos, animations and sounds in sequence according to the contents (Multimedia in Agricultral Work, 2020).

QR code technology is a type of barcode which can be found in various advertisements in different media such as newspapers, magazines, banners and name cards. QR codes contain and hide meanings and details which can be accessed via mobile phones with built-in camera. QR code apps can read and display messages encoded in the QR codes or go to the link inside the code. QR Code stands for Quick Response code. It is a 2-D barcode with information of a product such as title, price, contact phone number, and website. It was developed by Denso-Wave, a subsidiary of Toyota Company in Japan in 1994 and the patent for QR code was made in Japan and around the world. The developers made QR codes to be quick response and these codes are popular among mobile phones with built-in camera. Additional software can also be installed (Cheechang A. and Hangsapruk T., 2012).

Activities for publicity are a special kind of activities which public relations officers refer to as corporate events as well as marketing events. They form a part of event marketing

strategies in order to communicate different levels of brands from the organizational brand, the product brand and the service brand (Maen-in W., 2019).

Due to the coronavirus 2019 pandemic, every sector in the country has been affected, especially the educational sector. Universities have to change their instructional format from classrooms to the new normal mode, which is a new kind of living that is different from the past due to a certain cause. The pattern and the way of life which was considered to be predictable and normal have to change to meet the new pattern and the unfamiliar way of life (Thairath, 2020). Therefore, new normal activities have become a new kind of activities for online channels where the audience can communicate through a new channel. For the viewers, it costs less time. For the organizers it costs less expense because of no delivery and no additional equipment.

The Continuing Education Center is an organization which focuses on disseminating bodies of knowledge, academic outputs and research studies done by King Mongkut's University of Technology Thonburi through seminars, training sessions and conferences. It also offers a one-stop service for academics. It was established in 1989 with the aim to develop the human resources so that they can gain knowledge and experiences in sciences and technology through continuing education before, during and after their working hours. Moreover, the Continuing Education Center offers service to the community and the general public with the following vision: "The Center of Education of KMUTT for the society" with these three missions: 1) to develop training courses for all kinds of organizations, 2) to manage and offer services, training sessions, seminars and academic conferences and 3) to become a one-stop service center (The Continuing Education Center, 2014).

Because of the coronavirus (or COVID-19) crisis and after reviewing these following research studies as in the development of a multimedia modular for public relations (Sunthornwicharn N., 2000), the evaluation of special events to promote yacht tourism in case of Thailand Yacht Show 2016 (Dittawirun N., Srikalsin T. and Phaomanacharoen C.,2018) and public relations process in corporate image building for recruitment purpose (Ruangnok P., 2008) there was no research study into the design and development of interactive multimedia and activities for new normal public relations to promote the public image of an organization. Therefore, the researchers aimed to design and develop interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center, KMUTT. It was expected that the general public would be more aware of

the Continuing Education Center so that the organization would be more recognized and provide the best service to the society.

1.1 Research Objectives

a. To survey the demands of the sampling group regarding the design and the development of the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center

b. To design, develop and examine the quality of the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center

c. To evaluate the perception and the satisfaction of the sampling group towards to the development of the interactive multimedia and activities for new normal public relations

2. Literature Review

2.1 Multimedia

Multimedia is defined as the use of many media and formats and the use of knowledge from different perspectives to become one harmonious body of knowledge such as print media, online media and activities (Malithong K., 1997).

2.2 Publicity and Public Image

Public relations and public image refer to any kind or process of distributing information to make connections and good understanding between the organization and the target group inside and outside the organization with the aim to help the organization achieve its goal, be more recognized, trustworthy and reliable. This will create trust among students and the educational system, resulting in satisfaction (Pholchaniko T., 2015).

2.3 QR Code Technology

QR Code stands for Quick Response Code which is a 2-dimension barcode with many black modules arranged together. The base is square and the background is white. It can be read by QR Code Scanner app in mobile phones with built-in camera (Office of the Forest Resource Management for the Area 10., 2016).

