EVALUATION OF FUNCTIONAL REQUIREMENTS ON PERSONAL WEBLOG SERVICES: CASE STUDY IN THAILAND

**CHUTHATHIP SRISUWAN** 

# EVALUATION OF FUNCTIONAL REQUIREMENTS ON PERSONAL WEBLOG SERVICES: CASE STUDY IN THAILAND

A thesis submitted to the Graduate School in partial fulfillment of the requirement for the degree Master of Science (Information and Communication Technology)
Universiti Utara Malaysia

By Chuthathip Srisuwan



# JABATAN HAL EHWAL AKADEMIK (Department of Academic Affairs) Universiti Utara Malaysia

# PERAKUAN KERJA KERTAS PROJEK (Certificate of Project Paper)

Saya, yang bertandatangan, memperakukan bahawa (I, the undersigned, certify that)

# MISS CHUTHATHIP SRISUWAN

calon untuk Ijazah (candidate for the degree of ) MSc. (ICT)

telah mengemukakan kertas projek yang bertajuk (has presented his/her project paper of the following title)

# EVALUATION OF FUNCTIONAL REQUIREMENTS ON PERSONAL WEBLOG SERVICES CASE STUDY IN THAILAND

seperti yang tercatat di muka surat tajuk dan kulit kertas projek (as it appears on the title page and front cover of project paper)

bahawa kertas projek tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.

(that the project paper acceptable in form and content, and that a satisfactory knowledge of the filed is covered by the project paper).

Nama Penyelia Utama (Name of Main Supervisor): PN. AENI ZUHANA SAIDIN				
Tandatangan (Signature)	:	Tarikh (Date):		
Nama Penyelia Kedua (Name of 2 <sup>nd</sup> Supervisor): PN.ASMIDAH ALWI				
Tandatangan (Signature)	:	Tarikh (Date):		

### **GRADUATE SCHOOL**

### UNIVERSITI UTARA MALAYSIA

### PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a post graduate degree from Universiti Utara Malaysia, I agree that the University Library may take it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of the Graduate School. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:

Dean of Graduate School
Universiti Utara Malaysia
06010 UUM Sintok
Kedah Darul Aman

### **ABSTRACT**

Weblogs, or blogs, are frequently updated web pages containing information arranged in reverse chronological order. The number of weblogs has grown to several millions in the recent past and they represent a new trend of web publishing that influences the way people and search engines perceive the World Wide Web.

The objective of this report is to identify functional requirements that contribute to the level of acceptance and use of weblog services. Therefore it employs a qualitative quantitative research approach. Based on literature and interviews, the report identifies and ranks functional requirements for weblog services from a user's perspective. 25 of these requirements are considered to be the most significant ones. They are categorized according to the content creation process on weblogs using the categories "Community", "Content Creation", "Content Management", "Content Interaction", "Content Rendering", and "Security". The resulting criteria catalogue makes it possible to evaluate a sample of 18 weblog services in Thailand regarding the features they implement.

The result of the analysis shows that implementation levels vary widely among the different services and functional features. As one of the key results, it becomes obvious that the most popular services implement more features than their less popular competitors. Thus, the features offered by a weblog service seem to have an impact on its acceptance.

### **ACKNOWLEDGEMENTS**

This thesis would not be possible if it were not for the support and guidance from my supervisors, Pn.Aeni Zuhana binti Saidin and Pn.Asmidah binti Alwi. Her expertise has been extremely helpful, her knowledge and experience is inspiring.

But it's not over yet. There's a large group of people, 6 webmasters of weblog service in Thailand. I want to thank them all: webmaster of BlogGang, webmaster of DiaryClub, webmaster of DiaryLove, webmaster of DiaryThai, webmaster of NaraTozDiary Online and webmaster of When I Fall in Love who provided me with the experimental data that I regard as so important.

I would especially like to thank Onchaya Khongkeaw for her morning greetings mixed with advice and a sense of humor about life, Premrudee Boontamchuay for her fighting spirit.

Finally, I am forever indebted to my parents and sister for their understanding, endless patience and encouragement when it was most required.

