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**FACTORS INFLUENCING THE PERCEIVED TIMELINE
TO ADOPT XBRL AMONGST PUBLIC LISTED
COMPANIES IN MALAYSIA**

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AMONGST PUBLIC LISTED COMPANIES IN MALAYSIA



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ABSTRACT

Technology development has impacted the way businesses disseminate information to its stakeholders. eXtensible Business Reporting Language (XBRL) offers the ability to exchange business and financial information globally through a digitalized global standard language which is part of the global integrated reporting. There are limited studies on XBRL and enormous opportunities for further research globally, as well as in Malaysia. There have been studies on awareness and intention to adopt XBRL-based digital reporting, but no study has been conducted to understand the internal and external factors that would drive the perceived timeline to adopt XBRL amongst Public Listed Companies (PLC) in Malaysia. The goal of this study is in line with the Companies Commission of Malaysia (Suruhanjaya Syarikat Malaysia (SSM))'s intent to promote the voluntary adoption of XBRL in 2018 and upcoming mandates by other agencies. The proposed perceived timeline on XBRL adoption model was adapted from a previous study which represents an all-inclusive study at firm level as it combines the internal and external variables from the Diffusion of Innovations (DOI) Model, Technology, Organization and Environment (TOE) Framework (1990) and Iacovou et al. (1995) Model. The model was tested with data collected from 256 executives and managers of PLCs in Peninsular Malaysia. The findings of the study demonstrates that internal factors such as management characteristics (Management Innovativeness and Management Knowledge) and organisational characteristic (Internet Knowledge) along with external environmental factor (External Pressure) would influence the perceived timeline for XBRL adoption amongst Malaysian PLCs. The results support the current body of knowledge on the internal and external determinants influencing the perceived timeline of XBRL adoption and enable sufficient measures to be taken by authorities to increase the XBRL Adoption readiness amongst PLCs in Malaysia. The findings will prepare PLCs for a successful XBRL implementation before it is mandated in Malaysia.

Keywords: XBRL, global integrated reporting, technology adoption, Suruhanjaya Syarikat Malaysia (SSM), Public Listed Companies (PLCs).

ABSTRAK

Perkembangan teknologi telah menukar cara penyebaran maklumat perniagaan kepada pemegang-pemegang saham. Bahasa Pelaporan Perniagaan eXtensible (eXtensible Business Reporting Language (XBRL)) menawarkan keupayaan untuk menyebarkan maklumat perniagaan dan kewangan di peringkat antarabangsa melalui bahasa global digital standard yang merupakan sebahagian daripada pelaporan bersepadu global. Oleh kerana kajian mengenai XBRL terhad, terdapat banyak peluang untuk penyelidikan lanjut di peringkat global serta di Malaysia. Terdapat kajian mengenai kesedaran dan hasrat penggunaan pelaporan berasaskan XBRL, tetapi tiada kajian dijalankan untuk memahami faktor dalaman dan luaran yang boleh mendorong jangkamasa yang dianggap sesuai untuk penggunaan XBRL dalam kalangan Syarikat Awam Tersenarai (PLC) di Malaysia. Matlamat kajian ini adalah sejajar dengan hasrat Suruhanjaya Syarikat Malaysia (SSM) untuk menggalakkan penggunaannya secara sukarela XBRL dalam tahun 2018 serta mandat yang akan datang dari agensi lain. Model cadangan jangkamasa penggunaan XBRL telah diubah suai daripada kajian terdahulu yang mewakili kajian menyeluruh yang terdiri daripada gabungan pemboleh ubah dalaman dan luaran dari Model Penyebaran Inovasi (Diffusion of Technology (DOI)), Rangka Kerja Teknologi, Pertubuhan dan Alam Sekitar (Technology, Organisation and Environment (TOE))(1990) dan Model Iacovou et al. (1995). Model ini telah diuji dengan data yang dikumpulkan daripada 256 orang eksekutif dan pengurus syarikat-syarikat awam tersenarai (PLCs) di Semenanjung Malaysia. Penemuan kajian menunjukkan bahawa faktor dalaman seperti ciri-ciri pengurusan (Pengurusan Inovatif dan Pengetahuan Pengurusan) dan ciri organisasi (Pengetahuan Internet) berserta dengan faktor persekitaran luaran (Tekanan Luar) akan mempengaruhi tempoh masa yang diambil untuk menggunakan XBRL dalam kalangan syarikat awam yang tersenarai di Malaysia. Hasil kajian ini menyokong pengetahuan terkini tentang penentu dalaman dan luaran yang akan mempengaruhi gambaran jangka masa penerimaan XBRL dan membolehkan langkah-langkah diambil oleh pihak berkuasa untuk meningkatkan kesediaan menggunakan XBRL dalam kalangan syarikat awam yang tersenarai di Malaysia. Penemuan ini juga akan membantu pengurusan syarikat awam yang tersenarai mempersiapkan kejayaan pelaksanaan XBRL sebelum laporan XBRL dimandatkan di Malaysia.

Kata kunci: Bahasa Pelaporan Perniagaan eXtensible (eXtensible Business Reporting Language (XBRL)), laporan bersepadu global, penerimaan teknologi, Suruhanjaya Syarikat Malaysia (SSM), Syarikat Awam Tersenarai (PLCs)

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LIST OF ABBREVIATIONS

ICT	Information and Communication Technology
XML	eXtensible Markup Language
PDF	Portable Document Format
XBRL	eXtensible Business Reporting Language
FpML	Financial products Markup Language
RIXML	Research Information Exchange Markup Language
ebXML	Electronic Business XML
GAAP	Generally Accepted Accounting Practices
IFRS	International Financial Reporting Standard
DM	Digital Malaysia
MDec	Malaysia Digital Economy Corporation
GNI	Gross National Income
CCM	Companies Commission Malaysia
SSM	Suruhanjaya Syarikat Malaysia
SDP II	Strategic Direction Plan II
PLC	Public Listed Company
MFRS	Malaysian Financial Reporting Standard
SECCOM	Securities Commission Malaysia
IRB	Inland Revenue Board
LHDN	Lembaga Hasil Dalam Negeri
PRS	Private Retirement Schemes
MIA	Malaysian Institute of Accountants
EDI	Electronic Data Interchange
SEC	Securities and Exchange Commission
USA	United States of America
HTML	HyperText Markup Language
TAM	Technology Acceptance Model
DOI	Diffusion of Innovation
TOE	Technological–Organizational–Environmental
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behaviour
RA	Relative Advantage
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
BI	Behavioral Intention
IOS	Inter-organizational systems
MI	Management Innovativeness
MK	Management Knowledge
CO	Cost
IK	Internet Knowledge

CM	Comparability
EP	External Pressure
ES	External Support
PTAX	Perceived Timeline to Adopt XBRL
CEO	Chief Executive Officer
CA	Chartered Accountants
SPSS	Statistical Package for Social Sciences
IV	Independent Variable
DV	Dependent Variable
DBA	Doctorate in Business Administration
PHD	Doctor of Philosophy
SDR	Studentized Deleted Residual
MD	Mahalanobis Distance
CD	Cook's Distance
KMO	Kaiser-Meyer-Olkin
PERS	Private Entity Reporting Standards



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CHAPTER 1 INTRODUCTION

1.1 Background of the Study

According to Korpela, Montealegre and Poulymenakou (2003), Information and Communication Technology (ICT) greatly helps in generating value and creating eminence for the country, thus it can be positively associated to a country's economic development and opportunities. Korpela et al. (2003) added that innovation does not only enhances human capabilities but improves participation in many aspects of a community and drives economic growth through productivity gains. Most established countries have seen significant changes attributed by ICT over the last two decades as ICT leads to quick dissemination of information (Thioune, 2003).

ICT in Malaysia goes back to before the 21st-century era. Before the 1990's, computers, internet and mobile phones were not part of the mainstream business applications. In the 1990's, Malaysia still lacked in technology development to be in a position to compete in international markets in comparison with other developed countries.

