E-Organization Document Social Models

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บทคัดย่อ—งานวิจัยนี้มีวัตถุประสงค์เพื่อสร้างแบบจำลองการรับ ข้อมูลข่าวสารใน มหาวิทยาลัยเทคโนโลยีราชมงคลสุวรรณภูมิ เพื่อ หาความพึงพอใจของแบบจำลองการรับข้อมูลข่าวสารใน มหาวิทยาลัยเทคโนโลยีราชมงคลสุวรรณภูมิที่พัฒนาขึ้น ประชากรที่ ใช้ในการวิจัยครั้งนี้ เป็นผู้ใช้งาน อาจารย์ นักศึกษา และเจ้าหน้าที่ ภายใน มหาวิทยาลัยเทคโนโลยีราชมงุคลสุวรรณภูมิ กลุ่มตัวอย่างที่ ใช้ในการวิจัยครั้งนี้ ใช้วิธีการเลือกแบบเจาะจง (Purposive Sampling) โดยแบ่งเป็น 2 กลุ่ม ดังนี้ กลุ่มแรกเลือกจากนักศึกษาระดับปริญญา ตรี มหาวิทยาลัยเทคโนโลยีราชมงคลสุวรรณภูมิ ศูนย์สุพรรณบุรี ้ จำนวน 30 คน, และกลุ่มที่สองเลือกจากผู้ดูแลเว็บไซต์ อาจารย์ หรือ ผู้เกี่ยวข้อง ภายในมหาวิทยาลัยเทคโนโลยีราชมงคลสุวรรณภูมิ ้ จำนวน 10 คน ผลการวิจัยสรุปได้ดังนี้คือ แบบจำลองการรับข้อมูล ้ข่าวสารใน มหาวิทยาลัยเทคโนโลยีราชมงคลสุวรรณภูมิ ที่สร้างขึ้นมี ้ค่าเฉลี่ยและส่วนเบี่ยงเบนมาตรฐานความพึงพอใจของนักศึกษาต่อ การใช้แบบจำลองการรับข้อมูลข่าวสารใน มหาวิทยาลัยเทคโนโลยี ราชมงกลสุวรรณภูมิ ของผู้ดูแลเว็บไซต์ อาจารย์ หรือผู้เกี่ยวข้อง รวมอยู่ในระดับมากที่สุด ได้ค่าเฉลี่ย 4.36 และมีค่าเฉลี่ยและส่วน เบี่ยงเบนมาตรฐานความพึงพอใจของนักศึกษาต่อการใช้แบบจำลอง การรับข้อมูลข่าวสารในมหาวิทยาลัยเทคโนโลยีราชมงคลสุวรรณภูมิ ้ของนักศึกษารวมอยู่ในระคับมากที่สุด ได้ก่าเฉลี่ย 4.45 แสดงให้เห็น ว่า แบบจำลองการรับข้อมูลข่าวสารใน มหาวิทยาลัยเทคโนโลยีราช มงคลสุวรรณภูมิ ที่สร้างขึ้นสามารถจัดการข่าวสาร ข้อมูล การ ประชาสัมพันธ์เอกสารต่างๆ ด้วยแนวคิด e-Organization Document Social ให้เป็นไปในแนวทางเดียวกัน ลดความผิดพลาด ซ้ำซ้อนของ ข้อมล สะควกในการตรวจสอบเอกสาร เก็บข้อมล เรียกใช้งานข้อมล และสามารถจัดการข้อมูลบนส่วนของตนเอง ได้โดยตรงเพื่อใช้ ประโยชน์ในการปฏิบัติงานได้อย่างเหมาะสม

Abstract— The E-Organization Document Social Models was a website that developed to support the electronic news announcement within RMUTSB (Rajamangala University of Technology Suvarnabhumi, Suphanburi campus). The level of user satisfaction to the developed website was evaluated using purposive sampling method. The population was instructors, staffs, and students from RMUTSB. Sample of the population divided into two groups, which are thirty undergraduate students from faculty of Science and Technology in RMUTSB and ten instructors or staffs from RMUTSB. The website has an excellent level of user satisfaction to the website for all user, which have an average point of 4.34 and 4.45 for instructors/or staffs and students, respectively. Therefore, the E-Organization Document Social Models was able to organize and distribute the announcement of news or event within the campus in systematic way. The system can be used in document management, public relations news, and easy to shared and retrieve the documents. Moreover, this system will promote the concept of paperless society, or Edocument society in RMUTSB.

