

Tailoring Management Education – Insights from a Two-Decade Longitudinal Study of Iranian EMBA Programs

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<https://doi.org/10.51137/ijarbm.2024.5.1.6>

Abstract – This paper investigates the evolving subject areas required in management programs within business schools over a two-decade period through a survey of Iranian managers. The study identifies six clusters of subject areas and visually presents the evolving learning needs. It addresses the significance of the marketability and employability of graduates from management programs, contextualizing management education, fostering adaptability, and conducting cross-cultural studies. The paper discusses limitations and offers recommendations for future research, including the impact of cultural and contextual factors on management education. It argues that in today's rapidly changing business landscape, management programs must adopt a comprehensive and flexible approach to meet the diverse learning needs of managers from various backgrounds, ensuring the continued relevance and effectiveness of management education in preparing future leaders to address the dynamic business challenges.

Keywords – Management education, Business schools, Assessing management learning needs, MBA, EMBA, Iran

Submitted: 2024-03-05. Revised: 2024-03-18 Accepted: 2024-04-17.

1 Transforming Management Education for Relevance

Over the past few decades, management education has faced criticism from various scholars (Paton et al., 2014; Iwowo, 2015; Rubin & Dierdorff, 2009; Gosling & Mintzberg, 2006; Sambrook & Willmott, 2014) who have argued that it has failed to remain relevant and meet the evolving needs of the business community. The criticism has been particularly focused on MBA programs (Caza et al., 2015). Given the rapid changes and ongoing developments in the business environment, Davis and Hogarth (2013) emphasize the need to rethink management education. They assert that if management education fails to respond to the changing needs of the business community, it risks becoming irrelevant.

Management and leadership development programs implemented by organizations have been criticized for their perceived lack of effectiveness. According to Gottfredson and Reina (2020), global organizations allocate approximately \$356 billion towards leadership development initiatives. Despite this significant investment, a study conducted in 2013 that surveyed 329 organizations found that 75% of them rated their leadership development programs as "not very effective".

Given the changing demographics, globalization, digitalization, the emergence of alternative career paths, and the increasing complexity of the business world, business schools must continually update their programs and courses to remain relevant in the coming years. This evolution is crucial to assist managers in effectively running their businesses.

To improve the relevance of management education to the demands of the job market, scholars and researchers have explored the efficacy of different teaching methods, such as problem-based learning, action learning, and experiential learning. Additionally, the curricula and courses taught in management and business programs have also been scrutinized.

Drawing on the "learner-centered" approach of Dewey (1938) and the belief that "adult learners are the best people to decide their own educational needs" (Neary, 2003, p. 113), this study began by surveying Iranian EMBA participants to determine their learning needs. The survey results were used to develop a systemic model to guide program designers in creating programs tailored to learners' needs. This paper discusses the findings of a two-decade longitudinal study conducted to test the effectiveness of the model.

2 In Search of Relevance: A Literature Review

The following section presents a literature review of relevant prior studies aimed at making management education more relevant to the job market's needs. The review includes examining prior curriculum development models and the research methods used to develop these models. The section concludes with an overview of the research questions that guided this study and the research methodology employed to answer them.

2.1 Innovations in Instructional Methods and Curriculum Alignment

In response to criticisms concerning the perceived irrelevance of management education, experts have proposed various innovative instructional methods within the realm of business and management education. These methods encompass a range of approaches, including simulation-based training (Palmunen et al., 2021; Salas et al., 2009), action learning (Reynolds & Vince, 2004), case-based learning (Bridges & Hallinger, 1999), experiential learning (McCarthy & McCarthy, 2006), competition-based learning (Desai et al., 2014), problem-based learning (Carriger, 2016; Ungaretti et al., 2015; Hallinger & Lu, 2011; Bridges & Hallinger, 1996; Boud & Feletti, 2013; Stinson & Milter, 1996), and even a combined method referred to as the "knowledge-in-practice framework," as proposed by McIver et al. (2016, p. 47). This framework integrates knowledge management with instructional design, aiding instructors in selecting appropriate instructional methods aligned with the underlying knowledge structure of their learning objectives. These innovations have been introduced to enhance the overall effectiveness of management education.

However, it is important to note that while these instructional methods are presented as potential solutions, there remains a significant gap in the critical examination of their actual effectiveness in addressing the relevancy concerns within management education. The literature often highlights these innovations as promising approaches, yet their impact on students' employability and their ability to bridge the gap between theory and practice requires further empirical verification. This underscores the need for rigorous research to assess the practical implications and outcomes associated with the adoption of these instructional methods in management education programs.

On the other hand, some experts believe that the content of management education curricula is responsible for its perceived irrelevance. These authorities emphasize the need for business schools to reassess their management curricula and update them to align them with the evolving demands of the workplace.

For instance, Ritter *et al.* (2018) introduced a backward design model aimed at scrutinizing the soft skills that business graduates should possess for success in professional settings. Drawing inspiration from Wiggins and McTighe (2005), the researchers contend that employing this approach can facilitate curriculum adjustments tailored to the specific requirements of the job market.

According to Clarke (2018), universities have been motivated to update their degree programs and curricula due to the importance of graduate employability. To enhance this, institutions have introduced skill-based learning opportunities such as internships, work placements, and international study programs.

Turel and Kapoor (2016) suggested that American business schools revise their curriculum and course offerings to improve students' marketability in business analytics. Beech, MacIntosh, and MacLean (2010), along with Naz et al. (2020), have stressed the importance of involving external stakeholders such as beneficiaries and industry leaders in the design of management

education programs and curricula. They believe that real-world engagement and active involvement of these stakeholders is crucial.

Experts in other fields of study have also recognized the necessity of considering the job market's dynamics when designing educational programs. Allen and Simpson (2019) employed an "appreciative inquiry" approach to conduct a study involving various stakeholder groups, including students, academics, employers, and employment consultants, to craft a management curriculum that garners acceptance from both academics and industry leaders.

The internationalization of business schools and the imperative for cross-cultural relevance in management education have been identified as significant factors driving the need for curriculum revisions. Lamb et al. (2020) and Eisenberg et al. (2013) highlight the impact of national factors, encompassing cultural, economic, political, and social factors, on the learning requirements of business students. Szkudlarek *et al.* (2013) criticize management instructors for not considering the unique needs of diverse student backgrounds when delivering teaching content from one national context to another. Similarly, Khanna (2015) emphasizes the significance of "Contextual Intelligence," denoting the capacity to adapt knowledge to contexts different from the one in which it originated, in addressing cross-cultural management challenges.

Threshold concepts have been identified in various academic domains, including management education, and are fundamental for preparing students for future professional endeavours. Burch et al. (2015) contend that incorporating threshold concepts in management education can augment students' critical thinking prowess and their ability to apply theoretical concepts to practical situations. Hibbert and Cunliffe (2015) also propose that threshold concepts can aid students in developing a deeper understanding of business and critically evaluating different perspectives and approaches.

