

**ONLINE SHOPPING ADOPTION AMONG WOMEN
IN SAUDI ARABIA**

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Universiti Utara Malaysia

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**ONLINE SHOPPING ADOPTION AMONG WOMEN
IN SAUDI ARABIA**

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fulfillment of the requirements for the degree
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ABSTRACT

Online shopping gives the flexibility and the easy to access anytime and anywhere without need to visit stores physically. Women do not allow driving car in Saudi Arabia. It is difficult for women to go out to buy essential commodities during their husband or (the father of the family) is working or busy. In this project paper I will focus on the women's who find difficulty to shop by traditional way.

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LIST OF ABBREVIATIONS

B2B	Business-to-Business
B2C	Business-to-Consumer
ICT	Information and Communication Technology
EC	Electronic Commerce
C2B	Consumer-to-Business
C2C	Consumer -to- Consumer
EDI	Electronic Data Interchange
MMO	Massively Multiplayer Online
KACST	King Abdul Aziz City for Science and Technology
STITC	Saudi Telecommunications and Information Technology Commission
SNIC	Saudi Network Information Center
DNS	Domain Name Space
ISP	Internet Serves Provider
ADSL	Asymmetric Digital Subscriber Line
MICT	Ministry of Communications and Information Technology
FICCI	Federation of Indian Chambers of Commerce and Industry
ATM	Automatic Teller Machine
SAMA	Saudi Arabian Monetary Authority
SPAN	Saudi Payments Network
EFT	Electronic Funds Transfer
POS	Point of Sale
SARIE	Saudi Arabia Riyal Interbank Expresses
UPU	Universal Postal Union
GPS	Global Positioning System

AVS	Address Verification System
IP-VPN	Internet Protocol Virtual Private Network
STC	Saudi Telecommunication Company
PDA	Personal Digital Assistant
TAM	Technology Acceptance Model
PEOU	Perceived Ease of Use
PU	Perceived Usefulness
TPB	Theory of Planned Behavior
SN	Subjective Norm
ITU	Intention to Use

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

With the rapid expansion of e-commerce, more and more products are sold on the web; more and more people are also buying products online. In order to enhance customer satisfaction and shopping experience, it has become a common practice for online merchants to enable their customers to review or to express opinions on the products that they have purchased. With more and more common users becoming comfortable with the web, an increasing number of people are writing reviews. As a result, the number of reviews that a product receives grows rapidly.

Online shopping is the process consumers go through to purchase products or services over the Internet. An online shop, e-shop, e-store, internet shop, web shop or online store evokes the physical analogy of buying products or services at a bricks-and-mortar retailer or in hypermarkets. It is an electronic commerce application used for business-to-business electronic commerce (B2B) or business-to-consumer electronic commerce (B2C). Online shopping is popular mainly because of its speed and ease of use. Some issues of concern can include fluctuating exchange rates for foreign currencies, local and international laws and delivery methods (Dennis et al, 2002).

The contents of
the thesis is for
internal user
only

REFERENCES

- Abdesselam, R. (2002), "Guidelines for Improving the Development of Web-Based Applications Proceedings of the Fourth International Workshop on Web Site Evolution", (WSE'02) IEEE page 93-94.
- Adams, D. A., Nelson, P. R., and Todd, P. A., (1992). Perceived usefulness, ease of use and usage of information technology: a replication. *MIS Quarterly*, 16(2), 227-47.
- Agarwal, R. And Prasad, J. (1999). Are individual differences germane to the acceptance of new information technologies? *Decision Sciences*, 30(2) 361-391.
- Ahn, T., Ryu, S. and Han, I. (2004), "The Impact of the Online and Offline Features on the User Acceptance of Internet Shopping Mall", *Electronic Commerce Research*, 405-420.
- Alfuraih, S. I. (2008). E-commerce and E-commerce Fraud in Saudi Arabia: A Case Study. *International Conference on Information Security and Assurance*. IEEE DOI 10.1109/ISA.45.
- Alriyadh Newspaper, 2008. Project links the traditional post with new post. Retrieved on 17 October 2009. From (<http://www.alriyadh.com/2008/03/09/article324289.html>).
- Babin, B. J., Darden, W. R., and Griffen, M. (1994). Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 49 (2), 91-99.
- Bagozzi, Richard P. (1974). Marketing as an organized behavior system of exchange. *Journal of Marketing*, 38 (4), 77-81.
- Barnes, S. J. and Vidgen, Richard, (2000). Information and Interaction quality: Evaluating Internet Bookshop Web sites with SERVQUAL. *Proceedings of the 13th International E-Commerce Conference, BLED*.