The move to cultivate ICT started with the Vision 2020, which was a long-term vision initiated by Malaysia's former Prime Minister Tun Mahathir Mohammad for a sustained and productivity-driven growth. The vision would only be realizable when the labor force becomes fully equipped and technology savvy with the ability to think critically to fully participate in the economic and technological growth globally in the 21st-century and beyond.

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REFERENCES

- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22(5), 453-474. doi:10.1016/0022-1031(86)90045-4
- Alam, S. S., Khatibi, A., Ahamad, M. I. S. and Ismail, H. B. (2008). Factors affecting e-commerce adoption in the electronic in the electronic manufacturing companies in Malaysia. *Int. J. Commerce Manage*, 17 (1/2), 125-139.
- Alles, M., & Debreceeny, R. (2012). The evolution and future of XBRL research. *International Journal of Accounting Information Systems*, 13(2), 83–90.
- Alles, M., & Piechocki, M. (2012). Will XBRL improve corporate governance? *International Journal of Accounting Information Systems*, 13(2), 91–108.
- Al-Qirim, N. (2005). An empirical investigation of an e-commerce adoption-capability model in small businesses in New Zealand. *Electron. Markets* 15 (4), 418–437.

Al-Rawashdeh, A. A. (2011). Diffusion of XBRL Innovation Model of Adoption and Usage. PhD. thesis, Universiti Utara Malaysia.

Anderson, D. (2004). BOINC: A System for Public-Resource Computing and Storage. *Fifth IEEE/ACM International Workshop On Grid Computing*.

Armstrong, J. & Overton, T. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal Of Marketing Research*, 14(3), 396.
<http://dx.doi.org/10.2307/3150783>

Arrindell, W. A., & Ende, J. V. (1985). An Empirical Test of the Utility of the Observations-To-Variables Ratio in Factor and Components Analysis. *Applied Psychological Measurement*, 9(2), 165-178.
doi:10.1177/014662168500900205

Ashari, N. (2010). Intention to adopt XBRL-based digital reporting in Malaysia (Unpublished master's thesis). International Islamic University Malaysia.

Baldwin, A., Brown, C., & Trinkle, B. (2006). XBRL: An Impacts Framework and Research Challenge. *Journal Of Emerging Technologies In Accounting*, 3(1), 97-116. <http://dx.doi.org/10.2308/jeta.2006.3.1.97>

Bartlett, S. M. (1954). A Note on the Multiplying Factors for Various χ^2 Approximations. *Journal Of The Royal Statistical Society. Series B (Methodological)*, 16(2), 296-298.

Bartley, J; Taylor, E. Z. & Chen, A. Y. (2010). Common Errors of XBRL Implementation, *Journal of Accountancy*: 46-51.

Barton, K.E. (2003), "XBRL", available at: www.nysscpa.org/committees/emergingtech/xbrl_2003.htm (accessed 14 December 2016).

Berg, N. (2005). Non-response bias. Munich Personal RePEc Archive. Available from: http://mpa.ub.uni-muenchen.de/26373/1/MPRA_paper_26373.pdf (Date retrieved: 14.05.2014)

Bergeron, B. (2003). *Essentials of XBRL* (1st ed.). Hoboken, N.J.: Wiley.

Berry, W. (1993). Understanding Regression Assumptions. doi:10.4135/9781412986427

Benbasat, I., & Zmud, R. W. (1999). Empirical Research in Information Systems: The Practice of Relevance. *MIS Quarterly*, 23(1), 3. doi:10.2307/249403

- Bhattacharjee, A. (2001). Understanding information systems continuance: an expectation-confirmation model. *MIS Q.* 25 (3), 351–370.
- Bonson, E., Cortijo, V., & Escobar, T. (2009). A Delphi Investigation to Explain the Voluntary Adoption of XBRL. *The International Journal Of Digital Accounting Research*, 9. http://dx.doi.org/10.4192/1577-8517-v9_7
- Bouchard, L. (1993) Decision Criteria in the Adoption of EDI. "ICIS'93" - 14th International Conference on Information Systems, pp. 365-376.
- Brancheau, J. C., & Wetherbe, J. C. (1990). The Adoption of Spreadsheet Software: Testing Innovation Diffusion Theory in the Context of End-User Computing. *Information Systems Research*, 1(2), 115-143. doi:10.1287/isre.1.2.115
- Brand, M.J. and Huizingh, E.K. (2008) Into the drivers of innovation adoption: what is the impact of the current level of adoption? *Eur. J. Innovation Manager.* 11 (1), 5-24.
- Bursa Malaysia website. <http://www.bursamalaysia.com/market/listed-companies/>
(Assessed on 31/12/2016)
- Cavana, R., Delahaye, B., & Sekaran, U. (2001). *Applied business research* (1st ed.). Milton, Qld.: J. Wiley.

Chau, P., & Hu, P. (2001). Information Technology Acceptance by Individual Professionals: A Model Comparison Approach*. *Decision Sciences*, 32(4), 699-719.

Chin, W. W. (2010). How to write up and report PLS analyses. *Handbook of partial least squares*, 655-690.

Chong, S., Pervan, G. (2007). Factors influencing the extent of deployment of electronic commerce for small-and medium sized enterprises. *J. Electron. Commerce Organiz.* 5 (1), 1–29.

Churchill, G. (1979). A Paradigm for Developing Better Measures for Marketing Constructs. *Journal of Marketing Research*, 16(1), 64-73.

Churchill, G. A. (1995). *Marketing Research, Methodological Foundations*, The Dryden Press, 6th Edition, New York, USA.

Coakes, E. (2006). Storing and sharing knowledge. *The Learning Organization*, 13(6), 579-593. <http://dx.doi.org/10.1108/09696470610705460>

Coakes, S. J. & Steed, L. G. (2003). *SPSS : analysis without anguish : version 11.0 for Windows*. Milton, Qld : John Wiley & Sons

- Compeau, D. & Higgins, C. (1995). Computer Self-Efficacy: Development of a Measure and Initial Test. *MIS Quarterly*, 19(2), 189.
- Cooper, D. R., & Schindler, P. S. (2003). *Business Research Methods* (8th edition). USA: McGraw-Hill.
- Cooper, D. R., & Schindler, P. S. (2006). *Business Research Methods* (9 th edition). USA: McGraw-Hill.
- Cordery, C. J., Fowler, C. J., & Mustafa, K. (2011). A solution looking for a problem: factors associated with the non-adoption of XBRL. *Pacific Accounting Review*, 23(1), 69-88. doi:10.1108/01140581111130634
- Cragg, P. B., & King, M. (1993). *Small-Firm Computing: Motivators and Inhibitors*. *MIS Quarterly*, 17(1), 47. doi:10.2307/249509
- Creswell, J. (2003). *Research design* (1st ed.). Thousand Oaks, Calif.: Sage Publications.
- Cronbach, L. (1951). Coefficient alpha and the Internal Structure Tests. *Psychometrika*, 16, 297-334.

Damanpour, F. & Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization and top Managers, *British Journal of Management* 17 (3), 215-236.

Daugherty, T., Gangadharbatla, H., & Eastin, M. S. (2009). Impact of Internet Self-Efficacy on E-Service Brands Contemporary Research in E-Branding (pp. 176-192).

Davis, F., Bagozzi, R., & Warshaw, P. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982-1003.

Digital Malaysia. <http://www.digitalmalaysia.my/newsroom/news/news-releases/mdec%E2%80%99s-talent-enhancement-programmes-complements-national-agenda-boost> (Assessed on 21/7/2015)

DiMaggio, P. J. & Powell, W. (1983). The iron cage revisited, Institutional isomorphism and collective rationality in organizational fields, *American Sociological Review*, 48, 147-60.

Dishaw, M.T. & Strong, D.M. (1999), Extending the Technology Acceptance Model with Task-Technology Fit Constructs, *Information & Management* 36.1, 9-21.

