

**FACTORS THAT INFLUENCE THE USE OF E-  
PROCUREMENT IN MANUFACTURING SMEs AT  
NORTHERN REGION**

**SITTI AMINAH BAHARUDDIN**

**MASTER OF SCIENCE MANAGEMENT  
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**By**

**SITTI AMINAH BAHARUDDIN**

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## **Abstract**

E -procurement is one of the ranges of government measures to facilitate the process of purchasing goods online. E -procurement is an important aspect for manufacturing companies to improve the buying process in their supply chain while improving the performance of their companies. With the advancement of internet technology, it can be used in all places, including in the company or business. Small Medium Enterprise is a major contributor to the national economy. SME provide business opportunities and increase Gross Domestic Product by the opportunity given to the local community. The use of e -procurement within the company allows them to reduce costs and save time in purchasing process. E -procurement introduced by the government in 2000 under the MSC Flagship. In this study, researchers conducted a study on the factors influencing the use of e -procurement in the manufacturing SMEs in the northern corridor. In this study, TAM model is used to study the factors that influence the use of e -procurement. Among the factors that influence the use is perceive ease of use, perceive usefulness, attitude and behavioral intention. In this study, researchers used SPSS 20 to analyze the data and using nonparametric statistics to measure the influence and strength of the relationship between the independent variables.

Key words: E-procurement, theory TAM, Small and Medium Enterprise

## Abstrak

E-perolehan merupakan salah satu langkah kerajaan bagi memudahkan proses pembelian barangan secara atas talian. E-perolehan ini merupakan aspek yang penting kepada syarikat pembuatan bagi memperbaiki proses pembelian dalam rantai pembekal mereka sekaligus mempertingkatkan lagi pencapaian syarikat mereka. Dengan kemajuan teknologi internet, ianya dapat digunakan di kesemua tempat termasuk dalam syarikat mahupun perniagaan. Perusahaan Kecil Sederhana (PKS) merupakan satu daripada penyumbang utama kepada ekonomi negara. PKS memberi peluang peniagaan dan meningkatkan kadar Keluaran Dalam Negara Kasar melalui peluang yang diberikan kepada masyarakat setempat. Penggunaan e-perolehan dalam syarikat membolehkan mereka mengurangkan kos dan menjimatkan masa pembelian barangan. E-perolehan diperkenalkan oleh kerajaan pada tahun 2000 di bawah *MSC Flagship*. Dalam kajian ini, pengkaji menjalankan kajian terhadap faktor yang mempengaruhi penggunaan e-Perolehan dalam syarikat pembuatan PKS di kawasan koridor utara. Dalam kajian ini, model TAM digunakan untuk mengkaji faktor yang mempengaruhi penggunaan e-perolehan. Antara faktor yang mempengaruhi ialah kegunaanya, kemudahan penggunaan, sikap dan tingkah laku niat. Dalam kajian ini pengkaji menggunakan SPSS 20 untuk menganalisis data serta menggunakan kaedah non-parametrik bagi menganalisis dapatan kajian ini.

Kata kunci : E-Perolehan, model TAM, Indusri Kecil Sederhana

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## LIST OF ABBREVIATION

### Abbreviation

BNM	Bank Negara Malaysia
CEC	Communication of the European Communities
ELX	Electronic Labor Exchange
e-MRO	Electronic maintenance, repair and operating
EP	Electronic procurement
ERP	Web-based enterprise resource planning
e-SERVICE	Electronic Services
GDP	Gross Domestic Product
GOE	Generic Office Environment
HRMIS	Human Resource Management
ICT	Information and Communication Technology
IT	Internet Technology
JPY	Japanese Yen
KRW	South Korea Won
MSC	Multimedia Super Corridor
MYR	Malaysia Ringgit
MSIC	Malaysian Standard Industry Classification
NSDC	National SME Development
ONS	Office for National Statistic
Pikom	National ICT Association of Malaysia
PMS	Project Monitoring System
R&D	Research and Development
SDG	Singapore Dollar
SME	Small and Medium Enterprise
SMIDEC	Small Medium Industry Development Corporation
THB	Bath Thailand
TRA	Theory of Reasonable Action
TAM	Theory Acceptance Model
TPB	Theory Perceive Behavior
WWW	World Wide World

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of study**

Electronic procurement or e-procurement is an Internet Technology (IT) application which is to be uses internet function. It is a procurement system which enables supplier to sell their product and services to the online shopper. By using this system, it can also link buyer and also supplier relationship. The internet usage in Malaysia has nowadays becomes more important to various industries and also to Small Medium Enterprise (SME).

The use of e-commerce is very popular among consumers regardless of an individual or even a company that is use general and applies to almost all over the world. E-commerce is one of the applications that are used to save time in conducting a business. The Malaysian government's e-procurement system was implemented in 1990. According to Dato' Seri Abd Rahman Maidin, former president of the Malay Chamber of Commerce Malaysia, e-commerce suits the current business trend which necessitates businessman to change their traditional business method into e-business. At the same time, e-procurement can enhance corporate productivity through more reaching market over the internet.

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## Reference

- Abdullah, M.A. (2002) 7 An Overview of the Macroeconomic Contribution of SMEs in Malaysia. The role of SMEs in national economies in East Asia. No. 2 pp.181
- Aboelmaged, M. G. (2010). Predicting e-procurement adoption in a developing country: an empirical integration of technology acceptance model and theory of planned behavior. *Industrial Management & Data Systems*. Vol. 110 No. 3 pp. 392-414.
- Afshar, A. J., Zhang, S. X., Brem, A. (2013) E-commerce for SMEs: empirical insights from three countries. *Journal of Small Business and Enterprise Development*. Vol. 20, No. 4 pp, 849-865
- Alam, S. S., Adoption of internet in Malaysian SMEs. *Journal on Small Business and Enterprise Development*. Vol. 16 No. 2. pp. 240-255
- Alam. S.S., Jani, M.F.M., Omar, N.A., Hossain, T (2012). Empirical study of Theory of Reason Action (TRA) model for ICT adoption among the Malay based SMEs in Malaysia. *Journal Business Management and Strategy*. Vol. 3, No. 2, pp. 43-53
- Ali, K., Thyagarajan, V., Seetharaman, A. (2003) E-commerce in Malaysia : Perceive Benefit and Barrier, *Vikapla*, Vol. 28, No 3
- American Psychological Association (2012). *Publication Manual of The American Psychological Association*. Sixth Edition. American Psychological Association
- Ann, T. K. and Jason, G (2006), Problem with traditional procurement in the Malaysian construction industry – A survey. In runeson, Goran and Best, Rick, Eds.

Proceedings Australasian Universities Building Educators Association Annual Conference, pages pp. 1-21, University of Technology, Sydney.

Aris, N.M (2007). SMEs: Building Blocks for Economic Growth

Ajzen I (1991). The theory of planned behavior. *Journal Organizational Behavior and Human Decision Processes*. Vol.50. No 2. pp 179-211

Ajzen, I and Fishbein, M (1980). *Understanding attitudes and predicting social behavior*: fs, NJ: Practice Hall.