- Benetti, I., Beneventano, D., Bergamaschi, S., Corni, A., Guerra, F., and G. Malvezzi. (2001). Si-designer: a tool for intelligent integration of information. International Conference on System Sciences (HICSS2001). Retrieved on 5 September 2009. From (<http://dictionary.zdnet.com/definition/e-commerce.html>).
- Bhattacharjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*, (25)3, pp. 351-370
- Bohle, K., (2002). Integration of Electronic Payment Systems into B2C Internet Commerce. Background Paper No. 8. Electronic Payment Systems Observatory (ePSO). European Communities. Retrieved on 18 October 2009. From (<http://www.jrc.es>).
- Burke, R. R. (1997). "Do you see what I see? The future of virtual shopping", *Journal of the Academy of Science*, Vol, 25 No. 4, pp. 352-60.
- Brody, P., Misra, S. and Rao, H. (2001). On risk, Convenience, and Internet Shopping Behavior, *Communications of the ACM*, vol. 43, no. 11, pp.98-105, 20001.
- Crowston, J. and Rayport, J. (1997). The Coming Battle for Customer Information. *Harvard Business Review*, 75, 1, 53-65.
- Chen, Lei-da, Mark L. Gillenson, and Daniel L. Sherrell (2002). Enticing online consumers: An extended technology acceptance perspective. *Information & Management*, 39, 705-719.
- Childers, Terry L., Christopher L. Carr, Joann Peck, and Stephen Carson (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77, 511-535.
- Choi, S., Stahl, D.O., and Whinston, A.B. (1997). *The Economics of Electronic Commerce*. Indianapolis. Retrieved no 28 September 2009. From

(<http://scholar.google.com/scholar?q=Meanwhile,+ecommerce+can+be+defined+as+a+s+ubset+of+e-businessandhl=enandum=1andie=UTF-8andoi=scholar>).

CIA (2008). World Factbook. Retrieved no 8 October 2009. From (<http://www.airninja.com/worldfacts/countries/SaudiArabia/population.htm>).

CITC (2008). Communication and Information Technology Commission. Retrieved no 8 October 2009. From (http://www.internet.gov.sa/resources/statistics/tbdinternetuserstat/view?set_language=en).

Davis, F. D. (1989) "Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology," MIS Quarterly (13:3), pp. 319-340.

Dennis, C., Patel, T., King, T., and Hilton, J. (2002). Qualitative Studies of Shoppers' Motivations, 9th International Conference on Recent Advances in Retailing and Services Science. Germany: EIRASS, Heidelberg.

DigitSmith (2005). Ecommerce definition and types of ecommerce. Retrieved on 1 October 2009. From (<http://www.digitSmith.com/ecommerce-definition.html>).

DZNet, (2007). E-Commerce. Retrieved no 4 October 2009. From (<http://dictionary.zdnet.com/definition/e-commerce.html>).

EC. Retrieved on 2 November 2009. From (<http://www.american.edu/carmel/FB9122A/E-comm.htm>)

Economist Intelligence Unit (EIU) (2008). Growth of e-commerce. The Economist Intelligence Unit Ltd. Retrieved on November 10 2009. From (<http://www.pyr.com/documents/EIU%20Article.pdf>).

