

A Hybrid Model for Exploring Taichung City Elementary School Teachers' Shopping Intention Through Internet

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ABSTRACT

With the ever-changing information technology, the 24-hour internet platform, the real-time interaction, the home delivery service and the convenience store payment pickup, more favorable prices and other multiple advantages deeply touch the hearts of consumers. According to the Taiwan Network Information Center (TWNIC) statistics up to May 7, 2012, the website shopping proportion is 59.6%. The e-commerce market is growing year by year. The Ministry of Economic Affairs foresees, the e-commerce is expected to become a trillion dollar industry in 2015. Solid consumers can save their time and money by simply tapping on the mouse. This study ingetrates Technology Acceptance Model, the theory of planned behavior and trust to explore the willingness of Taichung City elementary school teachers' online shopping. Aiming at Taichung City elementary school teachers, a total of 700 questionnaires were distributed with effective recovery of 520 copies and effective rate at 74%. This study uses multiple regression to analyze the relationship between the variables. The study results show as follows: 1. Perceived usefulness, perceived ease of use, and trust have a positive impact on the internet shopping attitude of the elementary school teachers in Taichung City. 2. Perceived usefulness, attitude, subjective norm, and perceived behavioral control figure a positive impact on Taichung City elementary school teachers' behavior intentions

Keywords : Trust、 Technology Acceptance Model(TAM)、 Theory of Planned Behavior(TPB)、 Intentions to perform behavior

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REFERENCES

- 一、中文文獻 王存國、戴基峰、王凱(2004)。影響消費者接受線上購物傾向之探討—結合慎思行動理論以及交易成本理論。資訊管理學報, 第十一卷 第一期, 113-137。王成財、陳金足、王小龍(2010)。大學生參與休閒活動之行為意圖研究。萬能學報, 32期, 279-292。汪明生、陳正料、林錦郎(2005)。政府內部顧客參與行為之研究:以都市垃圾清運業務委外案為例。公共行政學報, 15期, 81-129。吳亞馨、朱素玟、方文昌(2008)。網路購物信任與科技接受模式之實證研究。資訊管理學報, 第15卷 第1期, 123~152。吳忠宏、蘇佩玲(2005)。職前教師參與生態旅遊活動之行為意圖研究。台中教育大學學報, 教育類, 19(2), 73-97。季力康、許哲彰(2005)。以計劃行為理論預測國小教師健身運動行為之研究。台灣運動心理學報, 7期, 115-129。林益民、邱郁文、施東河(2004)。線上學習使用傾向對立模式之比較實證。臺大管理論叢, 第16卷 第1期, 41-66。林秉毅(2007)。從計畫行為觀點探討網路購物顧客忠誠行為之研究(未出版之碩士論文)。開南大學, 桃園縣。林新龍(2006)。大學教師的規律運動行為:計劃行為理論的觀點。休閒運動期刊, 5期, 9-19。林娟娟、林禹均、王舒民(2010)。網路消費者的知覺風險對其購買態度及意願之研究 - 以網路購物經驗與退貨經驗為調節變數。Electronic Commerce Studies, 8(1), 37-70。邱光輝、吳文傑、秦大智(2006)。購物導向對線上購物採用之影響。行銷評論, 3(2), 221~242。許振唯(2007)。消費者網路購物意願之相關因素分析(未出版之碩士論文)。亞洲大學, 台中市。張紹勳(2001)。電子商店之關係品質模式---融合交易成本理論及科技接受模式的觀點(未出版之碩士論文)。政治大學, 台北市。陳宜棻、劉璧瑩(2010)。結合服務品質與 TAM 觀點探討消費者線上信任及購買意願之影響因素。顧客滿意學刊, 6(1), 1~32。黃智強(2000)。影響採用網路購務之研究—以網路書店為例(未出版之碩士論文)。中央大學, 桃園縣。黃維民、汪譽航、許恆韶(2012)。探討公共衛生資訊系統使用行為之實證研究—以台灣中南部雲嘉地區之糖尿病共同照護系統為例。創新與管理, 9(3), 105-141。游俊哲(2002)。以社會行銷觀點探討台北市民眾酒後駕車之行為意向(未出版之碩士論文)。交通大學, 新竹市。喻奉天、蘇國璋、許孟祥、王昭文、林盈君確定性與信任對線上消費者購買意願之影響(2010)。Journal of e-Business, 12(3), 431~456。董峰呈(2007)。利用新混合模型探討影響消費者使用網路銀行行為意圖之實證研究(未出版之博