2.4 New Normal

New Normal is a new kind of living that is different from the past due to a certain cause. The pattern and the way of life which was considered to be predictable and normal have to change to meet the new pattern and the unfamiliar way of life (Thairath, 2020).

3. Research Methodology

3.1 Research Hypotheses

a. The demands of the sampling group regarding the design and the development of the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center would be at a high level.

b. The quality of the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center would be at a good level.

c. The perception and the satisfaction of the sampling group regarding the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center would be at a high level.

3.2 Research Scope

The sampling group in this research consisted of 30 third-year undergraduate students in the Department of Education Communications and Technology, Faculty of Industrial Education and Technology, King Mongkut's University of Technology Thonburi, in the first semester of the academic year 2021 (KMUTT, 2020) who enrolled in the ETM 314 Professional Experiences in Educational Technology and Mass Communication course. They were chosen using purposive sampling method out of those who were willing to participate in this research.

The tools in this research were checked for their IOC by the panel experts. They consisted of 1) the demand survey2) the interactive multimedia and activities, 3) the quality evaluation forms for contents and media presentation, 4) the perception evaluation form and 5) the satisfaction evaluation form.

The diagram below how the researchers designed and developed the interactive multimedia and activities based on ADDIE Model to promote the public image of the Continuing Education Center.
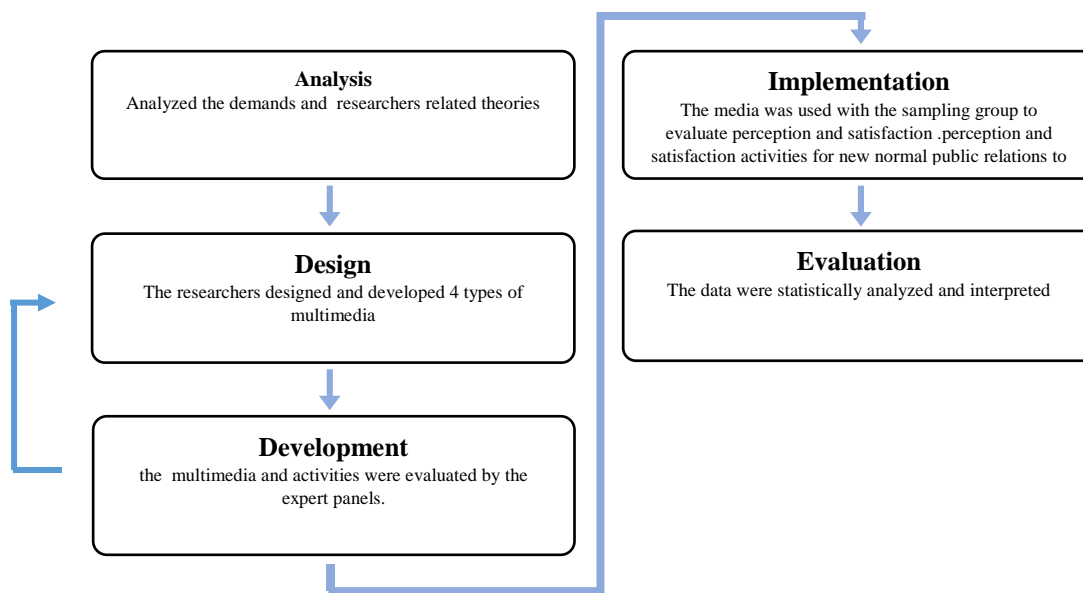
Figure 1. ADDIE Model to publicize the Department

4. Results

4.1 Results of tthe demand survey

Table 1. shows the demand

Item	$\overline{x}$	S.D.	Demand level
1. Demand for contents	4.40	0.68	High
2. Demand for media	4.36	0.63	High
3 . Demand for activities to promote the public image of the Continuing Education Center	4.47	0.62	High
Average Score	**4.40**	**0.65**	**High**

According to Table 1, the demand of the sampling group regarding the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center was at a high level ($\overline{x}$ = 4.40, S.D. = 0.65). This confirmed the research hypothesis. Therefore, the researchers developed the multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center.