Al-Ghatanni, S and King, M (1999). Attitude, Satisfaction and Usage Factor Contributing to Each of the Acceptance of Information Technology. *Journal of Behavior and Information Technology*. Vol. 18 No.4 pp. 227-297

Albano, Gian-Luigi, Dini, Federico, Zampino, Roberto and Fana, Marta (2008). “ The Determinant of Supplier Performance in E-procurement: Evidence from the Italian Government’s E-procurement Platform”, FEEM Working Paper. No 49.

Asian Development Bank, Inter-American Development Bank and World Bank (2004). Strategic electronic government procurement- strategy overview: an introduction for executive. Washington, DC: World Bank

Barker, N (1994). The internet as a reach generator for small business. Unpublished master thesis, Universiti of Durham.

Bartels, A, Hudson, R and Pohlmann, T (2003). ISM/Forrester Report on Technology in supply management, TechStretegy. pp.1-9



- Barua, A., Konana, P., Whinston and A.B., Yin, F. (2001) Driving e-business excellence. Sloan Management Review. pp. 36-44
- Benmati, J. and Rajkumar, T.M (2002), “A design of an empirical study of the applicability of the Technology Acceptance Model to Outsourcing Decision”. pp. 52-54
- Bhatti, T. (2007). Exploring Factors Influencing the Adoption of Mobile Commerce. *Journal of Internet Banking and Commerce*. Vol.12 No 3, pp.1-13.
- Blackburn, R and Athayde, R (2000), “Making the connection: The effectiveness of Internet training in small business, education and Training”. Vol.42. No 4/5, pp.289-299
- Bruner, G. C., & Kumar, A. (2005). Explaining consumer acceptance of handheld internet devices. *Journal of Business Research*, Vol.58. No 5, pp 553-558.
- Cagliano, R., Caniato, F and Spina, G. (2003), “E-Business strategy: how companies are shaping their supply chain through the internet”, *International Journal of Operation & Production Management*, Vol.23 No. 10, pp. 1142-1162
- Carayannis, E.G., et al., 2001. Service sector productivity: B2B electronic commerce as a strategic driver. *Journal of Technology Transfer* Vol.26 No.4
- Chang H-L, Wang K, Chiu I (2008) Business IT fit in e-procurement system: evidence from high technology firms in China. *Information System Journal*. Vol. 18 No.4 pp. 381-404

- Chong, A.Y.L., Ooi, K.B., Lin, B., & Tang, S.Y. (2009). Influence of interorganization relationship in SMEs e-Business adoption. *Internet Research*. Vol.19 No.3 pp.313-331.
- Chong, A.Y.L., Ooi, K.B and Sohal, A. (2009). The relationship between supply chain factors and adoption of e-Collaboration tools: An empirical examination International Journal of Production Economics. Vol.122 No. 1 pp. 150-160
- Chung, M and Liao, Z (2003), "Supply side hurdle in internet B2C e-commerce: an empirical investigate", *IEEE Transaction on Engineering Management*, Vol. 50 No 4 pp.458-69
- Cloete, E. and Courtney, S. (2002). Small business acceptance and adoption of e-commerce in the Western-Cape province of South –Africa. *Journal of Information System*. Vol. 10, No. 4, pp. 1-13
- Cockburn, C., & Wilson, T.D. (1995). Business use of the World-Wide Web. Retrieved September 29,2002 from web: <http://information.net/ir/1-2/vapero.html>
- Croom, S.R (2000). "The Impact of Web-Based Procurement on the Management of Operating Resource Supply". *The Journal of Supply Chain Management*, Vol.36 No.1, pp. 4-13
- Croom S.R. (2005) The impact of e-business on supply chain management: An empirical study of key development. *International Journal of Operations and Production Management*. Vol. 25 No.1 pp.55-73.

- Cronin, B., Overfelt, K., Fouchereaux, K., Manzvanvike, T., Cha, M., & Sona, E. (1994).  
The Internet and competitive intelligence: A survey of current practice:  
*International Journal of Information Management*, Vol. 14, pp. 204-222
- Daud, N. M., Mohammad, N., Azmi, A.E., Mohamed, I. S (2013). Factor influence the  
usage of E-procurement among contractor companies in Malaysia. Vol.4 No 3&4,  
pp. 62-80
- Davila A, Gupta M, and Palmer, R.J (2003). Moving Procurement System to the Internet:  
The Adoption and Use of E-procurement Technology Models. *Europe  
Management Journal*, Vol 21 No.1 , pp. 11-23
- Davis, F.D , Bagozzi, R.P and Warshaw, Paul R (1989). User Acceptance of Computer  
Technology: A Comparison of Two Theoretical Models. *Management Science*,  
Vol.35 No.8, pp. 982-1003
- Davis Fred D. (1989). “ A technology Acceptance Model for Empirically Testing New  
End User Information System: Theory and Result”. Doctoral Dissertation, Sloan  
School of Management Massachusetts Institute of Technology.
- Davis, Fred D (1989). “Perceive Usefulness; Perceive Ease of Use and User Acceptance  
of Information Technology” *MIS Quarterly*, Vol.13, No. 3, pp 329-340
- De Boer, L, Harink, J and G Heijboer (2002) “A conceptual mode for assessing the  
impact of e-procurement”, *European Journal of Purchasing and Supply Chain  
Management*, Vol.8 No.1 pp. 25-33

- Dyer, J.H., Kale, P. and Singh, H. (2001), "How to make strategic alliances work", *Sloan Management Review*, No. Summer, pp. 37-43.
- Fishbein, M and Ajzen, I (1987). *Belief, attitude, intention and behavior: an introduction to theory and research*. Addison Welsey, Reading, MA.
- Gattiker, U.E., Perlusz, S., Bohmann, K. (2000). Using the internet for B2B activities: a review and future direction for research. *Journal Internet Research: Electronic Network Application and Policy*. Vol.10 No 2. Pp. 126-140
- Halal, W.E (2003). The information technology evaluation. Computer hardware, software and services in to the 21<sup>st</sup> century. *Technology Forecasting and Social Change*, Vol.44 No.1 pp. 69-86.
- Hansan, H. and Tibbits, H. (2000), Strategic management of electronic commerce: an adaptation of the balanced scorecard, *Internet Research*, Vol. 10 No. 5, pp. 439-50.
- Harrison, D. A., Mykytyn, P. P., & Riemenschneider, C. K. (1997). Executive decision about adoption of information technology in small businesses: Theory and empirical test. *Information System Research*. Vol.8. No 2, pp. 171-195.
- Hashim, J. (2007), Information Communication technology (ICT) adoption among SME owner in Malaysia, *International journal of Business and Information*, Vol. 2, No.2, pp. 221-240.
- Hashim, R. and Yusof. A (1999). Internet in Malaysia [online]. Interasia. Available from: <http://www.interasia.org/malaysia/hashim-yusof.html> [accessed 27 March 2001]

