

## EDITORIAL: ENTREPRENEURSHIP AND INNOVATION IN THE SERVICE ECONOMY

The service sector serves as a key indicator of an economy and as a nation's economy develops, the importance of services also continues to grow. Based on the latest World Bank report, in 2014 the share of the service sector in the North American economy was 78% and in the OECD the percentage recorded was 74.2%. This is considerably higher than the average outlook of the service sector in low income countries, as they recorded a percentage of 47.5% and middle income countries who recorded a percentage of 55.5%. In Iran, the share of the service sector has increased from 48.5% in 1995 to 52.4% in 2014. In comparison with the Middle Eastern average of 46.2%, the Iranian economy is more service-oriented than the other regional economies.

Also manufactured products today have a larger amount of service component compared to decades ago. Many products have been transformed into and are sold as services. The price of many products has dramatically decreased, while the cost of many services has been raised. As a result, the traditional distinction of product-service has been blurred and we live within economies that are characterized by the servitization of products.

Based on this importance, the service markets are a vital portion of a modern economy, especially when it comes to a developing economy such as Iran. For an economy that suffers from a history of inefficiency, unproductivity, disadvantaged in manufacturing, recently freed from strong international sanctions that aims to join the international economy and take a share of the international and regional markets, the service sector is a key for economic development. Most of recent entrepreneurial activities in the country occur in the service sector, especially in communication technology sub-sector. In 2010, 49% of the nation's employment was in the service sector (World Bank, 2017) and it is estimated that there is an increase in the percentage. Recent investments have been also in education and technical training for service markets (Ministry of Labor of Iran, 2016).

As a result of these identified impacts of the service sector to economies, this special issue is a collection of academic articles that addresses the various aspects of the service economy, mostly in the Iranian context. Papers in this special issue highlight the relationship between entrepreneurship and/or innovation in organizations that operate in a service economy. The 12 papers included in this special issue are authored by 30 academics from 14 higher education institutions located in 5 different countries, namely Iran, Germany, Denmark, Egypt and Turkey. The diversity of author's nationalities is also visible in this issue which have Iranian, German, Japanese and United Kingdom authors. Three papers are co-authored by a collaboration of researchers from different nationalities (Iranian-German, Iranian-Japanese, Iranian-British). The diversity in the geographical, institutional and academic background provides valuable insight into the subject of entrepreneurship and innovation. In service economics, gender equality is an important issue, therefore with 16 male and 14 female authors, this special issue is well balanced from this perspective. Also gender issues, such as women entrepreneurship are covered in this special issue.

The diversity of methods is another characteristic of the selected papers. Empirical and theoretical papers are present in this collection and both quantitative and qualitative approaches have been adopted by the different authors. Quantitative methods such as Structural Equation Modeling, AHP, Regression model and multivariate regression analysis as well as qualitative methods such as the Delphi, thematic analysis and the bibliographic method have been employed in the papers for this issue.

This issue begins with two theoretical papers. Aidin Salamzadeh and Professor David A. Kirby explain how startups grow. Their findings stress the importance of opportunity and identification of an idea as a starting point towards pursuing new venture creation. Then Sara Yousefikhah, a Sociologist, contributes with the subject of sociology of innovation. She adopts the perspective of the social construction of technology and sheds light on the social aspects of technology and how human behavior shape technology implementation.

In the third paper, Prof. Dr. Mike Friedrichsen, Hadi Zarea, Amin Tayebi and Fatemeh Asadi Saeid Abad used the Unified SWOT and Fuzzy AHP approach to investigate competitive strategies of knowledge and the commercialization of innovation. Universities are identified as a source of innovation and creativity, but in a country such as Iran, their knowledge is not connected with industry. They have shown the importance of academic research as a source of innovation and have identified the proper strategies for successful commercialization.

