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ABOUT ME

I am a multi-disciplinary researcher with a strong background in different business sectors. My initial research interest was in business process management. I started with automatic identification in supply chain management. I continued this field of research by applying business platforms and IoT in farm-to-fork strategies in agriculture.

I have applied my research in various industrial settings and gained hands-on experience in the application of information technology and systems in transportation systems and services. The role of machine learning and AI in e-business has been my research focus in the past few years. This emerging technology will transform businesses to the next level.

During my research, I led several studies to analyze web-based information and gained deeper knowledge in the field. As a member of the Association of Information Systems (IS), I always tried to play a role in expanding the knowledge of IS as a science and advancing IS theories by conducting research in a developing country. Moreover, my experiences in different production and service-based sectors including transportation, banking, heavy equipment manufacturing, healthcare, auto manufacturing, software production, and web information systems have created a holistic and deep view into both society and business contexts. It enabled me to identify problems and conduct research to resolve them. I am very enthusiastic about expanding my expertise in cutting-edge technologies and knowledge in different contexts.

RESEARCH EXPERTISE

1 -Business Analytics and Machine Learning

My main focus in this field is to apply machine learning techniques in different businesses including banking, stock market, healthcare, retail and marketing, sports, and even astronomy. Based on the context, the aims of these studies have been predicting disease (healthcare), predicting performance (sports, education, astronomy, stock market, banking), and analyzing predictively or descriptively the customer behavior (retailing, social media). The conducted studies involve data mining, text mining, web usage mining, deep learning, transfer learning, and topic modeling. Most of the research in this field is based on real data and in collaboration with different businesses and companies. In several studies, data have been extracted from social networks or web contents. However, a few research rely on public data. The list of the published research and ongoing studies can be reached here (it is added at the end of this resume as well).

2- Intelligent Systems

One of the main applications of IS/IT is to develop intelligent systems that bring various benefits using automatic operations and services. Automatic Identification in the supply chain as a part of the electronic product code (EPC) global project was one of the first studies I conducted. I expanded this interest in designing an IoT-based model for intelligent management of urban transportation in Tehran. Moreover, smart greenhouse management, and intelligent detection of forest fire based on IoT are two more research projects I co-supervised. Most of these studies are ongoing or waiting to be published (see here for titles).

3- e-Business and Business Platforms

The research in this field involves e-commerce, m-commerce and social commerce, digital transformation, platform businesses and platform economy. In one research the focus was on developing an electronic business model for social commerce. Another research added perceived risk to technology acceptance model (TAM) of social commerce. Moreover, I conducted studies to explore the potential of emergent technologies such as blockchain in C2C e-businesses.

Business platforms using IoT can make farm-to-fork strategies possible in agriculture for which we have defined several research projects. Based on the progress of the business platforms, several important aspects including sustainability and ethical concerns have received attention in society and academics. Therefore, I am including the topic of the implications of platform business on sustainability and social issues in my research. List of the published and ongoing studies can be reached here (or you can also see the end of this resume).

4- IS Strategy and Management

One of the main challenges is to expand the scope of the IS theories as most of the IS research has been conducted in developed countries. I pursue IS as science and collaborate in generalizing theories by applying them in the context of Iran as a developing country which has a unique situation as it is explained in the published papers. This field of research involves strategic alignment, adoption of emergent technologies, organizational readiness, critical success factors in implementation information systems. (Please check here for a comprehensive list of published ones).

5- Customer Relationship Management (CRM)

I studied CRM as an information system and I focused more on analytical CRM which is based on machine learning techniques. However, as a supplementary result of those studies, I published two papers in this regard. One is a systematic review for customer lifetime value (CLV), and the other introduces activity level as a mediating variable between customer retention and CLV (here). However, several studies which are listed in business analytics and machine learning field can also be considered in this field as they studied customer behavior.

6- Business Process Management

My initial interest in research resulted in two published papers: one in the area of assessing readiness for business process reengineering (BPR) which has received more than 350 citations based on Google Scholar, and one for developing a unified BPR methodology.