# **TABLE OF CONTENT**

			Page
PER	MISSION	N TO USE	i
ABS	TRACT	(ENGLISH)	ii
ACK	NOWLE	EDGMENTS	iii
TAB	SLE OF C	CONTENTS	iv
LIST	OF TAE	BLES	vii
LIST	OF FIG	URES	viii
~			
	APTER C		
1.1	_	round of the study	1
1.2		m statement	2
1.3	Object		3
1.4	•	of the study	5
1.5	Signifi	icance of the study	5
CHA	APTER T	TWO : LITERATURE REVIEW	
2.1		al Information on Weblog	7
2.2		tions and background information	9
		Definitions	9
		2.2.1.1 Content management system	10
		2.2.1.2 Weblog	10
	2.2.2	History of weblogs	13
		2.2.2.1 Tool-based view	13
		2.2.2.2 Content-based view	14
	2.2.3	Personal Weblog	15
	2.2.4	Weblog-related terms	17
2.3	Applic	Application areas of weblogs	
	2.3.1	Journalism	17
	2.3.2	Librarian	18
	2.3.3	Education	19
	2.3.4	Business	20

2.4	Technology for weblog publishing	21
	2.4.1 Categorizing weblog publishing technology	21
	2.4.2 Manual publishing	22
	2.4.3 Weblog scripts	22
	2.4.4 Weblog services	24
	APTER THREE: METHODOLOGY	
3.1	Research approach	26
3.2	Research method	28
3.3	Data gathering	29
3.4	Data analysis	30
СНА	PTER FOUR : FINDING RESULTS AND DISC	CUSSION
4.1	Functional requirements for weblog services	32
	4.1.1 Structuring functional requirements	32
	4.1.1.1 Categorization of requirements	32
	4.1.1.2 Determination of relevance	35
	4.1.2 Description of requirements within categories	38
	4.1.2.1 Community requirements	38
	4.1.2.2 Content creation requirements	39
	4.1.2.3 Content management requirements	42
	4.1.2.4 Interaction requirements	44
	4.1.2.5 Rendering requirements	47
	4.1.2.6 Security requirements	49
4.2	Evaluation of weblog services	50
	4.2.1 Weblog services sample	50
	4.2.1.1 Identification of weblog services	50
	4.2.1.2 Sample structure	51
	4.2.2 Evaluation method	52

	4.2.3	Evaluation according to functional requirement	54
		categories	
		4.2.3.1 Community requirements	54
		4.2.3.2 Content creation requirements	54
		4.2.3.3 Content management requirements	55
		4.2.3.4 Interaction requirements	57
		4.2.3.5 Rendering requirements	58
		4.2.3.6 Security requirements	59
	4.2.4	Comparison of popular weblog services	60
CHAI	PTER FIVE	: CONCLUSION AND RECCOMENDA	TION
5.1	Conclusion		62
5.2	Problems and	limitation	63
5.3	Recommenda	itions	63
REFE	ERENCES		65
APPE	ENDICES		
	Appendix 1:	Tabulation of weblog features based on	70
		literature review	
	Appendix 2:	Categorization of functional requirements	72
	Appendix 3:	Priories functional requirements	73
	Appendix 4:	Interview questions	75
	Appendix 5:	Importance of feature as assessed	78
		by weblog webmasters	
	Appendix 6:	Weblog services sample in Thailand	79
	Appendix 7:	Evaluation of weblog services	80

# LIST OF TABLES

Table No.	Name of Table	Page No.
2.1	Selection of popular weblogs scripts	23
4.1	Relevant functional requirements	37
4.2	Evaluation of weblog services	53

# LIST OF FIGURES

Figure No.	Name of Figure	Page No.
3.1	Research approach and data gathering	30
4.1	Distribution of weblog authors among weblog service	49
4.2	Average feature implementation: Content creation	55
4.3	Average feature implementation: Content management	56
4.4	Average feature implementation: Interaction	58
4.5	Average feature implementation: Rendering	59
4.6	Average feature implementation: Security	60
4.7	Average feature implementation of top weblog services	61

### **CHAPTER 1**

### INTRODUCTION

### 1.1 Background of the study

One of the latest popular tools introduced on the Internet is the weblog (or blog). Researchers define it today by its format, and this definition is in tune with an encyclopedic definition of "blog". It is a frequently updated Website consisting of dated entries arranged in reverse chronological order so the most recent post appears first - typically published by individuals and having personal and informal style (Walker, 2005). Blog genres range from personal, diary-like pages to in-depth public affairs analysis. (Herring, Scheidt, Bonus, & Wright, 2004)