- Howard, M., Vidgen, R. and Powell, P. (2006), "Automotive e-hubs: exploring motivations and barriers to collaboration and interaction", *Journal of Strategic Information Systems*, Vol. 15 No. 1. pp. 51-75
- Ismail, M. (2012) Factor influence consumer acceptance of mobile marketing services.
- Kalakota, R., & Robinson, M., (1999). E-busines: Roadmap for Success. Addison Wesley
- Khalil, M. N., and Pearson, J. M (2008). An exploratory Study into the adoption of Internet Banking in a Deveoping Country: Malaysia. *Journal of Internet Commerce*. Vol.7 No.1 pp. 29-73
- Khu, S.E., Husain, W., Mustaffa, N., (2012) Survey on benefit and barrier of E-Procurement: Malaysia SMEs perspective. *International Journal in advance Science Engineering Information Technology*, Vol.2 No.6 pp. 14-19.
- Kotelnikov, V. (2007). Small and Medium Enterprise and ICT. Asia Pacific development programmed (UNDP-APDIP), pp. 1-12
- Lin, H.H., Wang, Y.S. (2005). Predicting consumer intention to use mobile commerce in Taiwan. International Conference on Mobile Business. *Journal of information technology*. pp. 1-7
- Lu, L., & Ling, S. (2009). Adoption intentions of Taiwanese passengers to use self-check-in services on international flight routes. *Journal Chinese Institute Transportation*, Vol.21 No.3 pp. 299-328.

- Norazah, M. S. (2011). Factors Affecting Third Generation (3G) Mobile Service Acceptance: Evidence from Malaysia. *Journal of Internet Banking and Commerce*, Vol.16 No.1 pp. 1-12
- MacManus, S. A. (2002) Understanding the incremental nature of e-Procurement implementation at the state and local level. *Journal of Public Procurement*. Vol. 2, No 1, pp. 5-28
- Maniam, K. and Halimah, A. (2008). Implementing electronic procurement in government: A case study on e-procurement in Malaysia. *Journal of Economic and Administration*. Vol, 2. No.1 pp. 44-51
- Maniam, K., Halimah A., Murali R., (2009). Government Purchasing: A Review of E-Procurement System in Malaysia. *Journal of Knowledge Economy & Knowledge Management* Vol.5 pp. 27-39
- Maniam K., Murali R and Magiswary D., (2009) E-procurement Adoption in the Malaysian Public Sector: Organization Perspectives, pp 1-10
- Martin, L.M. and Matlay, H. (2001), Blanket' approach to promoting ICT in small firm: some lessons from DTI Ladder adoption model in the UK, *Journal of internet Research*, November.
- Master, S.H. (2001). The impact of e-procurement application on business activities in Malaysian construction industry.
- Mesenbourg, T. L (2001). Measuring electronic business. *Journal of Economic Business*.

- Min, H. and Galle, W.P. (2003), "E-Purchasing: profile of adopters and non-adopter",  
Industrial Marketing Management, Vol. 32, pp. 227-233
- Minhan T. (2005). The e-procurement benchmark report: Less hype, more result.  
Aberdeen Group.
- Naresh K. Malhotra (2004), Review of Marketing Research (Review of Marketing  
research, Volume 2), *Emerald Group Publishing Limited*, pp.81-108
- Neef, D (2001). E-procurement: From Strategy to Implementation. Upper Saddle River,  
NJ: Prentice Hall
- Osmonbekov, T., Bello, D. and Gilliland, D. (2002). Adoption of electronic commerce  
tools in business procurement: enhance buying center structure and processes.  
*Journal of Business and Industrial Marketing*. Vol. 17 No.2/3 , pp. 151-166
- Pallant. J. (2005). *Survival Manual SPSS. Second Edition*. Allen & Unwin.
- Perrini, F., Russo, A and Tencati A. (2007). CSR strategy of SMEs and large firm.  
Evidence from Italy. *Journal of Business Ethic*. Vol. 74 No.3 pp. 285-300.
- PIKOM: E-commerce industry to grow 30% annually next 3-5 year, (2010) at  
<http://biz.thestar.com.my/news/story.asp?file=2020/7/13/business/20100713150259&sec=business>
- Plouffe, C. R., Hulland, J. S., & Vandenbosch, M. (2001). Research report: richness  
versus parsimony in modelling technology adoption decision-Understanding

- merchant adoption of a smart cardbased payment system. *Information System Research*, Vol. 12, No. 2, pp. 208-222.
- Poon, S., & Huang, X., (2004). E-commerce and SMEs: A reflection and the Way Ahead. Idea Group Inc. Charles Sturt University, Australia
- Poon, S., and Swatman, P.M.C (1995) The Internet for small business: An enabling infrastructure for competitiveness. Paper presented at Fifth Internet Society Conference, Hawaii, USA
- Pavlou, P.A (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*. Vol.7 No.3
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., Pahnla, S (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. *Internet Research*. Vol.14 No.3, pp. 224-235
- Pushmann, T and Alt, R. (2005). Successful Use of E-Procurement in Supply Chains. *An International Journal*, Vol.10 No.2 pp. 122-133
- Quayle, M (2003). A study of supply chain management practice in UK industrial SMEs. *Supply Chain Management: An International Journal* Vol.8 No.1, pp. 79-86
- Rahim, Md Mahbubur (2008) Identify Factor Affecting Acceptance of E-Procurement system: An Initial Qualitative Study at an Australian City Council, *Communication of the IBIMA*, Volume 3



- Ramayah and Jantan (2003). Intention to Purchase through the World Wide Web (WWW). The Malaysian Experience. The Third International Conference on the Electronic Commerce Engineering (ICeCE2003). Hangzhou, China.
- Ramayah, T., Rouibah, K., Gopi, M., & Rangel, G. J. (2009a). A decomposed theory of reasoned action to explain intention to use Internet stock trading among Malaysian investors. *Computers in Human Behavior*, Vol. 25, pp. 1222-1230.
- Ramayah, T., Yusliza, M. Y., Norzalila, J., & Amlus, I. (2009b). Applying the Theory of Planned Behavior (TPB) to Predict Internet Tax Filing Intentions. *International Journal of Management*, Vol.26, No.2 pp. 272-284.
- Ramsey, E., Ibbotson, P., Bell, J. and McCole, P. (2005), "Internet-based business among knowledge intensive business services: some Irish regional evidence", *Service Industries Journal*, Vol. 25 No. 4, pp. 525-45.
- Reymond, L. (2001). Determine of Web site implementation in small business. Internet Resesearch: Electronic Network Application and Policy, 411
- Ritchie, B. and Brindley, C. (2005), "ICT Adoption by SMEs: Implications for Relationships and Management, New Technology, Work and Employment", Vol. 20 No.3 pp. 205-217.
- Rohm, A. J., & Sultan, F. (2006). An Exploratory Cross-Market Study of Mobile Marketing Acceptance. *International Journal of Mobile Marketing*. Vol.1. No1, pp. 4-12.