Nahavandi (2016) underscores the significance of threshold concepts in nurturing students' professional identities, asserting that these concepts can assist students in grasping the values and ethical principles underpinning various management practices and in formulating their ethical frameworks for decision-making. Baillie et al. (2013) suggest that threshold concepts can also empower students to cultivate a more nuanced understanding of the interplay between theory and practice, enabling them to discern how various theoretical approaches can be applied in real-world scenarios.

Collectively, the emergence of threshold concepts as a didactic methodology underscores the imperative for management education to revamp both its curriculum and teaching methodologies. This is vital to equip students for future professional roles and to adequately equip them with the skills and knowledge required to navigate the intricacies of the ever-changing business landscape.

In this section, we have reviewed various innovative instructional methods and curriculum alignment approaches. However, clarifying their direct relevance to graduates' marketability in today's fast-changing job market is important. Our research, guided by critical thinking methodology, aims to explore this connection and introduce a practical solution to align managers' education with labour market needs.

2.2 Exploring Curriculum Development Models in Management Education

The curriculum is undeniably the cornerstone of any educational institution, underpinning the quality and effectiveness of programs and services. As emphasized by Khan and Law (2015), a well-structured curriculum serves as the blueprint for organizing an educational institution's structure, ensuring the delivery of efficient and impactful education.

In the realm of management education, the significance of curriculum development cannot be overstated. It shapes the competencies, skills, and knowledge that future business leaders and managers acquire during their academic journey. However, in the pursuit of excellence, it becomes essential to critically evaluate the existing models guiding curriculum development. This critical examination enables us to assess their strengths, weaknesses, and alignment with the evolving needs of the management job market.

2.3 Critical Examination of Curriculum Development Models

The following embarks on a discerning journey into various curriculum development models within management education. Through critical scrutiny, we aim to shed light on their relevance, applicability, and effectiveness. By doing so, we endeavour to contribute to the ongoing discourse on shaping management education programs that not only meet academic standards but also empower graduates with the practical skills and insights demanded by the dynamic business landscape.

One prominent approach is the 'backward design' model proposed by Ritter et al. (2018). This model focuses on identifying the soft skills and competencies that business graduates require to succeed in the workplace. However, a critical examination reveals that the model's effectiveness may vary depending on the specific industry or organizational context, calling for a more nuanced application.

Similarly, Clarke (2018) highlights the importance of graduate employability and suggests incorporating skill-based learning components into degree programs. While this approach shows promise, a critical assessment reveals challenges related to implementation, resource allocation, and the varying impact of such programs on different student populations.

Turel and Kapoor's (2016) examination of course offerings related to business analytics in the United States underscores the need for continuous curriculum adaptation. However, a critical perspective prompts consideration of potential limitations, such as the rapid evolution of technology and industry-specific demands.

Additionally, Beech, MacIntosh, and MacLean (2010) and Naz et al. (2020) emphasize the importance of real-world engagement and external stakeholder involvement in curriculum design. While this approach aligns with the experiential learning paradigm, it necessitates a critical evaluation of potential conflicts of interest and challenges related to scalability.

By critically assessing these curriculum development models, we can gain deeper insights into their applicability, limitations, and potential areas for

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improvement. This critical perspective is vital for refining management education programs and ensuring they effectively prepare students for the dynamic demands of the job market.

2.4 Contextual Factors in Curriculum Design

Experts, including Noll and Wilkins (2002), suggest that developing curriculum models can aid in creating programs that align with market demands and adequately prepare graduates for the labour market. As a result, these models should incorporate stakeholder expectations and assess the current environment to identify the skills and knowledge necessary for graduates.

According to O'Neill (2010), employing conceptual models of the curriculum can offer a more effective method for designers to clearly articulate the reasoning behind educational methodologies. This approach can enhance the precision and accuracy of the curriculum design process. Conceptual models illustrate the various components of a system, and their interconnections, and offer a visual representation that facilitates comprehension of the system's structure. Moreover, they guide the development or construction of a system that caters to users' specific requirements.

Educational models are differentiated by key factors that are viewed from various perspectives. According to Neary (2003), these factors are "content," "process," "context," and "the role of the learner". Considering these factors, Neary (2003) identifies four types of curriculum development models:

The "liberal-humanist" model is a knowledge-centered model that disregards the understanding of technology and work-related skills. The "technocrate" model is an outcome-based model that assumes the curriculum can be designed based on a specific outcome or objective. The "cultural analysis" model assumes that the curriculum is a cultural artifact emerging from a social negotiation between generations and the main task of educational institutions is this cultural transmission. The "progressive" model is learner-centered and places learners at the center of the educational process. This approach was first introduced by Dewey (1938), who defined progressive education as an approach that places a primary emphasis on the learner's interests and impulses while minimizing the influence or constraints imposed by educators.

Fink's (2003) well-known curriculum model, labeled by Wiggins and McTighe (2005) as "backward design," involves the concept of "looking back" to design a curriculum. As suggested by the label, the design of the curriculum for an educational program starts by assessing the learning needs of learners by imagining a time when the program is over.

Supporting backward design, Wiggins and McTighe (2005, p.13) argue that educational designers, like other professional designers, must prioritize the needs of their clients. They state, "Like other design professions, such as architecture, engineering, or graphic arts, designers in education must be mindful of their audiences. Professionals in these fields are strongly client-centered. The effectiveness of their designs corresponds to whether they have accomplished their goals for end-users. Students are our primary clients,

given that the effectiveness of curriculum, assessment, and instructional designs is ultimately determined by their achievement of desired learning".

The primary objective of management education and business schools, particularly MBA programs, is to cultivate the next generation of leaders and managers and equip graduates with the skills and knowledge necessary to succeed in the job market. To achieve this, it is crucial to consider contextual factors such as location (national factors) and time (global factors transforming businesses over time) in designing management programs that meet the needs of stakeholders and students' learning requirements, as suggested in the literature.

3 Research Questions

After conducting an extensive literature review, a research methodology was meticulously crafted to address fundamental questions and create a conceptual model that serves as a compass for management program designers. The inquiries guiding this research endeavour are:

1. What key topic areas should business school graduates master to boost their marketability?
2. How can management programs be tailored to effectively meet the learning needs of their participants?

This model is intentionally designed to accommodate the diverse requirements of both students and the dynamic job market. It draws inspiration from various curriculum development classifications, including "technocratic analysis," "progressive," and "cultural analysis" models.

By venturing into this methodological exploration, we aim to provide insights that can shape the landscape of management education to better align with the evolving demands of the professional world.

4 Research Methodology for Assessing Managers' Learning Needs

In this study, we used Dewey's (1938) 'learner-centered' and Fink's (2003) 'backward design' approaches to determine managers' learning needs. We conducted a needs assessment survey to collect data on this topic. As Neary (2003, p. 113) pointed out, "Adult learners are the best people to decide their educational needs." This is why we chose Executive MBA (EMBA) participants as the primary survey respondents. They hold managerial roles and possess practical insights and knowledge of academic terminology of management concepts. This makes them qualified to assess the learning needs of managers in the dynamic management job market. Our main goal is to align management education with the evolving demands of the management-labour market, as understood by those actively shaping and participating in it.