WORK EXPERIENCES

2013-present	<i>Alzahra University</i> Faculty Member, Associate Professor - Research and International Affairs Deputy of Social Sciences and Economics Faculty (2018-2021) - Head of Management Department (2016-2018) - Director of Educational Planning and Development Office (2014-2015)
2022-2023	<i>NIC Holding</i> Business Analytics Consultant: Data Strategy Planning, Developing Data Quality and Data Maturity Models.
2018-2020	<i>Ministry of Economic Affairs and Finances</i> Member of Intelligent Economy Committee The mission of this committee was developing the strategy and road map for intelligent economy.
2016- 2017	<i>Ministry of Science and Technology</i> Technology director for strategic planning for university publishing.
2015- 2016	<i>Institute of University Publishing</i> Research Deputy and technology Director The goal of this project was transforming the IUP using information technology to improve its performance as it was in the threat of closing. This project was later continued in the Ministry of Science and Technology for University Publishing.
2009-2011	<i>Hesco</i> Information System and Analytical CRM Consultancy and Planning
2007-2009	<i>Iran Fava Gostaresh</i> Technical Manager, SAP S&D Module Manager in IKCO
2005-2007	<i>Tarbiat Moderas University</i> Head of Software Development Team
2002-2003	<i>Iran's Railway Company</i>
2004-2005	Information Technology Consultant

RESEARCH ACTIVITIES AND COMMUNITY MEMBERSHIPS

Reviewer	<i>International Information Technology and People, International Journal of Electronic Commerce Research, Expert System with Applications, and ...</i>
Editorial Board	<i>Interdisciplinary Journal of Management Studies, Sport Business Journal</i>
Member	<i>Association of Information Systems (since 2009)</i>
Member of Board	<i>Middle East and North Africa Chapter of AIS (MENA)</i>

Co-Chair

Various Conferences including MENCIS and MCIS 2023, ITCO 2023, MENACIS 2022, and ...

EDUCATION

2012-2013 Tehran-Iran	POST Doctorate Tarbiat Modares University	Strategic Alignment in Healthcare
2007-2012 Tehran-Iran	Ph.D., Tarbiat Modares University	A Holistic Model for Performance Management based on Customer Lifetime Value in Geographically Distributed Service Companies.
2005-2007 Teran-Iran	M.Sc. degree, Information Technology Engineering Tarbiat Modares University	An Improved Decision System for Replenishment Using Rule- Based Expert System in EPC Network
2004 Melbourne- Australia	Post-Graduate Certificate, Information Systems Melbourne University	
1992-1996 Tehran-Iran	B.Sc. degree, Computer Engineering	

Teaching COURSES

Data Mining	Business Intelligence
e-Business	Management Information Systems
Business Process Management	Enterprise Resource Planning
Research Method	

AWARDS

Distinguished Researcher in Alzahra University in 2015, 2016, 2018, 2021, & 2022.

Best Student in Master Degree.

Language

English	Reading (Very Good), Writing (Good), Speaking (Good), Listening (Very Good)
Persian	Native