4.2 Results of the design, development, and quality of content and media

There are 4 the interactive multimedia with QR code technology to interact with the audience.and activities based on ADDIE Model to The diagram below how the researchers

designed and developed the interactive multimedia and activities based on ADDIE Model to promote the public image of the Continuing Education Center.. in Figures 2, 3, and 4.

Figure 2. shows the developed interactive multimedia and activities

Figure 3. shows motion graphic with QR code technology to interact with the audience

Figure 4. shows the activities for new normal public relations via Zoom Meeting

Activities to promote the public image via Zoom Meeting consisted of 3 stages:

a) Before the activities, with publicity such as posters and the meeting link for Zoom posted on Facebook.

b) During the activities for new normal public relations to promote the public image of the Continuing Education Center, with opening ceremony, watching, Q&A session, recreation, closing ceremony and photoshoot (the duration was 60 minutes).

c) After the activities, with questionnaires to evaluate the perception and the satisfaction of the sampling group. The researchers gave a speech to thank everybody and gave tokens of appreciation.

Table 2. shows the quality in terms of contents and media presentation by the expert panels

Item	$\bar{x}$	S.D.	Quality level
Quality of contents	4.81	0.21	Very good
Quality of media presentation	4.56	0.43	Very good

According to Table 2, the quality of the contents as evaluated by the experts was at a very good level ($\bar{x}$ = 4.81, S.D. = 0.24) and the quality of the media presentation was at a very good level ($\bar{x}$ = 4.56, S.D. = 0.43). This confirmed the research hypothesis.

Table 3. shows the perception evaluation form of the sampling group

Item	$\bar{x}$	S.D.	Satisfaction level
1. Evolution of the Continuing Education Center (CEC)	4.64	0.50	The highest
2. Missions of the Continuing Education Center (CEC)	4.70	0.47	The highest
3. Outputs and Services of the Continuing Education Center (CEC)	4.70	0.47	The highest
4. Concepts of Development of the Continuing Education Center (CEC)	4.68	0.49	The highest
Average Score	**4.68**	**0.48**	**The highest**

According to Table 3, the perception of the sampling group regarding the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center was at the highest level)$\bar{x}$ = 4.68, S.D. = 0.48). This confirmed the research hypothesis.

Table 4. shows the satisfaction evaluation form of the sampling group

Item	$\bar{x}$	S.D.	Satisfaction level
1. Contents and language use	4.74	0.44	The highest
2. Graphic and fonts	4.72	0.45	The highest
3. Images and sounds	4.75	0.44	The highest
4. Presentation and activities for new normal public relations	4.77	0.43	The highest
Average Score	**4.76**	**0.44**	**The highest**

According to Table 4, the satisfaction of the sampling group regarding the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center was at the highest level ($\bar{x}$ = 4.76, S.D. = 0.44). This confirmed the research hypothesis.

5. Discussion

According to the demand survey of the sampling group regarding the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center, it was found that the demand of the sampling group for the

multimedia and activities was at a high level $)\overline{x} = 4.40$, S.D. $= 0.65$). The Continuing Education Center has done many activities and these activities needed to be promoted as part of the public relations to promote the public image of the Continuing Education Center so that it is more recognized by the general public. This is similar to the research study entitled "Development of learning resources in educational institution with multimedia on Master and Doctoral Degree Courses" (Glubsaeng K., 2015) it was found that undergraduate students had a high level of demand for learning resources about Master and Doctoral Degree courses.