To capture the evolving landscape of management education and changing learning needs over time, a longitudinal approach was adopted. The initial survey was conducted in 1997, and subsequent surveys were replicated at

decade intervals, specifically in 2007 and 2017. This longitudinal design enables us to track and analyze shifts and trends in managers' learning needs, providing valuable insights into the evolving demands of the business environment.

4.1 Data-collecting Instrument

To gather data on learning needs, a self-report questionnaire was designed following McClelland's (1994) observation that self-report questionnaires are the most used method for assessing needs. The questionnaire was chosen for its ease of administration and the belief that individuals are the most knowledgeable and qualified to assess their own needs.

4.2 Questionnaire Design

To develop the questionnaire, a list of twenty-one (initially eighteen) topic areas was compiled, based on the subjects commonly taught in MBA programs in 1997. The curricula of top business schools in the United States, the United Kingdom, Canada, France, and Iran were reviewed to compile the list of courses. Each topic area was accompanied by a brief explanation of the issues covered in MBA programs. Respondents were asked to select and rank their top ten priorities from among the topic areas and were also allowed to write in any additional areas not listed.

A comparative scale was used for this part of the questionnaire, where respondents were asked to compare a set of objects directly against each other. The first draft of the questionnaire was pilot-tested with a group of 19 management course members and was subsequently edited and modified to produce a revised version.

The revised questionnaire was reliability tested with a group of 22 Executive MBA program participants before final administration. To examine the questionnaire's reliability, a test-retest was conducted. The results of the two runs were compared using Spearman's correlation coefficient, which was found to be 0.9091, indicating a high correlation between the two results.

As highlighted by Fowler Jr. (2013), continuity is a fundamental aspect of survey design in longitudinal studies. In line with the principles of longitudinal survey methodology and recognizing the significance of continuity, the decision to employ the same questionnaire in the 2007 and 2017 surveys was deliberate and well-founded.

The core rationale for using an unchanged questionnaire across multiple survey iterations was to facilitate a direct comparison of responses over time, enabling us to track and analyze shifts and trends in the perceived importance of various management topics. However, this continuity was not devoid of flexibility. Respondents were allowed to write in any additional areas not listed in the questionnaire, ensuring that the survey remained up-to-date and relevant. Consistent questionnaire maintenance established a longitudinal perspective on management learning needs, providing insight into evolving socio-economic and organizational contexts. This approach aligns with best practices

in longitudinal survey research, ensuring that data collected over time can be reliably compared and trends accurately identified.

4.3 Sampling Design

In 1997, when the first survey was conducted, there were only ten EMBA programs offered by Iranian business schools, with a total population of up to 300 participants. As the population was small, a census was conducted instead of sampling. For the final administration of the questionnaire, 223 copies were distributed in person by the primary researcher to the EMBA participants, and 174 questionnaires were returned, yielding a response rate of 78%. After removing 31 incomplete responses, the final sample size used in the survey was 143.

To ensure continuity in our longitude survey methodology for both the 2007 and 2017 surveys, mirroring our approach in 1997, we once again conducted a comprehensive census of all EMBA students within the same Iranian business schools.

In 2007, a total of 132 questionnaires were distributed, resulting in a final sample size of 112 and a commendable response rate of approximately 92%. Similarly, for the 2017 survey, we distributed 143 questionnaires and received 119 completed questionnaires, yielding a response rate of 83%.

The decrease in the number of questionnaires distributed during the 2007 and 2017 surveys was caused by a decline in the population of EMBA students in the surveyed business schools. This decline was due to the increase in Iranian business schools offering EMBA programs during that period, giving students more options and choices for their preferred EMBA programs, and causing variations in the student population across the surveyed institutions.

5 Data Analysis: Exploring Learning Needs

The initial summary of respondents' needs was obtained through ranking analyses. This provided a preliminary overview of the pattern of needs among the respondents. Further analysis was carried out through cluster analysis, which aimed to group respondents into fewer homogenous groups based on their needs. This provided a more in-depth understanding of the managers' learning needs.

Longitudinal data analysis was also conducted to compare data collected in 1997, 2007, and 2017 over time. The complete analysis process for the first survey conducted in 1997 is described below, while only the results for the surveys conducted in 2007 and 2017 are presented in this paper.

5.1 Profiles of Respondents

Table 1 provides a summary of the respondents' profiles for the three surveys conducted in 1997, 2007, and 2017.

Table 1: Profiles of Respondents in 1997, 2007 and 2017

Respondents' profile	1997	2007	2017
Average age	44	43.45	40.8
Average managerial experiences	11.61	10.8	11.26
Educational background	Engineering 35% Business 30.8% Others 34.2%	Engineering 53.6% Business 33.2% Others 13.2%	Engineering 23% Business 50.9% Others 26.1%
From the private sector	24.05%	24.07%	46.07%
From the public sector	75.95%	75.93%	53.93%

5.2 Ranking Analysis of Topic Priorities

Participants in the survey were asked to prioritize their top ten business objectives by assigning a value of 10 to their most important priority and 1 to the least important, which determined the priority of the topics. A value of zero was assigned to the topic areas not included in the table of ten priorities. The next step involved calculating the sum and mean ranks for all subject areas. Additionally, we calculated the relative importance weight (RIW) using the weighted frequency command in SPSS. Formula 1 was used to calculate RIW.

Formula 1: Relative Importance Weight

$$RIW_a = \left(\frac{Mean_a}{S_{means}} \right) \times 100$$

(S_{means} is the sum of means)

Based on the summation of the assigned rank scores, Table 2 displays the ranking of topic areas. The results indicate that OB, General Management, MIS, and HRM are the four highest priority areas, while Finance, Strategic Management, Economics, Statistics, Accounting, and Entrepreneurship are ranked as the next most important topics.

Table 2: Ranking topic areas by sums of ranks for perceived needs

Rank order	Topic areas	Sum of the ranks	Mean of the ranks	Relative Importance Weight (RIW) (%)
1	Organization Behaviour (OB)	763	5.61	10.3
2	General Management	762	5.60	10.3
3	MIS	615	4.52	8.3
4	HRM	597	4.39	8.0
5	Finance	557	4.10	7.5
6	Strategic Management	502	3.69	6.8
7	Economics in Management	453	3.33	6.1
8	Statistics Analysis	311	2.29	4.2
9	Accounting in Management	302	2.22	4.1
10	Entrepreneurship	279	2.05	3.8
11	Computer	277	2.04	3.7
12	Business/Mgt. Communication	269	1.98	3.6
13	Current Affairs in Management	269	1.98	3.6
14	Operation & Production Mgt.	253	1.86	3.4
15	OR	240	1.76	3.2
16	Research Method	204	1.50	2.7
17	Marketing	201	1.48	2.7
18	International Business/Mgt.	193	1.42	2.6
19	Technology Development	143	1.05	1.9
20	English Texts in Management	121	.89	1.6
21	Business Law	116	.85	1.6
	Total			100

To address the second research question and design a model that will guide the designers of management programs so that their programs match the learning needs of students, a cluster analysis was performed. This cluster analysis aims to group related lessons into topic clusters, each representing a specific task in managing organizations.

