The Effect of Work Discipline on The Use of Mobile Sales Force Automation System Usage

Endang Siti Astuti, Heribertus Himawan, Kertahadi, Hamidah Nayati Utami

Abstract— Purpose: The purpose of this study is to examine and describe the effect of work discipline on the use of mSFA, the effect of work motivation on the use of mSFA, the effect of work tidiness on the use of mSFA, and the effect of using mSFA on discipline. **Design / Method**: This research is a quantitative study and the sampling technique is simple random sampling where the research sample has the same unlimited opportunity to be selected as a sample. The analytical method used in this research is descriptive analysis and GSCA analysis. **Findings**: job discipline has a significant effect on the use of mSFA, work motivation has a significant effect on the use of mSFA, the use of mSFA has a significant effect on the use of mSFA. To complete future studies, researchers may consider using objective data from the database system from before using the mSFA system until some time after using the mSFA system. **Originality**: The researcher also tries to determine the relationship between work discipline and the use of mSFA and work motivation to update previous studies. By combining variables that affect income and the impact of usage on individuals, this research method differs from previous studies.

Index Terms— Automation System, Employee Job Satisfaction, Mobile Sales Personnel, Work Discipline

—————————— ◆ ——————————

1 INTRODUCTION

SOMEONE develops positive or negative attitude on mobile system usage based on evaluation of usefulness and ease of use [66]. If a system is considered difficult to use, users tend to have negative attitude on the system [13]. Previous studies show that ease of use has significant and positive effect on usability [56, 60, 55, 58, 64, 52, 48, 63, 49]. However, the opposite is found by [47] in their study on the impact of using creative learning media in the form of games software for college students. It finds that there is no significant relation between ease and usability.
Individual's attitude to new technology is strongly determined by their job characteristics [43, 44]. When an individual feels a new technology is suitable for their job, they tend to accept it. Conversely, when one feels the new technology isn't relevant with their job, the indiviual tends to rejects it. Empirical studies find that suitability with job has significant positive effect on perceived usage [69, 51, 68, 63]. Strong commitment from top leader, including senior organizational leaders, is very important to ensure acceptance of technology by creating environment which supports IT in organization, so management commitment has significant positive effect on the usage [73, 7, 15, 6]. However, previous studies find that top leaders' support significantly affect perceived usage (PU) [39, 46, 63]. Customer Relationship Management (CRM) system is an information technology support for sales department in managing sales process to make it more effective, e.g. making appointments with consumers, determining travel routes, sales presentation, enhancing salespeople's knowledge on the offered products or served consumers [35], by developing and nurturing long term relations with consumers [40].
PT Indomarco Adi Prima (PT IAP) is a business unit of PT Indofood Sukses makmur Tbk which works in distribution of consumer goods. PT IAP distributes the majority of Indofood products to some areas in Indonesia, from modern markets to traditional markets. There is limited study on the impact or result of acceptance of technology [70]. Previous studies on acceptance of technology generally start with variables affecting the acceptance and ends with usage or acceptance.

Many previous studies on the usage of m-SFA were performed using samples of leaders or managers and the relation with organizational performance (Kwak *et al.*, 2012; Rodriguez and Trainor, 2016).

2 LITERATURE REVIEW

In the context of IT usage, management support is defined as "individual perception on how far top management understands the importance of IT and how far top management is involved in IT implementation" [53]. Top management support is a key factor in acceptance technology [38, 39]. Strong commitment of top leaders, including senior organization leaders, is very important to ensure technology acceptance by creating environment which supports IT in organization [73, 7]. Empirical studies Sales Force Automation (SFA) application was introduced as a technology which can support the jobs of salespeople and sales manager in the 1980s [29]. SFA system utilizes computer hardware and software to collect, analyze and spread information automatically to increase the productivity of salespeople [50]. SFA technology system has many uses, including integrating consumer data and company data and being a part to integrate sales activities with company operations [11]. SFA is believed to produce information faster and more accurately [71], be more responsive [5, 36] and increase productivity in general through its support to determine market capability [65].
In the context of IT usage, conformity with job is defined as "individual perception on how far a technology should conform with their work" [70]). Individual attitude on new technology is affected by their job characteristics [43, 44]. When an individual feels a new technology is suitable for their job, they tend to accept it. Conversely, when one feels the new technology isn't relevant with their job, the individual tends to rejects it. Empirical studies find that suitability with job has significant positive effect on perceived usage [69, 51, 68]. Find that top leader support can affect perceived usability [39, 46]. Attitude is defined as individual's mental readiness formed through experience to act to all related objects and situations

[14]. In the present study, mSFA usage is attitude in using the system. If a system is considered difficult to use, users tend to have negative attitude to the system [13]. One develops positive or negative attitude on using mobile system based on evaluation on usability, easiness, security, comfort and satisfaction in usage [66]. User's attitude to a system is the main factor determining whether they accept or reject the system [22].