Keywords-E-Organization Document Social Models; Edocument society; RMUTSB; e-Document Center.

I. INTRODUCTION

Nowadays, an online social network was provided many communication channels for people to communicate to each other easily. Many organizations were build the website to propagate their organization. Some organization has more than one websites, which each department used to announcement the information to the audiences inside and outside the departments. The published information including a document, government document, academic services, and research etc.

Rajamangala University of Technology Suvarnabhumi, Suphanburi campus (RMUTSB) was composed of many department including faculty, branch, and institute, which each department has the website to announce the news and event of that department. Each day, various activities and events are posted on the website of departments for example administrative announcements, academic research announcements, admission announcements and etc. Sometime the news cannot deliver to the related department correctly, which result in the missed receiving of importance information for the students.

The problems can be overcome by developing an effective E-Organization Document Social Models to message the news, activities and event to the related audiences in a systematic manner. Therefore, the audience will not missed the importance information for their benefit. The E-Organization Document Social Models will promote the concept of paperless society, or E-document society in RMUTSB, which paper communication (written documents, mail, letters, poster etc.) is replaced by electronic communication. Moreover, to make the communication simpler, the departments were able to subscribe only the news that related to their department.

II. LITERATURE REVIEW

This paper has purpose to develop a method for classifying information sender of web documents, which constitutes an part of information credibility important analysis. Design/methodology/approach, Machine learning approach was employed. About 2,000 human-annotated web documents were prepared for training and evaluation. The classification model was based on support vector machine, and the features used for the classification included the title and URL of documents, as well as information of the top page. Findings, With relatively small set of features, the proposed method percent achieved over 50 accuracy. Research limitations/implications, Some of the information sender categories were found to be more difficult to classify. This is due to the subjective nature of the categories, and further refinement of the categories is needed. Practical implications. When combined with opinion/sentiment analysis techniques, information sender classification allows more profound analysis based on interactions between opinions and senders. Such analysis forms a basis of information credibility analysis. This study formulated the problem of information sender classification. It proposed a method which achieves moderate performance. It also identified some of the issues related to information sender classification [1].

The purpose of this paper is to present a revised communication model that describes advertising by drawing upon its kinship with crafted text rather than with everyday speech. The model expands the traditional communication triad by inscribing advertisers, promotional text, and consumers as multidimensional participants in a complex interactive process. The paper begins by presenting the rationale for treating commercial messages as written "text" and recategorizing them as more complex than the oral discourse of word-of-mouth conversations. It next summarizes the steps by which the original oral communication model is transformed from speech to literature to advertising. It then discusses the expanded triad, considering multiple aspects of the source, the message, and consumer-recipients. It concludes with suggestions for research using the revised model to investigate gaps in knowledge about source credibility, message/media effects, and the interactive consumer [2].

This study, to gather and synthesize information about the delivery of quality services through the website. Also, the structure and the search criteria that consumers use to evaluate e-SQ collectively, the "literary remains" shows that e-SQ is to create multi-dimensional. Although the content of what is considered a different e-SQ in the study. A summary of the existing efforts to measure. Be included in the next section by comparing the quality of service with traditional and e-SQ.

While some of the dimensions of e-SQ is similar to the SQ of others that last part as a synthesis of information on e-SQ and what has to be learned through research [3].