5.3 Uncovering Topic Clusters for Management Program Design through Cluster Analysis

In the context of this study, the choice of employing cluster analysis to group variables instead of cases is well-founded and aligns with established methodologies in the field of statistics. As Kerlinger and Lee (1999) suggest, treating ordinal measurements as though they were interval measurements is a widely recognized approach, particularly when the aim is to classify variables into homogenous groups for the purpose of uncovering meaningful patterns. This approach has been used effectively in various research endeavours (Bagozzi, 1994).

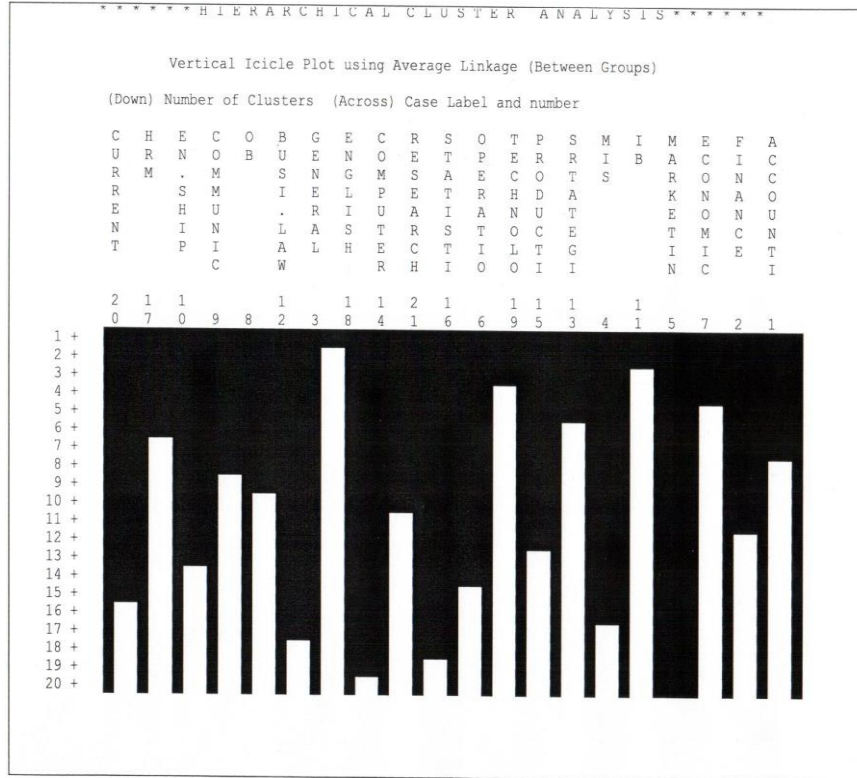
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Hierarchical clustering, as conducted using SPSS in this study, is a well-established method for exploring relationships among variables and identifying underlying structures within the data (Hartigan, 1975). By considering the correlation coefficient as a measure of similarity among the topic areas, the analysis focused on uncovering clusters of positively correlated variables, enhancing the interpretability of the results. This approach is in line with best practices in cluster analysis, ensuring that the sign of the coefficient was preserved to facilitate a more nuanced understanding of the findings.

Cluster analysis can be approached in two ways. The first approach involves grouping the cases included in the study and examining the resulting clusters to identify their shared characteristics. On the other hand, the second approach entails clustering the variables that describe the traits of the cases. For this study, the latter approach was employed, focusing on the variables as the unit of analysis. The similarity or distance measures were computed for all pairs of variables, and the data underwent hierarchical clustering using the statistical software SPSS. This method was used to uncover patterns and relationships among the variables and to identify any underlying structure in the data.

The cluster analysis conducted in this study, using the correlation coefficient as a measure of similarity among the topic areas, is depicted in Figure 1. It is important to note that only clusters for positively correlated variables were sought, and as a result, the absolute value of the coefficient was not utilized. This approach ensured that the sign of the coefficient was maintained, enabling the researchers to interpret the results better.

Figure 1: Icicle plot of the topic areas



The default method used for cluster analysis in SPSS was the Between-group Linkage Method, also known as UPGMA (Unweighted Pair Group Method with Arithmetic Mean). This method was considered suitable for the present study. The selection of the method was based on its widespread use, simplicity, and adaptability to hierarchical data. UPGMA's incremental approach suited the potential hierarchical relationships within management learning needs. Its lack of assumptions about equal variance across clusters accommodated diverse data. Moreover, the method's ability to generate dendrograms aligned to visually represent learning needs clusters. These factors collectively deemed UPGMA suitable for creating an informative and interpretable visualization of the data, justifying its selection.

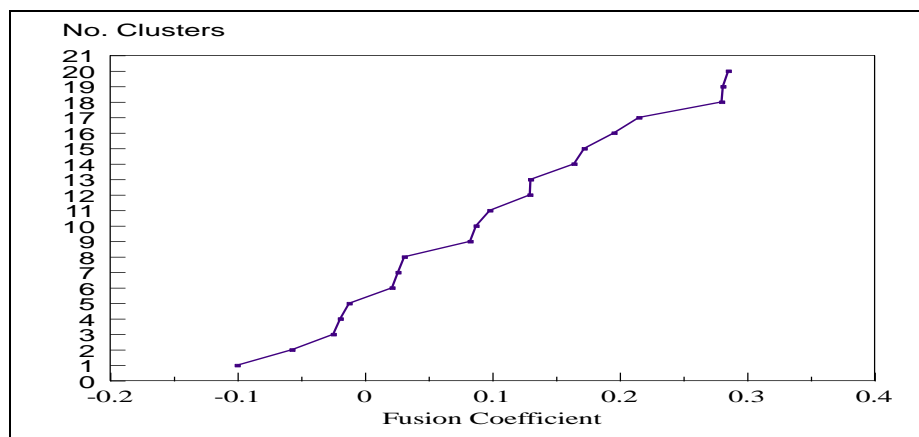
In the icicle plot (Figure 1), the initial stage of the analysis (Row 20) showed the merging of Marketing and International Business, which were found to be the most closely related subjects. The clustering process progressed until all subjects were eventually merged into a single cluster (Row 1).

Overall, the use of UPGMA as the default method in SPSS allowed for a systematic and comprehensive analysis of the subjects, leading to the formation of clusters based on their similarities.