List of Published and On-going Research

Business Analytics & Machine Learning

Published

- Mirfakhraei, S., Abdolvand, N., & Rajaei Harandi, S. (2023). The RFMRv Model for Customer Segmentation Based on the Referral Value. *Interdisciplinary Journal of Management Studies (Formerly known as Iranian Journal of Management Studies)*, x(x). doi: [10.22059/ijms.2023.329229.674722]. ([link](#))
- Arjmand, M., Abdolvand, N., & Harandi, S. R. (2023). The Impact of Customer Clubs on Lifetime Value of Banking Customers. *International Journal of Electronic Customer Relationship Management*, 14(1), 42-60. doi: [10.1108/IJECRM-07-2022-0117]. ([link](#))
- Mohazzab, A., Khavanin Zadeh, M., Dehesh, P., Abdolvand, N., Rahimi, Z., & Rahmani, S. (2022). Investigation of Risk Factors for Tunneled Hemodialysis Catheters Dysfunction: Competing Risk Analysis of a Tertiary Center Data. *BMC Nephrology*, 23(1), 300. doi: [10.1186/s12882-022-02768-4]. ([link](#))
- Sheykh Abbasi, B., Abdolvand, N., & Rajaei Harandi, S. (2022). Predicting Customers' Behavior Using Web-Content Mining and Web-Usage Mining. *International Journal of Information Science and Management (IJISM)*, 20(3), 141-163. doi: [10.2478/ijism-2022-0015]. ([link](#))
- Monfared, S., Abdolvand, N., Mirtorabi, M. T., & Rajaei Harandi, S. (2022). Machine Learning Method for Predicting the Merge and Morphology of Galaxies through Near-Infrared Spectroscopy. *Iranian Journal of Astronomy and Astrophysics*, 9(1), 19-30. doi: [10.22128/ijaa-2022-009]. ([link](#))
- Mahavarpour, N., Hosseinzadeh Shahri, M., Abdolvand, N., & Babaei Zakilaki, M. A. (2022). Rules Governing the Behavioral Intention of Instagram Users to Participate in Marketing Crowdsourcing Contests based on the Ruff Set Theory Approach. *Consumer Behavior Studies Journal*, 8(4), 132-159. ([link](#))
- Hosseini, M., Abdolvand, N., Harandi, S.R. (2022). Two-dimensional Analysis of Customer Behavior in Traditional and Electronic Banking. *Digital Business*, 100030 (2022). doi: [10.1016/j.digbus.2022.100040]. ([link](#))
- Azizi, Z., Abdolvand, N., Asl, H.G., & Harandi, S.R.(2021). The Impact of Persian News on Stock Returns through Text Mining Techniques. *Iranian Journal of Management Studies*, 14(4), 799-816. ([link](#))
- Yekrangi, M., & Abdolvand, N. (2021). Financial Markets Sentiment Analysis: Developing a Specialized Lexicon. *Journal of Intelligent Information Systems*, 57, 127-146. ([link](#))
- Rahimi, Z., Abdolvand, N., Sepehri, M. M., & Khavanin Zadeh, M. (2021). The association of vitamin-D level with catheter-related-thrombosis in hemodialysis patients: A data mining model. *The Journal of Vascular Access*, 11297298211001157. <https://doi.org/10.1177/11297298211001157> ([link](#))
- Sharifian, M., Abdolvand, N., & Harandi, S. R. (2020). Context-Based Expert Finding in Online Communities Using Ant Colony Algorithm. *Information Systems & Telecommunication*, 8(2), 130. ([link](#))
- Hassanpour, B., Abdolvand, N., & Rajaei Harandi, S. (2020). Improving Accuracy of Recommender Systems using Social Network Information and Longitudinal Data. *Journal of AI and Data Mining*, 8(3), 379-389. ([link](#))