士論文)。成功大學，台南市。蔣惠蓮(2003)。網站環境特性與產品特性對消費者網路購物行為影響之研究(未出版之碩士論文)。樹德科技大學，高雄市。鄭福昌(2008)。以IC3檢測桃園縣國中小學教師資訊素養能力之研究。國立臺灣師範大學(未出版之碩士論文)，台北市。劉玉山、王佳惠、郭乃文(2007)。醫院藥師提供用藥指導之態度與行為意向。北市醫學雜誌，4(2)，167-181。閻瑞彥、林佳燕(2009)。交易成本觀點下電子商店購買意願之研究。電子商務研究，7(2)，151-170。戴友榆、王慶堂、高紹源、李明儒(2012)。計劃行為理論應用於水域遊憩活動行為之探討—以澎湖為例。管理實務與理論研究，6(1)，34-59。蕭銘雄、鄭曉平(2008)。以延伸式科技接受模型探討消費者線上投保人壽保險之意願。Journal of e-Business，10(1)，1~26。羅希哲、劉一惠、孟祥仁(2007)。國小教師知識分享現況及行為模式比較之研究。人文社會科學研究，1(1)，99-122。二、英文文獻 Ajzen, I. (1985). From Intention to Action: A theory of planned behavior, In J. Kuhl and J. Beckman, Eds., *Actions-control : From cognition to behavior*, Heidelberg, 11-39. Ajzen, I. (1989). Attitude Structure and Behavior, in A. R. Pratkanis, S. J. Breckler and A. G. Greenwald, Eds., *Attitude Structure and Function*, Lawrence Erlbaum Associates, Hillsdale, NJ, 241-274. Ajzen, I., & Driver, B. L. (1992). Application of the Theory of Planned Behavior to Leisure Choice. *Journal of Leisure Research*, 24(3), 207-224. Ajzen, I., & M. Fishbein, (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall, Inc. Alba, Joseph, John Lynch, Barton Weitz, Chris Janiszewski, Richard Lutz, Alan Sawyer, & Stacy Wood(1997). Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Elec. *Journal of Marketing*, 61(July), 38-53. Anderson & Gerbing(1998). *Structural Equation Modeling In Practice: A Review and Recommended Two-Step Approach*, *Psychological Bulletin*, Vol. 103, No. 3, 411- 423. Anderson, R. E. & Srinivassans, S. S. (2003). E-satisfaction and E-loyalty: A contingency framework, *Psychology & Marketing*, 20(2), 123-138. Ba, S., & Pavlou, P.A.(2002). Evidence of the effect of trust building technology in electronic markets: price premium and buyer behavior, *MIS Quarterly* (26:3), 243-268. Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 25(3), 351-370. Blue, C. L., Wilbur, J. E., & Marston-Scott, M. V.(2001). Exercise among blue-collar workers: Application of the theory of planned behavior. *Wiley Online Library in Nursing & Health*, 24(6), 481-493. Brown, M., N. Pope, & K. Voges(2003). Buying or Browsing? An Exploration of Shopping Orientations and Online Purchase Intention, *European Journal of Marketing*, Vol. 37, No.11, 1666-1684. Chang, M. K., Cheung, W., & Lai, V. S.(2005). Literature derived reference models for the adoption of online shopping. *Information and Management*, Vol. 42(4), 543-559. Chang, S. H., & Tung, F. C.(2008). An empirical investigation Of students ' behavioural intentions to use the online learning course websites, *British Journal of Educational Technology*, 39(1), 71-83. Chaudhuri, A. & Morris, B.H. (2002). Product-class Effects on Brand Commitment and Brand Outcomes: The Role of Brand Trust and Brand Affect, *Brand Management*, 10, 33-58. Chen, L. D., Mark L. G., & Daniel L. S.(2004). Consumer Acceptance of virtual stores: a theoretical model and critical success factors for virtual stores, *ACM SIGMIS Data-base*, 35(2), 8-31. Chen, L. D., Tan, J. (2004). Technology Adaptation in E-commerce: Key Determinants of Virtual Stores Acceptance. *European Management Journal*, 22(1), 74-86. Cheung, C. M. K., Chan, G. W. W., & Limayem, M.(2005). A critical review of online consumer behavior: Empirical research. *Journal of Electronic Commerce in Organizations*, 3(4), 1~19. Choi, H., Choi, M., Kim, J. & Yu, H. (2003). An empirical study on the adoption of information appliances with a focus on interactive TV, *Telematics and Informatics*, 20(2), 161-183. Chow, S. & Holden, R.