

A Study of Organizational and Cultural Factors Influencing User Satisfaction of ERP Systems in a Developing Country: Case Studies from Thailand

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ABSTRACT

This study guides organizational and cultural variables, which seem to play crucial roles in *user satisfaction* of ERP implementation projects in developing country such as Thailand. The literature review was based on a multi-disciplinary research approach by incorporating organizational factors, cultural dimensions, and *user satisfaction* in implementation of ERP for developing countries. The eight ERP software's customers in Thailand were chosen for eleven semi-structured interviews performed during the period of April 2007 to April 2008. The findings confirm that *management commitment, IT maturity, and computer culture* are important factors influencing *user satisfaction* of the ERP projects. A company with richer *Business Process Redesign (BPR) experience* is more likely to succeed with ERP. Interestingly, the *collectivism* of ERP teamwork and composition is also critical issue for ERP implementation's satisfactions. Dealing with *masculinity* of users may lead to more satisfactions toward ERP implementation. Solving high *uncertainty avoidance* tends to boost users confidence and familiarity of users. The findings and recommendations can be useful for developing countries with similar conditions.

Keywords: ERP, Organization, Culture, Developing Country, User Satisfaction, Hofstede

1. INTRODUCTION

Enterprise Resource Planning (ERP) software has been implemented by organizations in industrialized countries such as the United States, Greece, and Finland [26] [30] [23]. Currently, many organizations in developing countries such as China, Thailand, Egypt, and Jordan have also

accelerated the implementation of ERP systems [12] [28] [33] [1] [40]. According to AMR Research (2005), the five biggest ERP vendors—SAP, Oracle (which bought PeopleSoft, J.D. Edwards), Sage Group, Microsoft's Business Solution Group, and SSA Global (which bought Baan)—accounted for 72 percent of a \$23.6 billion business in 2004. Moreover, AMR has also predicted that the growth would rise from 2004 through 2011 around 11 percent compound annual growth rate [30]. The economic growth of developing countries in Asia, Latin America, and Eastern Europe has made these regions become major targets of ERP software vendors [33] [6] [32]. Nevertheless, the implementation of ERP systems in developed and developing countries are unlikely to follow the same implemented model since labor cost, skill base, research and development capacity, infrastructure, and government of the two groups are significantly different. For example, the Internet infrastructure of Thailand (as a developing country) is far different from that of the USA (which is a developed country) because 24.4% of Thai population in 2008 is Internet users [24], while 74.1% of the US population is Internet users [18] [19]. However, the industrial production growth rate of Thailand is much higher than that of the USA since the industrial production growth rate of Thailand is 5.4%, while that of the USA is 0.5% [19].

2. LITERATURE REVIEW

According to Kanthawongs & Kini (2003), Huang & Palvia's (2001) framework model for examining ERP implementation issues in advanced and developing countries may need to be refined as only certain organizational factors may show connections with ERP implementation framework. To illustrate, *Management commitment, IT maturity, and computer culture* tend to

show positive connection with ERP systems [27] [28]. Nevertheless, *regions* of companies' locations are likely to be related to ERP system implementation framework. On one hand, *business size* is likely to show positive relationship with ERP systems implementation because medium and small sized enterprises claim to ally among themselves in order to increase the bargaining power as groups of customers with the software vendors. On the other hand, *business size* is likely to bring negative impact on ERP systems implementation since medium and small sized enterprises typically lack qualified team members in implementing the ERP projects. Additionally, *Business Process Redesign (BPR) Experience* factor is unlikely to produce identical and consistent patterns toward ERP implementation because firms address such issues differently, one firm views it positively: "If a company is familiar with BPR, it is highly likely that it will be successful in ERP implementation." However, some firms express a negative relationship, "...Each unit should consider how their works affects work in other departments. Now, we have problems with the frame of our ERP. ERP system forces us to work in certain ways. But, our users do not follow ERP system and are trying to work around the system with their old & own ways of doing" [28]. Therefore, organizational environment, including *management commitment, business size, BPR experience, IT maturity, and computer culture*, may related to ERP implementation framework.