- Fatemian, A. S., Abdolvand, N., Salimzadeh, H., & Delavari, A. (2019). Predictive Factors of Advanced Colonic Adenomas and Cancer Using Data Mining. *Middle East journal of digestive diseases*, 11(4), 192–198. <https://doi.org/10.15171/mejdd.2019.148> ([link](#))
- Damavandi, H., Abdolvand, N., & Karimpour, F. (2019). Utilizing Location-Based Social Network Data for Optimal Retail Store Placement. *Earth Observation and Geomatics Engineering*, 3(2), 77-91. ([link](#))
- Roustakiani, A., Abdolvand, N., & Harandi, S. R. (2018). An Improved Sentiment Analysis Algorithm Based on Appraisal Theory and Fuzzy Logic. *Information Systems & Telecommunication*, 6(2), 88. ([link](#))
- Jalaly, S., Abdolvand, N., & Rajae Harandi, S. (2018). Customer Behavior Analysis using Web Usage Mining. *New Marketing Research Journal*, 8(2), 69-86. (Persian). ([link](#))
- Haghghatnia, S., Abdolvand, N., & Rajae Harandi, S. (2018). Evaluating Discounts as A Dimension of Customer Behavior Analysis. *Journal of Marketing Communications*, 24(4), 321-336. doi: 10.1080/13527266.2016.1273246. ([link](#))
- Beygi, S. A. K., & Abdolvand, N. (2017). Stock Price Prediction Modeling Using Artificial Neural Network Approach and Imperialist Competitive Algorithm Based on Chaos Theory. *Journal of Financial Management Strategy*, 5(18), 27-44. (Persian) ([link](#))
- Qadaki Moghaddam, S., Abdolvand, N., & Rajae Harandi, S. (2017). A RFMV Model and Customer Segmentation Based on Variety of Products. *Journal of Information Systems and Telecommunication (JIST)*, 3(19), 155-166. ([link](#))
- Rashed, F. E., & Abdolvand, N. (2017). A Supervised Method for Constructing Sentiment Lexicon in Persian. *Journal of Computer & Robotics*, 10(1), 11-19. ([link](#))
- Mastoory, Y., Rajae Harandi, S., & Abdolvand, N. (2016). The Effects of Communication Networks on Students' Academic Performance: The Synthetic Approach of Social Network Analysis and Data Mining for Education. *International Journal on Integrating Technology in Education*, 5(4), 23-34. ([link](#))
- Abdolvand, N., Albadvi, A., & Aghdasi, M. (2015). Performance Management Using a Value-Based Customer-Centered Model. *International Journal of Production Research*, 53(18), 5472-5483. doi: 10.1080/00207543.2015.1026439. ([link](#))
- Abdolvand, N., & Albadvi, A. (2012). A Holistic Model Based on CLV for Performance Management in Service Industry. *Iranian Journal of Trade Studies*, 16(64), 43-90. (Persian) ([link](#))

Conferences & Chapter Books:

- Boubehreje, Atena; Abdolvand, Neda; and Sojodishijani, Omid, "RFL-Based Customer Segmentation Using K-Means Algorithm" (2022). *ICEB 2022 Proceedings (Bangkok, Thailand)*. 39. ([link](#))
- Abdolvand, N., Rahimi, Z., & Rajae Harandi, S. (2019). A Model for Improving Recommender Systems Based on the Similarity of Users. In *2019 15th Iran International Industrial Engineering Conference (IIIEC)* (pp. 121-126). doi: 10.1109/IIIEC.2019.8720643. ([link](#))
- Faridzadeh, S., Abdolvand, N., & Rajae Harandi, S. (2018). Market Basket Analysis Using Community Detection Approach: A Real Case. In *Applications of Data Management and Analysis: Case Studies in Social Networks and Beyond* (pp. 177-198). ([link](#))

Ongoing Research

- Improving the Cross-Domain Classification of Short Text Using the Deep Transfer Learning Framework (Accepted paper)

- Developing Recommender Systems and Retail Data Analysis Using Network Analysis Approach (Submitted)
- Sustainable Development and Corporate Profitability: Data Mining Approach (Submitted)
- Investigating the Effect of Sustainability Components on Stock Exchanges with Data Mining Approach (Submitted)
- Business Sustainability Performance Transformation and Economic Performance: Data Mining Approach (Submitted)
- Predicting the Success of Mobile Applications Using Deep Learning Methods, A Case Study of “Cafe Bazar”
- Social Network Analysis to Assess the Social Awareness Of The Environmental Crisis
- Analyzing the Effect of Gamification on Customers Migration Between Clusters Using Markov Chain Analysis

Intelligent Systems

Published

- Bahrami, M., Abdolvand, N., & Rajaei Harandi, S. (2021). Developing a Solution for Intelligent Urban Transportation Management Using the Internet of Things. *Scientia Iranica*, 28(2), 709-720. ([link](#))
- Abdolvand, N., & Kurnia, S. (2005). The EPC Technology Implications on Cross-Docking. In *Proceedings of the San Diego International Systems Conference*. ([link](#))