3 METHODOLOGY

This is a quantitative study directed to test certain theories by studying the relations between variables. The research population was 658 salespeople of PT Indomarco Adi Prima across Indonesia who used mSFA system in their work in the field. The sampling technique was simple random sampling where research samples have the same unlimited chance to be selected as samples. The expected total sample collected by Morgan table in [20] is at least 242 data. The reliability test of this study used Alpha Cronbach using SPSS. The analysis methods required in this study were descriptive analysis and GSCA analysis using *SPSS 17 for Windows*.

4 ANALYSIS RESULT

4.1 Linearity Test

From Table 1, it's known that all relations between exogenous variables and endogenous variables have probability of 0.000. It meant probability < level of significance (alpha (α=5%)). Therefore, all relations between exogenous variables and endogenous variables were linear.

TABLE 1
LINEARITY TEST

Relation	F	Sig.
work discipline on the use of mSFA	312.675	0.000
work motivation on the use of mSFA	110.560	0.000
work tidiness on the use of mSFA	287.008	0.000
using mSFA on discipline	159.043	0.000

4.2 Validity

Based on the result of analysis of measurement model, it's found that all indicators of variables have loading factors over 0.5. Therefore, the indicators were valid or able to measure variables which matched the indicators.

TABLE 2
VALIDITY TEST

Variable	Indicator	Estimate	Cut Off	Description
Job relevance	X1.1	0.865	0.5	Valid
	X1.2	0.897	0.5	Valid
	X1.3	0.783	0.5	Valid
Management support	X2.1	0.843	0.5	Valid
	X2.2	0.896	0.5	Valid
	X2.3	0.782	0.5	Valid
Usability	Y1.1	0.765	0.5	Valid
	Y1.2	0.889	0.5	Valid
	Y1.3	0.868	0.5	Valid
	Y1.4	0.887	0.5	Valid
mSFA Usage	Y2.1	0.817	0.5	Valid
	Y2.2	0.800	0.5	Valid
	Y2.3	0.837	0.5	Valid
	Y2.4	0.753	0.5	Valid
	Y2.5	0.766	0.5	Valid
Performance	Y3.1	0.888	0.5	Valid

4.3 Reliability Test

From table 3, it's found that the discriminant reliability of Job relevance is 0.722, meaning the discriminant reliability is bigger than the cut off value which is 0.50. Therefore, based on discriminant reliability, all indicators which measured Job relevance were reliable. On the other hand, the cronbach's alpha of Job relevance is 0.805, meaning the cronbach's alpha is bigger than the cut off value which is 0.60. Therefore, based on cronbach's alpha, all indicators which measured job relevance were reliable.

TABLE 3
RELIABILITY TEST

Variable	AVE	Cronbach's alpha
Job relevance	0.722	0.805
Management support	0.708	0.784
Usability	0.729	0.875
mSFA usage	0.632	0.847
Performance	0.751	0.890

The discriminant reliability of Management support is 0.708, meaning the discriminant reliability is bigger than the cut off value which is 0.50. Therefore, based on discriminant reliability, all indicators which measured Management support were reliable. On the other hand, the cronbach's alpha of Management support is 0.784, meaning the cronbach's alpha is bigger than the cut off value which is 0.60. Therefore, based on cronbach's alpha, all indicators which measured Management support were reliable. The discriminant reliability of Usability is 0.729, meaning the discriminant reliability is bigger than the cut off value which is 0.50. Therefore, based on discriminant reliability, all indicators which measured Usability were reliable. On the other hand, the cronbach's alpha of Usability is 0.875, meaning the cronbach's alpha is bigger than the cut off value which is 0.60. Therefore, based on cronbach's alpha, all indicators which measured Usability were reliable. The discriminant reliability of m-SFA usage is 0.632, meaning the discriminant reliability is bigger than the cut off value which is 0.50. Therefore, based on discriminant reliability, all indicators which measured m-SFA usage were reliable. On the other hand, the cronbach's alpha of m-SFA usage is 0.847, meaning the cronbach's alpha is bigger than the cut off value which is 0.60. Therefore, based on cronbach's alpha, all indicators which measured m-SFA usage were reliable. The discriminant reliability of Performance is 0.751, meaning the discriminant reliability is