Co-creation and the use of external sources of innovation is one of the most attractive subjects in the current research in innovation studies. Naser Shams Gharneh and Fatemeh Hamidi proposed a model on the impact of Co-Creation on Innovation Capability and Firm Performance using the Structural Equation Modeling (SEM). Their findings show that co-creation mediate the effect of process innovation capability.

Entrepreneurship in the Media Industry has been one of the most attractive and at the same time, one of most ambiguous areas in both fields of entrepreneurship and media management. Despite an increase in the research interest in this area, a clear and comprehensive definition of media entrepreneurship is still absent. A consensual definition of media entrepreneurship has been provided by collecting ideas from using a multi stage Delphi method. It is expected that this definition will be of benefit to the researchers of this subject.

While women, as half of the population have been neglected in many aspects, the business world has become a playground for women in many different places of the world to show their potential. Entrepreneurship among women is the subject of sixth paper of this special issue. A team of cross-national researchers from both genders have studied women entrepreneurship in a relatively poor province of Iran. They investigated the effect of social capital, innovation and market knowledge on the promotion of women entrepreneurs. Their result showed that social capital has a significant effect on the success of female entrepreneurs in small local markets.

To enable innovation in organizations, knowledge sharing is essential. Somayeh Labafi studied "knowledge hiding" as an obstacle towards innovation in organizations. She conducted a qualitative study of software industry to understand what factors lead employees to hide their knowledge. Her findings show that managers in knowledge organizations should pay special attention to the factors such as the incentives of knowledge sharing, internal competition, trust and learning.

The acceptance of an innovation is a very important subject in the study of technology adoption. Amiris and Artonis Moradiabadi and Abbas Jafari conducted a survey on a sample of taxpayers with regard to new tax information systems. Their aim was to evaluate customer satisfaction as an indicator of innovation acceptance. Using the American model of customer satisfaction, they showed that perceived value has a significant impact on user satisfaction and effects on successful innovation acceptance.

Seyyed Amiri, Shirkavand, Chalak and Rezaeei investigate competitive intelligence as a means of getting competitive advantage. In a case study of an insurance company as an important part of a service economy, they conducted a survey on a sample of managers and analyzed the data gathered using the Structural Equation Modeling. Their findings emphasized on the effect of competitive intelligence on creation of sustainable competitive advantage.

In tenth paper, sustainability in innovative organizations is studied again. This time in the area of human resource management. Aibaghi Esfahani, Rezaii, Koochmeshki and Sharifi Parsa investigated the effect of flexible human resource management in the innovativeness of organizations. They concluded that psychological capital and human resource flexibility should be considered as significant by HR managers in knowledge organizations that operate in a service economy.

The impact of educational expenditure by governments on economic growth is the subject of paper by Jeyhoontabar, Najafi and Sistani Badooei. In this paper the positive effect of investment in education on economic growth is identified. The findings of this research indicates that government expenditure on education strengthens the industries in the service sector of the economy. Therefore, governments should allocate more budget to the education sector for the skills needed in the service industries.

Finally, service performance has been studied by Zahra Zare. Using data envelopment analysis, she analyzed the data of 23 hospitals and public health institutes in Tehran to measure their efficiency. She then contributed in the improvement of efficiency evaluation models.

As the guest editor of this special issue, I do appreciate the sincere cooperation of Prof. Dr. Maria Alejandra Gonzalez-Perez, Editor-In-Chief of AD-minister, for accepting my request for this special issue and facilitating the process of finalizing the papers. Also I have a special thanks to the Universidad EAFIT in Colombia for providing this opportunity to collaborate on this issue. I also send my regards to the center of communication, media and information technologies (CMI) at Aalborg University for being very supportive during the preparation of this special issue. Finally, I appreciate AmirKabir University of Technology for hosting the platform of this special issue through their international event.

I hope the readers of this special issue benefit from the diversity of methodologies, perspectives and contributions. Also I hope the researchers in the fields of entrepreneurship and innovation find this collection as a valuable source of knowledge.

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