- Rosen, A. (2000), *The E-commerce Question and Answer Book*, American Management Association, New York, NY.
- Rowlatt, A. (2001), *Measuring E-commerce: Developments in the United Kingdom*, Economic Analysis and Satellite Accounts Division, Office of National Statistics, London, pp. 30-6.
- Saleh A.S and Ndubisi, N.O (2006). An evaluation of SME development in Malaysia. *International Review of Business Research Paper*. Vol.2 No.1 pp. 1-14
- Saleh, A.S and Ndubisi, N.O (2008), “SME Development in Malaysia: Domestic and Global Challenge” in Harvie, C. and Lee. B.C (eds), “Small and Medium Sized Enterprise in East Asia: Sectoral and Regional Dimension”, Volume 4 Edward Elgar
- Salkind. N. J. (1997) *Exploring Research*. Third edition. Prentice Hall, Upper Saddle River. New Jersey.
- Schoenherr, T and Mabert, V. (2007), “The use of building in B2B online reverse auction”, *Journal of Operation Management*, Vol. 26 N0.1, pp.81-95
- Schierz, P. G., Schilke, O., & Wirtz, B. W. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research and Applications*, Vol.9 pp. 209-216.
- Scull, C., Milewski, A and Millen ,D. (1999) “Envision the web : user expectation about the cyber experience”, *ASIS '99: Proceeding of the 62<sup>nd</sup> ASIS Annual Meeting*, Vol. 36 pp, 17-24

- Sekaran, U (2003), *Research methods for business*, John Willey and Son, New York, NY.
- Selamat, Z., Jaafar, N., and Khang. D.D (2010), Does ICT enhance hotel performance, *Journal of Hospitality and Tourism Technology*, Vol. 2 No. 1 pp.24-49
- Selamat, Z., Jaafar, N., Kadir, H.A., (2011), ICT adoption in Malaysian SMEs, *International Conference on Management and Service Science, IPEDR* Vol.8 pp, 135-139
- Sirarak, S., Islam. N., and Khang. D.D. (2010), “Does ICT enhance hotel performance”, *Journal of Hospitality and Tourism Technology*, Vol. 2 No.1 pp.34-49.
- SME Corp Malaysia (2014) Categories of SMEs in Malaysia. Retrieve from <http://www.smecorp.gov.my/vn2/> on 3, 2014
- SME Corporation Malaysia (2014), Retrieve <http://www.smebank.com.my/corporate-info/sme-definition> (1.4.2014)
- Soliman, K.S. and Affiso, J.F. (2003) *Key Factors in Establishing Successful e-Government Services, Information Technology and Organizations: Trends, Issues, Challenges and solutions*, Philadelphia, PA: Idea Group Publishing.
- Stair, R.M. and Reynolds, G.W. (2007), *Principles of Information Systems – A Managerial Approach*, Thomson Learning, Inc., Mason, OH.
- Steven, L.H.K (2011), Implementation of E-Procurement for construction material. Undergraduate project paper, Faculty of Civil Engineering, Universiti Teknologi Malaysia.

- Subramani, M. and Walden, E. (2000), “Economic returns to firms from business-to-business electronic commerce initiatives: an empirical examination”, paper presented at International Conference on Information Systems, Brisbane.
- Taylor, S., & Todd, P. A. (1995a). Understanding Information Technology Usage: A Test of Competing Models. *Information Systems Research*, Vol.6.No 2, pp 144-176.
- Taylor, S., & Todd, P. (1995b). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International Journal of Research in Marketing* ,Vol.12 pp 137-155.
- Thai, K. & Grimm, R. (2000). “Government Procurement: Past and Current Developments.” *Journal of Public Budgeting, Accounting and Financial Management*, Vol.12, No 2. pp 231–247.
- Timmers, M. (1989). Supplier development. *Sloan Management Review*. 31 (3), 4-12
- Teo, T. S., & Pok, S. H. (2003). Adoption of WAP-enabled mobile phones among Internet users. *Omega : The International Journal of Management Science* ,Vol. 31, pp 483-498.
- Teo, T.S.H and Lin, S. and Lai, K.H (2009). Adopter and non-adopter of e-procurement in Singapore: An empirical study. *Journal of Science and Logistic*. Vol.37, pp. 972-987
- Tsai, C.-Y. (2010). An analysis of usage intentions for mobile travel guide systems. *African Journal of Business Management*, Vol.13, pp 2962-2970.

- Turban, E., King, D., Lee, J. and Viehland, D. (2008) *Electronic Commerce: a managerial perspective*, New Jersey: Pearson Education, Inc.
- Turban, E., Lee J, King D and Chung, H.M (2000) *Electronic Commerce: A managerial perspective*. Pearson/ Prentice Hall, New Jersey
- Trkman, P., McComack, K., (2010) Estimating the benefit and risk of implementing E-Procurement. *IEEE transaction on Engineering Management*, 57 (2), pp 338-349.
- Truong, Y. (2009). An Evaluation of the Theory of Planned Behavior in Consumer Acceptance of Online Video and Television Services. *Electronic Journal Information Systems Evaluation*, Vol.12, No 2. pp 177-186.
- Van Weele, A.J. (2000). *Purchasing and supply chain management: Analysis, Planning and Practice* (2<sup>nd</sup> edition). Business Press
- Vijayasarathy, L. R. (2004). Predicting consumer intention to use online shopping: the case for and augmented technology acceptance model. *Journal Information and Management*. Vol.41. pp, 747-762
- Watson, R.T., Adela, J.W., Chen, Boudreau, M. (2008) —Green IS: Building Sustainable Business Practices, *Information Systems*, Athens, GA: Global Text Project.
- Warshaw, P.R., and Davis, F, D. (1985). Disentangling behavior intention and behavior expectation. *Journal of Experimental Social Psychology*, Vol.21, pp. 213-228
- Wei, T.T., Marthandan, G., Chong, A.Y.L., Ooi, K.B (2008). What drive Malaysian m-commerce adoption? An empirical analysis. *Industrial Management and Data System*. Vol. 109. No. 3. pp 370-388

- Wiki Books (2008), "Small and Medium Enterprise and ICT Concept and definition",  
Retrieve from  
[http://en.wikibooks.org/wiki/Small\\_and\\_Medium\\_Enterprises\\_and\\_ICT/Concept\\_and\\_Definitions](http://en.wikibooks.org/wiki/Small_and_Medium_Enterprises_and_ICT/Concept_and_Definitions)
- World Bank (2006) Electronic Government Procurement (e-GP): Opportunities and Challenges, the World Bank, Washington DC, June.
- Wu, F., Zsaidin, G.A, and Ross, A.D (2007). "Antecedents and outcomes of e-procurement adoption: an integrative model". *IEEE Transaction on Engineering Management*, Vol, 54., pp. 576-587
- Wyckoff, A. and Colecchia, A. (1999), "The economic and social impact of electronic commerce: preliminary findings and research agenda", Organization for Economic Co-operation and Development, Paris, pp. 168.
- Yusliza M.Y and Ramayah T. (2011) Explaining the Intention to Use Electronic HRM among HR Professionals: Result from a Pilot Study. *Australian Journal of Basic and Applied Sciences*. 5 (8): 489-497
- Yusoff, W.S., Abas, Z., Islam, M.A., Yusuf, D.H.M. (2011). Electronic government procurement adoption behavior amongst Malaysian SMEs. *Journal of International Business*. Vol.4, No.1 pp. 100-115
- Zainuddin, N., Rahman, B. A., Hamed, A. B., Sam, T. L., Mustapa, A.N., Zakaria, N., Deraman, N., Jamaludin, N., Rani, S.H.A., Hanan, S.A. (2010). *Penyelidikan Saintifik, Asas dan Aplikasi*. Mc Graw Hill.

