

Analysis of the Interactive Effects of Drivers on the Development of Marketing Agility in Educational Services in Iran

Farid. Entezari¹, Seyyed Hassan. Hataminasab^{2*}, Shahnaz. Nayebzadah³

¹ PhD student, Department of Business Management, Yazd Branch, Islamic Azad University, Yazd, Iran

² Associate Professor, Department of Business Management, Yazd Branch, Islamic Azad University, Yazd, Iran

³ Professor, Department of Business Management, Yazd Branch, Islamic Azad University, Yazd, Iran

* Corresponding author email address: hataminasab@iauyazd.ac.ir

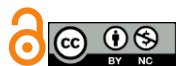
Article Info

Article type:

Original Research

How to cite this article:

Entezari, F., Hataminasab, S. H., & Nayebzadah, S. (2023). Analysis of the Interactive Effects of Drivers on the Development of Marketing Agility in Educational Services in Iran. *International Journal of Innovation Management and Organizational Behavior*, 3(2), 142-147. <https://doi.org/10.61838/kman.ijimob.3.2.16>



© 2023 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Objective: The increasing changes in the field of educational services, along with the heightened competitive power of organizations active in this domain, have compelled them to exhibit greater dynamism and flexibility. Therefore, possessing marketing agility is essential and a competitive advantage for educational service centers. This research aims to identify the factors influencing the development of marketing agility in Iran's educational services.

Methodology: Using a mixed-method approach, it seeks to identify these factors to enhance and develop educational marketing performance by extracting how these factors affect each other. For this purpose, data collection and evaluation were conducted using three methods: content analysis, Delphi analysis, and interaction effects analysis, based on data from previous articles and research, and expert evaluations using questionnaires.

Findings: The results indicate that seven factors of marketing agility in Iran's educational services are of significant importance, among which culture has the most influence, and dynamism is the most influenced. Additionally, the indirect effects of technology on dynamism, competence on dynamism, and competence on management are also relatively significant.

Conclusion: The indirect effects matrix analysis also shows that, besides the indirect effect of technology and competence on dynamism, they also indirectly influence management, with competence having a more significant impact.

Keywords: *marketing agility, educational services, interaction effects analysis, drivers*

1 Introduction

Nowadays, in most countries, services have more economic added value compared to other economic

activities such as agriculture, raw materials, and production. Thus, this concept has garnered significant attention (Riccomini et al., 2024). Currently, considering the volume of challenges and surrounding issues facing humanity, many

researchers believe that educational programs and related services lack the necessary efficiency. The performance of educational services in converting present and future issues into comprehensive scientific learning experiences is not satisfactory (Hemmati & GODARZI, 2015). Indeed, with the fundamental shift in the types of skills required in the job market, many learners find a discrepancy between what they learn in the formal and informal educational systems and the essential skills needed in the current era.

Given the intangible nature of services, their marketing has become a challenging yet crucial task. Adopting agile marketing strategies in educational institutions is a solution to mitigate the negative impacts of increasing educational services at the public level, which often manifests as a lack of individual attention to audiences (Mahajan & Golahit, 2020). Researchers argue that most problems arise from the misalignment of the product or service provided with customer demands and from competitors in a non-monopolistic market outpacing others in identifying and meeting customer needs through proper customer relationship management and organizational innovation capabilities. In this context, company agility in facing threats and seizing marketing opportunities plays a significant role, which can be achieved through innovative actions (Zhou et al., 2019). Khan (2020) states that agile marketing is a new approach focusing on rapid development and is considered a key priority for achieving marketing excellence. Marketing agility enables companies to identify opportunities and respond swiftly to market changes and competition (Khan, 2020).

Moreover, humanity is currently immersed in a world full of uncertainties, new opportunities, and threats. The various developments and advancements in human history indicate that the future is not like the past, and the way to avoid falling behind is to think about the future and move towards building it intelligently (Vaillant & Lafuente, 2019). Thus, utilizing foresight methods and their results in long-term, strategic, and even medium- and short-term planning ensures a proactive approach to the future. One crucial prerequisite for foresight is identifying key drivers affecting the phenomena of interest, which can aid in navigating future developments (Vidergor, 2021). Foresight introduces alternative futures using data, models incorporating uncertainties, and future scenarios based on desirable and achievable futures, with the results typically presented as vision reports or scenarios (Bezold, 2010).

