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($\gamma = /$ $p < /$) ($\beta = /$ $p < /$)

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.(Shafei, 1991)

.(Mansoori-rad, 2006)

(Hemmat & Asadi Khoshooei,
(2007) Osfoori & Esfandiyari .1997)

(Lee et al., 2007)

(Lawden &
.Jeen, 2001; United Nation. 2001)

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.(Sasao & Shibusawa, 2000)

.(Shibusawa, 2002)

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.(Griffin et al., 2004)

Lee et al.

Featherman & Pavlou (2006) Fu et al. (2007)

(2003)

.(Fu et al., 2006)

(1999) Karahanna et al.

Premkumar & .

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(2005) Bhattacharjee

(EDT)

.(Willock et al., 1999)

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.(Ajzen & Fishbin, 1980)

(2005) Adrian et al.

.(Fu et al., 2006)

.(Yi et al., 2006)

(1975) Fishbein & Ajzen (TRA)

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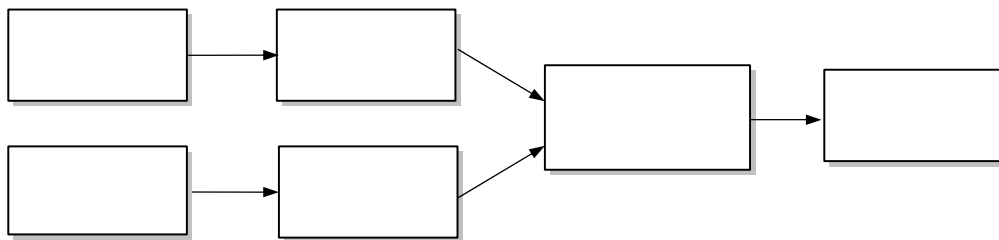
(2008) Salehi et al.

TAM

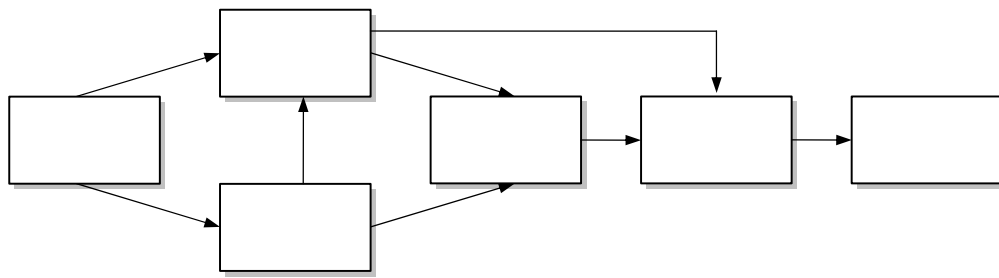
.(Davis, 1989)

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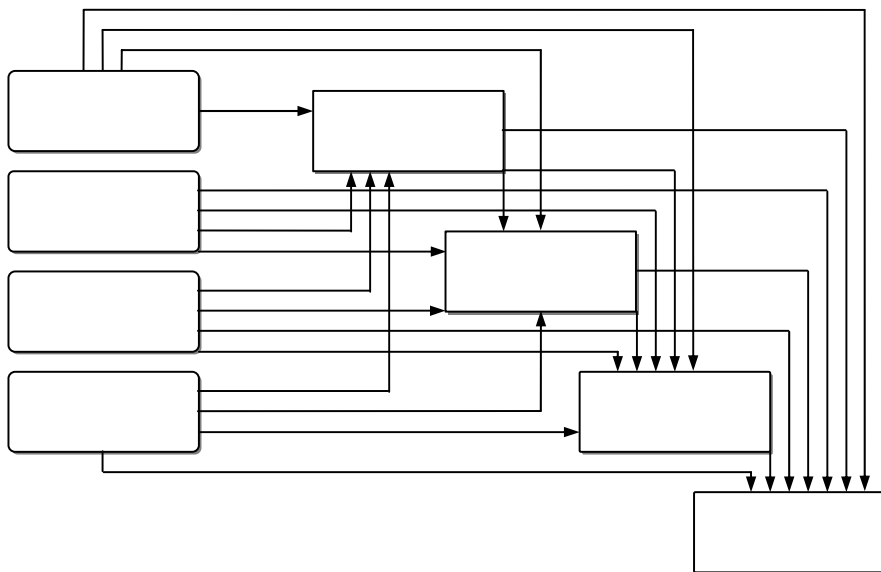
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(1975) Fishbein & Ajzen