Zikmund (2003), *Business Research Method*, 7<sup>th</sup> edition.

Zsidin, G.A & Ellaram, L.M (2001). Activities related to purchasing and supply management involvement in supplier alliance. *International Journal of Physical Distribution & Logistics Management*. Vol. 31 (9), pp. 629-646

Zwass, V. (1998). Structure and macro level impact of electronic commerce: From technological infrastructure to electronic marketplace. In K.E Kendall (ed), *Emerging Information Technologies*. Thousand Oaks, CA: Sage, pp. 289-315

## **APPENDIX A**



### **BORANG KAJI SELIDIK / QUESTIONNAIRE**

#### **FAKTOR YANG MEMPENGARUHI PENGGUNAAN E-PEROLEHAN DALAM INDUSTRI PEMBUATAN DI WILAYAH UTARA MALAYSIA**

#### **FACTORS THAT INFLUNCE THE USE OF E-PROCUREMENT IN MANUFACTURING INDUSTRY AT NORTHEN REGION MALAYSIA**

Dear participant,

I am very pleased to inform you that you have been chosen to participate in this research. It would be much appreciated if you could spend a few minutes of your time to fill the attached questionnaire. Please be assured that all your responses will be strictly for academic purpose only.

Thank you for your kind cooperation.

Researcher

Sitti Aminah Baharuddin (813387)

Master in Science (Management)

Graduate School of Business

Universiti Utara Malaysia

Supervisor

DR. Risyawati Bt. Ismail

Lecturer,

School of Technology and Logistic

Universiti Utara Malaysia



## Section A: Demographic- Respondent Profile

*Please tick the appropriate answer / Sila tanda mana yang berkaitan*

1. Department attached to / *Jabatan berkaitan*

☐ IT☐

Finance / *Kewangan*

☐

Purchasing/ *Pembelian*

☐

Planning / *Perancang*

☐

Operation / *Operasi*

☐

Others \_\_\_\_\_

☐

Quality Assurance / *Jaminan Kualiti*

2. Job position / *Jawatan*

☐

Executive/ *Eksekutif*

☐

Clerk / *Kerani*

☐

Manager / *Pengurus*

☐

Others \_\_\_\_\_

3. What is your highest level of education? / *Tahap pendidikan tertinggi?*

☐

Diploma / *Diploma*

☐

Master / *Ijazah Sarjana*

☐

Degree/ *Ijazah sarjana Muda*

☐

PhD / *Ijazah Kedoktoran*

## Section B: Organization Information / *Maklumat Organisasi*

1. How long has your company been in business? *Berapa lama syarikat telah beroperasi?*

☐

< 1 Year / < 1 Tahun

☐

3-5 years / *3-5 tahun*

☐

2-3 years/ *2-3 tahun*

☐

more than 5 years / *lebih 5*

*tahun.*

2. What is the ownership form of your business? / *Apakah pemilikan perniagaan anda?*

☐ Sole proprietor/ *Persendirian* ☐ Private Limited / *Sdn Bhd*

☐ Partnership / *Perkongsian*

3. Please indicate the level of sales revenue for the business for the last financial year / *Sila nyatakan tahap hasil jualan untuk perniagaan bagi tahun kewangan yang lalu*

☐ Less than RM50,000 / *Kurang dari RM50,000*

☐ RM50,001 – RM100,000 / *RM50,001 – RM100,000*

☐ RM100,001 – RM500,000 / *RM100,001 – RM500,000*

☐ RM500,001 – RM1 Million / *RM500,001 – RM1 Juta*

☐ More than RM1 Million / *Lebih daripada RM1 Juta*

4. What is your industry?

☐ Textile & Apparels

☐ Rubber Product

☐ Chemical Petrochemical Product

☐ Metal Product

☐ Machinery & Engineering

☐ Transport Equipment

☐ Electric & Electronic

☐ Metal

☐ Plastic

☐ Food beverage

☐ Paper printing

☐ Non-metallic mineral

☐ Wood & wood

5. Do your companies use IT in your operation? / Adakah syarikat anda menggunakan IT?

☐ Yes / Ya

☐ No / Tidak

**Section C: The factor influence use of e-Procurement (e-P) / Faktor yang Mempengaruhi Penggunaan e-Perolehan (e-P).**

**In this section, the question about the factor influence use of e-procurement. / Bahagian ini berkaitan dengan faktor penggunaan e-Perolehan.**

**Please tick (/) the appropriate box / Sila tanda (/) dalam kotak berkaitan**

Strongly Agree		Strongly Disagree				
V1	<b>PERCEIVE USEFULNESS</b>	1	2	3	4	5
Q1	e-P is useful <i>e-P adalah berguna</i>					
Q2	e-p support selling requirement <i>e-P menyokong keperluan penjualan</i>					
Q3	e-P improve selling efficiency <i>e-P meningkatkan penjualan</i>					
Q4	e-P simplifies selling process <i>e-P memudahkan proses penjualan</i>					
Q5	e-P reduce financial cost <i>e-P mengurangkan kos kewangan</i>					
Q6	e-P increase administrative saving <i>e-P meningkatkan penjimatan pengurusan</i>					
Q7	e-P increase overall job performance <i>e-P meningkatkan keseluruhan prestasi kerja</i>					
Q8	e-P increase overall job productivity <i>e-P meningkatkan keseluruhan produktiviti kerja</i>					
Q9	e-P is effective than manual system <i>e-P adalah berkesan daripada sistem manual</i>					

Q10	e-P improve information management <i>e-P meningkatkan pengurusan informasi</i>					
Q11	e-P is fast <i>e-P adalah cepat</i>					
Q12	e-P improve inventory management <i>e-P meningkatkan pengurusan inventori</i>					

V2	<b>PERCEIVE EASE OF USE / MEMAHAMI KEMUDAHAN PENGGUNAAN</b>	1	2	3	4	5
Q1	e-P is easy to use <i>e-P adalah mudah untuk digunakan</i>					
Q2	e-p is flexible to interact with <i>e-P adalah fleksibel untuk berinteraksi</i>					
Q3	e-P is easy to learn <i>e-P adalah mudah untuk belajar</i>					
Q4	e-P is user friendly <i>e-P adalah mesra pelanggan</i>					
Q5	e-P can be easily understood <i>e-P mudah difahami</i>					
Q6	e-P skill can be acquired easily <i>e-P boleh diperolehi dengan mudah</i>					

V3	<b>ATTITUDE / SIKAP</b>	1	2	3	4	5
Q1	Using e-P technology is a good idea <i>Menggunakan teknologi e-P adalah idea yang baik</i>					
Q2	Using e-P technology would be a wise idea <i>Menggunakan teknologi e-P adalah idea yang bernas</i>					
Q3	Using e-P technology in procurement is unpleasant <i>Menggunakan e-P dalam perolehan tidak menyenangkan</i>					
Q4	It is desirable to use e-P technology <i>Penggunaan e-P sangat wajar</i>					