(1997). Toward an Understanding of Loyalty: The Moderating Role of Trust, *Journal of Management Issues*, 3, 275-298. Davis, Fred D.(1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340. Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, (35), 982 – 1002. Doney, P. M., & J. P. Cannon(1997). An Examination of the Nature of Trust in Buyer-Seller Relationship. *Journal of Marketing*, Vol. 61, 35-51. Evans, K. R., Christiansen, T., & Gill, J. D. (1996). The impact of social influence and role expectations on shopping center patronage intentions. *Journal of the Academy of Marketing Science*, 24(3), 208-218. Fishbein, M., & Ajzen, I.(1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. MA: Addison-Wesley. Fench, T.(1998). Using perceived ease of use and perceived usefulness to predict acceptance of the world wide web. *Computer Networks and ISDN System*, 30, 629-630. Ganesan, S.(1994). Determinants of Long-Term Orientation in Buyer-Seller Relationships. *Journal of Marketing*, Vol.58(2), 1-19. Gefen, D.(2000). E-commerce: The Role of Familiarity and Trust, *Omega*, 28(6), 725-737. Gefen, D., & Straub, D. W.(2000). The Relative Importance of Perceived Ease-of-Use in IS Adoption: A Study of E-Commerce Adoption. *Journal of the Association for Information System*, (1:8) 2000, 1-30. Gefen, David, Karahanna, E., & Straub, D. W.(2003a). Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, (27:1), 51-90. Gefen, David, Karahanna, E., & Straub, D. W.(2003b). Inexperience and Experience With Online Stores: The Importance of TAM and Trust. *IEEE Transactions on Engineering Management*, (50:3), 307-321. Genevieve & Bassellier G. (2001). Information Technology Competence of Business Managers: A Definition and Research Model. *Journal of Management Information Systems*, 17, 159 – 182. George, J. F.(2004). The theory of planned behavior and Internet purchasing. *Intrnet Research*, vol.14(3), 198 – 212. Hair, J. F., Black, B., Anderson, R. E. & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, New York :Pearson Prentice Hall. Hsiao, C. H., & Hung, Y. C. (2004). The Study of Behavior Intention to Accept Mobile Commerce in Technology Acceptance Model. Thesis for Master of Science Department of Information Management, Tatung University. Hsiu-Fen Lin.(2007). Predicting consumer intentions to shop online: An empirical test of competing theories. *Electronic Commerce Research & Applications*, vol.6(4), 433-442. Hsu, C.L., & Lu, H.P. (2004). Why do people play on-line games? An extended TAM with social influences and flow experience. *Information & Management*, 41, 853-868. Igarbaria, M., Zinatelli N., Cragg P., & Cavaye A. L. M. (1997). Personal Computing Acceptance Factors in Small Firms: A Structural Equation Model. *MIS Quarterly*, 21, 279 -305. Jap, J. H., & Chu, W. (2000). The Determinants of Trust in Supplier-Automaker Relationship in the U. S., Japan and Korea. *Journal of Business Studies*, 31, 259-285. Jap, S., & Weitz, B. (1995). Achieving Synergistic Outcomes in Long-Term Buyer-Supplier Relationships: A Longitudinal Investigation.