- Doll, W.J. & Torkzadeh, G. (1991). The measurement of end-user computing satisfaction: theoretical and methodological issues. *MIS Quarterly*, pp. 68-95.
- Doolin, B., & Troshani, I. (2004). XBRL: a research note. *Qualitative Research in Accounting & Management*, 1(2), 93-104. doi:10.1108/11766090410813373
- Doolin, B., and Troshani, I. (2005). Drivers and Inhibitors Impacting Technology Adoption: A Qualitative Investigation into the Australian Experience with XBRL. *BLED 2005 Proceedings*. 19
- Doolin, B., & Troshani, I. (2007). Organizational Adoption of XBRL. *Electronic Markets*, 17(3), 199-209. doi:10.1080/10196780701503195
- Drucker, P. F. (2001). The Next Society: A survey of the near future. *The Economist* online (2001, November 1). Retrieved January 16, 2017, from <http://www.economist.com/node/770819>
- Eastin, M. S., & LaRose, R. (2000). Internet self-efficacy and the psychology of the digital divide. *Journal of Computer Mediated Communication*, 6(1), 1-20.
- Enachi, M., & Andone, I. I. (2015). The Progress of XBRL in Europe – Projects, Users and Prospects. *Procedia Economics and Finance*, 20, 185-192. doi:10.1016/s2212-5671(15)00064-7

- Felden, C. (2011). Characteristics of XBRL adoption in Germany. *Journal of Management Control*, 22(2), 161-186. doi:10.1007/s00187-011-0134-7
- Fichman, R. G. (1992). Information technology diffusion: A review of empirical research," *Proc. 13th Inter. Conf. on IS*, pp. 195–206.
- Fishbein, M., & Ajzen, I. (1977). *Belief, attitude, intention, and behavior: An introduction to theory and research*.
- Flowerday, S., Blundell, A., & Solms, R. V. (2006). Continuous auditing technologies and models: A discussion. *Computers & Security*, 25(5), 325-331. doi:10.1016/j.cose.2006.06.004
- Francis, P. (2012). Intro to XBRL, *Accountants Today*, September/ October, 34-41
- Francis, P. (2012). XBRL – A Technical Perspective, *Accountants Today*, November/ December, 30-33.
- Francis, P. (2013). XBRL – Challenges and Best Practices, *Accountants Today*, March/ April, 16-19.
- Frazer, L. and Lawley, M. (2000) *Questionnaire Design and Administration: A practical guide*, New York: Wiley.

- Gefen, D., Straub, D. W. and Boudreau, M.-C. (2000). Structural equation modeling and regression: Guidelines for research practice. Communications of the Association for Information Systems. Citeseer.
- Ghani, E. & Jusoff, K. (2009). Determinants of Preferred Financial Digital Format by New Zealand Accounting Practitioners. *International Education Studies*, 2(1), P167.
- Ghani, E., Mara, U., Laswad, F., Tooley, S., & Jusoff, K. (2009). The Role of Presentation Format on Decision-makers' Behaviour in Accounting. *International Business Research*, 2(1), P183.
- Ghani, E.K., Muhammad, K. (2014). Financial Reporting Preparers' Perception on Usage Expectation of Extensible of Business Reporting Language in Malaysia. *British Journal of Economic, Finance and Management Sciences*, 9 (1).
- Gibbs, J. L., & Kraemer, K. L. (2004). A Cross-Country investigation of the determinants of scope of e-commerce use: An institutional approach. *Electronic Markets*, 14(2), 124-137.
- Gostimir, D. (2015). XBRL Standard for Financial Reporting in Croatia: Current State and Perspectives. *Business Systems Research Journal*, 6(2). doi:10.1515/bsrj-2015-0009

- Grandon, E. & Pearson, J.M. (2003). Strategic value and adoption of electronic commerce: an empirical study of Chilean small and medium businesses. *J. Global Inf. Technol. Manage.* 6 (3), 22–43.
- Gray, G. L., & Miller, D. W. (2009). XBRL: Solving real-world problems. *International Journal of Disclosure and Governance*, 6(3), 207-223.
doi:10.1057/jdg.2009.8
- Groves, R. (2004). *Survey Methodology*. Hoboken, NJ: Wiley.
- Hair, J. F. Jr., Anderson, R. E., Tatham, R. L. & Black, W. C. (1995). *Multivariate Data Analysis* (3rd ed). New York: Macmillan.
- Hair, J. (1998). *Multivariate data analysis* (1st ed.). Upper Saddle River, N.J.: Prentice Hall.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate Data Analysis with Readings*, 4th Edition. Englewood Cliffs, NJ: Prentice Hall.
- Hair, J. F., Bush, P. R., & Ortinau, J. D. (2003). *Marketing Research Within a Changing Information Environment* (2nd ed.). New York: McGraw-Hill/Irwin.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, N.J.: Prentice Hall.

Hair, J. F., Ringle, C. M., and Sarstedt, M. 2011. "PLS-SEM: Indeed a Silver Bullet."
Journal of Marketing Theory and Practice 19 (2): 139-151.

Hair, J. F., Hult, G. T. M., Ringle, C. M. and Sarstedt, M. (2014), A Primer on Partial
Least Squares Structural Equation Modeling (PLS-SEM), Sage Publication,
Los Angeles.

Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2017). A Primer on Partial
Least Squares Structural Equation Modeling (PLS-SEM), 2nd Ed., Sage:
Thousand Oaks.

Hart, P., & Saunders, C. (1997). Power and Trust: Critical Factors in the Adoption
and Use of Electronic Data Interchange. *Organization Science*, 8(1), 23-42.
doi:10.1287/orsc.8.1.23

Henderson, D., Sheetz, S. D., & Trinkle, B. S. (2011). Understanding the Intention to
Adopt XBRL: An Environmental Perspective. *Journal of Emerging
Technologies in Accounting*, 8(1), 7-30. doi:10.2308/jeta-10251

Hendrickson, A. R., Glorfeld, K., & Cronan, T. P. (1994). On the Repeated Test-
Retest Reliability of the End-User Computing Satisfaction Instrument: A
Comment. *Decision Sciences*, 25(4), 655-665. doi:10.1111/j.1540-
5915.1994.tb01864.

Henseler, J., Hubona, G. and Ray, P. A. (2016), "Using PLS path modeling in new technology research: updated guidelines", *Industrial Management & Data Systems*, Vol. 116 No. 1, pp. 2-20.

Higgins, L. N., & Harrell, H. W. (2003). XBRL: Don't lag behind the digital information revolution. *Journal of Corporate Accounting & Finance*, 14(5), 13-21. doi:10.1002/jcaf.10178

Hodge, F., Kennedy, J., & Maines, L. (2004). Does search-facilitating technology improve the transparency of financial reporting? *Accounting Review*, 79(3), 687-703.

Hoffer, J. A., & Alexander, M. B. (1992). The diffusion of database machines. *ACM SIGMIS Database*, 23(2), 13-19. doi:10.1145/141342.141352

Hoffman, C. (2006). *Financial reporting using XBRL: IFRS and US GAAP edition*. Lulu. com.

Hunt, S. D., Sparkman Jr, R. D., & Wilcox, J. B. (1982). The pretest in survey research: Issues and preliminary findings. *Journal of Marketing Research*, 269-273.

Hussein, R., Karim, N.S.A., Mohamed, N. & Ahlan, A.R. (2007). The influence of organizational factors on information systems success in e-government agencies in Malaysia. *Electron. J. Inf. Syst. Dev. Countries* 29 (1), 1–17.

