



Identifying factors affecting the adoption of information systems from the point of view of accountants of companies listed on the Tehran Stock Exchange

Fereshteh Pourghanbari^{1*} , **Hassan Yazdi Far**² , **Mahdi Faghani**³ 

- 1) Department of Accounting, National University of Skills (NUS), Tehran, Iran. PHD In Accounting.
- 1) Prof., Department of Accounting, University of Derby, UK.
- 2) Assistant Professor, Department of Accounting, Faculty of Management and Economics, University of Sistan and Baluchestan, Zahedan, Iran.

OPEN ACCESS

Article Type: Research Article

*Correspondence:

Fereshteh Pourghanbari

fpourghanari@gmail.com

Received: February 19, 2025

Accepted: March 16, 2025

Published: Winter 2025

Citation: Pourghanbari, F. , Yazdi Far, H. and Faghani, M. (2025). Identifying factors affecting the adoption of information systems from the point of view of accountants of companies listed on the Tehran Stock Exchange. *Strategic Management Accounting*, 1(1), 86-110.

Publisher's Note: MSDS stays neutral with regard to jurisdictional claims in published material and institutional affiliations.



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract

The aim of the research is to identify the factors affecting the acceptance of information systems from the perspective of accountants of companies listed on the Tehran Stock Exchange. This research examines the factors influencing the adoption of accounting systems from the point of view of accountants using the integration of the unified model of technology acceptance and use, technology fit, task and institutional theory. In terms of the practical purpose and method of data collection, the present study is a descriptive-survey based on the standard questionnaire of Venkatesh et al. (2003) for the variables related to the integrated model of acceptance of technology use and from the questionnaire of Goodhue and Thompson (1995) for the task technology fit variable and from the standard questionnaire of DiMaggio. and Powell (1983) was used for variables related to institutional pressures. Analysis and measurement of the model was done using the structural equation model. The software used in this research for analysis is Smart PL3. The information was collected using a questionnaire distributed among the accountants of the companies listed to the Tehran Stock Exchange in 2019 and 200 questionnaires were confirmed and analyzed. The results showed that all the constructs of the model (i.e. self-efficacy, effort expectancy, performance expectancy, perceived technology fit, coercive pressure and mimetic pressure) except for the structure of facilitating conditions in research has a positive and direct relationship in the acceptance of accounting information system. On the other hand, the moderating variables of age, gender and industry had an effect on the behavioral intention of accountants in accepting the accounting information system and moderated it, but the experience variable in self-efficacy did not moderate the relationship.

Keywords: Accounting information system, behavioral tendencies, integrated model of technology acceptance and use.

JEL Classification:DOI: <https://doi.org/10.22034/smajournal.2025.515137.1008>**INTRODUCTION**

The use of information technology is expanding rapidly in the present era, and this trend has led to major developments in various fields, including accounting. The use of these technologies brings significant benefits to organizations. Therefore, identifying the factors affecting the acceptance and use of computers in organizations has become an important and vital issue. Therefore, understanding and analyzing the factors that affect the acceptance of information technology is essential, which can help organizations improve their performance and competitiveness. Since the 1990s, companies have invested heavily in the implementation of accounting information systems, and its technology has been introduced to accountants and has gained importance. Currently, many companies have accepted accounting information systems and have entered the post-implementation stage; but the implementation of technology does not mean that companies have had better efficiency and effectiveness in accounting operations. As a result, issues related to the use of accounting information systems by accountants have become very important (Aoun., et al. 2010). However, the successful implementation of accounting information systems depends on the acceptance and actual use of accountants in organizations, so organizations are looking for ways to ensure that accountants accept the system instead of focusing only on the acceptance of decision makers. Although accountants' participation played an important role in the successful implementation of the system, existing research has mainly focused on issues related to design and development and the effects of its implementation (Abdullah Naheb, 2017). Usually, users have different reactions to the use and acceptance of technology. Today, many organizations are faced with employee resistance to using new technology and computer systems. The effectiveness of these systems in the organization is measured by measuring user acceptance. Researchers have conducted a lot of research on how users accept technology and what factors affect their decisions. This has led to the formation of numerous models in technology acceptance (Taleghani., et al. 2013). A number of researchers use traditional frameworks for their studies, and others combine previous models or add a component to expand their model to the research. Therefore, combining factors from different theoretical perspectives can provide a general understanding of the potential influential factors in the adoption of information technology (Taherdoost, H. 2018). Given the development and introduction of various technologies in the business environment and their application in accounting information systems, and since there are limited studies in the research literature on accounting information systems that examine the adoption of information systems from the perspective of The behavioral tendencies of accountants have been examined in a multidimensional manner and beyond a specific attitude.