bigger than the cut off value which is 0.50. Therefore, based on discriminant reliability, all indicators which measured Performance were reliable. On the other hand, the cronbach's alpha of Performance is 0.890, meaning the cronbach's alpha is

bigger than the cut off value which is 0.60. Therefore, based on cronbach's alpha, all indicators which measured Performance were reliable.

TABLE 4
RESULT OF DIRECT EFFECT HYPOTHESIS ANALYSIS

Hypothesis	Relation Between Variables	Estimate	SE	CR	Des.
H1	work discipline on the use of mSFA	0.415	0.129	3.56*	Significant
H2	work motivation on the use of mSFA	0.433	0.178	3.04*	Significant
H3	work tidiness on the use of mSFA	0.269	0.097	4.31*	Significant
H4	using mSFA on discipline	0.479	0.107	3.94*	Significant

4.4 Validity

Hypothesis 1 was the effect of work discipline on the use of mSFA. The test result in the table above shows that the critical ratio (CR) of Job relevance to Usability is 3.56*(asterisk). It meant CR > t-table (t=2.00, alpha=5%). Therefore, Job relevance had significant direct effect on Usability. Therefore, hypothesis 1 was fulfilled. Hypothesis 2 was the effect of work motivation on the use of mSFA. The test result in the table above shows that the critical ratio (CR) of Management support to Usability is 3.04* (asterisk). It meant CR > t-table (t=2.00, alpha=5%). Therefore, Management support had significant direct effect on Usability. Therefore, hypothesis 2

was fulfilled. Hypothesis 3 was the effect of work tidiness on the use of mSFA. The test result in the table above shows that the critical ratio (CR) of Usability to mSFA usage is 4.31*(asterisk). It meant CR > t-table (t=2.00, alpha=5%). Therefore, Usability had significant direct effect on mSFA usage. Therefore, hypothesis 3 was fulfilled. Hypothesis 4 was the effect of using mSFA on discipline. The test result in the table above shows that the critical ratio (CR) of mSFA usage on Performance is 3.94* (asterisk). It meant CR > t-table (t=2.00, alpha=5%). Therefore, mSFA usage had significant direct effect on Performance. Therefore, hypothesis 4 was fulfilled.

TABLE 5
INDIRECT EFFECT

Exogenous	Medium	Endogenous	Indirect	SE	t-statistics
X1	Y1	Y2	0.112	0.067	2.67*
X2	Y1	Y2	0.116	0.081	3.22*
Y1	Y2	Y3	0.129	0.160	3.10*

4.5 Indirect Effect

The effect of Job relevance on mSFA usage through Usability produces T-statistics value of 2.67. It meant CR > t-table (t=2.00, alpha=5%). Therefore, it meant Job Relevance had significant indirect effect on mSFA usage. Thus, usability could mediate the effect of Job relevance on mSFA usage. Therefore, the effect of Job relevance on mSFA usage through Usability was fulfilled. The effect of Management support on m-SFA usage through Usability produces T-statistics value of 3.22. It meant CR > t-table (t=2.00, alpha=5%). Therefore, it meant Management support had significant indirect effect on m-SFA usage. Thus, usability could mediate the effect of Management support on m-SFA usage. Therefore, the effect of Management support on mSFA usage through Usability was fulfilled. The effect of Usability on Performance through mSFA usage produces T-statistics value of 3.10. It meant CR > t-table (t=2.00, alpha=5%). Therefore, it meant Usability had significant indirect effect on Performance. Thus, mSFA usage could mediate the effect of Usability on Performance. Therefore the effect of Usability on Performance through mSFA usage was fulfilled.