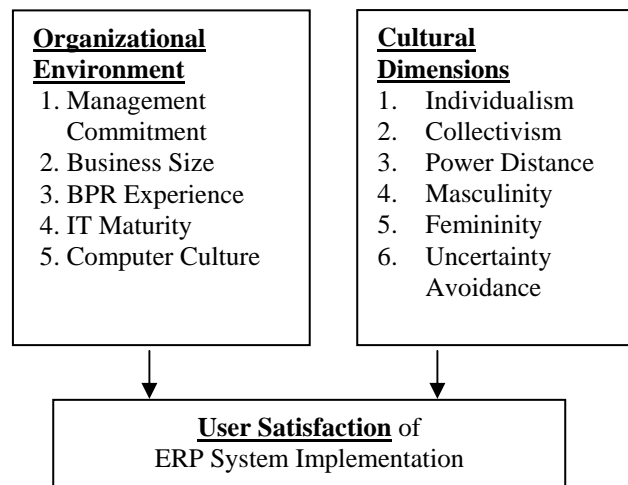
Furthermore, many studies have pointed out that the popular ERP packages developed by Western countries, though based on good business models, may not fit the requirements of other organizations. For example, Soh et al. (2000) emphasizes that the "misfit" examples should be recognized in the unique Asian context when adopting ERP systems, especially when the business models originated from Western practices. Specifically, they suggest that the specific data, functional, and output issues are the basic categorization of misfits in the Asian context. Ngai et al. (2008) found empirical support for the impacts of CEO-IT distance on senior management support of IT of Western origin, while the relationship was not supported for the Asian firms operating in Hong Kong. The ERP implementation in China has not fully perceived as positively by Chinese managers and end-users as it is by their business counterparts in the USA [13].

Therefore, many studies provided evidence that national cultural issues are significantly related to ERP system implementation [2] [21] [27] [33] [1]. Hofstede [14] [15] [16] defined national culture as the collective programming of the mind which distinguished the inhabitants of one country from another. Fundamental values, beliefs, and norms in different countries are likely to affect the practices of professional activities, including ERP implementation. For instance, similar to many developing countries, Jordanian employees were threatened because they had a lot of uncertainty and anxiety (high *uncertainty avoidance*) toward the ERP projects. They resisted the project since they viewed that the projects would change their jobs. Also, Jordanians also accepted high *power distance* since the ERP project managers stated that managers were unhappy with the idea of sharing information among the subordinates, the managers requested for restricted access to information for themselves [1]. Moreover, if managers in China could

enthusiastically communicate with their subordinates the benefits and capabilities in implementing ERP systems (high *collectivism*), the organizations should successfully adopt the systems [11]. Egyptian culture hindered the ERP implementation success such as "centralized decision making, hierarchical structure, loose lateral links, and ill-defined documentation cycle" [33]. Therefore, the beliefs and attitudes of *individualism, collectivism, power distance, masculinity, femininity, and uncertainty avoidance* may be related to the implementation of ERP systems.

User satisfaction with technology has been widely used indicators of success of information systems research [37] [33] [36] [8] [13]. If people have positive attitudes about a technological application, they are likely to behave in ways that enable them to get benefit from it. Recognizing the importance of people in ERP implementation, people related measure is user satisfaction [25]. Satisfaction with technology is viewed by the respondents' belief that the ERP system is able to provide integrated, accurate, timely, and reliable information to the respondents and whether they believe that the new system is better than the one it is replacing [13]. User Satisfaction is also concerned with the interaction between the information produced by the system and the recipients [1].