METHODOLOGY

In order to collect data and information, library and field methods were used. The library method was used by referring to books, articles, theses and databases related to the research topic. The field method was also used by using a questionnaire; which used the standard questionnaire of Venkatesh., et al. (2003) for variables related to the integrated model of acceptance of technology use and the questionnaire of Goodhue. & Thompson. (1995) for the variable of perceived appropriate technology and the standard questionnaire of DiMaggio and Powell was used for variables related to institutional pressures. The questionnaire consisted of 45 questions based on the study objectives and covered all research hypotheses in three parts: 10 general questions, the second part, 2 questions about the accounting company's information system, and the third part consisted of 33 specialized questions that were assessed with a 5-point Likert scale (each of the questionnaires was a separate standard and was used in various studies, and the combined questionnaire was also used in the research of Alamin., et al. (2015)). The questionnaire was translated by the researchers. In the next stage, using the opinions of experts and specialists, first 10 questionnaires were distributed among these people and ambiguities related to the questions were determined. The final corrections and final preparation of the questionnaire were made by the researcher. The face validity and content of the questionnaire were verified in this way. A total of about 350 electronic links were sent in these several ways, and in the end, 206 electronic questionnaires were returned to the researcher, of which 6 of these questionnaires were incompletely answered and were deleted. Cronbach's alpha and composite reliability were used for its reliability.

RESULTS

According to the results, it was found that performance expectations were an important factor in the respondents' acceptance of technology, meaning that if the new technology is perceived to have higher performance, it will be more likely to be adopted. The reason for this may be that performance expectations reflect accountants' perception of improving their work performance by using the accounting information system, meaning that they perceive that the new system can increase convenience, save time, and make their work easier. On the other hand, the first sub-hypothesis states that the effect of performance expectations on accountants' behavioral tendencies is moderated by age and gender. The reason for this is that women emphasize more on work efficiency using information systems and the usefulness of technology, and older people also give more importance to external reinforcers; because performance expectations are related to external reinforcement that increases work efficiency, and as people age, they are influenced by people in the field of information technology. On the other hand, if accountants feel that using accounting information systems is easy, they will use it more. Accountants usually prefer to adopt a system that is not complicated and is easy to implement. The relationship between effort expectations and behavioral tendencies is moderated by age, gender, and experience. This could be due to women's greater emphasis on

the intrinsic benefits of technology, such as ease of use. On the other hand, since new women are less likely than experienced individuals to be required to use technology to increase their productivity, intrinsic motivation, i.e., the convenience of technology, will have a major impact on their decision to use it. The lower the experience in using it, the more convenient the computer technology will be. The fit between the characteristics of accounting information systems and current accounting practices was one of the biggest concerns of accountants for adopting this system.

CONCLUSION

The results showed that all the constructs of the model (i.e. self-efficacy, effort expectancy, performance expectancy, perceived technology fit, coercive pressure and mimetic pressure) except for the structure of facilitating conditions in research has a positive and direct relationship in the acceptance of accounting information system. On the other hand, the moderating variables of age, gender and industry had an effect on the behavioral intention of accountants in accepting the accounting information system and moderated it, but the experience variable in self-efficacy did not moderate the relationship.