V4	<b>BEHAVIOR INTENTION / KECENDERUNGAN GELAGAT</b>	1	2	3	4	5
Q1	I would be able to use e-P technology <i>Saya boleh menggunakan teknologi e-P</i>					
Q2	Using e-P technology would be entirely within my control <i>Menggunakan teknologi e-P dalam kawalan saya sepenuhnya</i>					
Q3	I have the resource to use e-P technology <i>Saya ada sumber untuk gunakan teknologi e-P</i>					
Q4	I have the knowledge to use e-P					

	<i>Saya ada pengetahuan penggunaan e-P</i>					
Q5	I have the ability to use e-P <i>Saya ada kebolehan menggunakan e-P</i>					

DV	<b>INTENTION TO USE E-PROCUREMENT / CADANGAN PENGGUNAAN E-PEROLEHAN</b>	1	2	3	4	5
Q1	I would use e-P for my procurement needs <i>Saya akan menggunakan e-P untuk keperluan perolehan</i>					
Q2	Using e-P technology for handling my procurement task is something I would do <i>Penggunaan teknologi e-P adalah untuk mengendalikan tugas perolehan saya</i>					
Q3	I would see myself using e-P technology for handling my procurement task <i>Saya melihat diri saya menggunakan teknologi e-P untuk mengendalikan tugas perolehan saya.</i>					

**Questionnaire Finish**

**Thank You**

## **APPENDIX B**



**OTHMAN YEOP ABDULLAH  
GRADUATE SCHOOL OF BUSINESS**  
Universiti Utara Malaysia  
06010 UUM SINTOK  
KEDAH DARUL AMAN  
MALAYSIA



Tel: 604-928 7118/7119/7130  
Faks (fax): 604-928 7160  
Laman Web (Web): [www.oyagsb.uum.edu.my](http://www.oyagsb.uum.edu.my)

### **KEDAH AMAN MAKMUR • BERSAMA MEMACU TRANSFORMASI**

**UUM/OYAGSB/K-14**

7 April 2014

#### **TO WHOM IT MAY CONCERN**

Dear Sir/Madam

#### **DATA COLLECTION**

**COURSE : Dissertation**  
**COURSE CODE : BPMZ69912**  
**LECTURER : Puan Rizyawati Mohd Ismail**

This is to certify that the following is a postgraduate student from the OYA Graduate School of Business, Universiti Utara Malaysia. She is pursuing the above mentioned course which requires her to undertake an academic study and prepare an assignment. The details are as follows:

<b>NO.</b>	<b>NAME</b>	<b>MATRIC NO.</b>
1.	Sitti Aminah Binti Baharuddin	813387

In this regard, I hope that you could kindly provide assistance and cooperation for her to successfully complete the assignment given. All the information gathered will be strictly used for academic purposes only.

Your cooperation and assistance is very much appreciated.

Thank you.

**"SCHOLARSHIP, VIRTUE, SERVICE"**

Yours faithfully

**KARTINI BINTI DATO' TAJUL URUS**  
Assistant Registrar  
for Dean  
Othman Yeop Abdullah Graduate School of Business

c.c - Student's File (813387)

Universiti Pengurusan Terkemuka  
*The Eminent Management University*



## APPENDIX C

**Table Krecjie and Morgan**

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

## **APPENDIX D**

### **Normality Test for Intention to use**

**Tests of Normality**

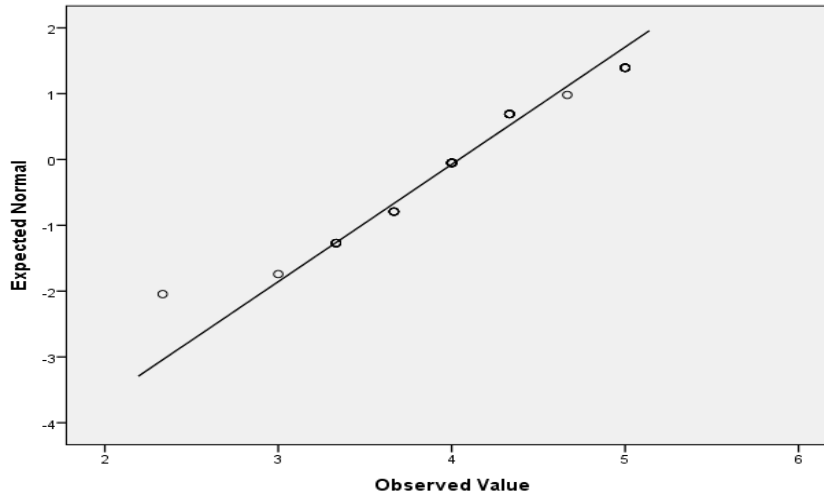
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IntentionToUse	.217	48	.000	.907	48	.001

a. Lilliefors Significance Correction

**Descriptives**

				Statistic	Std. Error
IntentionToUse	Mean			4.0417	.08101
	95% Confidence Interval for Mean	Lower Bound		3.8787	
		Upper Bound		4.2046	
	5% Trimmed Mean			4.0586	
	Median			4.0000	
	Variance			.315	
	Std. Deviation			.56126	
	Minimum			2.33	
	Maximum			5.00	
	Range			2.67	
	Interquartile Range			.67	
	Skewness			-.205	.343
	Kurtosis			.984	.674

**Normal Q-Q Plot of IntentionToUse**





## Normality Test for Perceive ease of use

**Tests of Normality**

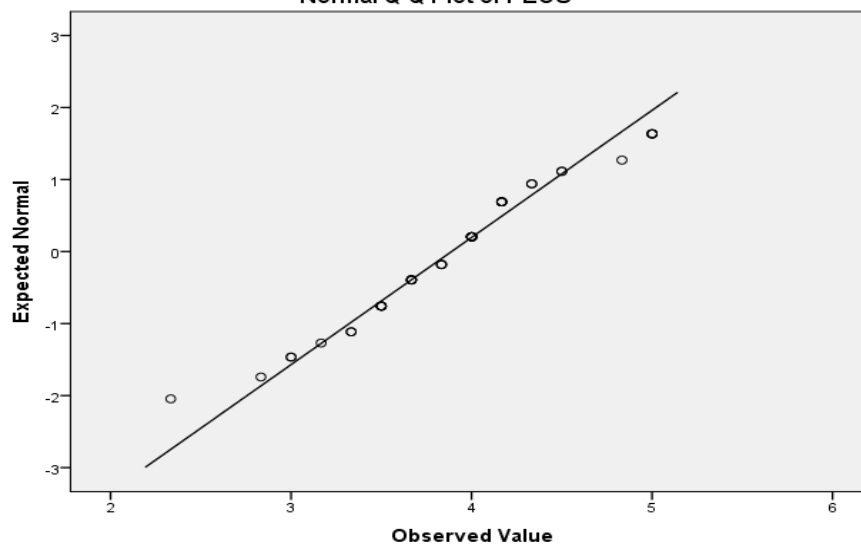
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PEOU	.131	48	.040	.959	48	.088

a. Lilliefors Significance Correction

**Descriptives**

				Statistic	Std. Error
PEOU	Mean			3.8889	.08174
	95% Confidence Interval for Mean	Lower Bound		3.7244	
		Upper Bound		4.0533	
	5% Trimmed Mean			3.8958	
	Median			4.0000	
	Variance			.321	
	Std. Deviation			.56633	
	Minimum			2.33	
	Maximum			5.00	
	Range			2.67	
	Interquartile Range			.67	
	Skewness			-.055	.343
	Kurtosis			.620	.674