- Iacovou, C.L., Benbasat, I. & Dexter, A.S. (1995). Electronic data interchange and small organizations: adoption and impact of technology. *MIS Q.* 19 (4), 465–485
- Igbaria, M., Parasuraman, S., & Baroudi, J. J. (1996). A motivational model of microcomputer usage. *Journal of Management Information Systems*, 13(1), 127-143.
- Ilias, A., Razak, Z. M. A. & Razak, S. F. F. A. (2014). The Awareness of the Extensible Business Reporting Language (XBRL) In Malaysia, *Journal of Internet Banking & Commerce*. Aug2014, Vol. 19 Issue 2, p1-26. 26p.
- Ilias, A., Razak, Z. M. A. & Razak, S. F. F. A. (2014). The Intention to Re-use the Internet Financial Reporting (IFR) in Malaysia. *Rev. Integr. Bus. Econ. Res.* Vol 3(1).
- Ilias, A. & Ghani E. K. (2015). Examining the Adoption of Extensible Business Reporting Language among Public Listed Companies in Malaysia, *Procedia Economics and Finance* 28, 32 – 38.
- Ilias, A., Razak, M. Z., & Rahman, R. A. (2015). The Expectation of Perceived Benefit of Extensible Business Reporting Language (XBRL): A Case in Malaysia. *The Journal of Developing Areas*, 49(5), 263-271. doi:10.1353/jda.2015.0060

- Ives, B., & Olson, M. H. (1984). User Involvement and MIS Success: A Review of Research. *Management Science*, 30(5), 586-603. doi:10.1287/mnsc.30.5.586
- Jamieson, S. (2004). Likert Scales: How to (Ab) Use Them. *Medical Education*, 38, 1217-1218.
- Jantan, M., Ramayah, T., Ismail, N., & Hikmat, A. (2001). The CEO and AMT Adoption in Malaysia Small and Medium Scale Manufacturing Industries. The 10th International Conference on Management of Technology.
- Janvrin, D., Bierstaker, J., & Lowe, D. J. (2008). An Examination of Audit Information Technology Use and Perceived Importance. *Accounting Horizons*, 22(1), 1-21. doi:10.2308/acch.2008.22.1.1
- Janvrin, D., Pinsker, R. & Mascha, M.F. (2011). XBRL-Enabled, Excel, or PDF? The Effects of Exclusive Technology Choice on the Analysis of Financial Information. CAAA Annual Conference 2011. Available at SSRN: <http://ssrn.com/abstract=1740249> or <http://dx.doi.org/10.2139/ssrn.1740249>.
- Jehangir, M., Dominic, P., Naseebullah, N., & Khan, A. (2011). Towards Digital Economy: The Development of ICT and E-Commerce in Malaysia. *Modern Applied Science*, 5(2). doi:10.5539/mas.v5n2p171

Jeyaraj, A., Rottman, J.W., Lacity, M.C. (2006). A review of the predictors, linkages and biases in IT innovation adoption research. *J. Inf. Technology*. 21 (1), 1-23.

Jones, A. & Willis, M. (2003). The challenge of XBRL: business reporting for the investor. *Balance Sheet*, 11(3), 29-37.
<http://dx.doi.org/10.1108/09657960310491172>

Kaiser, H. (1970). A second-generation little jiffy. *Psychometrika*, 35(4), 401-415.

Kamel, S. (Ed.). (2006). *Electronic Business in Developing Countries, Opportunities and Challenges*. Hershey: Idea Group.

Khatibi, A., Haque, A., Ismail, H. and Al Mahmud, S. (2007). Factors driving electronic commerce initiative in Malaysian organization. *J. Social Science*, 14 (1), 1-11.

Kim, H. W., Chan, H. C. & Chan, Y. P. (2007). A balanced thinking-feelings model of information systems continuance. *Int. J. Hum Comput Stud*. 65 (6), 511-525.

Kline, R. (2005). *Principles and practice of structural equation modeling* (1st ed.). New York: Guilford Press.

Kline, R. (2011). *Principles and practice of structural equation modeling* (3rd ed.).
New York: Guilford Press.

Krejcie, R. & Morgan, D. (1970). *Determining sample size for research activities* (1st ed.). [Emmitsburg, MD]: [National Emergency Training Center].

Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315-330.

Krueger Jr, N. F. (2007). The cognitive infrastructure of opportunity emergence. In *Entrepreneurship* (pp. 185-206). Springer Berlin Heidelberg.

Korpela, M., Montealegre, R., & Poulymenakou, A. (2003). *Organizational Information Systems in the Context of Globalization*, Boston, Kluwer, pp 373-386

Kowtha, N.R. and Choon, T.W.I. (2001). Determinants of website development: a study of electronic commerce in Singapore. *Inf Manage*, 39 (3), 227-242.

Laerd Statistics. (2015). Statistical tutorials and software guides. Retrieved from <https://statistics.laerd.com/>

Lester, W. (2007). XBRL: The New Language of Corporate Financial Reporting. *Business Communication Quarterly*, 70(2), 226-231.
<http://dx.doi.org/10.1177/10805699070700020603>

Leonard-Barton, D. (1995), "Wellsprings of knowledge: Building and sustaining the sources of innovation", *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*

Li, S., Park S. H. & Li S. (2004). The great leap forward: The transition from relation-based governance to rule-based governance. *Organizational Dynamics*, 33 (1), 63-78.

Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology*, 140, 1-55.

Lin, H. Y. (2003). *The Business Financial Reporting with XBRL Technology*. National Yunlin University of Science & Technology, Taiwan.

Litwin, M. (1995). *How to Measure Survey Reliability and Validity* (1st ed.). Thousand Oaks: SAGE Publications.

Liu, C. & O'Farrell, G. (2013). The role of accounting values in the relation between XBRL and forecast accuracy. *International Journal Of Accounting &*

Information Management, 21(4), 297-313. <http://dx.doi.org/10.1108/ijaim-03-2013-0023>

Low, C., Chen, Y., & Wu, M. (2011). Understanding the determinants of cloud computing adoption. *Industrial Management & Data Systems*, 111 (7), 1006-1023.

Mason, D.J. and Zuercher, S.L. (1995). Pilot studies in clinical nursing research. *Journal of the New York State Nursing Association* 26: 11.

Mathieson, K. (1991). Predicting User Intentions: Comparing the Technology Acceptance Model with the Theory of Planned Behavior. *Information Systems Research*, 2(3), 173-191. doi:10.1287/isre.2.3.173

Meyer, J. P., Becker, T. E., & Dick, R. V. (2006). Social identities and commitments at work: toward an integrative model. *Journal of Organizational Behavior*, 27(5), 665-683. doi:10.1002/job.383

Molla, A., & Licker, P.S. (2005). eCommerce adoption in developing countries: a model and instrument. *Information & Management*, 42, 877-899.

Moore, G. C., & Benbasat, I. (1991). Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. *Information Systems Research*, 2(3), 192-222. doi:10.1287/isre.2.3.192

- Nel, G., & Steenkamp, L. (2008). An exploratory study of chartered accountants' awareness and understanding of XBRL. *Meditari Accountancy Research*, 16(1), 79-93. doi:10.1108/10222529200800005
- Nilikanta, S., & Scammel, W. (1990). The effect of information sources and communication channels on the diffusion of innovation in a database development environment. *Management Science*, 36(1), 24-40.
- Norazimah, A. A. (2013). 26th XBRL Conference, Ireland. The Companies Commission of Malaysia's XBRL Taxonomy for Financial Reporting. Director of Corporate Development And Policy Division, Companies Commission Of Malaysia. .
- Nunnally, J. (1967). *Psychometric theory* (1st ed.). New York: McGraw-Hill.
- Nunnally, J. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw Hill.
- O'Leary, Z. (2004). *The essential guide to doing research* (1st ed.). London: SAGE.
- Oliveira, T., & Martins, M. F. (2011). Literature Review of Information Technology Adoption Models at Firm Level. *Electronic Journal Information Systems Evaluation*, 14 (1), 110-121.

Pallant, J. (2013). *SPSS survival manual* (1st ed.). Maidenhead, Berkshire, England: McGraw Hill.

Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach*. Hillsdale, NJ: Erlbaum.