Contribution of Author

The authors of the article have contributed jointly and equally to the writing of the article.

Ethical Approval

Informed written consent has been obtained from the individuals for the publication of their anonymous information in this study.

Sponsor

The present study had no financial sponsor.

Conflict of Interest

No conflict of interest has been declared by the authors.

Acknowledgements

I would like to express my gratitude to all the professors who supported me in conducting the research.

References

- Abdullah Naheb, O. (2017). The influence of critical factors on the behavior libya. intention to computerized accounting systems (cas) in cement manufactures in The in cement manufactures in libya. *International Journal of Accounting and Business Society*, 25(1), 86–108.
<https://doi.org/10.21776/ub.ijabs.2017.25.1.7>
- Abu Afifa, M. M., Vo Van, H., & Le Hoang Van, T. (2023). Blockchain adoption in accounting by an extended UTAUT model: empirical evidence from an emerging economy. *Journal of Financial Reporting and Accounting*, 21(1), 5-44.
<https://doi.org/10.1108/JFRA-12-2021-0434>
- Afsay, A., Tahriri, A., & Rezaee, Z. (2023). A meta-analysis of factors affecting acceptance of information technology in auditing. *International Journal of Accounting Information Systems*, 49, 100608. [in persian]
<https://doi.org/10.1016/j.accinf.2022.100608>
- Alamin, A. A. Wilkin, C. L. Yeoh, W. & Warren, M. (2020). The Impact of Self-Efficacy on Accountants' Behavioral Intention to Adopt and Use Accounting Information Systems. *Journal of Information Systems*, 34(3), 31–46.
<https://doi.org/10.2308/isys-52617>
- Alamin, A., Yeoh, W., Warren, M., & Salzman, S. (2015). An empirical study of factors influencing accounting information systems adoption. 23rd European Conference on Information Systems, ECIS 2015, 2015-May.
<https://doi.org/10.18151/7217259>
- Alizadehjamal, M., & Keyhan, J. (2021). Testing unified theory of acceptance and use of technology for predicting teachers' computer technology use in classroom. *Technology of Education Journal (TEJ)*, 16(1), 147-156. [in persian]
<https://doi.org/10.22061/tej.2021.6711.2438>
- Al-ma'aitah, M. (2017). The Drivers of ERP Cloud Computing from an Institutional Perspective. *Journal of Theoretical and Applied Information Technology*, 95(19), 5142-5157.
https://www.researchgate.net/publication/320693435_The_drivers_of_erp_cloud_computing_from_an_institutional_perspective
- Alsyouf, A. (2021). Self-efficacy and personal innovativeness influence on nurses' beliefs about EHRS usage in Saudi Arabia: Conceptual model. *International Journal of Management (IJM)*, 12(3). pp. 1049-1058.
https://iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_12_ISSUE_3/IJM_12_03_096.pdf <http://iaeme.com/Home/journal/IJM>
- Aoun, C., Vatanasakdakul, S., & Li, Y. (2010, December). AIS in Australia: UTAUT application & cultural implication. In *21st Australasian Conference on Information Systems, ACIS-2010* (pp. 1-12). AIS Library. <https://research-management.mq.edu.au/ws/portalfiles/portal/62197117/Publisher+version+%28open+access%29.pdf>
- Andwika, V. R. & Witjaksono, R. W. (2020). Analysis of user acceptance of ERP system on after sales function using unified theory of acceptance and use of technology (UTAUT) model. *International Journal of Advances in Data and Information Systems*, 1(1), 26-33. DOI:10.25008/ijadis.v1i1.178
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, vol. 1, no. 2, pp. 164–80.
<https://doi.org/10.1111/j.1745-6916.2006.00011.x>