Number of clusters

The determination of the number of clusters was based on the analysis of the plot depicting the relationship between the number of clusters and the fusion coefficient (Figure 2). The plot exhibited two noticeable jumps in the curve when considering fewer than ten clusters. The first jump was observed during the transition from five to six clusters, followed by a second jump from eight to nine clusters. These distinct jumps strongly indicate the presence of either six or nine clusters within the data.

Figure 2: Plot of the number of clusters versus the fusion coefficient



The agglomeration schedule (Figure 3) provides evidence of a significant decrease in the correlation similarity coefficient, which also suggests the presence of either six or nine clusters in the data. This decrease is particularly notable through the substantial jump in the coefficient value between six and five clusters, as well as between nine and eight clusters.

It is important to note that in the Agglomeration Schedule, positive coefficients indicate the merging of homogeneous clusters, while negative coefficients signify the combination of clusters that contain members with negative relationships. During the analysis, it is crucial to halt the agglomeration process as soon as the positive relationship changes to a negative one to ensure accurate cluster formation.

Figure 3: Agglomeration Schedule using Average Linkage (Between Groups)

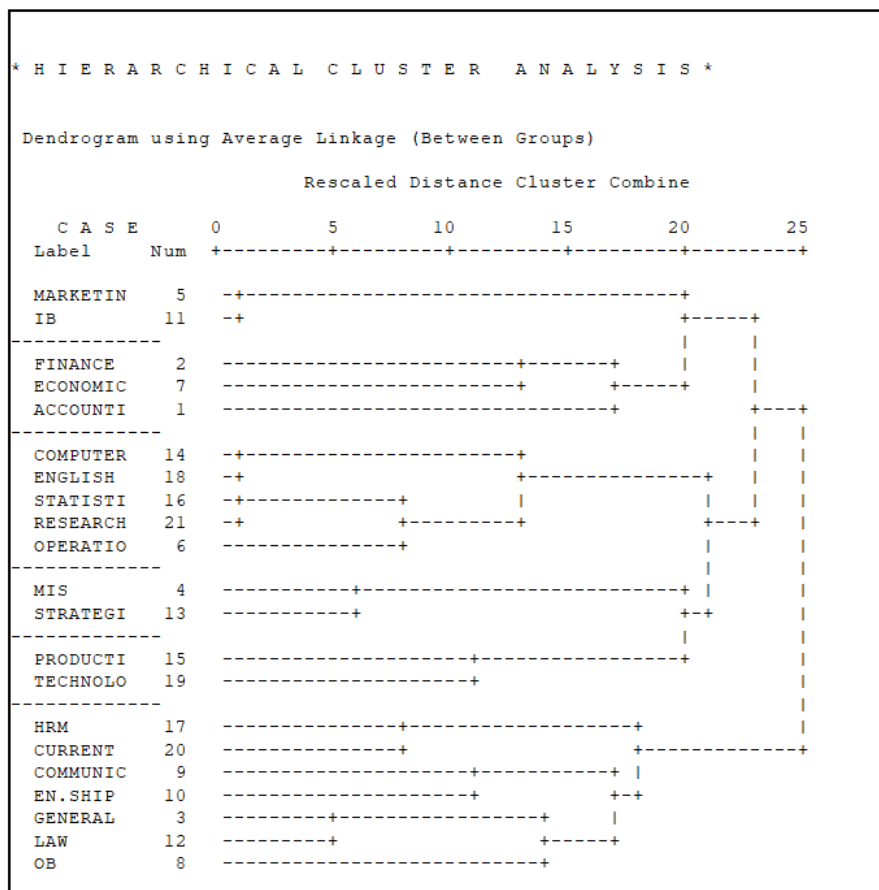
Data Information
 136 unweighted cases accepted.
 7 cases were rejected because of missing value.
 Correlation measure used.

HIERARCHICAL CLUSTER ANALYSIS
 Agglomeration Schedule using Average Linkage (Between Groups)

Stage	Clusters Cluster 1	Combined Cluster 2	Coefficient	Stage Cluster Cluster 1	1st Appears Cluster 2	Next Stage
1	5	11	.285129	0	0	17
2	14	18	.280892	0	0	11
3	16	21	.279904	0	0	7
4	3	12	.214951	0	0	12
5	4	13	.195457	0	0	16
6	17	20	.172056	0	0	15
7	6	16	.163943	0	3	11
8	9	10	.129872	0	0	13
9	15	19	.129353	0	0	16
10	2	7	.097918	0	0	14
11	6	14	.087176	7	2	18
12	3	8	.082386	4	0	13
13	3	9	.030824	12	8	15
14	1	2	.025788	0	10	17
15	3	17	.021188	13	6	20
16	4	15	-.012508	5	9	18
17	1	5	-.019455	14	1	19
18	4	6	-.024973	16	11	19
19	1	4	-.057391	17	18	20
20	1	3	-.100409	19	15	0

After conducting a thorough analysis of the Dendrogram (as depicted in Figure 4), we have determined that the six-cluster solution is the most appropriate option. This solution allows for more distinct and relevant groupings of subjects within the clusters. We made this decision based on several factors, including the structure of the dendrogram, the cohesion and separation of clusters, and the interpretability of the resulting clusters. Our goal in selecting the six-cluster solution is to accurately capture the underlying patterns and relationships among the subjects, providing valuable insights and facilitating further analysis.

Figure 4: Dendrogram of the topic areas obtained from SPSS output



The selection of the six-cluster solution is further supported by Figure 5, which presents the cluster membership of subjects across different stages (from 6 to 9) of the solutions. The accompanying table in Figure 5 allows for the examination of cluster composition at each stage. Notably, during the transition from six to seven clusters, HRM and Current Affairs form a subcluster within the sixth cluster. Similarly, as the solution progresses from seven to eight clusters, Finance and Accounting separate into two independent clusters. Lastly, in the transition from eight to nine clusters, Entrepreneurship, and Business Communication form a new subcluster within the sixth cluster.

After taking a closer look, it was decided that the extra subclusters did not provide any valuable or important insights that would improve our comprehension beyond the six-cluster solution. As a result, the six-cluster solution was deemed the most appropriate choice, as it offers a clear and meaningful representation of the subject groupings.

Figure 5: Cluster membership in the six to nine-cluster solutions

*****HIERARCHICAL CLUSTER ANALYSIS*****				
Cluster Membership of Cases using Average Linkage (Between Groups)				
Label	Number of Clusters			
	9	8	7	6
ACCOUNTING	1	1	1	1
FINANCE	2	2	1	1
GENERAL MGT	3	3	2	2
MIS	4	4	3	3
MARKETING	5	5	4	4
OPERATION	6	6	5	5
ECONOMICS	2	2	1	1
OB	3	3	2	2
COMMUNICATION	7	3	2	2
ENTREPRENEURSHIP	7	3	2	2
IB	5	5	4	4
BUSINESS LAW	3	3	2	2
STRATEGIC MGT	4	4	3	3
COMPUTER	6	6	5	5
PRODUCTION MGT	8	7	6	6
STATISTICS	6	6	5	5
HRM	9	8	7	2
ENGLISH	6	6	5	5
TECHNOLOGY	8	7	6	6
CURRENT	9	8	7	2
RESEARCH	6	6	5	5

The clusters

The subject areas have been classified below using the six-cluster solution, and their respective Relative Importance Weights (RIW) from Table 2 are provided in Table 3. Each of the six categories is named based on the thematic content of its constituent members, resulting in a clear and descriptive representation of the subject groups.