- Endo, M., and Yutaka, T. (2006). A proposal of encoded computations for distributed massively multiplayer online services.
- FICCI, (2003). Federation of Indian Chambers of Commerce and Industry. Business potential for Indian ICT sector in Saudi Arabia
- Fishbein, Martin and Icek Ajzen (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Foucault B E and Scheufele Laroche, M., Yang, Z., McDougall, G. H. G. and Bergeron, J. (2005). Internet versus bricks and mortar retailers: an investigation into intangibility and its consequences. *Journal of Retailing*, Vol. 81 No. 4 pp. 251-267.
- Galletta, D. F., Henry, R., McCoy, S. and Polak, P. (2004). Web Site Delays: How Tolerant Are Users. *Journal of the Association for Information Systems*, 1-28.
- Gefen, D. and Straub, D. W. (1997), "The relative importance of perceived and adoption of email: an extension to the technology acceptance model", *MIS Quarterly*, 21(4), 389-400.
- Gefen, David and Detmar Straub (2000). The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption. *Journal of the Association for Information Systems*, 8 (1), 1-28.
- Gefen, D., and Keil, M. (1998). The impact of developer responsiveness on perceptions of usefulness and ease of use: An extension of the technology acceptance model. *The DATA BASE for advances in information Systems*, 29(2), 35-49
- Gerald, L. and Spiller, L. (1998). Electronic shopping: The effect of customer in- terraces on traffic and sales. *Communications of the ACM*, 41(7), pages 81-87.

- Gpayments (2001). Smart Payment Technology. Form filling techniques designed to expedite online payment transactions. Warriewood (Australia). Retrieved on 2 September 2009. From
(http://www.gpayments.com/pdfs/GPayments_Smart_Payment_Technology_Whitepaper.pdf).
- Gpayments (2002). VISA 3D-Secure vs. MasterCard SPA. A comparison of online authentication standards, Warriewood (Australia).
- Haubl, G., Trifts, V. (2000). Consumer Decision Making in Online Shopping Environments: The Effects of Interactive Decision Aids. Faculty of Business, University of Alberta, Edmonton, Alberta, Canada T6G 2R6. Vol. 19, No. 1, pp. 4–21
- Henderson, Ron and Megan J. Divett (2003). Perceived usefulness, ease of use and electronic supermarket use. *International Journal of Human-Computer Studies*, 59, 383-395.
- Hendrickson, A. R., Massey, P. D., and Cronan, T. P. (1993). On the test-retest reliability of perceived usefulness and perceived ease of use scales. *MIS Quarterly*, 17 (2), 227-230.
- Hendry and Mike (2002). The Internet Open Trading Protocol: What is it and why is it needed? EPISO-Newsletter, Retrieved on 12 September 2009. From (<http://epso.jrc.es/newsletter>).
- Hesterbrink, C. (1999). E-Commerce and ERP: Bring Two Paradigms Together, Price Waterhouse and Cooper.
- Hoffman, D.L. and Novak, T. P. (1996). Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations, *Journal of Marketing*, 60, (3), 50-68.
- Huang, Ming-Hui (2000). Information load: Its relationship to online exploratory and shopping behavior. *International Journal of Information Management*, 20, 337-347.

- Hurlburt, R. T. (1994). *Comprehending Behavioral Statistics*. Pacific Grove, CA: Brooks/Cole.
- Junping, W. (2007). Risk Control and Estimation of Online Services Market Segmentation.1 – 5.
- Krulwich, B. (1996). The Bargain Finder agent: Comparison price shopping on the Internet. In *Agents, Bots, and other Internet Beasts*, SAMS.NET publishing, pages 257-263.
- Kushmerich, R., Devaraj, S. and Mahmood, A. (2004). “Understanding Determinants of Online Consumer Satisfaction: A Decision Process Perspective,” *Journal of Management Information Systems*, 115-135.
- Kwok, S., Yang, C., and Tam, K. (2004). Intellectual property protection for electronic Commerce applications. *Electronic commerce research*, 5(1). Retrieved on 10 September 2009. From (<http://www.csulb.edu/web/journals/jecr/issues/20041/Paper1.pdf>).
- Labovitz, C., Abuja, A., and Jahanian, F. (1999). Experimental Study of Internet Stability and Backbone Failures, In *Proceedings of the Twenty-Ninth Annual International Symposium on Fault-Tolerant Computing*.
- Lee, K. and Jae, Y. H. (2008). A Survey on Internet Payment Systems. Retrieved on September 26 2009. From (<http://ai.kaist.ac.kr/~jkim/cs591-2007/%B9%DF%C7%A5%C0%DA%B7%E1+%BA%B8%B0%ED%BC%AD/Report-Fox-A%20Survey%20on%20Internet%20Payment%20Systems%20%5BFINAL%20REPORT%5D.pdf>).
- Liu, Xiao and Kwok Kee Wei (2003). An empirical study of product differences in consumers’ e-commerce adoption behavior. *Electronic Commerce Research and Applications*, 2, 229-239.