Peng, E. Y., Shon, J., & Tan, C. (2014). Market Reactions to XBRL-Formatted Financial Information: Empirical Evidence from China. *International Journal of E-Business Research*, 10(3), 1-17. doi:10.4018/ijebr.2014070101

Pfeiffer, H. K. (1992). The Diffusion of Electronic Data Interchange. *Contributions to Management Science*. doi:10.1007/978-3-642-51559-0

Pinsker, R. (2003). XBRL Awareness in Auditing: A Sleeping Giant? *Managerial Auditing Journal*, 18 (9) (2003), pp. 732–736.
<http://dx.doi.org/10.1108/02686900310500497>

Pinsker, R. (2007). A Theoretical Framework for Examining the Corporate Adoption Decision Involving XBRL as a Continuous Disclosure Reporting Technology
New Dimensions of Business Reporting and XBRL (pp. 73-98).

Pinsker, R. & Wheeler, P. (2009). Nonprofessional Investors' Perceptions of the Efficiency and Effectiveness of XBRL Enabled Financial Statement Analysis

and of Firms Providing XBRL-Formatted Information International Journal of Disclosure and Governance, 6 (3) (2009), pp. 241–261

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.

Premkumar, G., Ramamurthy, K., & Nilakanta, S. (1994). Implementation of Electronic Data Interchange: An Innovation Diffusion Perspective. *Journal Of Management Information Systems*, 11(2), 157-186.

Premkumar, G. & Roberts, M. (1999). Adoption of new information technologies in rural small businesses. *Omega*, 27(4), 467-484.

Premuroso, R. F., & Bhattacharya, S. (2008). Do early and voluntary filers of financial information in XBRL format signal superior corporate governance and operating performance? *International Journal of Accounting Information Systems*, 9(1), 1-20. doi:10.1016/j.accinf.2008.01.002

Public Finance International Website.
<http://www.publicfinanceinternational.org/news/2016/10/integrated-reporting-play-key-role-malaysias-economic-development>. (Assessed on 11/12/2016).

- Ramayah, T., Ling, N., Taghizadeh, S., & Rahman, S. (2016). Factors influencing SMEs website continuance intention in Malaysia. *Telematics And Informatics*, 33(1), 150-164.
- Randall, D. & Gibson, A. (1990). Methodology in business ethics research: A review and critical assessment. *Journal Of Business Ethics*, 9(6), 457-471.
<http://dx.doi.org/10.1007/bf00382838>
- Rawashdeh, A.A. (2010). "Towards a conceptual model of XBRL diffusion", available at: <http://ssrn.com/abstract/41551430> (accessed 18 December 2016).
- Raymond, L. (2001). Determinants of web site implementation in small businesses, *Internet Res*, 11 (5), 411-424.
- Rogers, E. (1995). *Diffusion of innovation*: The Free Press New York.
- Romijn, H. and Albaladejo, M. (2002). "Determinants of innovation capability in small electronics and software firms in southeast England", *Research Policy*, Vol. 31 No. 7, pp. 1053-1067.
- Saunders, C. S., & Clark, S. (1992). EDI Adoption and Implementation. *Information Resources Management Journal*, 5(1), 9-20. doi:10.4018/irmj.1992010102

Scott, W.R. (2001). *Institutions and organizations*, 2 ed. Thousand Oaks, CA, Sage Publications.

Scupola, A. (2003). Government intervention in SMEs e-commerce adoption: an institutional approach. *PACIS 2003 Proceedings*, 13.

Securities Commission (SECCOM) Website. <http://www.sc.com.my/my/data-statistics/extensible-business-reporting-language-xbrl/> (Assessed on 31/7/2015)

Sekaran, U. & Bougie, R. (2013). *Research Methods for Business: A Skill-Building Approach*. ISBN-10: 111994225X. ISBN-13: 978-1119942252. 6th Ed. Wiley.

Shapiro, A & Sokol, L. (1982). Social Dimensions of Entrepreneurship. In: Kent C, Sexton D, Vesper K (eds.), *The Encyclopedia of Entrepreneurship*, Prentice-Hall, Englewood Cliffs, pp. 72–90

Sharma, S. (1996). *Applied Multivariate Techniques* (0471310646). ISBN: 978-0-471-31064-8. 512 pages. October 1995, ©1996.

Staples, D.S., & Seddon, P. (2004). Testing the technology-to-performance chain model, *Journal of Organizational and End User Computing*, 16(4), 17-26.

Steenkamp, L., & Nel, G. (2012). The adoption of XBRL in South Africa: an empirical study. *The Electronic Library*, 30(3), 409-425. doi:10.1108/02640471211241672

Stergiaki, E., Stavropoulos, A. & Lalou, T. (2013). "Acceptance and usage of extensible business reporting language: An empirical review", *Journal of Social Sciences*, Vol. 9, No. 2, pp. 1-14.

Sulaiman, A. (2000). The status of e-commerce applications in Malaysia. *Information Technology For Development*, 9(3-4), 153-161.

Suruhanjaya Syarikat Malaysia (SSM) Website. <http://www.ssm.com.my/en/xbrl-en> (Assessed on 24/1/2018)

Swatman, P. M., & Swatman, P. A. (1992). EDI system integration: A definition and literature survey. *The Information Society*, 8(3), 169-205. doi:10.1080/01972243.1992.9960119

Szajna, B., & Scamell, R. W. (1993). The Effects of Information System User Expectations on Their Performance and Perceptions. *MIS Quarterly*, 17(4), 493. doi:10.2307/249589

Szajna, B. (1996). Empirical Evaluation of the Revised Technology Acceptance Model. *Management Science*, 42(1), 85-92. Retrieved from <http://www.jstor.org/stable/2633017>

Tabachnick, B. & Fidell, L. (2001). *Using multivariate statistics* (4th ed.). Boston: Pearson/Allyn & Bacon.

Tabachnick, B. G. & Fidell, S. L. (2013). *Using Multivariate Statistics* (6th ed.). Boston: Pearson Education.

Tarmidi, M., & Roni, R. A. (2014). An International Comparison of the Determinants and Financial Information Quality in XBRL Reporting Environment. *Procedia - Social and Behavioral Sciences*, 164, 135-140.
doi:10.1016/j.sbspro.2014.11.061

Taylor, S., & Todd, P. A. (1995). Understanding Information Technology Usage: A Test of Competing Models. *Information Systems Research*, 6(2), 144-176.
doi:10.1287/isre.6.2.144

Teo, T. (2007). Organizational Characteristics, Modes of Internet Adoption and Their Impact. *Journal Of Global Information Management*, 15(2), 91-117.

Teo, T. S. H., Lim, G. S., & Fedric, S. A. (2007). The adoption and diffusion of human resources information systems in Singapore. *Asia Pacific Journal of Human Resources*, 45(1), 44-62.

- Thioune, R.M.C. (2003). Information and communication technologies for development in Africa: Opportunities and challenges for community development. Volume 1. Ottawa: IDRC. Available: <http://www.idrc.ca>
- Thompson, R., Compeau, D., & Higgins, C. (2006). Intentions to use information technologies: An integrative model. *Journal of Organizational and End User Computing (JOEUC)*, 18(3), 25-46.
- Thong, J. & Yap, C. (1995). CEO characteristics, organizational characteristics and information technology adoption in small businesses. *Omega*, 23(4), 429-442.
- Thong, J. (1999). An Integrated Model of Information Systems Adoption in Small Businesses. *Journal Of Management Information Systems*, 15(4), 187-214.
- Thong, J. (2001). Resource constraints and information systems implementation in Singaporean small businesses. *Omega*, 29(2), 143-156.
- Tornatzky, L.G., & Fleischer, M. (1990). *The Processes of Technological Innovation*. Lexington Books, Lexington, Massachusetts.
- Trochim, W. M. (2006). *The Research Methods Knowledge Base*, 2nd Edition. Internet WWW page, at URL: <http://www.socialresearchmethods.net/kb/> (version current as of October 20, 2006).