From the above, it can be argued that market orientation in service organizations is a precursor to creating customer

and human resource agility, thereby leading to marketing agility. This improves the financial and market performance of the organization (Vidergor, 2021). Marketing agility in the services sector, as a novel marketing method, helps these organizations perform their tasks and service projects more quickly, robustly, and focused, speeding up service delivery. Additionally, this approach enables greater flexibility and speed in tracking issues by grouping individuals and topics. Despite the efforts to promote marketing agility, service organizations, particularly, struggle to identify which variables to invest their resources in for agility. Most marketing agility research has focused on the production sector, with limited studies in the service sector in Iran (Homburg et al., 2020; Kalaiganam et al., 2021).

Marketing agility in the academic system, as a service provider, involves the ability to easily, swiftly, and skillfully identify and respond to environmental opportunities and threats. Organizational participation in knowledge production, inter-organizational cooperation for wealth distribution and dissemination, organizational speed and accuracy in responding to stakeholder needs, flexibility, demand responsiveness, and a culture of change and development are capabilities of agile universities (Katare, 2022; Khavari et al., 2019; Trzcielinski, 2015).

Given the challenges facing our country in education and learning, and the need for agility in delivering educational services aligned with customer (learner) needs to outpace competitors (increasing competition in attracting learners), combating threats, and seizing opportunities, educational service providers in our country need to identify the forces driving changes. By understanding these drivers and their future relationships, they can better design and implement strategies to gain competitive advantages and create a desirable future. Thus, the issue of monitoring and understanding the future in marketing agility for educational services is a crucial and complex problem for organizations in this field. Therefore, this research seeks to answer the question: What is the future path of marketing agility in educational services in Iran?

2 Methods and Materials

This research is applied in terms of its objective, descriptive-analytical in nature, and mixed-method in methodology due to the use of content analysis, Delphi method, and cross-impact analysis. It is also cross-sectional since the qualitative data collection pertains to a specific

time frame, and the quantitative section is based on evaluations during the research period.

In the first step, using an exploratory approach, systematic review, and meta-synthesis of documents and past literature (library studies), factors influencing marketing agility in Iran's educational services were identified. These were then filtered using expert opinions familiar with the research topic and the Delphi method. In the second step, direct and indirect relationships among identified factors were determined using cross-impact analysis through the MICMAC software.

The statistical population for content analysis includes relevant internal and external research published in reputable databases such as ScienceDirect, PubMed, Elsevier, ProQuest, Google Scholar, and Scopus, and domestic databases like Magiran and IranDoc, within the time frame of 2011-2023 (for internal research) and 2000-2023 (for international research). A non-probability purposive sampling method was used. The Delphi and cross-impact analysis sections involved expert opinions, including university professors (6 individuals) and specialists and experts familiar with educational services and marketing agility (19 individuals), using purposive and judgmental sampling.

Data collection methods included library research using fiches for content analysis and field surveys using questionnaires for the Delphi method and cross-impact

analysis. The validity and reliability of the tools were ensured through repeated comparison of extracted codes, expert opinions for code evaluation, Kendall's W correlation test for the Delphi method, and content validity analysis for cross-impact analysis.

3 Findings and Results

An in-depth review of past research over a 30-year period ending in 2023, using qualitative content analysis, identified 42 and 94 articles related to the research topic from 1540 domestic and 907 international articles, respectively. The most important marketing agility factors were extracted, including 397 sub-codes, 86 main codes, and 7 categories. After repeated reviews, these codes were reduced and summarized to 148 sub-codes and 30 main codes, with 7 categories (dynamism and adaptability, technology, organizational management, cultures and values, environment, competence, and resource empowerment) identified as marketing agility factors for educational services, and 30 main codes recognized as their components.

Localization of the identified items, components, and factors using the Delphi method in four consecutive rounds confirmed the literature indicators and added some items. Accordingly, [Table 1](#) presents the factors, components, and indicators effective in creating and developing marketing agility in educational services in Iran.