- Brower, J. & Dacin, P. A. (2020). An institutional theory approach to the evolution of the corporate social performance–corporate financial performance relationship. *Journal of management studies*, 57(4), 805-836.
<https://doi.org/10.1111/joms.12550>
- Dishaw, M & Strong, D. (1999). Extending the technology acceptance model with task-technology fit constructs. *Information & Management*, vol. 36, no. 1, pp. 9–21.
[https://doi.org/10.1016/S0378-7206\(98\)00101-3](https://doi.org/10.1016/S0378-7206(98)00101-3)
- Dishaw, M, Strong, D & Bandy, B(2004). The impact of task-technology fit in technology acceptance and utilization models. Proceedings of the tenth Americas conference on information systems, 6–8 August, New York, AISel, 3306-3311.
https://www.researchgate.net/publication/220890479_The_Impact_of_Task-Technology_Fit_in_Technology_Acceptance_and_Utilization_Models
- Dimaggio, P. & Powell, W. (1983). Standard Questionnaire,
[https://books.google.com/books?hl=en&lr=&id=ZPhlVSwXIRQC&oi=fnd&pg=PA276&dq=DiMaggio+and+Powell%27s+Standard+Questionnaire+\(1983\)&ots=0bmUk7yau&sig=jws2hdaJa5CdJOLRLHpt9H3Mf4I#v=onepage&q=DiMaggio%20and%20Powell's%20Standard%20Questionnaire%20\(1983\)&f=false](https://books.google.com/books?hl=en&lr=&id=ZPhlVSwXIRQC&oi=fnd&pg=PA276&dq=DiMaggio+and+Powell%27s+Standard+Questionnaire+(1983)&ots=0bmUk7yau&sig=jws2hdaJa5CdJOLRLHpt9H3Mf4I#v=onepage&q=DiMaggio%20and%20Powell's%20Standard%20Questionnaire%20(1983)&f=false)
- Etemady Jooriaby, M. , kheradyar, S. and Azadi Hir, K. (2020). The study of Institutional Pressures Effects on Accountants' Intentions of Accounting Information System Adoption: Empirical Evidence of Unified Theory of Acceptance and Use of Technology. *Journal of Accounting Advances*, 12(2), 27-63. [in persian]
<https://doi.org/10.22099/jaa.2021.39300.2079>
- Etemadi Juriyabi, Khurdiar, Sina, Azadi Hir, & Kayhan. (2021). Acceptance of Accounting Information Systems Based on Prudence Self-Assessment. *Auditing Science*, 21(85), 373-393. [in persian]
<https://danesh.dmk.ir/article-1-2577-en.html>
- Forward, S. E. (2009). The theory of planned behavior: The role of descriptive norms and past behavior in the prediction of drivers' intentions to violate. *Transportation Research Part F: Traffic Psychology and Behavior*, 12(3), 198–207.
<https://doi.org/10.1016/j.trf.2008.12.002> Get rights and content
- Greenwood, R., & Meyer, R. E. (2008). Influencing Ideas: A Celebration of DiMaggio and Powell (1983). *Journal of Management Inquiry*, 17(4), 258-264. (Original work published 2008)
<https://doi.org/10.1177/1056492608326693>
- Goodhue, D. L. (1998). Development and measurement validity of a task-technology fit instrument for user evaluations of information system. *Decision sciences*, 29(1), 105-138. <https://doi.org/10.1111/j.1540-5915.1998.tb01346.x>
- Goodhue, D., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS Quarterly*, 19, 213-236.
<http://dx.doi.org/10.2307/249689>
- Gonzalez, G. C. Sharma, P. N. & Galletta, D. (2012). Factors influencing the planned adoption of continuous monitoring technology. *Journal of Information Systems*, 26(2), 53–69.
<https://doi.org/10.2308/jsys-50259>