- Troshani, I., & Rao, S. (2007). Drivers and Inhibitors to XBRL adoption. *International Journal of E-Business Research*, 3(4), 98-111. doi:10.4018/jebr.2007100106
- Troshani, I. & Lymer, A. (2010). Translation in XBRL standardization. *Information Technology & People*, 23(2), 136-164. <http://dx.doi.org/10.1108/09593841011052147>
- Tse, A., Tse, K. C., Yin, C. H., Ting, C. B., Yi, K. W., Yee, K. P. & Hong, W. C. (1995). Comparing two methods of sending our questionnaires: E-mail versus mail. *Journal of the Market Research Society*, 37(4), 441-446.
- Valentinetti, D., & Rea, M. A. (2011). Adopting XBRL in Italy: Early evidence of fit between Italian GAAP Taxonomy and current reporting practices of non-listed companies. *The International Journal of Digital Accounting Research*, 11. doi:10.4192/1577-8517-v11_3
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.
- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.

XBRL International Website. <https://www.xbrl.org/>. (Assessed on 1/8/2018).

Zalkin Taylor, E., W. Bartley, J., & Al Chen, Y. (2010). Common Errors of XBRL Implementation. *Journal Of Accountancy*, 209(2), 46-51.

Zikmund, G. (2003). *Business Research Methods* (7th ed.). USA: Thomson South-Western.

Zikmund, G., & Babin, B. (2007). *Essentials of Marketing Research*. Australia: Thomson South-Western.

Zhu, K., Kraemer, K. L., & Xu, S. (2006). The Process of Innovation Assimilation by Firms in Different Countries: A Technology Diffusion Perspective on E-Business. *Management Science*, 52(10), 1557-1576.
doi:10.1287/mnsc.1050.0487

APPENDICES

Appendix 1 – Questionnaire



UNIVERSITI UTARA MALAYSIA

A Study on factors influencing the perceived timeline to Adopt XBRL Amongst PLC's in Malaysia.

HIGHLY CONFIDENTIAL

Dear Sir/Madam,

First and foremost, thank you very much for taking part in this survey. The objective of this survey is to perform a preliminary study on the determinants of XBRL adoption readiness amongst Public Listed Companies (PLCs) in Malaysia. It's purely an academic study that is undertaken to fulfill the partial requirement of the Doctorate in Business Administration program of Universiti Utara Malaysia.

Ideally, this questionnaire should be filled up by the CEO, managing director, managers or executives who has an influence on the decision making on technology adoption matters. If you are not in such a position, I would appreciate if you could refer it to the rightful person.

Appreciate if you could please complete the questionnaire based on your honest opinion. All the information provided by you will be kept anonymous and strictly confidential, and will only be used for the purpose of this academic research.

Your participation is highly appreciated in making this study successful. Should you have any queries, please feel free to drop me an email at patfran2013@gmail.com or reach me on my mobile at 012 – 4858174.

Thank you very much for your valuable time and assistance in completing this questionnaire.

Sincerely

Patricia Francis
Matric No. 95595,
Doctorate in Business Administration Student,
Universiti Utara Malaysia.

SECTION A: GENERAL INFORMATION

Please fill in the blanks with the relevant general information. Please tick (✓) the box and fill the necessary information for the option which best describes your company and yourself.

RESPONDENT'S PROFILE			
1	Job Level:		
	<input type="checkbox"/> Chief Executive Officer	<input type="checkbox"/> Managing Director	
	<input type="checkbox"/> Senior Manager/ Manager	<input type="checkbox"/> Senior Executive	
	<input type="checkbox"/> Others:		
2	Department/ Division:		
3	Working Experience:		
	Current organization (Years):	Overall working experience (Years):	
4	Age (Years):	<input type="checkbox"/> Below 35	<input type="checkbox"/> Between 36-55 <input type="checkbox"/> Above 55
5	Race:		
	<input type="checkbox"/> Muslim	<input type="checkbox"/> Chinese	
	<input type="checkbox"/> Indian	<input type="checkbox"/> Others:	
6	Education Level:		
	<input type="checkbox"/> Secondary	<input type="checkbox"/> Diploma	
	<input type="checkbox"/> Graduate	<input type="checkbox"/> Post Graduate	
	<input type="checkbox"/> DBA/ Ph. D	<input type="checkbox"/> Others:	
COMPANY'S PROFILE			
7	Company Name:		
8	Number of Employees:		
9	Year of Incorporation:		
10	Year of Listing:		
11	Type of Listing (Main/Ace):		
12	Industry/ Sector:		
	<input type="checkbox"/> Construction	<input type="checkbox"/> Plantations	
	<input type="checkbox"/> Consumer Products	<input type="checkbox"/> Properties	
	<input type="checkbox"/> Finance	<input type="checkbox"/> REITS	
	<input type="checkbox"/> Hotels	<input type="checkbox"/> Technology	
	<input type="checkbox"/> Industrial Products	<input type="checkbox"/> Trading/ Services	
	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Others:	

SECTION B: FACTORS INFLUENCING XBRL ADOPTION TIMELINE

This section will emphasize on the factors that will influence the XBRL adoption readiness in your company. Please circle the appropriate number that best describes your personal opinion regarding the question.

Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree
Number	1	2	3	4

Part 1. Management Characteristics					
(1) Management Innovativeness					
13	I have/ Management has original ideas	1	2	3	4
14	I have/ Management is stimulating	1	2	3	4
15	I have/ Management copes with several new ideas at the same time	1	2	3	4
16	I have/ Management has fresh perspective on old problems	1	2	3	4
17	I have/ Management would create something new rather than improve something	1	2	3	4
18	I have/ Management often risk doing things differently	1	2	3	4
(2) Management Knowledge					
19	I would rate my own/ Management understanding of technologies as very good compared to other people in similar positions	1	2	3	4
20	I have/ Management have formal qualifications in XBRL (attended workshop or training on XBRL)	1	2	3	4
21	XBRL increases the productivity of employees	1	2	3	4
22	My employees find XBRL easy to use for reporting and decision-making	1	2	3	4
23	I have/ Management has seen what other global Public Listed Companies have achieved with XBRL	1	2	3	4
24	XBRL makes financial information easier to analyse	1	2	3	4

Part 2. Organization Characteristics					
(3) Cost					
25	The cost of adopting XBRL is far greater than the benefits	1	2	3	4
26	The cost of maintenance and support of XBRL are very high for our company	1	2	3	4
27	The amount of money and time invested in training employees in XBRL is very high	1	2	3	4
(4) Internet Knowledge/ competence					
28	Most employees are computer-literate and internet savvy	1	2	3	4
29	There is at least one employee who is a computer expert	1	2	3	4
30	I would rate my/ the employees' understanding of internet and technology as very good compared with other companies in the same industry	1	2	3	4

Part 3. Technological Characteristics					
(5) Compatibility					
31	The adoption of XBRL is consistent with the values, beliefs and business needs of our company	1	2	3	4
32	There is sufficient support for the adoption of XBRL from our top management	1	2	3	4
33	There is no or only minimal resistance to change from our staff	1	2	3	4
(6) Relative Advantage					
34	Our company is satisfied with the use of internet and technology in the business	1	2	3	4
35	Technology adoption has enhanced the corporate image of our company	1	2	3	4
36	Internet and technology adoption has helped establish stronger links with our clients or other Organizations	1	2	3	4
37	Internet and technology adoption has helped our company develop new business opportunities	1	2	3	4
38	Internet and technology adoption has helped reduce the costs of information marketing and advertising, customer service and support, information gathering and telecommuting	1	2	3	4

Part 4. Environmental Characteristics					
(7) External Pressure					
39	Competition is a factor in our decision to adopt XBRL	1	2	3	4
40	Social factors are important in our decision to adopt XBRL	1	2	3	4
41	My company depend on other firms that are already using XBRL	1	2	3	4
42	Our industry is pressuring us to adopt XBRL	1	2	3	4
43	Our organization is pressured by government to adopt XBRL	1	2	3	4
(8) External Support					
44	Regulators and government agencies provide incentives for XBRL adoption	1	2	3	4
45	There are business partners who provide training on XBRL	1	2	3	4
46	Technology vendors actively market XBRL by providing incentives and subsidies for adoption	1	2	3	4
47	Technology vendors promote XBRL by offering free awareness workshops, training sessions and technical support for effective XBRL adoption	1	2	3	4

Part 5. Perceived Timeline to Adopt XBRL					
48	My company intends to adopt XBRL right now	1	2	3	4
49	My company will be ready to adopt XBRL in a year's time	1	2	3	4
50	If my company could, my company would like to further delay the time to adopt XBRL after one year or later	1	2	3	4

--- End of Questionnaire ---

Thank you for your time.