(1989) Davis



(1988) Bagozzi & Yi

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(SEM)

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1. Validity
 2. Reliability

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(χ^2) ()

1. Measurement
2. Structure
3. Chi-Square
4. Degree of Freedom
5. Goodness-of-fit
6. Normed Fit Index
7. Comparative Fit Index
8. Root Mean square Residual
9. Root Mean Square error of Approximation
10. Squared Multiple Correlation (SMC)

F																
/	/	**	/	a	/	a	/	ab	/	ab	/	ab	/	ab	/	b

** :a , b

(Gefen et al., 2000; Jöreskog & Sörbom, 1983; Markland, 2006)

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($r = /$ $p < /$) ($r = /$ $p < /$)

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Chau & Hu

(2006) Ong & Lai (2002)

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/	\leq	χ^2/df
/	$\geq /$	<i>p-value</i>
/	$\geq /$	NFI
/	$\geq /$	NNFI
/	$\geq /$	CFI
/	$\geq /$	GFI
/	$\geq /$	AGFI
/	$\leq /$	RMR
/	$\leq /$	RMSEA

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($r = /$) /

Davis (Davis et al., 1989)

(1989) (/ /)

(1989) Davis et al. ($r = /$) /

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(1989) Davis (2008) Salehi et al.

(2006) Hung et al. (1999) Karahanna et al.

(2007) Schepers & Wetzels

($\gamma = 1$)

($\gamma = 1$)

(1999) Karahanna et al.

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(SMC = 1)

(2005) Adrian et al.

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($\gamma = 1$ $p < 1$)

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($\gamma = 1$ $p < 1$)

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($\beta = 1$ $p < 1$)

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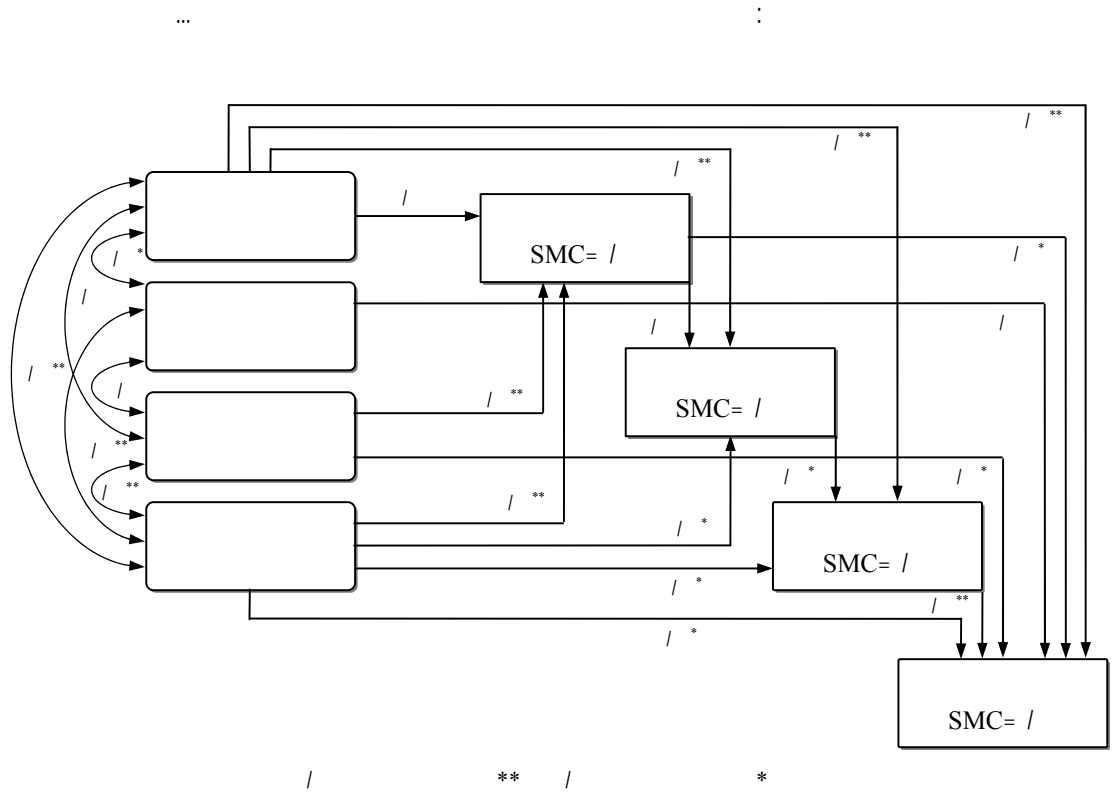
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(2006) Hung et al. (2007) Schepers & Wetzels