Therefore, the purpose of this study was to explore *organizational and cultural factors* relating to *user satisfaction* of ERP system implementation framework in a developing country such as Thailand. The proposed model for the study is as follows:



3. RESEARCH METHODOLOGY

Since the focus of this research study was an exploratory research, an in-depth case study approach was applied. Case research has been shown to be particularly appropriate for exploratory research of this nature [22]. Case analysis and cross-case analysis have proved to be particularly effective [17] [35]. The data collection was undertaken through interviews and reviews of secondary documents. The first author of this study's teams conducted a set of interviews with key persons involved in ERP implementations in Thailand as parts of the major project assignment in the course, BA616: Information Technology, M.B.A. level, instructed by the researcher for

two semesters at Bangkok University [10] [29] [33] [20] [31] [5] [39] [3]. Every team was instructed, trained, and graded for class scores in order to thoroughly understand definitions and concepts of the past literature related to all domains of knowledge for this study. The eight ERP software's customers in Thailand were chosen as the case studies for this research. The eleven semi-structured interviews were performed to reveal information related to impact of ERP issues on *user satisfaction* of ERP system implementation. The interviews were performed during the period of April 2007 to April 2008. To maintain confidentiality, the names of the case sites were not included; the names of respondents were disguised; and the names of the software vendors and consultants were omitted.

4. FINDINGS

The results from the interviews obtaining through the analytical process described in the preceding section are presented in Table 1: Company Information.

Table 1: Company Information

Respondents' Titles	Company (ies)
1. Director of the Port Operation and Product	1
2. Assistant Director of the Port Product	1
3. Human Resources Manager	1
4. Assistant Vice President of Information Services	1
5. Information Services Officer	1
6. System Engineer	1
7. Senior Staff IT Systems	1
8. Senior Staff System Section	1
9. Accounting and Finance Department Senior Manager	1
10. Accounting Officer	1
11. Assistant Director of Finance	1
Number of Employees for ERP Projects	
< = 99	1
> 99	4
Adopted ERP modules	
Financial and Managerial Accounting	3
Material or Warehouse Management	2
Human Resources	2
Maintenance or Repair	2
Management Information Systems	2
Operations and Logistics	1
Sale & Marketing	1
Procurement	1

Company Type/ Software Used/ Business Size

1. The Port Service Company/ Software No. 1 / Large Size Enterprise
2. The Automotive Component Company/ Software No. 3 / Medium Size Enterprise
3. The Retailer Company/ Software No. 1 / Large Size Enterprise
4. The Fashioned Dress Company/ Software No. 3 / Small Size Enterprise

5. The Electronic Equipment Parts Company/ Software No. 3 / Large Size Enterprise
6. The Car Company/ Software No. 1 / Large Size Enterprise
7. The Retail Agent Company/ Software No. 1 / Large Size Enterprise
8. The Public Industrialized Company/ Software No. 1 / Large Size Enterprise.

The important findings are:

1. **Positive Relationship between Management Commitment & User Satisfaction** [41] [28] [27] [12] [13] [25] [1]. The frequency of the comments in this category is eight. For example,
 - 1.1 "The executives decided to purchase the expensive ERP system in order to help fasten the operation processes and increase efficiencies,"
 - 1.2 "The executive were quite satisfied with the ERP consultant company,"
 - 1.3 "Our executives highly support the use of ERP software and even play major roles in solving conflicts in departmental levels."
2. **Negative Relationship between Management Commitment & User Satisfaction** [41] [28] [27] [12] [13] [25] [1]. The frequency of the comment in this category is one; for example, "The executives were dissatisfied with the ERP vendor because slow progress and costly investment."
3. **Positive Relationship between Small/ Medium Business Sizes & User Satisfaction** [41] [28] [27] [12] [13] [25] [1]. The frequency of the comments in this category is four. For instance,
 - 3.1 "Our organization has tried to reduce the number of employees by implementing more computer work,"
 - 3.2 "Our small numbers of people in our organization use the ERP systems."
4. **Positive Relationship between Large Business Size & User Satisfaction** [41] [28] [27] [12] [13] [25] [1]. The frequency of the comments in this category is four. For instance,
 - 4.1 "Since there is a lot of information involved in our operation now, so ERP will help create central database,"
 - 4.2 "Business size affected the system selection stage because small size enterprises lacked sufficient investment fund for such expensive ERP software."
5. **Positive Relationship between BPR Experience & User Satisfaction** [41] [28] [27] [12] [13] [25] [1]. The frequency of the comments in this category is six. For instance,
 - 5.1 "We used to change from an old system to a new ERP system once, then that experience helped us dealt with the new ERP system,"
 - 5.2 "We had 2-3 major changes in our systems before, so adopting ERP system helped us shorten our work processes,"
 - 5.3 "Having experience from BPR for 2 times (due to software change) would allow employees to realize their needs to change the way they work,"
 - 5.4 "If private companies can do better business