MahaSeptember, Vijay, Eitan Muller, and Frank M. Bass (1990). New product diffusion models in marketing: A review and directions for research. *Journal of Marketing*, 54 (September), 1-26.

MCIT, (2003). Information and telecommunication technology in Saudi Arabia. Ministry of Communications and Information Technology. Retrieved on September 15 2009, from (http://www.itu.int/dms_pub/itus/md/03/wsispc3/c/S03-WSISPC3-C-0025!!MSWE.doc).

Ni, D., and Wang, J. (1999). System scaling for large-scale Internet-based online services. 180 – 185.

O’Cass, Aron and Tino Fenech (2003). Web retailing adoption: Exploring the nature of internet users web retailing behavior. *Journal of Retailing and Consumer Services*, 10, 81-94.

Peterson, Robert A., Sridhar Balasubramanian, and Bart J. Bronnenberg (1997). Exploring the implications of the internet for consumer marketing. *Journal of Academy of Marketing Science*, 25 (4), 329-346.

Poynder, R. (1998). Online engineering information. *IEEE* vol. 8, Issue:6 289-294.

Price Water House Coopers (2005). Global Retail and Consumer Study from Beijing to Budapest.

Sait, S. M., Al-Tawil K. M., Ali S. and Ali H. (2002). Use and effect of internet in Saudi Arabia. Retrieved on 15 September 2009. From <http://faculty.kfupm.edu.sa/COE/sadiq/richfiles/rich/doc/USE%20AND%20EFFECT%20OF%20INTERNET%20IN%20SAUDI%20ARABIA.doc>

Saudi Post, 2008. Retrieved on September 5 2009. From (<http://www.sp.gov.sa>).

Shim S, Eastlick M A, Lotz S L and Warrington P (2001). An online pre-purchase intentions model: the role of intention to search. *Journal of Retailing*, 77: 397-416.

- Shang, Rong-An, Yu-Chen Chen, and Lysander Shen (2005). Extrinsic versus intrinsic motivations for consumers to shop on-line. *Information & Management*, 42, 401-413.
- Subramanian, G. H., A. (1994). Replication of perceived usefulness and perceived ease of use measurement, *Decision Sciences*, 25 (5/6), 863-874.
- UPU (2007). Universal Postal Union. E-shopping for everyone everywhere, A White Paper Retrieved on 22 October 2009. From (http://www.upu.int/e-commerce/en/2007-12-11_presentation-08_e-shopping_for_everyone_anywhere_en.pdf).
- Venkatesh, V., M. G. Morris, G. B. Davis and F. D. Davis (2003). User Acceptance of Information Technology: Toward a Unified View. pp. 425-478
- Verhoef, Peter C. and Fred Langerak (2001). Possible determinants of consumers' adoption of electronic grocery shopping in the Netherlands. *Journal of Retailing and Consumer Services*, 8, 275-285.
- Wiki, (2009). Wikipedia, retrieved on October 12 from (http://en.wikipedia.org/wiki/Saudi_Arabia#Demographics).
- Wunnavu, S. (1995). Advances in Internet and interconnectivity of networks, retrieved on 11 October 2009. From <http://ieeexplore.ieee.org/Xplore/login.jsp?url=/iel3/3891/11317/00513046.pdf?temp=x>
- Xinyu, C. and Patricia, L. M. (2005). The Intended and Actual Adoption of Online Purchasing: A Brief Review of Recent Literature. Institute of Transportation Studies. Adopted from <http://its.ucdavis.edu/>
- Yuan, K. (2002). The Coming Battle for Customer Information. *Harvard Business Review*, 75, 1, 53-65.