(2005) Adrian et al.

Salehi et
Malhotra & (1994) Phillips et al. (2008) al.
Chang (1999) Karahanna et al. (1999) Galletta
(2007) Schepers & Wetzels (2004)

(1995) Rogers

(1999) Karahanna et al.

(2007) Schepers & Wetzels

(1999) Hu et al.

(2002) Chau & Hu

REFERENCES

1. Adrian, A. M., Norwood, S. H. & Mask, P. L. (2005). Producers' perceptions and attitudes toward precision agriculture technologies. *Computers and Electronics in Agriculture*, 48(3), 256–271.
2. Agarwal, R. & Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research*, 9(2), 204-215.
3. Ajzen, I. & Fishbin, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.
4. Bagozzi, R. P. & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of Academy of Marketing Science*, 16(1), 74–94.
5. Carswell, A. D. & Venkatesh, V. (2002). Learner outcomes in an asynchronous distance education environment. *International Journal of Human-Computers Studies*, 56, 475-494.
6. Chang, P. V. (2004). *The validity of an extended technology acceptance model (TAM) for predicting intranet/portal usage*. A Master's paper, Master of Science in Information Science, Faculty of the School of Information and Library Science of the University of North Carolina at Chapel Hill.
7. Chau, P. Y. K. & Hu, P. J. (2002). Investigating healthcare professionals' decisions to accept telemedicine technology: An empirical test of competing theories. *Information & Management*, 39(4), 297-311.