processes for our systems, we will outsource to the private companies to build the systems, ”

- 5.5 At first, many key ERP systems’ users did not like the system, and then change management team managed all departments to use it and listen to complains to improve work efficiencies.”
6. **Negative Relationship between BPR Experience & User Satisfaction** [27] [28]. The frequency of the comments in this category is two; for example, “Our company is so big that we hardly make any change to our systems.”
7. **Positive Relationship between IT Maturity & User Satisfaction** [41] [28] [27] [12] [13] [25] [1]. The frequency of the comments in this category is eight. To illustrate,
 - 7.1 “We have many state-of-art hardware, software, and network for our operations, ”
 - 7.2 “We build our own infrastructure for our domestic and international locations with lease line network speed at 2Mbps.”
8. **Positive Relationship between Computer Culture & User Satisfaction** [41] [28] [27] [12] [13] [25] [1]. The frequency of the comments in this category is eight. To illustrate,
 - 8.1 “Now, our new employees can easily adopt the use of computers, but some of our old employees may resist using computers,”
 - 8.2 “Our goal to have all employee do online self service,”
 - 8.3 “Our ERP users who can fully utilize computers are quite satisfied with the system especially it helps fasten their work processes.”
9. **Negative Relationship between Computer Culture & User Satisfaction** [41] [28] [27]. The frequency of the comment in this category is four; for example, “Some of our ERP users do not like to use computers and have limited English language skills; they tend to resist using the system.”
10. **Positive Relationship between Individualism & User Satisfaction** [33] [1]. The frequency of the comments in this category is two. To clarify,
 - 10.1 “Our company philosophy is that employee should rely on oneself in a certain level,”
 - 10.2 “During systems selection process, IT department was solely empowered to make decision in choosing ERP software for the company.”
11. **Positive Relationship between Collectivism & User Satisfaction** [11] [12] [33] [1]. The frequency of the comments in this category is six. For example,
 - 11.1 “We tend to do work as a team more than individuals,”
 - 11.2 “Our work system supported teamwork because all business processes were linked.”
12. **Negative Relationship between Power Distance & User Satisfaction** [12] [33] [1] [13] [1]. The frequency of the comments in this category is three; for example, “We have a long chain of commands, so this cause trouble in implementing ERP systems sometimes.”
13. **Positive Relationship between Power Distance & User Satisfaction** [11] [12] [33] [1]. The frequency of the comments in this category is four. For example,
 - 13.1 “The executives pay close attention and help our ERP users to satisfactory work with the system,”
 - 13.2 “Top executives could exercise control of the ERP project directly to all divisional boundaries.”
14. **Negative Relationship between Masculinity & User Satisfaction** [12] [25] [33] [1]. The frequency of the comments in this category is five. For instance,
 - 14.1 “Now our employees complained often how ERP have slowed their work processes,”
 - 14.2 “Dissatisfied ERP users were giving 6 months training program,”
 - 14.3 “With the previous system, we input our data once, with Software No. 1 was in place, we input our data 3 times for each of 20-items.”
15. **Positive Relationship between Femininity & User Satisfaction** [12] [25] [33] [1]. The frequency of the comments in this category is four. For example,
 - 15.1 “Many departments who could adjust to the ERP system were quite satisfied with the efficiency and effectiveness of the system,”
 - 15.2 “If there are problems in using the system, we will talk in the committees’ meetings.”
16. **Negative Relationship between Uncertainty Avoidance & User Satisfaction** [25] [1]. The frequency of the comment in this category is five; for instance, “Our employee tend avoid uncertainty in a way that they do not want to deal with the new ERP systems, but rather want to go back and use the old system instead.”