A weblog could be seen as a form of a webpage to which lots of tools are added. Current descriptions of blogs focus on describing these tools. Weblogs use RSS (real simple syndication), comment function, trackback function (to track discussion between different blogs), blogrolls, and archives. (Hourihan, 2002; Gill, 2004) Popularity of blogs started increasing after a few years with the launch of sites like Blogger (http://www.blogger.com), Weblogger (http://www.weblogger.com), or LiveJournal (http://www.livejournal.com), which offered masses user-friendly software that allowed pushbutton publishing.

# The contents of the thesis is for internal user only

# **REFERENCES**

- Barrett, C. (1999). *Anatomy of a weblog*. Retrieved July 20, 2005, from Camworld Web site: http://www.camworld.com/journal/rants/99/01/26.html
- Bausch, P., Haughey, M., & Hourihan, M. (2002). We blog Publishing online with weblogs. Indianapolis: Wiley.
- Berners-Lee, T. (1992). *What's new in '92*. Retrieved August 4, 2005, from http://www.w3.org/History/19921103-hypertext/hypertext/WWW/News/9201.html
- Blood, R. (2000). *Weblogs a history and perspective*. Retrieved August 5, 2005, from http://www.rebeccablood.net/essays/weblog history.html
- Blood, R. (2003). Weblogs and journalism do they connect?. *Nieman Reports*, 57(3), 61-63. Retrieved August 24, 2005, from Ebsco database.
- Brown, A. (1999). It's a blog's life. *New Statesman*, 128(4458), 49-50. Retrieved July 24, 2005, from Ebsco database.
- Browning, P., & Lowndes, M. (2001). *JISC techwatch report content management systems*. Retrieved August 30, 2005, from http://www.jisc.ac.uk/uploaded\_documents/tsw\_01-02.pdf
- Carver, B. (2003). Is it time to get blogging?. *Net Connect*, 128 (1), 30-32. Retrieved August 5, 2005, from Ebsco database.
- Clyde, L.A. (2002). Weblogs and Blogging Part 1. *Free Pint, no Vol.* (111).

  Retrieved July 26, 2005, from

  http://www.freepint.com/issues/020502.htm#feature
- Cresswell, J. W. (1994). Research design qualitative & quantitative approaches.

  Thousand Oaks: Sage.

- Curling, C. (2001). *A closer look at weblogs*. Retrieved July 25, 2005, from http://www.llrx.com/columns/notes46.htm
- Dragan, R. (2003). Weblog service providers and weblog tools. *PC Magazine*, 22(23), 102-105. Retrieved July 5, 2005, from Ebsco database.
- Economist (Ed., 2003). Golden blogs. *Economist*, *369*(8337), 55. Retrieved August 15, 2005, from Ebsco database.
- Ernst, W. (2003). Building blogs. *PC Magazine*, *22*(11), 60-62. Retrieved August 5, 2005, from Ebsco database.
- Fogel, M. (2003). Blogging for dollars. *Inc.*, 25(5), 36. Retrieved August 5, 2005, from Ebsco database.
- Foley, J. (2002). Are you blogging yet? *InformationWeek*, no Vol. (898), 28-31.

  Retrieved July 15, 2005, from ProQuest Computing database.
- Frauenfelder, M. (2000). Blogging. *Whole Earth*, *no Vol.* (103), 52-52. Retrieved April 25, 2005, from Ebsco database.
- Gebhardt, M. (2002). Blog. *Inside the Internet*, 9 (12), 14. Retrieved June 12, 2005, from ProQuest Computing database.
- Gill, K.E. (2004). *How can we measure the influence of the blogosphere?* Retrieved April 25, 2005, from http://faculty.washington.edu/kegill/pub/www2004\_blogosphere\_gill.pdf
- Glenn, D. (2003). Scholars who blog. *Chronicle of Higher Education*, 49 (39), 14-16. Retrieved June 15, 2005, from Ebsco database.
- Goans, D. (2003). Building a home for library news with a blog. *Computers in Libraries*, 23 (10), 20-26. Retrieved August 5, 2005, from Ebsco database.
- Herring, S.C., Scheidt, L.A., Bonus, S., & Wright, E. (2004). Bridging the gap: A genre analysis of weblogs. *Proceedings of the Thirty-seventh Hawaii*