**Normal Q-Q Plot of PEOU**



## Normality test for Perceive Usefulness

**Tests of Normality**

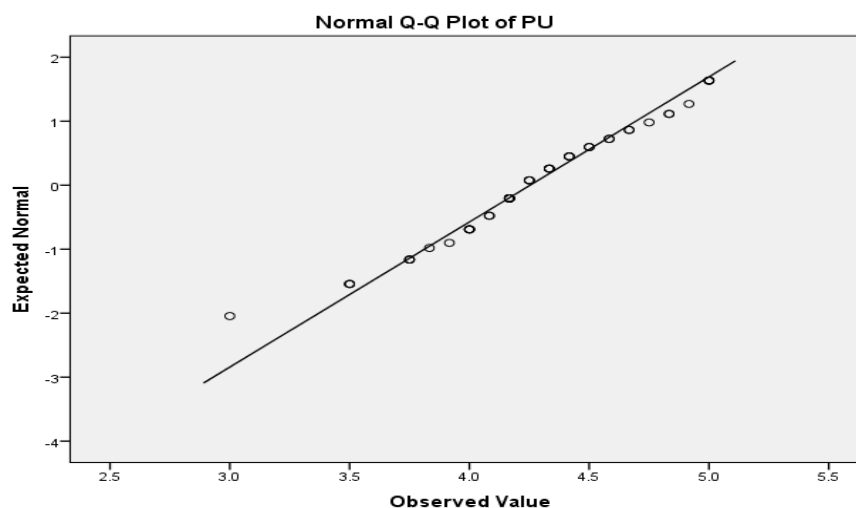
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PU	.095	48	.200 <sup>*</sup>	.969	48	.221

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

**Descriptives**

			Statistic	Std. Error
PU	Mean		4.2535	.06364
	95% Confidence Interval for Mean	Lower Bound	4.1254	
		Upper Bound	4.3815	
	5% Trimmed Mean		4.2654	
	Median		4.2083	
	Variance		.194	
	Std. Deviation		.44094	
	Minimum		3.00	
	Maximum		5.00	
	Range		2.00	
	Interquartile Range		.56	
	Skewness		-.290	.343
	Kurtosis		.322	.674



## Normality test for Attitude

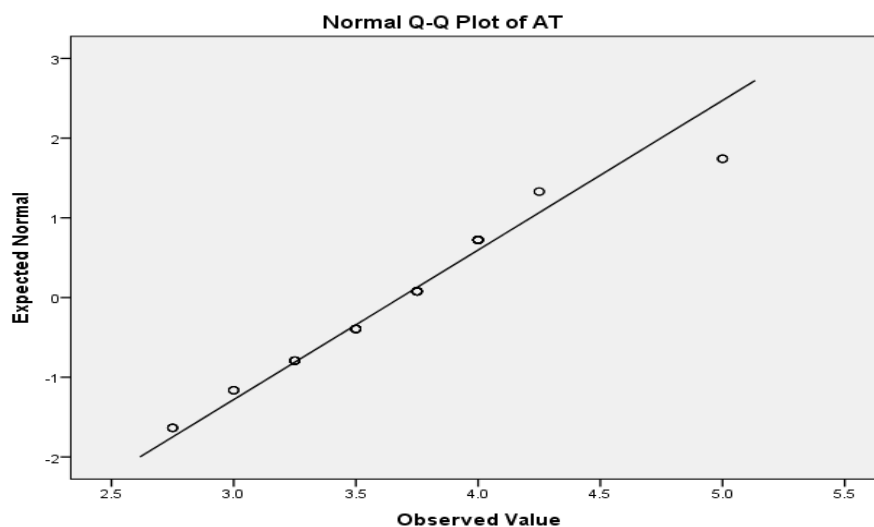
Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
AT	.171	48	.001	.926	48	.005

a. Lilliefors Significance Correction

Descriptives

			Statistic	Std. Error
AT	Mean		3.6823	.07690
	95% Confidence Interval for Mean	Lower Bound	3.5276	
		Upper Bound	3.8370	
	5% Trimmed Mean		3.6609	
	Median		3.7500	
	Variance		.284	
	Std. Deviation		.53281	
	Minimum		2.75	
	Maximum		5.00	
	Range		2.25	
	Interquartile Range		.75	
	Skewness		.425	.343
	Kurtosis		.778	.674



## Normality Test for Behavior intention.

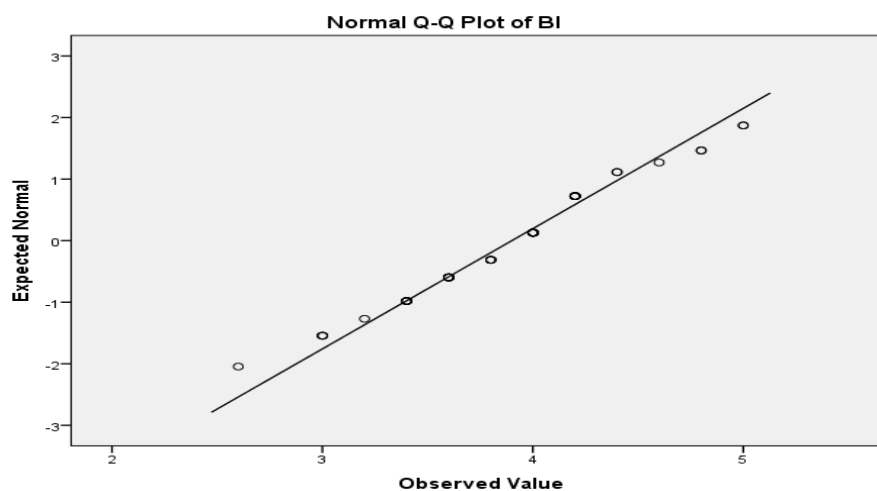
Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
BI	.161	48	.003	.964	48	.148

a. Lilliefors Significance Correction

Descriptives

			Statistic	Std. Error
BI	Mean		3.9000	.07390
	95% Confidence Interval for Mean	Lower Bound	3.7513	
		Upper Bound	4.0487	
	5% Trimmed Mean		3.9000	
	Median		4.0000	
	Variance		.262	
	Std. Deviation		.51198	
	Minimum		2.60	
	Maximum		5.00	
	Range		2.40	
	Interquartile Range		.60	
	Skewness		-.095	.343
	Kurtosis		.351	.674



## **APPENDIX D**

### **Frequency Analysis**

**Job position**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manager	20	41.7	41.7	41.7
	Executive	28	58.3	58.3	100.0
	Total	48	100.0	100.0	