5. DISCUSSIONS AND RECOMMENDATIONS

The findings confirm the past literature that giving the complexity and resource requirements, **(1.1) management commitment** is considered a key to ERP implementation in developing countries. Moreover, top management must involve allocating valuable resources to the implementation effort because ERP projects span divisional boundaries and affect many stakeholders in an organization. Then, senior executives need to mediate between various interest groups to resolve political conflicts when necessary. The high level of **(1.2) IT maturity** can significantly influence an organization’s strategic decision in acquiring and deploying IT/IS. A company with strong **(1.3) computer culture** would have better understanding of application functionality, data management, and more satisfactions with ERP systems. A company with richer experience in **(2.1) BPR** is more likely to succeed with ERP. The **(2.2) collectivism** of ERP teamwork and composition is another critical issue for ERP implementation’s satisfaction. The project team should be composed of both IT and business experts from within the implementation company or from an external consultancy to have an effective and fast decision maker. Moreover, the key member of the project team must be empowered. The dissatisfactions from being **(3) masculinity** with the ERP software should be solved because the software slow down the regular work processes and create work redundancy. Parallel run between the old and the new ERP systems may be applied in order to solve negative reactions from high **(4)**

uncertainty avoidance of to boost developing country's users confidence and familiarity.

6. CONCLUSIONS

This study reveals variables, which seem to play crucial roles in ERP implementation projects in developing country such as Thailand. Like most other developing countries, the ERP projects must receive approval and support from *top management* before it can be implemented. The level of *IT maturity* and *computer culture* can significantly influence an organization's strategic decision in implementation of ERP. A company with richer experience in *business process redesign experience (BPR)* is more likely to succeed with ERP. More companies reveal *collectivism* in implementing ERP projects rather than individualism. Solving *masculinity* of users may lead to more satisfactions toward ERP implementation. Once implementing ERP projects, ERP users tend to make sure they familiar and have confidence in using the systems. Last but not least, implications for future researches are quantitative researches for ERP implementation and evaluation in Thai context. The findings from this study can be very useful in the ERP adoption decisions of other emerging countries such as Hungary, Poland, Czechoslovakia, and Bulgaria, as these countries move towards more networked economies. This research is subject to a possible threat of external validity since the total sample size of 8 companies may still be small. Future studies also include comparative studies of ERP implementation between developing and developed countries.