5 DISCUSSION

The calculation showed that the critical ratio (CR) value of usability on mSFA usage is 4.31*. This CR value is bigger than

t-table (t=2, alpha=5%). It meant Usability had significant direct effect on mSFA usage. The analysis of the correlation of Usability on mSFA usage produces correlation coefficient of 0.627 with significant value of 0.000. It meant there was significant relation with high correlation between the variables. The research result was consistent or in support of MOPTAM model [67]. Usability is perception of how far an individual believes that using mSFA will improve the quality of their work [22]. usability is still considered an important variable to measure satisfaction of information technology usage [22, 69]. Other researchers who also directly connects Usability with Use are [54, 42, 72] and their research results were that Usability has significant effect on use. The coefficient of the indirect effect of Job relevance on mSFA usage through Usability is 0,112. It shows that Job relevance had positive and significant effect on mSFA usage through Usability. When mSFA technology was considered suitable for the salespeople's needs in their job and able to help the salespeople in improving the quality of their work, the usage of the technology would increase the research result supported the study of [59] which states that generally mSFA usage can improve the performance of sales people, as well as the study of [61] which state that mobile technology which is a part of sales force automation (SFA) can give added value for the activities of sales people by enhancing communication and providing efficiency when accessing information on

66

customers. The employees felt that the technology was very important and effective for the company when company leaders participated in giving support. mSFA was a subsystem of Customer Relationship Management (CRM). The coefficient of indirect effect in table also shows that the coefficient of indirect effect of usability on performance through mSFA usage is 0,129, showing that usability had positive and significant effect on Performance through mSFA usage. Therefore, Performance would increase if mSFA usage also increased, because perceived Usability would also be. The performance of salespeople would be higher if they continuously used mSFA technology in their daily tasks.

6 CONCLUSION

Work discipline has a significant effect on mSFA, work motivation has a significant effect on mSFA, work neatness has a significant effect on mSFA, the use of mSFA has a significant effect on discipline. Hopes for future research to evaluate data from user samples from various companies in various fields because the mSFA system is not only applied in distributor companies but also other companies for different purposes. It is expected to get a more diverse picture about the background of the user's company. In this study, performance appraisal is based on subjective assessments of salespeople as respondents. To complete future studies, researchers may consider using objective data from a database system from before using the mSFA system until some time after using the mSFA system. If using a new system or technology is a must, use of freedom and perception of use can be used.

ACKNOWLEDGMENT

REFERENCES

[1] A.C Nielsen. 2007. Survei of Consumer Behaviour and Perception Toward Modern Retail and Traditional Trade Channels. Jakarta: Departemen Perdagangan Indonesia.

[2] Abeka, Silvance O. "Perceived usefulness, ease of use, organizational and bank support as determinants of adoption of internet banking in east Africa." International Journal of Academic Research in Business and Social Sciences 2, no. 10 (2012): 97.

[3] Adetoro, Niran. "Information technology availability, use and job satisfaction of academic staff at Tai Solarin University of Education, Nigeria: A correlative study." Journal of Balkan Libraries Union 2, no. 1 (2014): 5-10.

[4] Agarwal, Ritu, and Thomas W. Ferratt. "Crafting an HR strategy to meet the need for IT workers." Communications of the ACM 44, no. 7 (2001): 58-64.

[5] Ahearne, Michael, Eli Jones, Adam Rapp, and John Mathieu. "High touch through high tech: The impact of salesperson technology usage on sales performance via mediating mechanisms." Management Science 54, no. 4 (2008): 671-685.

[6] Al-alak, Basheer A., and Ibrahim AM Alnawas. "Measuring the acceptance and adoption of e-learning by academic staff." Knowledge Management & E-Learning: An International Journal 3, no. 2 (2011): 201-221.

[7] Bajwa, Deepinder S., Arun Rai, and Ian Brennan. "Key antecedents of executive information system success: a path analytic approach." Decision Support Systems 22, no. 1 (1998): 31-43.

[8] Baldauf, Artur, David W. Cravens, and Nigel F. Piercy. "Examining business strategy, sales management, and salesperson antecedents of sales organization effectiveness." Journal of Personal Selling & Sales Management 21, no. 2 (2001): 109-122.

[9] Balouch, Rifat, and Fatima Hassan. "Determinants of job satisfaction and its impact on employee performance and turnover intentions." International Journal of Learning & Development 4, no. 2 (2014): 120-140.

[10] Bandura, Albert. "Self-efficacy mechanism in human agency." American psychologist 37, no. 2 (1982): 122.

[11] Barker, Robert M., Stephan F. Gohmann, Jian Guan, and David J. Faulds. "Why is my sales force automation system failing?." Business Horizons 52, no. 3 (2009): 233-241.