Table 3: Classified Subject Areas grouped in six homogenized Clusters

<u>Cluster One: Market-related Subjects</u>	RIW (%)
Marketing	2.7
International Business	2.6
<u>Cluster Two: Money-related Subjects</u>	
Finance	7.5
Economics in Management	6.1
Accounting in Management	4.1
<u>Cluster Three: Analytical Subjects</u>	
Statistical Analysis	4.2
Operation Research	3.4
Research Methods	2.7
Computer in Business/Management	3.7
English texts in Management	1.6
<u>Cluster Four: Environment/Information-related Subjects</u>	
Management Information System	8.3
Strategic Management	6.8
<u>Cluster Five: Product-related Subjects</u>	
Operation/Production Management	3.4
Technology Development	1.9
<u>Cluster Six: General & People-related Subjects</u>	
Organization Behaviour	10.3
Human Resource Management.	8.0
Business/Management Communication	3.6
General Management.	10.3
Entrepreneurship	3.8
Current Affairs in Management	3.6
Business Law	1.6
Total RIW (%)	100

These groupings offer valuable insights into the relationships among different topic areas. They can serve as a guiding framework for designing management programs that cater to the specific learning needs of participants.

The Market-related Subjects cluster comprises Marketing and International Business, both of which are focused on developing market awareness. The

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Money-related Subjects cluster encompasses Finance, Accounting, and Economics, all of which pertain to monetary matters. The Analytical Subjects cluster includes Statistics, Operation Research, Research Methods, Computers, and English in Business, which provide managers with valuable tools for analyzing their organizations. The Environment/Information-related Subjects cluster comprises MIS and Strategic Management, which are closely interrelated and offer strategic information. Operation/Production Management and Technology Development are combined to form the Product-related Subjects cluster, which deals with production procedures. Lastly, the General & People-related Subjects cluster encompasses subjects such as Organization Behaviour, Human Resource Management, Business Communication, General Management, Entrepreneurship, Current Affairs in Management, and Business Law. The first three subjects pertain to people management, while the last four are considered essential topics for starting or operating a business or organization.

Based on Table 4, the Environment/Information-related Subjects cluster was identified as the most significant cluster of topic areas in 1997, with a Relative Importance Weight (RIW) of 25.7%. Following closely, the General & People-related Subjects cluster held the second-highest importance with a RIW of 20.1%. The Money-related Subjects cluster ranked third in importance, having a RIW of 20.1%. The Market-related Subjects cluster held a RIW of 14.5%, positioning it as the fourth most important cluster. The Analytical Subjects cluster followed with an RIW of 10.6%, and lastly, the Product-related Subjects cluster was assigned an RIW of 9.1%.

Table 4: Rank order of the clusters in 1997

Rank order	Cluster	Mean of priority values	RIW (%)
1	Environment/Information-related Subjects	4.11	25.7
2	Money-related Subjects	3.22	20.1
3	General & People-related Subjects	3.21	20.1
4	Market-related Subjects	2.31	14.5
5	Analytical Subjects	1.70	10.6
6	Product-related Subjects	1.46	9.1
	Total		100

6 Longitudinal Data Analysis: Examining Learning Needs of Iranian EMBA Students over Two Decades

In conducting this study, we aimed to assess the evolution of management education needs over two decades among Iranian managers. The initial survey in 1997 marked our starting point, driven by the desire to understand how well management programs in Iran aligned with the demands of the local management labour market. Subsequently, we replicated the survey every

decade, in 2007 and 2017, to track changes over time. This longitudinal approach allowed us to capture shifts in the educational requirements of managers, offering valuable insights into the dynamic nature of their learning needs. By comparing responses from these three critical time points, we sought to uncover trends, patterns, and developments that shed light on the evolving landscape of management education in Iran.

Moreover, it is essential to emphasize that management training programs need to adapt to the socio-economic, cultural, political, and technological developments in a country. The national context, including social, economic, and political factors, plays a crucial role in shaping the educational needs of future managers. Our survey timeline was strategically designed to provide a comprehensive view of the changes that have occurred within the past two decades in response to these evolving dynamics. This holistic approach allows us to consider not only the changing needs of managers but also the broader contextual factors influencing management education in Iran.

The surveys provided valuable insights into the respondents' changing learning needs over two decades. The findings from each survey are presented in Table 4 (1997), Table 5 (2007), and Table 6 (2017), displaying the hierarchical ranking of the learning needs of the respondents at each time point. By analyzing the data collected over multiple periods, this longitudinal data analysis offers a comprehensive understanding of the evolving educational requirements and trends among Iranian EMBA students.

Table 5: Rank order of the clusters in 2007

Rank order	Cluster	Mean of priority values	RIW (%)
1	Analytical Subjects	5.7	20
2	Market-related Subjects	5.5	19.4
3	General & People-related Subjects	5.1	17.9
4	Environment/Information-related Subjects	4.4	15.4
5	Money-related Subjects	4.3	15.1
6	Product-related Subjects	3.5	12.3
	Total		100

RIW stands for Relative Importance Weight, which is a measure of the perceived importance of each cluster by the respondents. The rank order of the clusters in each table indicates the perceived priority of learning needs by the respondents in that particular year. The higher the rank order, the higher the priority.

Table 6: Rank order of the clusters in 2017

Rank order	Cluster	Mean of priority values	RIW (%)
1	Environment/Information-related Subjects	7.65	25.5
2	Money-related Subjects	6.4	21
3	General & People-related Subjects	5.4	18
4	Market-related Subjects	4.9	16.3
5	Product-related Subjects	3.5	11.6
6	Analytical Subjects	2.3	7.6
	Total		100

From the tables, we can observe that the order of the first three clusters remains consistent across both surveys, with Environment/Information-related Subjects being the most important cluster followed by General & People-related Subjects and then Money-related Subjects. However, there are some changes in the rank order of other clusters. Analytical Subjects, which were ranked fourth in 2007, dropped to fifth in 2017, while Market-related Subjects and Product-related Subjects swapped places between the two surveys.

Table 7 presents the rank orders of the learning needs clusters extracted from surveys conducted in 1997, 2007, and 2017.