**Department attach to**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	IT	1	2.1	2.1	2.1
	Purchasing	12	25.0	25.0	27.1
	Operation	23	47.9	47.9	75.0
	Finance	1	2.1	2.1	77.1
	Planning	4	8.3	8.3	85.4
	Others	7	14.6	14.6	100.0
	Total	48	100.0	100.0	

**How long has your company been in business**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 1 Year	5	10.4	10.4	10.4
	2-3 Years	15	31.3	31.3	41.7
	3-5 Years	8	16.7	16.7	58.3
	> 5 Years	20	41.7	41.7	100.0
	Total	48	100.0	100.0	

**What is your highest level of education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	9	18.8	18.8	18.8
	Degree	23	47.9	47.9	66.7
	Master	16	33.3	33.3	100.0
	Total	48	100.0	100.0	

**What is the industry**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Chemical Petrochemical Product	1	2.1	2.1	2.1
Transport Equipment	5	10.4	10.4	12.5
Machinery & Engineering	11	22.9	22.9	35.4
Metal Product	8	16.7	16.7	52.1
Textile & Apparels	9	18.8	18.8	70.8
Electric & Electronic	3	6.3	6.3	77.1
Wood & Wood	2	4.2	4.2	81.3
Rubber Product	2	4.2	4.2	85.4
Paper Printing	5	10.4	10.4	95.8
Food Beverage	2	4.2	4.2	100.0
Total	48	100.0	100.0	

**Please indicate the level of sales revenue for the business for the last financial year**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
< RM50,00	6	12.5	12.5	12.5
RM50,001-RM100,000	12	25.0	25.0	37.5
RM100,001-RM500,00	8	16.7	16.7	54.2
RM500,001-RM1 Million	11	22.9	22.9	77.1
> RM1 Million	11	22.9	22.9	100.0
Total	48	100.0	100.0	

**What is the ownership form of your business**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Sole Proprietor	6	12.5	12.5	12.5
Partnership	11	22.9	22.9	35.4
Private Limited	31	64.6	64.6	100.0
Total	48	100.0	100.0	

## **APPENDIX E**

### **Median and range analysis**

#### **Perceive Ease of use**

##### **Statistics**

	e-P is easy to use	e-P is flexible to interact with	e-P is easy to learn	e-P is user friendly	e-P can be easily understood	e-P skill can be acquired easily
N Valid	48	48	48	48	48	48
N Missing	0	0	0	0	0	0
Mean	3.96	3.90	3.85	4.02	3.90	3.71
Median	4.00	4.00	4.00	4.00	4.00	4.00
Mode	4	4	4	4	4	4
Std. Deviation	.743	.751	.714	.635	.722	1.071
Variance	.551	.563	.510	.404	.521	1.147
Range	4	3	3	2	3	4
Minimum	1	2	2	3	2	1
Maximum	5	5	5	5	5	5
Sum	190	187	185	193	187	178

## Perceive Usefulness

### Statistics

	e-P is useful	e-P support selling requirement	e-P improve selling efficiency	e-P simplifies selling process	e-P reduce financial cost	e-P increase administrative saving	e-P increase overall job performance	e-P increase job productivity	e-P is effective than manual system	e-P improve information management	e-P is fast	e-P is easy to use
Valid N	48	48	48	48	48	48	48	48	48	48	48	48
Missing	0	0	0	0	0	0	0	0	0	0	0	0
Mean	4.23	4.19	4.31	4.19	4.29	4.21	4.25	4.19	4.33	4.29	4.31	3.96
Median	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode	4	4	4	4	4	4	4	4	4	4	4	4
Std. Deviation	.515	.607	.589	.607	.651	.651	.565	.673	.663	.651	.657	.743
Variance	.266	.368	.347	.368	.424	.424	.319	.453	.440	.424	.432	.551
Range	2	2	2	2	2	2	2	2	2	2	3	4
Minimum	3	3	3	3	3	3	3	3	3	3	2	1
Maximum	5	5	5	5	5	5	5	5	5	5	5	5
Sum	203	201	207	201	206	202	204	201	208	206	207	190



## Attitude

		Statistics			
		using e-P technology is a good idea	Using e-P technology would be a wise idea	Using e-P technology in procurement is pleasant	It is desirable to use e-P technology
N	Valid	48	48	48	48
	Missing	0	0	0	0
Mean		4.17	3.54	3.48	3.54
Median		4.00	4.00	4.00	4.00
Mode		4	4	4	4
Std. Deviation		.519	1.166	1.185	1.071
Variance		.270	1.360	1.404	1.147
Range		2	4	4	4
Minimum		3	1	1	1
Maximum		5	5	5	5
Sum		200	170	167	170

## Behavior Intention

		Statistics				
		I would be able to use e-P technology	Using e-P technology would be entirely within my control	I have the resource to use e-P	I have the knowledge to use e-P	I have the ability to use e-P
N	Valid	48	48	48	48	48
	Missing	0	0	0	0	0
Mean		4.08	3.79	3.98	3.73	3.92
Median		4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4
Std. Deviation		.613	.651	.635	.676	.647
Variance		.376	.424	.404	.457	.418
Range		2	3	3	3	2
Minimum		3	2	2	2	3
Maximum		5	5	5	5	5
Sum		196	182	191	179	188

## Intention to Use

### Statistics

	I would use e-P for my procurement	Using e-P technology for handling my procurement task is something I would do	I would see myself using e- P technology for handling my procurement task
N	Valid 48	48	48
	Missing 0	0	0
Mean	4.15	3.88	4.10
Median	4.00	4.00	4.00
Mode	4	4	4
Std. Deviation	.583	.761	.805
Variance	.340	.580	.648
Range	2	4	4
Minimum	3	1	1
Maximum	5	5	5
Sum	199	186	197

## **APPENDIX F**

### **Correlation Analysis**

<b>Correlations</b>			IntentionToUse	PU	PEOU	AT	BI
Spearman's rho	IntentionToUse	Correlation	1.000	.587**	.221	.171	.586**
		Coefficient					
		Sig. (1-tailed)	.	.000	.066	.122	.000
		N	48	48	48	48	48
	PU	Correlation	.587**	1.000	.354**	.422**	.547**
		Coefficient					
		Sig. (1-tailed)	.000	.	.007	.001	.000
		N	48	48	48	48	48
	PEOU	Correlation	.221	.354**	1.000	.048	.386**
		Coefficient					
		Sig. (1-tailed)	.066	.007	.	.374	.003
		N	48	48	48	48	48
	AT	Correlation	.171	.422**	.048	1.000	.258*
		Coefficient					
		Sig. (1-tailed)	.122	.001	.374	.	.038
		N	48	48	48	48	48
	BI	Correlation	.586**	.547**	.386**	.258*	1.000
		Coefficient					
		Sig. (1-tailed)	.000	.000	.003	.038	.
		N	48	48	48	48	48

\*\* . Correlation is significant at the 0.01 level (1-tailed).

\* . Correlation is significant at the 0.05 level (1-tailed).