[12] Basaglia, Stefano, Leonardo Caporarello, Massimo Magni, and Ferdinando Pennarola. "Individual adoption of convergent mobile phone in Italy." Review of Managerial Science 3, no. 1 (2009): 1-18.

[13] Beckers, Astrid M., and Mohammad Z. Bsat. "An analysis of intercultural business communication." Journal of Business and Behavioral Sciences 26, no. 3 (2014): 143.

[14] Cantril, Hadley, and Gordon Willard Allport. "The psychology of radio." (1935).

[15] Cascio, Robert, Babu John Mariadoss, and Nacef Mouri. "The impact of management commitment alignment on salespersons' adoption of sales force automation technologies: An empirical investigation." Industrial Marketing Management 39, no. 7 (2010): 1088-1096.

[16] Chang, Li-Chun, Chia-Hui Shih, and Shu-Man Lin. "The mediating role of psychological empowerment on job satisfaction and organizational commitment for school health nurses: A cross-sectional questionnaire survey." International Journal of Nursing Studies 47, no. 4 (2010): 427-433.

[17] Chen, Ling-Hsiu. "Job satisfaction among information system (IS) personnel." Computers in human behavior 24, no. 1 (2008): 105-118.

[18] Cheney, Paul H. "Effects of individual characteristics, organizational factors and task characteristics on computer programmer productivity and job satisfaction." Information & Management 7, no. 4 (1984): 209-214.

[19] Cheney, Paul H., Robert I. Mann, and Donald L. Amoroso. "Organizational factors affecting the success of end-user computing." Journal of Management Information Systems 3, no. 1 (1986): 65-80.

[20] Cohen, Louis, Lawrence Manion, and Keith Morrison. Research methods in education. routledge, 2013.

[21] Davar, S. C., and RanjuBala. "Relationship between job satisfaction & job performance: A meta-analysis." Indian Journal of Industrial Relations (2012): 290-305.

[22] Davis, Fred D. "Perceived usefulness, perceived ease of use, and user acceptance of information technology." MIS quarterly (1989): 319-340.

[23] Dekoulou, Paraskevi, and Panagiotis Trivellas. "Measuring the impact of learning organization on job satisfaction and individual performance in Greek advertising sector." Procedia-Social and Behavioral Sciences 175, no. 4 (2015): 367-375.

[24] Dillon, Andrew, and Michael G. Morris. "User acceptance of new information technology: theories and models." Medford, NJ: Information Today, 1996.

[25] Eisenhardt, Kathleen M., and Shona L. Brown. "Time pacing: Competing in markets that won't stand still." Harvard business review 76, no. 2 (1998): 59-70.

[26] Erffmeyer, Robert C., and Dale A. Johnson. "An exploratory study of sales force automation practices: expectations and realities." Journal of Personal Selling & Sales Management 21, no. 2 (2001): 167-175.

[27] Escobar-Rodríguez, Tomás, and Lourdes Bartual-Sopena. "Impact of cultural factors on attitude toward using ERP systems in public hospitals." Revista de Contabilidad 18, no. 2 (2015): 127-137.

[28] Ferdinand A (2006) Metode Penelitian Manajemen. Pedoman Penelitian untuk Penulisan Skripsi, Tesis dan Desertasi ilmu manajemen. Penerbit BP Universitas Diponegoro, Semarang.

[29] Fernandes, Adji Achmad Rinaldo, Benny Hutahayan, Endang Arisoesilaningsih, Indah Yanti, Ani Budi Astuti, and Luthfatul Amaliana. "Comparison of Curve Estimation of the Smoothing Spline Nonparametric Function Path Based on PLS and PWLS In Various Levels of Heteroscedasticity." In IOP Conference Series: Materials Science and Engineering, vol. 546, no. 5, p. 052024. IOP Publishing, 2019.

[30] Finnis, Joshua, Nalin Saigal, Adriana Iamnitchi, and Jay Ligatti. "A location-based policy-specification language for mobile devices." Pervasive and Mobile Computing 8, no. 3 (2012): 402-414.

[31] Fishbein MA (1975) Belief, Attitude, Intention and Behaviour:An Introduction to Theory and Research. Addision-Wesley, Reading, MA.

[32] Glisson, Charles, and Mark Durick. "Predictors of job satisfaction and organizational commitment in human service organizations." Administrative science quarterly (1988): 61-81.

[33] Herzberg F, Mausner B, Synderman,BB (1959) The Motivation to Work. Wiley, NewYork.