The evaluation of the quality of the contents evaluation and the media presentation showed that the quality of the contents as evaluated by the experts was at a very good level $)\overline{x} = 4.81$, S.D. $= 0.24$) because the contents were accurate, suitable and relevant to the objectives. The quality of the media presentation was at a very good level $)\overline{x} = 4.56$, S.D. $= 0.43$) because the multimedia were colorful with good composition, layout and graphic. The researchers used the principles of the ADDIE MODEL (Anukulwech A., 2014) which consists of Analysis, Design, Development, Implementation and Evaluation. This is similar to the research study entitled "The Development of Interactive Multimedia on Science Learning Based Adobe Flash CS6" (Sukariasih, L, Erniwati, E. and Salim A., 2019) it was found that the quality of the contents was at a very good level (76.56%(and the quality of the media presentation was at a very good level $) 81.67\%$(. Therefore, science is a good topic for multimedia. Moreover, this research is similar to the research study entitled "The development of interactive mathematics learning media based on local wisdom and 21st century skills: social arithmetic concept" (Pujiastuti H, Utami R. and Haryadi R., 2020) it was found that the quality of the contents was at a very good level (89.02%) and the quality of the media presentation was at a very good level)92.48 %). Therefore, andromah software was a good program for students to learn.

The evaluation of the perception of the sampling group regarding the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center showed that their perception was at a high level $)\overline{x} = 4.68$, S.D. $= 0.48$). This complies with the ideas by Sithasang P. et al (2014) who say that perception will take place when there are these components: stimulant, sense, experience and interpretation. The sampling group participated in the activities and they engaged with the interactive multimedia for new normal public relations to promote the public image of the Continuing Education Center. The multimedia consisted of images, video clips and QR Code for the sampling group. These were stimulants for the sampling group to use their senses.

This technique complies with the one used by Poonjarern S. (2014) who developed specific media and new media for public relations curriculum image of Master of Science in Industrial Education Program in Learning Technology and Mass Communication and examined the quality of the media as well as the perception of the sampling group. It was found that the sampling group showed a high level of perception towards that specific media $)\overline{x}$ = 4.47, S.D. = 0.59). Moreover, this research is similar to the research study entitled "Development of Interactive Multimedia in Learning Islamic Education (Ramadhani R. and Muhtadi A., 2018) it was found that the level of perception was 4.0 (or acceptable).

The evaluation of the satisfaction of the sampling group regarding the interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center showed that their perception was at the highest level ($\overline{x}$ = 4.76, S.D. = 0.44) because the researchers did the survey on the demands before developing the interactive multimedia and activities. Therefore, the developed interactive multimedia and activities met the demands of the sampling group. Moreover, QR Code technology was used in order to offer interactivity to the sampling group so that they could learn better. This supports the idea by Kemp, Jerrold E. and Don C. Smellie (1998) who say that media is important for learners. If media is suitable, learners will learn effectively. Different types of media can offer different levels of interactivity. This is similar to the research study entitled "A development of cueing public relation media with augmented reality (AR) technology for users of Nakornthon Ayuwattana Wellness Center, Nakornthon Hospital" (Thapphangthiam A., 2015) it was found that the satisfaction of the sampling group was at the highest level ($\overline{x}$ = 4.97, S.D. = 0.12).

6. Conclusion

The interactive Multimedia and Activities for New Normal Public Relations to Promote the Public Image of the Continuing Education Center could be distributed effectively.

6.1 Suggestions for Application

The interactive multimedia and activities for new normal public relations to promote the public image of the Continuing Education Center could be used to promote the Continuing Education Center, King Mongkut's University of Technology Thonburi so that it will become more recognized by the general public. The multimedia could be used or shown in their

training sessions, seminars and activities organized by the Continuing Education Center, for example, before the opening ceremony or during the break.

6.2 Suggestions for Further Research

There should be a study into the development of publicity media to promote the public image of services offered by the Continuing Education Center such as a 3-D exhibition or other formats to attract attention from the target group.

Acknowledgements

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