III. METHODOLOGY

First, the objectives of research were defined. The research schedule was planned. The analysis of news and information management structure in RMUTSB was performed. Then, analyse the process to distribute the information between departments. The types of information were classified after that the webpages designing was accomplished. Investigate user satisfaction survey form to evaluate the effectiveness of developed website. Develop and test the designed website. Advertise and encourage each department to use the developed website. Maintain and updating the website. The procedure to develop the E-Organization Document Social Models in RMUTSB was achieved as follows: i) Design the site structure of E-Organization Document Social Models in RMUTSB. ii) Design the webpage of E-Organization Document Social Models in RMUTSB. iii) Construct the entity relationship diagram (ER diagram). iv) Data Dictionary

To design the database for E-Organization Document Social Models. The researcher was construct the entity relationship diagram (ER diagram), which each entity represent as a group of related data that has relationship with the data within the database.

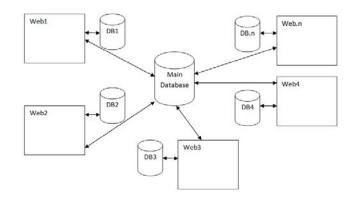


Figure 1. Site structure for the E-Organization Document Social Models in RMUTSB.

IV. RESULTS AND DISCUSSION

The users for the E-Organization Document Social Models website was divided into two groups, which are group I (Instructors and staff) and group II (Students).

A. The management ability of user

The ability to manage the E-Organization Document Social Models was limited according to the group of users.

Group I: Instructors and staff

This group of users are administrator of the system. The user was allowed to login to the main page of administrator. The user was permitted to use the following function, which are International Journal of Applied Computer Technology and Information Systems: Volume 3, No.1, April 2013 - September 2013

Profile edit, add/remove/edit the news announcement, and system logout.

Group II: Students

The user was allowed to login to the main page of student. The functions that students user can be used were Profile edit, view faculty member information, and system logout. The administrator can be link out to the news announcement main clicking the "add/remove/edit the news page by announcement" button in the main page of administrator. The administrator was required to login to news announcement main page again to verify the personality. The news announcement main page consist of four main sections, which are i) create new news announcement in department, ii) news announcement in department, iii) added news announcement from other department, and iv) news announcement from other department.

B. User interface of the E-Organization Document Social Models website

The developed website was used to organize the new announcement in RMUTSB and reduce the data redundancy. Moreover, this system also promote the E-document society in RMUTSB, which reduce the cost for news or activity announcement in the campus. The user interface screens of the developed website were illustrate in Figure 2 to 4.

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Figure 2. Screen of user login page



Figure 3. Screen of news announcement page

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	other in ITS Add News			
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		(CONTRACT) (201		
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24	The tracker Carabian Development Devision project petwork		Add News	
		Mr Kirtsalt Physical Education and I	terren Add News	
40				
49		Mr Sittkeen Mathematics	Add News	

Figure 4. Screen of online news announcement management

C. The E-Organization Document Social Models website evaluation

To evaluate the E-Organization Document Social Models website in RMUTSB, which developed in this study, a user satisfaction to the website survey was performed. The survey form is a rating scale and the scale in classified into five levels, which are summarize the score in form an interval scale [4]. Then the mean of scores were calculate and compute the significant level of user satisfaction [5]. An average point and description are shown below:

Average point		Description
4.21 - 5.00	=	excellent level of satisfaction
3.41 - 4.20	=	very good level of satisfaction
2.61 - 3.40	=	good level of satisfaction
1.81 - 2.60	=	fair level of satisfaction
1.00 - 1.80	=	poor level of satisfaction

The survey results for user satisfaction to the website were summarized in Table 1 and 2.

Table 1, represent the mean point and standard deviation (S.D.) of user satisfaction of instructor users. The average user satisfaction level is excellent level, which has an average point of 4.36. The users were satisfy the website in excellent level for all question, except the evaluation in the topic "The web site has a beautiful design and appropriate function to use" and "The web site is organized the news appropriately, which are easy and convenience to used.", which result in very good level of user satisfaction. The survey results of student user satisfaction to the website shown in Table 2.