Table 7: The rank orders of the learning needs clusters in 1997, 2007, and 2017

Cluster	1997 Rank Order	2007 Rank Order	2017 Rank Order
Environment/Information-related Subjects	1	3	1
General & People-related Subjects	2	1	2
Money-related Subjects	3	2	3
Market-related Subjects	4	4	5
Analytical Subjects	5	5	4
Product-related Subjects	6	6	6

When comparing the rankings over the three years, we can observe the following variations:

Environment/Information-related Subjects: In 1997, this cluster was ranked first, dropped to the third position in 2007, and then regained its top position in 2017. This indicates a shift in the perceived importance of environment/information-related subjects over time.

General & People-related Subjects: This cluster held the second position in 1997, rose to the top rank in 2007, and remained in the second position in 2017. It consistently maintained high importance throughout the surveyed years.

Money-related Subjects: Initially ranked third in 1997, this cluster moved to the second position in 2007 and returned to the third position in 2017. While it remained among the top three clusters, there was some fluctuation in its perceived importance.

Market-related Subjects: This cluster retained its rank as the fourth most important in both 1997 and 2007. However, there was a decline in its ranking to the fifth position in 2017, indicating relatively lower perceived importance compared to the other clusters.

Analytical Subjects: The Analytical Subjects cluster maintained its rank as the fifth most important in 1997 and 2007. However, it experienced a shift in 2017, moving up to the fourth position. This suggests an increased recognition of the value of analytical subjects over time.

Product-related Subjects: The Product-related Subjects cluster remained consistently in the sixth position across all three surveys, indicating its relatively lower perceived importance compared to the other clusters.

In summary, the ranking variations in Table 7 signify shifts in the perceived importance of different learning needs clusters among the respondents over time. The Environment/Information-related Subjects cluster reclaimed its top position, while the Market-related Subjects cluster experienced a decline in ranking. The General & People-related Subjects cluster consistently maintained a prominent position, exhibiting high rankings across all three years. In contrast, the rankings of the Money-related and Analytical Subjects clusters displayed some fluctuations, although the Money-related cluster consistently remained among the top three. On the other hand, the Product-related Subjects cluster consistently occupied the lowest rank throughout the surveyed years.

It is worth noting that these changes likely reflect adjustments in the business environment and the evolving needs of managers. This aspect will be further discussed later.

7 The System-Approach Model for Managerial Learning Needs: A Survey Perspective

The present study aimed to visually represent the pattern of management learning needs by developing an empirically derived system-approach model, as depicted in Figure 6. The model illustrates the six Management Learning Need Clusters (MLNC) along two dimensions: the Internal/External Perspective (vertical axis) and the Input/Output (horizontal axis).

The system-approach model presented in Figure 6 aims to provide a visual representation of the patterns of management learning needs based on empirical data. Two key dimensions, the Internal/External Perspective (vertical axis) and the Input/Output (horizontal axis), have been employed to categorize and elucidate these needs. The rationale behind the selection of these dimensions stems from the fundamental distinction between the management of internal resources and operations within an organization and the need to respond effectively to external factors and influences.

The Internal/External Perspective (vertical axis) delineates this critical division. Specifically, subjects falling under the domains of money-related and product-related management pertain to the internal perspective. These subjects primarily address the allocation and utilization of internal resources, as well as the management of internal operations and processes. In contrast, subjects related to the environment/information and market represent the external perspective. These subjects emphasize the importance of understanding and responding to external factors that lie beyond a manager's direct control, such as the organization's external environment and market dynamics.

The conceptual basis for this categorization draws from the foundational principles of management, which underscore the distinction between internal and external factors influencing organizational success. Management literature has long recognized the significance of managing internal resources efficiently (e.g., Kaplan & Norton, 1996; Barney, 1991) and responding to external market conditions effectively (e.g., Porter, 1998; Kotler, 2003). Additionally, research in strategic management (e.g., Barney, 2001; Hamel & Prahalad, 1989) emphasizes the role of managers in aligning internal capabilities with external opportunities and threats.

Furthermore, the Input/Output dimension (horizontal axis) signifies the relationship between the inputs (such as resources, information, and knowledge) and the desired outputs or outcomes (such as organizational performance and competitiveness). While managing internal resources and operations (Internal Perspective) primarily addresses the inputs required for efficient functioning, the external perspective focuses on responding to external factors and demands, which influence the desired outputs.

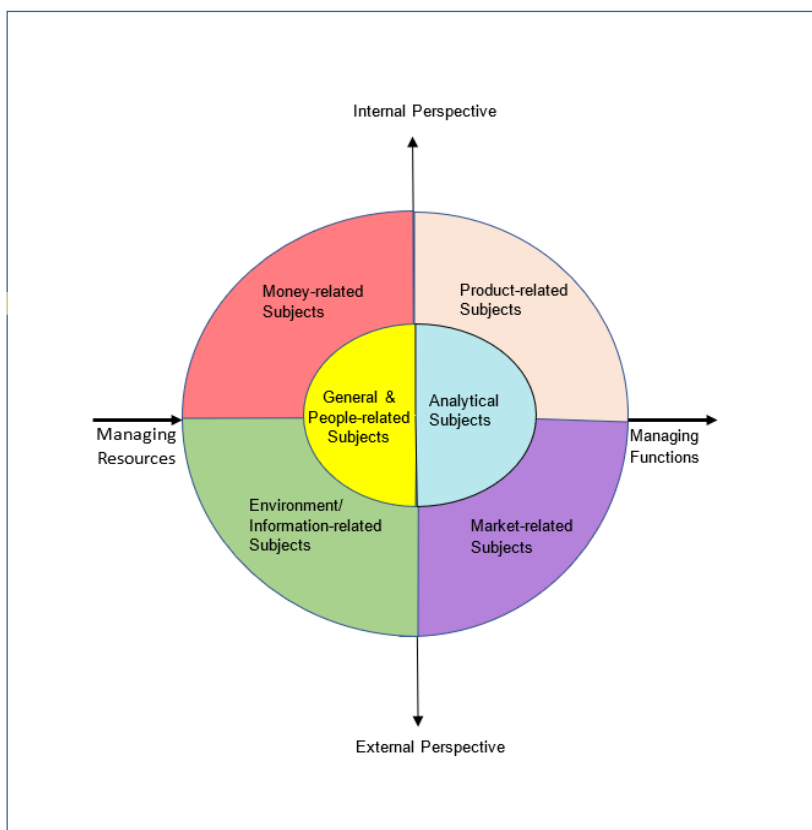
In summary, the choice of these dimensions is grounded in established management principles and theory, emphasizing the importance of both managing internal resources and responding to external factors to ensure organizational success.

At the heart of the model, the Analytical Subjects and General & People-related Subjects clusters serve as the core components. These clusters encompass subjects essential for the effective operation and management of an organization, encompassing foundational skills such as interpersonal skills (e.g., OB, HRM, Communication), analytical skills (e.g., OR, Statistics, Computer), and general managerial skills (e.g., Business Law, Entrepreneurship, General Management). These subjects are not specific to any organizational function but are crucial for successfully launching and managing managerial roles.