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8. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
 9. Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
 10. Featherman, M. S. & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human-Computers Studies*, 59, 451-474.
 11. Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention and behaviour*. Addison-Wesley, Reading, MA.
 12. Fu, J., Farn, C. & Chao, W. (2006). Acceptance of electronic tax filing: A study of taxpayer intentions. *Information & Management*, 43(1), 109-126.
 13. Gefen, D., Straub, D. W. & Boudreau, M. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of Association for Information Systems*, 4(7), 1-78.
 14. Griffin, T. W., Lowenberg-DeBoer, J., Lambert, D. M., Peone, J., Payne, T. & Daberkow, S. G. (2004). *Adoption, profitability, and making better use of precision farming data*. Dept. of Agricultural Economics Purdue University, Staff Paper #04-06, 1-18.
 15. Hargrave, W. I., Reid, J. T. & Gallagher, R. N. (1982). Influence of tillage practices on the fertility status of acid soil double-cropped to wheat and soybean. *Agron Journal*, 74, 684-687.
 16. Hemmat, A. & Asadi Khoshooei, A. (1997). Effects of non-moldboarding direct plant systems and conventional tillage on yield of autumn wheat. *Iranian Agricultural Sciences Journal*, 28(1), 19-33. (In Farsi).
 17. Hu, P. J., Chau, P. Y. K., Liu Sheng, O. R. & Tam, K. Y. (1999). Examining the technology acceptance model using physician acceptance of telemedicine technology. *Journal of Management Information Systems*, 16(2), 91-112.
 18. Hung, S., Chang, C. & Yu, T. (2006). Determinants of user acceptance of the e-government services: The case of online tax filing and payment system. *Government Information Quarterly*, 23(1), 97-122.
 19. Jöreskog, K. G. & Sörbom, D. (1983). *LISREL: Analysis of linear structural relations by the method of maximum likelihood*, 2nd Edition. Chicago: National Educational Resources.
 20. Karahanna, E., Straub, D. W. & Chervany, M. L. (1999). Information technology adoption across time: A cross-sectional comparison of pre-adoption and post-adoption beliefs. *MIS Quarterly*, 23(2), 183-213.
 21. Lawden, K. C. & Jeen, P. (2001). *Information technology: Concepts and applications* (translator: Hamid Mohseni). Tehran: Ketabdar Publisher. (In Farsi).
 22. Lee, K. C., Kang, I. & Kim, J. S. (2007). Exploring the user interface of negotiation support systems from the user acceptance perspective. *Computers in Human Behavior*, 23(1), 220-239.
 23. Malhotra, Y. & Galletta, D. F. (1999). Extending the technology acceptance model to account for social influence: Theoretical bases and empirical validation. In: *Proceedings of the 32nd Hawaii International Conference on System Sciences*, 1-14.
 24. Mansoori-rad, D. (2006). *Tractor and agricultural machines* (Second Volume). Hamedan: Boo-ali sina University Publisher. (In Farsi).
 25. Markland, D. (2006). *Latent variable modeling: An introduction to confirmatory factor analysis and structural equation modeling*. University of Wales, Bangor.
from <http://www.bangor.ac.uk/~pes004/resmeth/lisrel/lisrel.htm>, [15-Jan.-2007].
 26. Ong, C. & Lai, J. (2006). Gender differences in perceptions and relationships among dominants of e-learning acceptance. *Computers in Human Behavior*, 22(5), 816-829.
 27. Osfoori, M. & Esfandiyari, M. (2007). Comparison of 3 date and methods of planting across tillage and no-tillage situation on canola yield and yield components. In: *Proceedings of The 1st Conference on Environmental Engineering*. from http://www.civilica.com/Printable-CEE01_180.html
 28. Phillips, L. A., Calantone, R. & Lee, M. T. (1994). International technology adoption: Behavior structure, demand certainty and culture. *Journal of Business & Industrial Marketing*, 9(2), 16-28.
 29. Porter, C. E. & Donthu, N. (2006). Using the technology acceptance model to explain how attitudes determine internet usage: The role of perceived access barriers and demographics. *Journal of Business Research*, 59(9), 999-1007.
 30. Premkumar, G. & Bhattacharjee, A. (2005). Explaining information technology usage: A test of competing models. *The International Journal of Management Science (Omega)*, 4, 756-775.
 31. Rogers, E. M. (1995). *Diffusion of Innovations* (4th Ed). New York: Free Press.
 32. Salehi, S., Ajili, A. & Rezaei-Moghaddam, K. in press. *Application of variable rate technologies- fertilizers: Toward precision agriculture*. Man and Environment. (In Farsi).
 33. Salehi, S., Rezaei-Moghaddam, K. & Ajili, A. (2008). Application of yield monitoring technologies: An approach to sustainable agriculture. *Iranian Agricultural Extension & Education Sciences Journal*, 4(1), 15-32. (In Farsi).
 34. Sasao, A. & Shibusawa, S. (2000). *Prospect and strategies for precision farming in Japan*. from <http://ss.jircas.Go.Jp/kankoubutsu/jarq/34-4/Sasao/sasao.html>. [12-Sept.-2006].

35. Schepers, J. & Wetzels, M. (2007). A meta-analysis of the technology acceptance model: Investigating subjective norm and moderation effects. *Information & Management*, 44(5), 90-103.
36. Shafiei, A. (1991). *The principles of agricultural machines* (First Volume). Tehran: Tehran University Publisher. (In Farsi).
37. Shibusawa, S. (2002). Precision farming approaches to small-farm agriculture. *Agro-chemicals report*, 2(4), 13-20.
38. United Nation. (2001). *Sustainable social development in a period of rapid globalization: Challenges, Opportunities and Policy Options*. UN, NEWYORK, p 10.
39. Willock, J., Deary, I. J., Edwards-Jones, G., Gibson, G. J., McGregor, M. J., Sutherland, A., Dent, J. B., Morgan, O. & Grieve, R. (1999). The role of attitudes and objectives in farmer decision making: Business and environmentally-oriented behaviour in Scotland. *Journal of Agricultural Economics*, 50, 286–303.
40. Yi, M. Y., Jackson, J. D., Park, J. S. & Probst, J. C. (2006). Understanding information technology acceptance by individual professionals: Toward an integrative view. *Information & Management*, 43(3), 350-363.