Working Paper, University Park, PA: Pennsylvania State University. Jarvenpaa, S. L. (1999). Consumer trust in an internet store: A cross-cultural validation. *Journal of Computer-Mediated Communication*, 5(2), 1-35. Jarvenpaa, S. L., & P. A. Todd (1997). Consumer Reactions to Electronic Shopping on the World Wide Web. *International Journal of Electronic Commerce*, 1(2), 59-88. Jarvenpaa, S. L., Tractinsky, N., & Vitale, M. (2000). Consumer trust in an internet store. *Information Technology and Management*, 1(1-2), 45-71. Jones, S., Wilkins, M., Morris, P., & Masera, M. (2000). Trust requirements in E-Business. *Communications of the ACM*, 43(12), 81-87. Kai, H. L. (2004). Is Ecommerce Boundary-less? Effects of Individualism-Collectivism and Uncertainty Avoidance on Internet Shopping. *Journal of International Business Studies*, 35(6), 547-559. Karahanna, E., & Straub, D. W. (1999). The psychological origins of perceived usefulness and perceived ease-of-use. *Information Management*, (35), 237-250. Klopffing, I. M., & McKinney, E. (2004). Extending the Technology Acceptance Model and the Task-Technology Fit Model to Consumer E-Commerce. *Information Technology, Learning, and Performance Journal*, 22(1), 35-48. Lai, V. S., & H. Li. (2005). Technology acceptance model for internet banking: an invariance analysis. *Information & Management*, 42, 373-386. Lederer, A. L., D. J. Maupin, M. P. Sena & Y. Zhuang. (2000). The technology acceptance model and the World Wide Web. *Decision Support System*, 29(3), 269-282. Lee, J., Cerreto, F. A., & Lee, J. (2010). Theory of Planned Behavior and Teacher's Decisions Regarding Use of Educational Technology. *Educational Technology and Society*, 13(1), 152-164. Lee, D., Park, J., & Ahn, J. (2001). On the Expansion of Factors Affecting E-Commerce Adoption. *Proceedings of the 22nd International Conference on Information Systems*, V. Storey, S. Sarket, and J. I. DeGross (eds.), New Orleans, Louisiana, 109-120. Lee, Sang M., & Chen, Liqiang (2010). *The Journal of Computer Information Systems*; Summer 50(4). Lee, M. K. O., & Turban, E. (2001). A trust model for consumer Internet shopping. *International Journal of Electronic Commerce*, 6(1), 75-91. Lewicki, R. J., & Bunker, B. B. (1995). *Developing and Maintaining Trust in Work Relationships. Trust in Organizations: Frontiers of Theory and Research*, Sage Publication, CA. Liao, S., Shao, Y. P., Wang, H., & Chen, A. (1999). The adoption of virtual banking: an empirical study. *International Journal of Information Management*, 19, 63-74. Lin, J. C. C., & Lu, H. (2000). Towards an understanding of the behavioral intention to use a web site. *International Journal of Information Management*, 20, 197-208. Loch, K. D., & Conger, S. (1996). Evaluating Ethical Decision Making and Computer Use. *Communications of the ACM*, 39(7), 74-83. Mathieson K. (1991). Predicting user intention: comparing the technology acceptance model with theory of planned behavior. *Information Systems Research*, 2(3), 173-191. Mathieson K., Peacock E., & Chin, W. (2001). Extending the Technology Acceptance Model: The Influence of Perceived User Resources. *DATA BASE for Advances in Information Systems*, 32, 86 - 112. Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web context. *Information and Management*, 38(4), 217-230. Morgan, R. M., & Hunt, S. D. (1994). The commitments trust theory of relationship marketing. *Journal of Marketing*, 58, 20-38. Morwitz, V. G., & David Schmittlein (1992). Using segmentation to improve sales forecasts based on purchase intent: which interorders actually buy? *Journal of Marketing Research*, 29(4), 391-405. Nunnally, J. C. (1978). *Psychometric Theory*, New York: McGraw-Hill. Neter, J., Kutner, M., Nachtsheim, C., & Wasserman, W. (1996). *Applied linear statistical models*, 4th ed., Chicago: Irwin. Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101-133. Pavlou, P. A. & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior. *MIS Quarterly*, 30(1), 115-143. Pavlou, P. A., & Gefen, D. (2004). Building effective online marketplaces with institution-based trust. *Information Systems Research*, 15(1), 37-59. Raghuram, P., & K. P. Corfman (1999). When Do Price Promotions Affect Brand Evaluations? *Journal of Marketing Research*, Vol. 36, May, 211-222. Reichheld, F. F., & Scheffer, P. (2000). E-loyalty: Your secret weapon on the Web. *Harvard Business Review*, July-August, 105-113. Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393-404. Sang M. Lee, Liqiang Chen (2011). An integrative research framework for the online social network service. *Service Business* September, 5(3), 259-276. Selim, H. M. (2003). An empirical investigation of student acceptance of course websites. *Computers and Education*, 40, 343-360. Shaoyi, L., Yuan, P. S., Huaqing, W., & Ada, C. (1999). The Adoption of Virtual Banking: an Empirical Study?. *International Journal of Information Management*, 19, 63 - 74. Shih, H. P. (2004). An empirical study on predicting user acceptance of e-shopping on the Web. *Information & Management*, 41, 351-368. Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, 66(January), 15-37. Szajna, B., (1996). Empirical evaluation of the revised technology acceptance model. *Management Science*, 42(1), 85-92. Taylor Nelson Sofres, (2005). TNS/TRUSTe Holiday Survey Shows Identity Theft, Spam and Spyware to be Top Concerns When Shopping Online, " November, 30. Taylor, S., & Todd, P. A. (1995a). Understanding information technology usage: a test of competing models. *Information System Research*, 6(2), 144-176. Taylor, S., & Todd, P. A. (1995b). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International Journal of Research in Marketing*, 12(2), 137-155. Tung, F. C., Chang, S. H., & Chou, C. M. (2007). An extension of trust and TAM model with IDT in the adoption of the electronic logistics information system in HIS in the medical industry. *International Journal of Medical Informatics*, In Press, Corrected Proof. Van Der Heijden, H., Verhagen, T., & Creemers, M., (2003). Understanding online purchase intentions contributions from technology and trust perspectives. *European Journal of Information Systems*, 12(1), 41-48. Vijayasathy, L. R. (2002). Product characteristics and internet shopping intentions. *Internet Research*, 12(5), 411-426. Yu, J., Ha, I., Choi, M., & Rho, J. (2005). Extending the TAM for a t-commerce. *Information & Management*, 42, 965-976. 三、網路部份 財團法人資訊工業策進會 <http://www.find.org.tw/find/aboutFind.aspx> 資策會產業情報研究所《團購快速成長 手機購物潛力無窮》2011.1.25 http://www.iii.org.tw/about/1_7_5_1.asp 資策會產業情報研究所 消費者行動購物使用現況分析(2012.3.6) 創市際(InsightXplorer)市場研究顧問公司 研究案例:電子商務小調查(2011.12.23) <http://www.insightexplorer.com/index.html> 財團法人台灣網路資訊中心(TWNIC) <http://www.twnic.net.tw>.