7. REFERENCES

- [1] A. Hawari & R. Heeks, "Explaining ERP Failure in a Developing Country: a Jordanian Case Study", **Journal of Enterprise Information Management**, Vol. 23, No. 2, 2010, pp. 35-160.
- [2] A. Trompenaars, *Riding the Waves of Culture*, London: **Economist Books**, 1993.
- [3] A. Wankavisan, P. Charoenbongkot, M. Wongwatthanapong, W. Eamlaor, & K. Charoennun, (Interview Team), *The Electronic Equipment Parts Company*, 2008.
- [4] AMR Research. "ERP Market Grew Solidly in 2004, AMR Research Says", Retrieved September 20, 2008, from **AMR Report**, 2005, Web site: <http://www.itjungle.com/two/two062205-story04.html>
- [5] B. Sopolwasu, B. Boonviset, W. Nakpet, P. Kaokeaw, & S. Preyanon, (Interview Team), *The Public Industrialized Company*, 2008.
- [6] Business News Americas, "ERP Market Moves US\$620mn in 1H09 – Brazil", Retrieved February 20, 2010 from **Business News Americas Report**, 2010, Web Site: http://www.bnamericas.com/news/technology/ERP_market_moves_US*620mn_in_1H09
- [7] C. P. Holland, B. Light, & N. Gibson, "A Critical Success Factors Model for Enterprise Resource Planning Systems Implementation", presented at **7th European Conference on Information Systems**, Copenhagen, 1999.
- [8] C. Petter, W. H. Delone, & E.R. Mclean, "Measuring Information Systems Success: Models, Dimensions, Measures, and Interrelationships", **European Journal of Information Systems**, Vol 17, No. 3, pp. 236-63.
- [9] C. Soh, S.S. Kien, & J. Tay-Yap, "Cultural Fits and Misfits; Is ERP A Universal Solution?", **Communications of the ACM**, Vol. 43, No. 4, 2000, pp. 47-51.
- [10] D. Jaiwung, A. Kengnoi, T. Suwannachai., & P. Samakkamai, (Interviewer Team), *The Port Service Company*, 2007.
- [11] E. Bendoly, D. G. Bachrach, H. Wang, S. Zhang, "ERP in the Minds of Supervisors Joint Roles of Task Interdependence and Cultural Norms", **International Journal of Operations & Production Management**, Vol. 26, No. 5, 2006, pp. 558-578.
- [12] E.W.T. Ngai, C.C.H. Law, & F.K.T. Wat, "Examining the Critical Success Factors in The Adoption Of Enterprise Resource Planning", **Computers in Industry**, Vol. 59, 2008, pp. 548–564.
- [13] F. Lin & C.E. T. Rohm, "Managers' and end-users' concerns on innovation implementation: a Case of an ERP implementation in China", **Business Process Management Journal**, Vol. 15, No. 4, 2009, pp. 527-547.
- [14] G. Hofstede, "Dimensions of National Culture in Fifty Countries and Three Regions", **Cross-Cultural Psychology**, 1983, pp. 333-55.
- [15] G. Hofstede, "The Cultural Relativity of the Quality of Life Concept", **Academy of Management Review**, Vol. 9, No. 3, 1984, pp. 389-398.
- [16] G. Hofstede, **Cultures and Organizations**, London: McGrawHill, 1991.
- [17] GlobalEdge. Retrieved February 20, 2010, from **GlobalEdge Report**, 2010, Web Site: <http://globoledge.msu.edu/countries/countrycomparator.asp?Year=2008&Countries=175&Countries=3&Stats=3>
- [18] Internet World Stats. "Internet Usage and Population in Asia". Retrieved February 20, 2010, from **Internet World Stats Report**, 2010, Web site: <http://www.internetworldstats.com/stats3.htm>
- [19] Internet World Stats. "Internet Usage and Population in North America". Retrieved February 20, 2010, from **Internet World Stats Report**, 2010, Web site: <http://www.internetworldstats.com/stats14.htm>
- [20] K. Santhaveesuk, P. Santhaveesuk, Y. Tasaneesriwong, P. Ritthongchailerd, & W. Thongsima, (Interview Team), *The Retailer Company*, 2008.
- [21] M. Krumbholz & N. Maiden, "The Implementation of Enterprise Resource Planning Packages in Different Organizational And National Cultures", **Information Systems**, Vol. 26, 2001, pp. 185–204.
- [22] M. Newman & R. Sabherwal, "Determinants of Commitment to Information Systems Development: a Longitudinal Investigation", **MIS Quarterly**, Vol. 20, 1996, pp. 23-55.
- [23] M.A. Rothenberger, "The Impact of Project Team Attributes on ERP System Implementations", **International Technology & People**, Vol. 23, No.1, 2010, pp. 80-109.
- [24] Nectec. "Internet User in Thailand". Retrieved