[34] Ho, Shuk Ying. "The effects of location personalization on individuals' intention to use mobile services." Decision Support Systems 53, no. 4 (2012): 802-812.

[35] Honeycutt Jr, Earl D. "Technology improves sales performance—doesn't it?: An introduction to the special issue on selling and sales technology." Industrial Marketing Management 34, no. 4 (2005): 301-304.

[36] Huber, George P. "A theory of the effects of advanced information technologies on organizational design, intelligence, and decision making." Academy of management review 15, no. 1 (1990): 47-71.

[37] Hutahayan, Benny, Adji Achmad Rinaldo Fernandes, Indah Yanti, Ani Budi Astuti, and Luthfatul Amaliana. "Mixed Second Order Indicator Model: The First Order Using Principal Component Analysis and The Second Order Using Factor Analysis." In IOP Conference Series: Materials Science and Engineering, vol. 546, no. 5, p. 052073. IOP Publishing, 2019.

[38] Igbaria, Magid. "An examination of the factors contributing to microcomputer technology acceptance." Accounting, Management and Information Technologies 4, no. 4 (1994): 205-224.

[39] Igbaria, Magid, Nancy Zinatelli, Paul Cragg, and Angèle LM Cavaye. "Personal computing acceptance factors in small firms: a structural equation model." MIS quarterly (1997): 279-305.

[40] Ingram, Thomas N., Raymond W. LaForge, and Thomas W. Leigh. "Selling in the new millennium: a joint agenda." Industrial Marketing Management 31, no. 7 (2002): 559-567.

[41] Irfan Sabir R, Rehman A, Bahadur W, Aziz S, Ejaz K (2013) Impact of Sales Force Automation on Relationship Quality and Sales Force Performance. Journal of Basic and Applied Scientific Research 3(12):1-7.

[42] Karjaluoto, Heikki, Aarne Töllinen, Janne Pirttiniemi, and Chanaka Jayawardhena. "Intention to use mobile customer relationship management systems." Industrial Management & Data Systems (2014).

[43] Kieras, David E. The Role of Prior Knowledge in Operating Equipment from Written Instructions. No. FR-85/ONR-19. MICHIGAN UNIV ANN ARBOR, 1985.

[44] Kim, Yong Jin, Jae Uk Chun, and Jaeki Song. "Investigating the role of attitude in technology acceptance from an attitude strength perspective." International Journal of Information Management 29, no. 1 (2009): 67-77.

[45] Lee, Gwanhoo, and Young Hoon Kwak. "An open government maturity model for social media-based public engagement." Government information quarterly 29, no. 4 (2012): 492-503.

[46] Lewis, William, Ritu Agarwal, and Vallabh Sambamurthy. "Sources of influence on beliefs about information technology use: An empirical study of knowledge workers." MIS quarterly (2003): 657-678.

[47] Lo, Fan-Chen, Jon-Chao Hong, Ming-Xien Lin, and Ching-Yuan Hsu. "Extending the Technology Acceptance Model to Investigate Impact of Embodied Games on Learning of Xiao-zhuan ()." Procedia-Social and Behavioral Sciences 64 (2012): 545-554.

[48] Maier, Christian, Sven Laumer, Andreas Eckhardt, and Tim Weitzel. "Using user personality to explain the intention-behavior gap and changes in beliefs: A longitudinal analysis." (2012).

[49] Mariani, Marco Giovanni, Matteo Curcuruto, and Ivan Gaetani. "Training opportunities, technology acceptance and job satisfaction." Journal of Workplace Learning (2013).

[50] Morgan, Amy J., and Scott A. Inks. "Technology and the

sales force: Increasing acceptance of sales force automation." Industrial Marketing Management 30, no. 5 (2001): 463-472.

[51] Mokhtarian, Patricia L., and Ilan Salomon. "Modeling the desire to telecommute: The importance of attitudinal factors in behavioral models." Transportation Research Part A: Policy and Practice 31, no. 1 (1997): 35-50.

[52] Pai, Fan-Yun, and Kai-I. Huang. "Applying the technology acceptance model to the introduction of healthcare information systems." Technological Forecasting and Social Change 78, no. 4 (2011): 650-660.

[53] Ragu-Nathan, Bhanu S., Charles H. Apigian, T. S. Ragu-Nathan, and Qiang Tu. "A path analytic study of the effect of top management support for information systems performance." Omega 32, no. 6 (2004): 459-471.