Would you like to have a copy of the results of the survey mailed to your company?

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No, thank you
--------------------------	-----	--------------------------	---------------

Appendix 2 – Table for Determining Sample Size for a Finite Population created by Krejcie and Morgan (1970)

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note: N is Population Size; S is Sample Size Source: Krejcie & Morgan, 1970

Appendix 3 – Missing Data Analysis

	N	Missing Count
JoLe	256	0
CuEx	256	0
OvEx	256	0
Age	256	0
Ra	256	0
EdLe	256	0
Ind	256	0
MI1	256	0
MI2	256	0
MI3	256	0
MI4	256	0

Appendix 3 (continued)

MI5	256	0
MI6	256	0
XA1	256	0
XA2	256	0
XA3	256	0
XA4	256	0
XA5	256	0
XA6	256	0
ReOR1	256	0
OR2	256	0
OR3	256	0
IK1	256	0
IK2	256	0
IK3	256	0
PEOU1	256	0
PEOU2	256	0
PEOU3	256	0
RA1	256	0
RA2	256	0
RA3	256	0
RA4	256	0
RA5	256	0
RePC1	256	0
RePC2	256	0
RePC3	256	0
CP1	256	0
CP2	256	0
CP3	256	0
TPP1	256	0
TPP2	256	0
GR1	256	0
GR2	256	0
ES1	256	0
ES2	256	0
ES3	256	0
ES4	256	0
XA1_A	256	0
XA2_A	256	0
ReXA3_A	256	0



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Appendix 4 – Dimension Reduction Reports

Appendix 4.1 – Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
MIFull	256	1.83	3.83	2.7826	.43137
MK	256	1.00	3.83	2.8073	.60641
COFull	256	1.67	4.00	3.1276	.56418
IKFull	256	1.33	4.00	2.7656	.51447
CMFull	256	1.33	4.00	2.7695	.40077
RAFull	256	1.40	3.40	2.2383	.42503
EPFull	256	1.40	3.60	2.4172	.46122
ESFull	256	1.25	3.25	2.5166	.42642
PTXA	256	1.33	3.33	2.4271	.54981
Valid N (listwise)	256				

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
MI1	2.89	.668	256
MI2	2.46	.940	256
MI3	2.31	.737	256
MI4	3.00	.861	256
MI5	3.17	.898	256
MI6	2.88	.690	256
MK1	2.78	.650	256
MK2	2.77	.637	256
MK3	2.68	.825	256
MK4	2.88	.704	256
MK5	2.88	.555	256
MK6	2.84	.644	256
CO1	3.13	.862	256
CO2	2.91	.861	256
CO3	3.34	.655	256
IK1	2.43	.694	256
IK2	2.96	.804	256
IK3	2.90	.815	256
CM1	2.76	.609	256
CM2	2.89	.512	256
CM3	2.66	.674	256
RA1	2.34	.667	256
RA2	2.17	.573	256
RA3	2.22	.994	256
RA4	1.80	.778	256

Appendix 4.1 – Descriptive Statistics (cont'd.)

RA5	2.66	.734	256
EP1	2.64	.760	256
EP2	2.34	.724	256
EP3	2.57	.683	256
EP4	2.33	.887	256
EP5	2.21	.657	256
ES1	2.27	.651	256
ES2	2.51	.613	256
ES3	2.64	.721	256
ES4	2.64	.694	256
PTAX1	2.37	.724	256
PTAX2	2.55	.723	256
Re PTAX3	2.36	.641	256

Appendix 4.2 – KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.854
Bartlett's Test of Sphericity	Approx. Chi-Square	9671.874
	df	703
	Sig.	.000

Appendix 4.3 – Total Variance Explained (All Variables)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.863	42.923	42.923	3.863	42.923	42.923	3.051	33.895	33.895
2	1.583	17.588	60.511	1.583	17.588	60.511	2.093	23.254	57.149
3	1.113	12.366	72.877	1.113	12.366	72.877	1.298	14.426	71.575
4	1.012	11.244	84.121	1.012	11.244	84.121	1.129	12.546	84.121
5	.436	4.849	88.97						
6	.353	3.926	92.896						
7	.279	3.098	95.994						
8	.241	2.676	98.671						
9	.119	1.326	100						

Extraction Method: Principal Component Analysis.

Appendix 4.4 – Factor Loadings (Outer Loadings – PLS3)

	1. Mgt Innovativeness (MI)	2. Mgt Knowledge (MK)	3. Cost (CO)	4. Int Knowledge (IK)	5. Compatibility (CM)	6. Relative Adv (RA)	7. Ex Pressure (EP)	8. Ex Support (ES)	9. Perceived Timeline to Adopt XBRL (PTAX)
CM1					0.967				
CM3					0.917				
CO1			0.864						
CO2			0.844						
EP1							0.746		
EP2							0.778		
EP4							0.642		
EP5							0.852		
ES2								0.766	
ES3								0.662	
ES4								0.881	
IK2				0.983					
IK3				0.978					
MI4	0.942								
MI5	0.831								
MI6	0.937								
MK1		0.866							
MK2		0.894							
MK3		0.892							
MK4		0.916							
MK5		0.904							
MK6		0.963							
PTAX1									0.816
PTAX2									0.787
RA1						0.697			
RA2						0.937			
RA5						0.710			
Re_PTAX3									0.760

Appendix 5 – Descriptive Statistics Reports

Appendix 5.1 – Frequency Tables

I. Job Level

JoLe

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Top Management	56	21.9	21.9	21.9
	Mid Management	125	48.8	48.8	70.7
	Executive	75	29.3	29.3	100.0
	Total	256	100.0	100.0	

II. Current Experience

CuEx

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 5 yrs	187	73.0	73.0	73.0
	Between 5-10 yrs	58	22.7	22.7	95.7
	Above 10 yrs	11	4.3	4.3	100.0
	Total	256	100.0	100.0	

III. Overall Experience

OvEx

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 10 yrs	31	12.1	12.1	12.1
	Between 10-20 yrs	104	40.6	40.6	52.7
	Above 20 yrs	121	47.3	47.3	100.0
	Total	256	100.0	100.0	

IV. Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 35 yrs	33	12.9	12.9	12.9
	Between 36-55 yrs	220	85.9	85.9	98.8
	Above 55 yrs	3	1.2	1.2	100.0
	Total	256	100.0	100.0	

V. Race

Ra

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Muslim	74	28.9	28.9	28.9
	Chinese	116	45.3	45.3	74.2
	Indian	52	20.3	20.3	94.5
	Others	14	5.5	5.5	100.0
	Total	256	100.0	100.0	

VI. Education Level

EdLe

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Diploma	9	3.5	3.5	3.5
Graduate	105	41.0	41.0	44.5
Post Graduate	65	25.4	25.4	69.9
DBA/ PHD	2	.8	.8	70.7
Professional	75	29.3	29.3	100.0
Total	256	100.0	100.0	

VII. Industry

Ind

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Manufacturing	43	16.8	16.8	16.8
Oil & Gas	18	7.0	7.0	23.8
Construction	8	3.1	3.1	27.0
Retail	17	6.6	6.6	33.6
Service	170	66.4	66.4	100.0
Total	256	100.0	100.0	