Table 1

Factors, Components, and Final Indicators Obtained from the Delphi Method

| Factors | Components: Indicators |
|---------------------------|--|
| Dynamism and Adaptability | Speed: Familiarity and adoption of up-to-date technologies; rapid preparation and provision of new necessary resources; ability to quickly solve problems and respond to sudden issues; timely and quick delivery of services; speed in facing changes; possibility of training and learning in the shortest time. Flexibility: Ability to change in volume, structure, and manner of service delivery; reference to applicable laws; management of significant and impactful changes; flexible service delivery. Adaptability: Compatibility with changes; capacity to face changes; availability of tools and resources for change; opportunity identification and readiness for change. Responsiveness: Effective response to employer and customer needs; provision of new services requested by the audience; programs to identify audience needs; customer satisfaction and value delivery; ability to sense, perceive, and predict changes; ability to utilize and improve from changes; quick response to changes. |
| Organizational Management | Process Management: Innovation in processes; diversity in processes; transparency of project processes; adoption of appropriate processes; use of complementary processes; improvement of processes based on opportunity and need identification in the organization. Project Planning and Control: Accurate prediction of requirements; simultaneous execution of project activities; project rescheduling if necessary; correct understanding of the project framework; cost estimation and project budgeting; innovative programs. Total Quality Management: Performance evaluation system; operational efficiency and effectiveness; use of objective measurement methods; continuous quality improvement. Organizational Leadership and Management: Leadership style; use of modern management methods; dynamic management style. Strategy: Dynamic vision and mission; review and evaluation of organizational strategies; use of open and participatory management style. Information Management: Knowledge sharing and sufficient new information transfer; optimal information management and utilization; enhancement of information and access to databases; speed in data analysis; access to valuable and timely information; technology utilization knowledge and skills; transparency. Communication Management: Provision of non-presential communication tools; possibility of electronic information exchange; regular communication networks; establishment of automation and information and communication technology in service delivery; existence of regular communication networks for stakeholder interaction and consultation; information classification. |
| Cultures and Values | Fundamental Values: Valuing change; focus on values and work ethics; organizational attitude towards service management; individual and interpersonal insights; increased trust and honesty; change acceptance spirit. Encouragement: Compensation |

| | |
|-------------------------------------|---|
| | system; performance-based rewards for employees; rewards for employee innovation. Creativity: Being creative; welcoming employee ideas and suggestions. |
| Environment | External Environment and Market Changes: Market knowledge and external change prediction; establishing connections with the market chain. Diverse Work Environment: Improvement of processes based on opportunity and need identification in the organization; flexible organizational structure; changing regulations. Changes in Audience, Customers, and Consumers: Selection of customer ideas and opinions; stakeholder participation in negotiations; considering customer interests in contracts; identification of new customer needs and demands; having close and trust-based relationships with customers and suppliers. Safety and Security: Adherence to security and protection standards; promoting a safe work culture through training and retraining; risk management capability. |
| Competence and Resource Empowerment | Human Resource Management: Employee empowerment; enhancement of employee and executive team commitment; remuneration and benefits management for the team; job satisfaction of employees; employment of capable individuals; no employee resistance to change. Specialized and Continuous Training: Education and training; updating employee skills; use of continuous improvement techniques; improvement of job skills. Multi-Skill: Employee willingness to accept new responsibilities; presence of multi-tasking teams; employees possessing various skills; employee substitution capabilities. |
| Technology | Hardware: Use of new and appropriate technology; ability to transform technologies. Brainware: Leadership in the use of modern technologies; knowledge technologies; identification, design, and use of appropriate software systems; speed in data analysis; regular communication networks. Infrastructure: Virtual organization; information technology infrastructure. |

The results of Kendall's W correlation test in Table 2 for the four iterations (all metrics) with values above 0.5

indicate homogeneity of opinions and confirmation of the received information's validity and reliability.

Table 2

Kendall's W Correlation Test

| Step | Number | Kendall's W Correlation Coefficient | Chi-Square Index | Significance Index (Sig.) |
|--------|--------|-------------------------------------|------------------|---------------------------|
| First | 25 | 0.546 | 582.036 | 0.024 |
| Second | 25 | 0.621 | 508.851 | 0.046 |
| Third | 25 | 0.715 | 351.78 | 0.011 |
| Fourth | 25 | 0.769 | 304.48 | 0.09 |

The results of the cross-impact analysis at 15% and 25% levels indicate that, according to Figure 1, the direct effect of variables on each other at 15% (highest 15% intensity of relationships), culture is the main and primary factor in the marketing agility of educational services. This variable can change organizational management, leading to greater dynamism and adaptability, and can enhance resource competence and empowerment. Meanwhile, technology directly influences resource competence and empowerment.