- Gullkvist, B. (2011). Drivers of diffusion of digital accounting practice. *Contributions to Accounting, Auditing and Internal Control*, 25, 25-43.
https://d1wqtxts1xzle7.cloudfront.net/112499335/197966996libre.pdf?1710694990=&responsecontentdisposition=inline%3B+filename%3DContributions_to_Accounting_Auditing_and.pdf&Expires=1744481304&Signature=AG1ZqUHJSqECXvvpb22rNmGd8Srrsyt~8IU1zI5sCstqNPQciSnXMyAwR2XNbKm2xSCIVAMLPSR81B3shzPT11veKfUiY68TzUDick0bzT4bGaVo7Bxmjp3OHOXj6Sg7kc2uKCr5Oo1-DC3-CDVd9~b52TVIcJf9gJRnBjkrY~HGJykPwOOkAMZpWrGhgJQF6SKO6MsH4tAbEKIwWNdmCK3oTXgN8VY2ZKNQB~cV8qiiHnsU8KG7ekSrKujLlVkrPuOKAgCP2c7hxf3KBbFPgvSoD9bDLJ~7yRL21tdQl3m9S46K~RiySjpA4VdY~1ZmjOIkWqIWk~gU9ZSBA &Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA#page=41
- Hayashi, A. Chen, C. Ryan, T. & Wu, J. (2020). The Role of Social Presence and Moderating Role of Computer Self Efficacy in Predicting the Continuance Usage of E-Learning Systems. *Journal of Information Systems Education*, 15(2)
https://www.researchgate.net/publication/267855475_The_Role_of_Social_Presence_and_Moderating_Role_of_Computer_Self_Efficacy_in_Predicting_the_Continuance_Usage_of_E-Learning_Systems
- Krell, K. Matook, S. & Rohde, F. (2016). The impact of legitimacy- based motives on IS adoption success: An institutional theory perspective. *Information & Management*, 53(6), 683-697.
<https://doi.org/10.1016/j.im.2016.02.006>
- Latif, B. Mahmood, Z. Tze San, O. Mohd Said, R. & Bakhsh, A. (2020). Coercive, Normative and Mimetic Pressures as Drivers of Environmental Management Accounting Adoption. *Sustainability*, 12(11), 4506-4517.
<https://doi.org/10.3390/su12114506>
- Odeh, M. H. (2019). Factors affecting the adoption of financial information systems based on UTAUT model. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(2), 108-116.
https://hrmars.com/papers_submitted/6046/Factors_Affecting_the_Adoption_of_Financial_Information_Systems_Based_on_UTAUT_Model.pdf
- Taherdoost, H. (2018). A review of technology acceptance and adoption models and theories. *Procedia Manufacturing*, 22(April), 960–967. [in persian]
<https://doi.org/10.1016/j.promfg.2018.03.137>
- Taleghani, Mohammad, Taghizadeh Jorshuri, Mohammad Reza, Mirzapour, Fatemeh (2013). Evaluating the development process of the technology acceptance model. *Management Engineering Monthly*, (53), 43-48. [in persian]
<https://www.magiran.com/paper/1170559/%D8%A7%D8%B1%D8%B2%DB%8C%D8%A7%D8%A8%DB%8C-%D8%B1%D9%88%D9%86%D8%AF-%D8%AA%D9%88%D8%B3%D8%B9%D9%87-%D9%85%D8%AF%D9%84-%D9%BE%D8%B0%DB%8C%D8%B1%D8%B4-%D8%AA%DA%A9%D9%86%D9%88%D9%84%D9%88%DA%98%DB%8C-tam>
- Tilahun, M. (2019). A Review on Determinants of Accounting Information System Adoption. *Science Journal of Business and Management*, 7(1), 17-22.
DOI:[10.11648/j.sjbm.20190701.13](https://doi.org/10.11648/j.sjbm.20190701.13)
- Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425.
<https://doi.org/10.2307/30036540>

Zhang, J, Huang, J & Chen, J (2010). Empirical research on user acceptance of mobile searches. *Tsinghua Science & Technology*, vol. 15, no. 2, pp. 235–45.

DOI: [10.1016/S1007-0214\(10\)70056-0](https://doi.org/10.1016/S1007-0214(10)70056-0)