Appendix 5.2 – Frequencies

Statistics

		JoLe	CuEx	OvEx	Age	Ra	EdLe	Ind
N	Valid	256	256	256	256	256	256	256
	Missing	0	0	0	0	0	0	0
Mean		2.07	1.31	2.35	1.88	2.02	3.11	3.99
Std. Error of Mean		.045	.034	.043	.022	.053	.082	.099
Median		2.00	1.00	2.00	2.00	2.00	3.00	5.00
Mode		2	1	3	2	2	2	5
Std. Deviation		.713	.550	.687	.357	.844	1.313	1.580
Variance		.508	.302	.472	.127	.713	1.724	2.498
Skewness		-.109	1.572	-.586	-1.579	.507	.480	-1.122
Std. Error of Skewness		.152	.152	.152	.152	.152	.152	.152
Kurtosis		-1.020	1.541	-.757	3.090	-.335	-1.291	-.529
Std. Error of Kurtosis		.303	.303	.303	.303	.303	.303	.303
Minimum		1	1	1	1	1	1	1
Maximum		3	3	3	3	4	5	5
Sum		531	336	602	482	518	797	1021
Percentiles	25	2.00	1.00	2.00	2.00	1.00	2.00	3.00
	50	2.00	1.00	2.00	2.00	2.00	3.00	5.00
	75	3.00	2.00	3.00	2.00	3.00	5.00	5.00

JoLe

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Top Management	56	21.9	21.9	21.9
	Mid Management	125	48.8	48.8	70.7
	Executive	75	29.3	29.3	100.0
	Total	256	100.0	100.0	

CuEx

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 5 yrs	187	73.0	73.0	73.0
	Between 5-10 yrs	58	22.7	22.7	95.7
	Above 10 yrs	11	4.3	4.3	100.0
	Total	256	100.0	100.0	

OvEx

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 10 yrs	31	12.1	12.1	12.1
	Between 10-20 yrs	104	40.6	40.6	52.7
	Above 20 yrs	121	47.3	47.3	100.0
	Total	256	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 35 yrs	33	12.9	12.9	12.9
	Between 36-55 yrs	220	85.9	85.9	98.8
	Above 55 yrs	3	1.2	1.2	100.0
	Total	256	100.0	100.0	

Ra

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Muslim	74	28.9	28.9	28.9
	Chinese	116	45.3	45.3	74.2
	Indian	52	20.3	20.3	94.5
	Others	14	5.5	5.5	100.0
	Total	256	100.0	100.0	

EdLe

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Diploma	9	3.5	3.5	3.5
Graduate	105	41.0	41.0	44.5
Post Graduate	65	25.4	25.4	69.9
DBA/ PHD	2	.8	.8	70.7
Professional	75	29.3	29.3	100.0
Total	256	100.0	100.0	

Ind

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Manufacturing	43	16.8	16.8	16.8
Oil & Gas	18	7.0	7.0	23.8
Construction	8	3.1	3.1	27.0
Retail	17	6.6	6.6	33.6
Service	170	66.4	66.4	100.0
Total	256	100.0	100.0	

Appendix 6 – Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
1. Mgt Innovativeness (MI)	0.893	0.962	0.931	0.819
2. Mgt Knowledge (MK)_	0.956	0.964	0.965	0.821
3. Cost (CO)	0.630	0.632	0.844	0.730
4. Int Knowledge (IK)	0.960	0.970	0.980	0.961
5. Compatibility (CM)	0.879	1.005	0.941	0.888
6. Relative Adv (RA)	0.702	0.908	0.829	0.622
7. Ex Pressure (EP)	0.760	0.789	0.843	0.575
8. Ex Support (ES)	0.685	0.801	0.817	0.601
9. Perceived Timeline to Adopt XBRL (PTAX)	0.695	0.694	0.831	0.621

Appendix 7 – Fornell-Larcker Criterion

	1. Mgt Innovativeness (MI)	2. Mgt Knowledge (MK)	3. Cost (CO)	4. Int Knowledge (IK)	5. Compatibility (CM)	6. Relative Adv (RA)	7. Ex Pressure (EP)	8. Ex Support (ES)	9. Perceived Timeline to Adopt XBRL (PTAX)
1. Mgt Innovativeness (MI)	0.905								
2. Mgt Knowledge (MK)	0.896	0.906							
3. Cost (CO)	0.805	0.819	0.854						
4. Int Knowledge (IK)	0.602	0.609	0.707	0.980					
5. Compatibility (CM)	-0.143	-0.039	-0.157	-0.273	0.942				
6. Relative Adv (RA)	0.389	0.545	0.400	0.150	0.322	0.789			
7. Ex Pressure (EP)	0.453	0.618	0.431	0.219	0.100	0.739	0.758		
8. Ex Support (ES)	0.634	0.680	0.618	0.224	0.097	0.566	0.584	0.775	
9. Perceived Timeline to Adopt XBRL (PTAX)	0.628	0.648	0.576	0.632	-0.324	0.333	0.480	0.250	0.788

Appendix 8 – Inner VIF Values

	1. Mgt Innovativeness (MI)	2. Mgt Knowledge (MK)	3. Cost (CO)	4. Int Knowledge (IK)	5. Compatibility (CM)	6. Relative Adv (RA)	7. Ex Pressure (EP)	8. Ex Support (ES)	9. Perceived Timeline to Adopt XBRL (PTAX)
1. Mgt Innovativeness (MI)									6.282
2. Mgt Knowledge (MK)									8.895
3. Cost (CO)									4.667
4. Int Knowledge (IK)									2.610
5. Compatibility (CM)									1.356
6. Relative Adv (RA)									2.795
7. Ex Pressure (EP)									2.864
8. Ex Support (ES)									2.667
9. Perceived Timeline to Adopt XBRL (PTAX)									

Appendix 9 – R Square

	R Square	R Square Adjusted
9. Perceived Timeline to Adopt XBRL (PTAX)	0.658	0.647

Appendix 10 – F Square

	1. Mgt Innovativeness (MI)	2. Mgt Knowledge (MK)	3. Cost (CO)	4. Int Knowledge (IK)	5. Compatibility (CM)	6. Relative Adv (RA)	7. Ex Pressure (EP)	8. Ex Support (ES)	9. Perceived Timeline to Adopt XBRL (PTAX)
1. Mgt Innovativeness (MI)									0.044
2. Mgt Knowledge (MK)									0.015
3. Cost (CO)									0.001
4. Int Knowledge (IK)									0.085
5. Compatibility (CM)									0.124
6. Relative Adv (RA)									0.016
7. Ex Pressure (EP)									0.095
8. Ex Support (ES)									0.133
9. Perceived Timeline to Adopt XBRL (PTAX)									

Appendix 11 – Path Coefficient (Mean, STDEV, T-Values, P-Values) (One Tail Test)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
1. Mgt Innovativeness (MI) -> 9. Perceived Timeline to Adopt XBRL (PTAX)	0.306	0.306	0.112	2.731	0.003
2. Mgt Knowledge (MK) -> 9. Perceived Timeline to Adopt XBRL (PTAX)	0.213	0.196	0.113	1.877	0.030
3. Cost (CO) -> 9. Perceived Timeline to Adopt XBRL (PTAX)	-0.041	-0.056	0.093	0.445	0.328
4. Int Knowledge (IK) -> 9. Perceived Timeline to Adopt XBRL (PTAX)	0.275	0.288	0.076	3.617	0.000
5. Compatibility (CM) -> 9. Perceived Timeline to Adopt XBRL (PTAX)	-0.240	-0.252	0.053	4.516	0.000
6. Relative Adv (RA) -> 9. Perceived Timeline to Adopt XBRL (PTAX)	0.123	0.143	0.099	1.236	0.108
7. Ex Pressure (EP) -> 9. Perceived Timeline to Adopt XBRL (PTAX)	0.304	0.290	0.078	3.912	0.000
8. Ex Support (ES) -> 9. Perceived Timeline to Adopt XBRL (PTAX)	-0.349	-0.321	0.126	2.763	0.003

Appendix 12 –The PLS3 Algorithm Results