At the 25% level, the mutual influence of competence and dynamism is evident. In other words, dynamism plays a primary role in enhancing competence, but competence also has a significant but lesser impact on dynamism. Conversely, technology, which was an independent factor at 15%, establishes an interactive relationship with the environment. At this second level of intensity, the environment emerges as a new actor.

The results indicate that organizational management is essentially a dependent variable, while technology plays the most independent role. Among other variables, the environment has relatively less independent effect, and dynamism and adaptability take on an intermediate position. Competence remains more independent, though occasionally influenced, and culture has a similar condition but with lesser impact.

The indirect impact matrix analysis (MII) shows that, compared to the direct and indirect effects of drivers, dynamism and environment exhibit slightly greater independence; in contrast, culture's influence decreases. In terms of influence, competence and dynamism increase, while culture slightly decreases.

Regarding indirect relationships, the results show that at the 15% level, the most indirect impact comes from technology on management. Indirect effects of technology on dynamism, competence on dynamism, and competence on management are also relatively significant.

The classification of marketing agility factors for educational services shows direct (left) and indirect (right) influences, indicating that competence ranks fifth directly but rises to third indirectly. Technology, which is directly second, falls to fifth indirectly.

4 Discussion and Conclusion

Foresight in the factors of marketing agility in educational services in Iran, in the face of changes in educational structures and methods, laws, educational aids, virtual space, etc., was conducted with the collective participation of experts and scholars in four stages. The results show that culture (15%) can influence organizational

management, leading to more dynamic educational service marketing, while technology can enhance competence similarly. As engagement level increases (25%), the environment's role becomes significant, creating an interactive effect with technology. Additionally, dynamism can enhance competence. As engagement increases, relationships with lower importance levels become clear. The indirect effects matrix analysis also shows that, besides the indirect effect of technology and competence on dynamism, they also indirectly influence management, with competence having a more significant impact. Based on the research findings in the three stages, we find:

The identification of indicators and components of marketing agility in educational services in the first research stage (content analysis) showed that many factors play a role in marketing agility, each of which is controllable and manageable. However, the educational system's structure and different environmental conditions limit the implementation of these factors in each country. Thus, not all identified items can be used to improve marketing agility in Iran.

The localization of identified items, components, and factors using the Delphi method revealed that a combination of internal and external factors play a fundamental role in marketing agility in educational services. A key insight from this research is the interdependence and alignment of many of these factors. In other words, individual and independent implementation is difficult and sometimes impossible. Therefore, the primary achievement of this research is that a one-dimensional view of each dimension (as previously observed) cannot significantly succeed in marketing educational services. Instead, all factors must be considered as a comprehensive map.

Based on the second stage's findings, detailed foresight of the relationships among marketing agility factors in this research reveals that management and technology are the most directly influenced factors in marketing agility. Thus, prioritizing agile programs in these two areas can yield the most immediate results. Management is also the highest-ranked indirectly influenced factor. Comparing the impact/influence matrix of variables directly and indirectly (3 - section a and b) shows no significant difference in the independent and dependent roles of all factors, whether directly or indirectly. Management is a completely dependent variable, and technology is a completely independent variable (with little dependence). Therefore, in marketing agility for educational services in Iran, organizational management components should be the most

flexible, while technology should be as compatible as possible. The relatively independent status of technology and competence, and the low impact of the environment, are notable. The review shows that changes in human resources and skills are challenging, and the education services sector will not be highly dependent on this aspect. Conversely, this sector plays a significant role in marketing agility for educational services. Based on the first and second research stages, it is suggested:

Educational service center managers should evaluate the current state of their service marketing, analyze the gaps, and understand their marketing style. Then, based on the identified gaps and considering the components of each factor, they should make necessary improvements and adjustments.