Ongoing research

- A Business Model for Smart Home Providers (submitted paper)
- Providing an IOT-Based Solution to Improve Plant Maintenance in an Intelligent Greenhouse
- Proposing a Novel IOT Based Solution for Detecting Forest Fire

e-Business and Platform Business

Published

- Bordbar, A., Abdolvand, N., Ghanbartehrani, N., & Rajaei Harandi, S. (2019). Developing a Business Model for Social Commerce in Tourism Industry in Iran. *Journal of Business Management*, 11(4), 895-918. (Persian) ([link](#))
- Biucky, S. T., & Harandi, S. R. (2017). The Effects of Perceived Risk on Social Commerce Adoption Based on TAM Model. *International Journal of Electronic Commerce Studies*, 8(2), 173-196. ([link](#))
- Abdolvand, N., Moaghadam Charkari, N., & Mohammadi, R. (2006). A Technical Model for Improving Customer Loyalty With M-Commerce: Mobile Service Providers. *International Journal on Computer Science and Information System*, 1(2), 50-62. ([link](#))

Conferences & Chapter Books:

- A Framework for Digital Transformation in the Banking Industry of Iran (Presented at MCIS & MENACIS 2023 and will be published in AISel)
- The Impact of Platform Businesses on Sustainable Development (Accepted to Publish in Special Issue)
- Megerdichian, N., Abdolvand, N., & Harandi, S. R. (2021). The Effect of Blockchain on Customer-To-Customer Electronic Commerce. ICEB 2021 Proceedings (Nanjing, China), 15. ([link](#))
- Platform Economy and Its Implications for Workers (Accepted Chapter Book)
- Platform Economy Implications for Sustainability: Good, Bad, Unknown (Accepted Chapter Book)

Ongoing Research:

- Providing a Solution Based on the Internet of Things and Platform Business to Improve Dates and Olive Supply Chain

IS Strategy and Management

Published

- Mardan, F., Abdolvand, N., & Harandi, S. R. (2023). The Effect of IT Flexibility and IT Governance on Business-IT Strategic Alignment. *International Journal of Business and Systems Research*, 17(3), 251-265. ([link](#)).
- Farshadi, R., Nazemi, E., & Abdolvand, N. (2022). A Framework for Ranking Critical Success Factors of Business Intelligence Based on Enterprise Architecture and Maturity Model. *Interdisciplinary Journal of Information, Knowledge, and Management*, 17, 543-575. ([link](#))
- Forootani, S., Abdolvand, N., & Harandi, S. R. (2022). Factors Affecting the Adoption of Cloud-Based CRM in Small and Medium Enterprises. *International Journal of Services Technology and Management*, 28(1-2), 120-140. ([link](#))
- Pashutan, M., Abdolvand, N., & Harandi, S. R. (2022). The Impact of IT Resources and Strategic Alignment on Organizational Performance: The Moderating Role of Environmental Uncertainty. *Digital Business*, 2(2), 100026. <https://doi.org/10.1016/j.digbus.2022.100026>. ([link](#))
- Ghalami, A., Abdolvand, N., & Rajae Harandi, S. (2021). Investigating and Ranking Factors Affecting Sustainable Development with Application of Information Systems. *Management Research in Iran*, 22(1), 187-217. (Persian) ([link](#))
- Nazari Salari, L., Khadivar, A., & Abdolvand, N. (2016). A model for analyzing the barriers of using Business Intelligence (BI) in the tourism industry of Iran, a mixed method approach. *Modern Research in Decision Making*, 1(1), 79-102. (Persian) ([link](#))
- Tarani, D., Abdolvand, N., & Harandi, S. R. (2021). A Survey on Adoption Factors of Cloud-Based Enterprise Systems and Their Differences in Iranian SMEs. *International Journal of Business Information Systems*, 36(2), 165-189. ([link](#))
- Marashi, M., & Abdolvand, N. (2020). A Proposed Model for Achieving Cloud Computing Strategic Alignment Using a Mixed Method Approach: Cloud Service Providers. *International Journal of Business Information Systems*, 35(3), 378-400. ([link](#))
- Alavi, S. N., Abdolvand, N., & Harandi, S. R. (2020). A Model for Studying the Value of the Inter-Organisational Information Systems' Implementation-Case Study: Tourism Industry. *International Journal of Networking and Virtual Organisations*, 23(2), 149-170. ([link](#))