- February 20, 2010, from **Nectec Report**, 2010, Web site:
<http://internet.nectec.or.th/webstats/internetuser.iir?Sc=internetuser>
- [25] O.Y. Saatcioglu, "What Determines User Satisfaction in ERP Projects : Benefits, Barries or Risks?", **Journal of Enterprise Information Management**, Vol. 22, No.6, 2009 pp. 690-708.
- [26] P. Ifinedo, "Interactions between Contingency, Organizational IT Factors, and ERP Success", **Industrial Management & Data Systems**, Vol. 109, No. 1, 2009, pp. 118-137.
- [27] P. Kanthawongs & F. F. Nah, "A Comparative Study of Factors Influencing ERP Systems Implementation Framework between a Developing Country and a Developed Country: Case Studies from Thailand and the USA", Proceedings of the **2004 IRMA International Conference: Innovations Through Information Technology**, Louisiana, USA, pp. 1132-1134.
- [28] P. Kanthawongs & Kini, R. B.. "A Study of Factors Influencing ERP Adoption Framework and Evaluation in a Developing Country: Case Studies from Thailand", Proceedings of the **10th European Conference on Information Technology Evaluation**, Madrid, Spain, 2003. pp. 387-396.
- [29] P. Lohawatnawasee, S. Wongkittiwat, T. Wirunrat, & S. Prasobthai, (Interviewer Team), The Automotive Component Company, 2007.
- [30] P. Longinidis & K. Gotzamani, "ERP User Satisfaction Issues: Insights from a Greek Industrial Giant", **Industrial Management & Data Systems**, Vol. 109, No. 5, 2009, pp. 628-645.
- [31] R. Srisakul, P. Leelasunthornwatthana, J. Boonyapisomparn, R. Lukanakul, P. Siriratchaneekorn, & J. Rattanaramik, (Interview Team), The Car Company, 2008.
- [32] Report Linker, "Romania Information Technology Report Q1 2010", Retrieved February 20, 2010 from **Report Linker Report**, 2010, Web Site:
<http://www.reportlinker.com/p0178055/Romania-Information-Technology-Report-Q1-2010.html>
- [33] S. E. Sawah, A. A. E. F. Tharwat and M. H. Rasmy, "A Quantitative Model to Predict the Egyptian ERP Implementation Success Index", **Business Process Management Journal**, Vol. 14, No.3, 2008, pp. 288-306
- [34] S. E. Sawah, A. A. E. F. Tharwat, & M. H. Rasmy, "A Quantitative Model to Predict the Egyptian ERP Implementation Success Index", **Business Process Management Journal**, Vol. 14, No. 3, 2008, pp. 288-306.
- [35] T. S. Waring & D. Wainwright, "Integrated Information Systems: Rhetoric and Reality", Presented at **5th UK AIS Conference**, Cardiff, 2000.
- [36] W. H. Delone & E. R. Mclean, "The Delone and Mclean Model of Information System Success: A Ten-Year Update", **Journal of Management Information Systems**, Vol. 19, No. 4, 2003, pp.9-30.
- [37] W. J. Doll, W. Xia, & G. Torkzadeh, "A Confirmatory Factor Analysis of the End-User Computing Satisfaction Instrument", **MIS Quarterly**, 1994, pp. 453-461.
- [38] W. Larbaekudom, S. Kumsap, T. Srinoun, T. Saeteng, N. Tosumree, & S. Wungsalun, (Interview Team), The Fashioned Dress Company, 2008.
- [39] W. Tongaop, Y. Wongorn, K. Wanichwatthana, & K. Jungsombat, (Interview Team), The Retail Agent Company, 2008.
- [40] World Bank, "Country Groups", Retrieved February 20, 2010 from **World Bank Report**, 2010, Web Site:
<http://go.worldbank.org/D7SN0B8YU0>
- [41] Z. Huang & P. Palvia, "ERP Implementation Issues in Advancedand Developing Countries", **Business Process Management Journal**, Vol. 7, No. 3, 2001, pp. 276-284.