Based on the third research stage, it is suggested:

Evaluate the performance of educational service activities and employees (marketing and non-marketing) to identify existing strengths and weaknesses and to conduct needs assessments for necessary training in a practical manner. This will improve multi-skilling of human resources and better utilize employees in appropriate jobs.

Review and evaluate existing technology in the organization, strengthen it where necessary, and ensure compatibility of existing capabilities with technology.

Establish a suitable database of all identified components in the research to optimize organizational use and assist managers in dynamic decision-making. In this regard, managing communication and information networks in the organization to increase flexibility is crucial.

Review organizational values in educational services and promote a culture of creativity and innovation through training and incentive systems.

Continuously improve service quality and use methods to enhance dynamic marketing quality (such as viral marketing, electronic marketing, sensory marketing, etc.).

Acknowledgments

The cooperation of all participants in the research is thanked and appreciated.

Declaration of Interest

The authors of this article declared no conflict of interest.

Authors Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Ethical Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

References

- Bezold, C. (2010). Lessons from using scenarios for strategic foresight. *Technological Forecasting and Social Change*, 77(9), 1513-1518. <https://doi.org/10.1016/j.techfore.2010.06.012>
- Hemmati, A., & GODARZI, M. A. (2015). Futures studies, necessities of education systems. <https://www.sid.ir/paper/907580/fa>
- Homburg, C., Theel, M., & Hohenberg, S. (2020). Marketing Excellence: Nature, Measurement, and Investor Valuations. *Journal of Marketing*, 84(4), 1-22. <https://doi.org/10.1177/0022242920925517>
- Kalaignanam, K., Tuli, K. R., Kushwaha, T., Lee, L., & Gal, D. (2021). Marketing Agility: The Concept, Antecedents, and a Research Agenda. *Journal of Marketing*, 85(1), 35-58. <https://doi.org/10.1177/0022242920952760>
- Katara, S. (2022). Agile marketing as a key driver to increasing operational efficiencies and speed to market. *International Journal of Business Administration*, 13(2), 92-101. <https://doi.org/10.5430/ijba.v13n2p92>
- Khan, H. (2020). Is marketing agility important for emerging market firms in advanced markets? *International Business Review*, 29(5), 101733. <https://doi.org/10.1016/j.ibusrev.2020.101733>
- Khavari, A., Araste, H., & Jafari, P. (2019). • Factors affecting the agility of university educational programs With a foundation-based approach to data theory. *Journal of Educational Planning Studies*, 8(15), 252-281. https://eps.journals.umz.ac.ir/article_2501_en.html?lang=fa
- Mahajan, P., & Golahit, S. (2020). Service marketing mix as input and output of higher and technical education. *Journal of Applied Research in Higher Education*, 12(2), 151-193. <https://doi.org/10.1108/JARHE-01-2019-0022>
- Riccomini, F. E., Cirani, C. B. S., Pedro, S. d. C., Garzaro, D. M., & Kevin, K. S. (2024). Innovation in educational marketing: a study applied to Brazilian private higher education institutions. *Journal of Marketing for Higher Education*, 34(1), 95-115. <https://doi.org/10.1080/08841241.2021.1966157>
- Trzcielinski, S. (2015). The Influence of Knowledge Based Economy on Agility of Enterprise. *Procedia Manufacturing*, 3, 6615-6623. <https://doi.org/10.1016/j.promfg.2015.11.001>
- Vaillant, Y., & Lafuente, E. (2019). The increased international propensity of serial entrepreneurs demonstrating ambidextrous strategic agility. *International Marketing Review*, 36(2), 239-259. <https://doi.org/10.1108/IMR-01-2018-0015>
- Vidergor, H. E. (2021). Futures Studies and Future Thinking Literacy in Gifted Education: A Multidimensional Instructional-Based Conception. In R. J. Sternberg & D. Ambrose (Eds.), *Conceptions of Giftedness and Talent* (pp. 467-487). Springer International Publishing. https://doi.org/10.1007/978-3-030-56869-6_26
- Zhou, J., Mavondo, F. T., & Saunders, S. G. (2019). The relationship between marketing agility and financial performance under different levels of market turbulence. *Industrial Marketing Management*, 83, 31-41. <https://doi.org/10.1016/j.indmarman.2018.11.008>