- Rajaei Harandi, S., & Abdolvand, N. (2018). Investigating the Effect of Online and Offline Workplace Communication Networks on Employees' Job Performance: Considering the Role of Culture. *Journal of Global Information Technology Management*, 21(1), 26-44. ([link](#))
- Tafti, F. F., Abdolvand, N., & Harandi, S. R. (2019). A Strategic Alignment Model for Collaborative Open Innovation Networks. *International Journal of Business Innovation and Research*, 19(1), 1-28. ([link](#))
- Hejazi, A., Abdolvand, N., & Harandi, S. R. (2017). Assessing the Importance of Data Factors of Data Quality Model in the Business Intelligence Area. *International Journal of Trade, Economics and Finance*, 8(2), 102-108. ([link](#))
- Rahimi, Z., & Abdolvand, N. (2016). Identifying and Ranking the Effective Factors on Successful Implementation of Social Commerce in Iran, Using AHP Fuzzy. *Journal of Information Technology Management*, 8(2), 295-314. (Persian) ([link](#))
- Abdolvand, N. & Boubehrezh, A., (2016). A Systematic Approach to the Challenge of Data Quality in Customer-Centric Strategy in Banking Industry. *New Marketing Research Journal*, 6, 177-196. (Persian) ([link](#))
- Abdolvand, N., & Sepehri, M. M. (2016). Antecedents of strategic information systems alignment in Iran. *Journal of Global Information Technology Management*, 19(2), 80-103. ([link](#))
- Faraji, Z., & Abdolvand, N. (2016). Effects of human factor on the success of Information technology outsourcing. *arXiv e-prints*, arXiv-1603. ([link](#))
- Abdolvand, N., & Rajaei Harandi, S. (2016). Assessing the organizational readiness for implementing BI systems. *International Journal of Information Technology Convergence and Services (IJITCS)*. 6 (1), 13-22. ([link](#))
- Shahidi, S., Abdolvand, N., & Harandi, S. R. (2015). Assessing the organizational readiness for implementing knowledge management in organizations. *International Journal of Information Technology Convergence and Services*, 5(6), 11-23. ([link](#))
- Ghaffari, K., Delgosha, M. S., & Abdolvand, N. (2014). Towards Cloud Computing: A SWOT Analysis on Its Adoption in SMEs. *International Journal of Information Technology Convergence and Services*, 4(2), 13. ([link](#))
- Abdolvand, N., & Tatani, D. (2014). Comprehensive investigation on Cloud-ERP Adoption Factors of SMEs in Iran. *Iranian Journal of Management Sciences*, 9(34), 81-104. (Persian) ([link](#))
- Abdolvand, N., Sepehri, M. M., & Baradaran, V. (2013). Development Model of Strategic Alignment of Business and Information Technology. *Journal of Strategic Management Studies*, 4(14), 125-143. ([link](#))

Ongoing Studies

- The Importance of Data at Different Business Intelligence Maturity Levels (Submitted)

CRM

Published

- Abdolvand, N., Baradaran, V., & Albadvi, A. (2015). Activity–Level as a Link Between Customer Retention and Consumer Lifetime Value. *Iranian Journal of Management Studies (IJMS)*, 8(4), 567-587. ([link](#))
- Abdolvand, N., Albadvi, A., & Koosha, H. (2014). Customer Lifetime Value: Literature Scoping Map, and an Agenda for Future Research. *International Journal of Management*, 1(3), 41-59. ([link](#))

BPM

Published

- Abdolvand, N., Albadvi, A., & Ferdowsi, Z. (2008). Assessing Readiness for Business Process Reengineering. *Business Process Management Journal*, 14(4), 497-511. ([link](#))
- Abdolvand, N., Ferdowsi, Z., & Albadvi, A. (2007). Towards a Unified Perspective of Business Process Reengineering Methodologies. *International Journal of Technology Transfer and Commercialization*, 6(1), 100-111. ([link](#))