Table	1	Instructors	and	staff	user	satisfaction	to	the	E-
Organ	iza	tion Docume	ent So	ocial N	Aodels	s website			

Topics		No. of	Mean	S.D.	Satisfaction
Top	105	Instructors	points	S.D.	Level
 The web sit beautiful de appropriate use. 		10	4.00	0.81	very good
		10	4.10	0.73	very good
3. The data in reliable.	website are	10	4.30	0.82	excellent
4. The website information	e display the 1 fast.	10	4.50	0.52	excellent
5. The website to use.	e is convenient	10	4.30	0.82	excellent
6. The user ca information an effective	in website in	10	4.40	0.69	excellent
effective so	e provides an lution for incement in	10	4.30	0.67	excellent
communica campus.	peneficial for tion within the	10	4.40	0.51	excellent
9. The website the users.	e is useful for	10	4.60	0.51	excellent
10. Overall sati of user to th		10	4.70	0.48	excellent
Average p (10 questi		10	4.36	0.65	excellent

 Table 2 Student user satisfaction to the E-Organization

 Document Social Models website

Topics	No. of student	Mean points	S.D.	Satisfaction Level
1. The web site has a beautiful design and appropriate function to use.	30	4.30	0.79	excellent
 The web site is organized the news appropriately, which are easy and convenience to used. 	30	4.47	0.81	excellent
3. The data in website are reliable.	30	4.40	0.77	excellent
4. The website display the information fast.	30	4.53	0.57	excellent
5. The website is convenient to use.	30	4.13	0.93	very good
6. The user can edit information in website in an effective way.	30	4.53	0.62	excellent
 The website provides an effective solution for news announcement in RMUTSB. 	30	4.37	0.76	excellent
 Information on the website is beneficial for communication within the campus. 	30	4.50	0.63	excellent
9. The website is useful for the users.	30	4.63	0.55	excellent
10. Overall satisfaction level of user to the website.	30	4.70	0.46	excellent
Average point (10 questions)	30	4.45	0.68	excellent

Table 2, represent the mean point and S.D. of student user satisfaction. The average user satisfaction level is excellent level with average point of 4.45. The users were satisfy the website in excellent level for all question, except the evaluation in the topic "The website is convenient to use", which result in very good level of user satisfaction.

V. CONCLUSIONS

The research aimed to develop the E-Organization Document Social Models website. The average user satisfaction level is excellent level for both group of users. The website assist the user to announce the news and event within RMUTSB in systematic way. In addition, the website can be reduce data redundancy for instructor and staff to manage the news announcement or document sending among each department. Moreover, this system will promote the concept of paperless society, or E-document society in RMUTSB, which paper communication (written documents, mail, letters, poster etc.) is replaced by electronic communication. In the future, the system need to include other social media such as Facebook to the website; increase data security to the system; and develop a mobile application to provide more communication channel.

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REFERENCES

- [1] Kato, Yoshikiyo; Kurohashi, Sadao; Inui, Kentaro. (2013). Classifying information sender of web documents. Internet Research, 2008.
- [2] Stern, Barbara B. (2013). A revised communication model for advertising: Multiple dimensions of the source, the message, and the recipient. Journal of Advertising, 1994, Vol. 2, No. 23, Pg 5.
- [3] Zeithaml, Valarie A; Parasuraman, A; Malhotra, Arvind. (2013). Service quality delivery through Web sites: A critical review of extant knowledge. Academy of Marketing Science.Journal, 2002, Vol. 4, No. 30, Pg 362.
- K.Wanichbuncha, *Statistic for Research*. 2nded, Bangkok: Chulalongkorn University, 2006.
- [5] K.Wanichbuncha, *Data Analysis for SPSS for Windows*. 3rded, Bangkok: Chulalongkorn University, 1997.