[54] Rajan, Christy Angeline, and Rupashree Baral. "Adoption of ERP system: An empirical study of factors influencing the usage of ERP and its impact on end user." IIMB Management Review 27, no. 2 (2015): 105-117.

[55] Revels, Janeaya, Dewi Tojib, and Yelena Tsarenko. "Understanding consumer intention to use mobile services." Australasian Marketing Journal (AMJ) 18, no. 2 (2010): 74-80.

[56] Robinson Jr, Leroy, Greg W. Marshall, and Miriam B. Stamps. "Sales force use of technology: antecedents to technology acceptance." Journal of Business Research 58, no. 12 (2005): 1623-1631.

[57] Rodriguez, Michael, and Kevin Trainor. "A conceptual model of the drivers and outcomes of mobile CRM application adoption." Journal of Research in Interactive Marketing 10, no. 1 (2016): 67-84.

[58] Sánchez, R. Arteaga, and A. Duarte Hueros. "Motivational factors that influence the acceptance of Moodle using TAM." Computers in human behavior 26, no. 6 (2010): 1632-1640.

[59] Scornavacca, Eusebio, and Adam Sutherland. "The perceived impact of mobile sales force automation systems on salespeople's performance." In 2008 7th International Conference on Mobile Business, pp. 270-279. IEEE, 2008.

[60] Shen, Demei, James Laffey, Yimei Lin, and Xinxin Huang. "Social influence for perceived usefulness and ease-of-use of course delivery systems." Journal of Interactive Online Learning 5, no. 3 (2006): 270-282.

[61] Sinisalo, Jaakko, Heikki Karjaluoto, and Saila Saraniemi. "Barriers to the use of mobile sales force automation systems: a salesperson's perspective." Journal of Systems and Information Technology (2015).

[62] Solimun, Adji Achmad Rinaldo Fernandes, and Endang Arisoesilaningsih. "The efficiency of parameter estimation of latent path analysis using summated rating scale (SRS) and method of successive interval (MSI) for transformation of score to scale." In AIP Conference Proceedings, vol. 1913, no. 1, p. 020037. AIP Publishing LLC, 2017.

[63] Son, Hyojoo, Yoora Park, Changwan Kim, and Jui-Sheng Chou. "Toward an understanding of construction professionals' acceptance of mobile computing devices in South Korea: An extension of the technology acceptance model." Automation in construction 28 (2012): 82-90.

[64] Suki, Norazah Mohd, and Norbayah Mohd Suki. "Exploring the relationship between perceived usefulness, perceived ease of use, perceived enjoyment, attitude and subscribers' intention towards using 3G mobile services." Journal of Information Technology Management 22, no. 1 (2011): 1-7.

[65] Tanner Jr, John F., and Shannon Shipp. "Sales technology within the salesperson's relationships: A research agenda." Industrial Marketing Management 34, no. 4 (2005): 305-312.

[66] Taylor, Shirley, and Peter Todd. "Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions." International journal of research in marketing 12, no. 2 (1995): 137-155.

[67] Van Biljon, Judy, and Paula Kotzé. "Cultural factors in a mobile phone adoption and usage model." (2008).

[68] Vatrapu, Ravikiran, and Manuel A. Pérez-Quiñones. "Culture and International Usability Testing: The effects of culture in structured interviews." arXiv preprint cs/0405045 (2004).

[69] Venkatesh, Viswanath, and Fred D. Davis. "A theoretical extension of the technology acceptance model: Four longitudinal field studies." Management science 46, no. 2 (2000): 186-204.

[70] Venkatesh, Viswanath, Fred Davis, and Michael G. Morris. "Dead or alive? The development, trajectory and future of technology adoption research." Journal of the association for information systems 8, no. 4 (2007): 1.

[71] Venkatesh, Viswanath, Cheri Speier, and Michael G. Morris. "User acceptance enablers in individual decision making about technology: Toward an integrated model." Decision sciences 33, no. 2 (2002): 297-316.

[72] Venter, Peet, Mari Jansen van Rensburg, and Annemari Davis. "Drivers of learning management system use in a South African open and distance learning institution." Australasian Journal of Educational Technology 28, no. 2 (2012).

[73] Weill, Peter. "The relationship between investment in information technology and firm performance: A study of the valve manufacturing sector." Information systems research 3, no. 4 (1992): 307-333.