- International Conference on System Sciences (HICSS-37). Los Alamitos: IEEE Press.
- Hiler, J. (2002). The microcontent news blogging software roundup part one of the weblog industry report. Retrieved August 5, 2005, from http://www.microcontentnews.com/articles/blogware.htm
- Hourihan, M. (2002). *What we're doing when we blog*. Retrieved July 1, 2005, from http://www.oreillynet.com/pub/a/javascript/2002/06/13/megnut.html
- Indopedia (2004), *Weblog*. Retrieved June 12, 2005, from http://www.indopedia.org/Weblog.html
- Mayring, Philipp (2000, June). Qualitative Content Analysis [28 paragraphs]. Forum

  Qualitative Sozialforschung / Forum: Qualitative Social Research [On-line

  Journal], 1(2). Retrieved April 25, 2005, from http://qualitativeresearch.net/fqs/fqs-e/2-00inhalt-e.htm
- Myers, M.D. (1997). *Qualitative research in information systems*. Retrieved May 8, 2005, from
- http://www.qual.auckland.ac.nz/#Qualitative%20Research%20Methods NCSA (1993). *What's new, June 1993*. Retrieved August 5, 2005, from
- http://archive.ncsa.uiuc.edu/SDG/Software/Mosaic/Docs/old-whats-new/whatsnew-0693.html
- Netscape (1995). What's new! Retrieved June 2, 2005, from http://wp.netscape.com/home/whatsnew/
- O'Rourke, S. (2003). *Blog definition, information, sites, articles*. Retrieved July 5, 2005, from http://marketingterms.com/dictionary/blog/
- Scott, P. (2001). *Blogging: creating instant content for the web*. Retrieved April 25, 2005, from http://library.usask.ca/~scottp/il2001/definitions.html

- Stauffer, T. (2002). *Blog on the essential guide to building dynamic weblogs*. Berkeley: McGraw-Hill/Osborne.
- Stiler, G.M., & Philleo, T. (2003). Blogging and blogspots an alternative format for encouraging reflective practice among preservice teachers. *Education*, 123
  (4), 789-797. Retrieved August 5, 2005, from Ebsco database.
- TechEncyclopedia (2005a). Content Management System. Retrieved July 30, 2005, from

  http://www.techweb.com/encyclopedia/defineterm?term=contentmanagement system
- TechEncyclopedia (2005b). *Blogging*. Retrieved July 30, 2005, from http://www.techweb.com/encyclopedia/defineterm?term=blogging
- TechEncyclopedia (2005c). *Blogger*. Retrieved July 30, 2005, from http://www.techweb.com/encyclopedia/defineterm?term=blogger
- TechEncyclopedia (2005d). *Blogosphere*. Retrieved July 30, 2005, from http://www.techweb.com/encyclopedia/defineterm?term=blogosphere
- Thairath (2005, June 26) Weblog: Nextstep of internet. Retrieved April 25, 2005, from
  - http://www.thairath.co.th/thairath1/2548/itdigest/itdigest/mar/23/itdigest.php
- Walker, J. (2005, forthcoming). Weblog, Definition for the *Routledge Encyclopedia*of Narrative Theory, Forthcoming. Retrieved July 1, 2005, from

  http://huminf.uib.no/~jill/archives/blog\_theorising/final\_version\_of\_weblog\_

  definition.html
- Weil, D. (2003). *Top 20 definitions of blogging*. Retrieved June 26, 2005, from http://www.wordbiz.com/archive/20blogdefs.shtml

- Welch, M. (2003). Blogworld and its gravity. *Columbia Journalism Review*, 42 (3), 21-26. Retrieved July 5, 2005, from Ebsco database.
- Winer, D. (2001). What are weblogs?. Retrieved May 5, 2005, from Weblogs.Com News Web site:

http://newhome.weblogs.com/personalWebPublishingCommunities

Winer, D. (2002). *The history of weblogs*. Retrieved May 5, 2005, from Weblogs.Com News Web site:

http://newhome.weblogs.com/historyOfWeblogs