The remaining four clusters revolve around managing resources (money and information) or managing functions (market and production) within an organization. These functional and resource management clusters are positioned in the four quadrants surrounding the core clusters on the graph. The Money-related Cluster, representing internal resources (inputs), is in the top left quadrant on the Internal Perspective of the vertical axis and the Input pole on the horizontal axis. The Environment/Information-related Cluster, encompassing subjects related to external resources like environmental information, resides in the bottom left quadrant. The Product-related Cluster, comprising subjects associated with internal functions (outputs), is situated in the top right

quadrant. Lastly, the Market-related Cluster, focusing on the marketing function, resides in the bottom right quadrant, positioned at the Output and External Perspective poles.

Figure 6: System-approach model for management learning needs

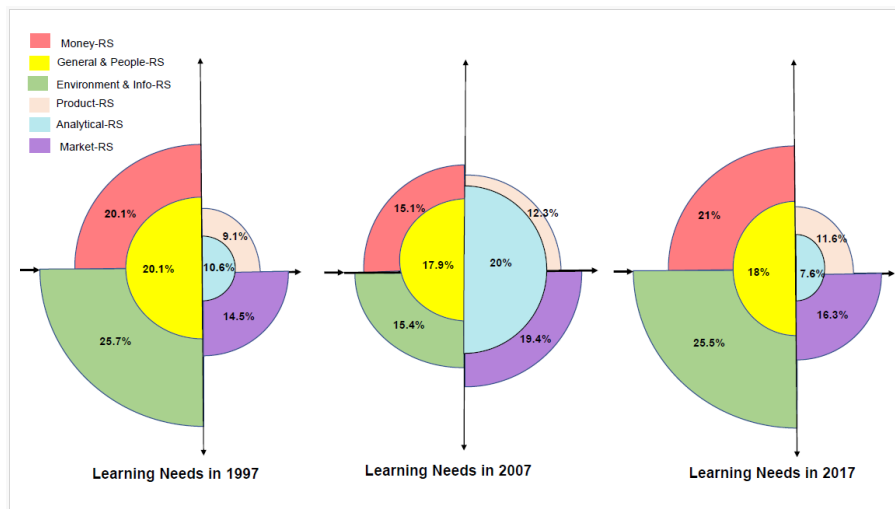


It is noteworthy that while the clusters within the model are presented as equal, it is crucial to acknowledge that their respective needs may not be equivalent. The proportions can vary across organizations, over time, and between countries. Thus, the model can be classified according to Neary's (2003) taxonomy, encompassing the "Progressive" (learner-centered), "Technocrate" (outcome-based), and "Cultural-analysis" (cultural artifact) types discussed in the literature review.

The model can serve as a valuable tool for both tailoring and evaluating the prioritization of management learning needs within a population. This encompasses either resource-focused (input orientation) or function-focused (output orientation) management approaches. Furthermore, the assessment can be tailored based on managers' perspectives regarding the significance of managing internal or external factors.

Visually, the model illustrates the diverse combinations of clusters that correspond to individuals, organizations, or an entire country's management learning needs. It also showcases how these needs may vary across different periods. These distinctive features emerged from a longitudinal study conducted over two decades in Iranian business schools. Figure 7 provides a schema developed based on the model, offering a visual representation of the changes in management learning needs observed in the country throughout the past two decades.

Figure 7: The Management Learning Needs of Respondents within Two Decades



8 In-Depth Discussion of Learning Needs and Program Design

The study's findings illuminate a transformative shift in the learning needs of managers within Iranian business schools over two decades. The inherent strength of the model used in this research lies in its capacity to visually represent and facilitate comparisons of evolving learning needs within specific populations across time intervals or among diverse cohorts at a given point in time. Drawing on data spanning two decades and sourced from Iranian managers, this study has provided valuable insights into the dynamic nature of their learning needs, vividly presented in Figure 7.

In both 1997 and 2017, Figure 7 indicates that Iranian managers prioritize managing resources like money, information, and human resources, using an input-oriented approach, while highlighting a relatively lower priority placed on output-oriented aspects like managing market and production. Such a trend can potentially be attributed to historical factors, such as the resource scarcity and product limitations arising from the Iran-Iraq war (1980-1988) and the international economic sanctions imposed on Iran (2006-2015). Interestingly,

managers exhibited a heightened focus on people skills compared to analytical competencies during this period.

Intriguingly, Figure 7 reveals a notable deviation in the learning needs of managers in 2007. During this period, there was a discernible shift towards an increased emphasis on output-oriented aspects, particularly in market and product-related domains, compared to both 1997 and 2017. This surge in importance ascribed to these subjects aligns with the notable economic growth experienced by Iran between 1998 and 2006, before the imposition of international economic sanctions on Iran. Additionally, analytical skills gained prominence, likely influenced by a substantial proportion of managers possessing engineering backgrounds. Table 1 underscores this point by revealing that more than half (53.57%) of the 2007 survey respondents hailed from engineering disciplines.

The observed shifts in managers' educational needs can be closely linked to broader societal, educational, and economic transformations, which are further elucidated by the insights gleaned from Table 1. Notably, the trajectory of these changes finds its roots in Iran's industrialization initiatives, which commenced during the 1930s and heralded the establishment of industrial universities and engineering programs within the country. Consequently, a significant proportion of managerial positions in Iran's industrial entities were occupied by graduates with engineering backgrounds.

However, the landscape began to evolve in the early 2000s. During this period, there was a growing recognition of the pivotal role played by business knowledge in shaping effective managers. This awareness prompted a substantial increase in students' interest in business-related courses and the proliferation of MBA programs across Iranian universities. Consequently, the pool of prospective managers began to increasingly feature graduates with business education backgrounds.

These significant changes in the educational composition of aspiring managers highlight the dynamic nature of Iran's educational landscape. The transition from an engineering-centric managerial workforce to a more diversified and business-oriented talent pool is reflected in the shifting emphasis on various learning needs over the years, as illustrated in Figure 7. Such changes underscore the crucial role played by higher education institutions in responding to evolving societal and economic demands while equipping future managers with the requisite skills and knowledge for success in the ever-changing business environment.

Moreover, Table 1 provides an insightful glimpse into the profiles of respondents hailing from both the public and private sectors. This diverse representation illuminates how the evolution of Iranian managers' learning needs correlates with key historical junctures that have shaped the nation's socio-economic landscape.

One pivotal turning point in Iran's history was the nationalization of organizations after the Islamic Revolution of 1979 (referred to as 1357 in the Iranian calendar). This transformative period brought about sweeping changes in the structures and management paradigms of various entities. Consequently, it exerted a profound influence on the educational prerequisites expected of future managers.

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Another notable phase of transition unfolded during the early 2000s, characterized by a significant shift towards privatization within Iran's economic landscape. This transformative period ushered in a fresh array of challenges and opportunities, compelling a recalibration of the skillsets and knowledge profiles demanded of managers. As organizations adapted to the evolving socio-economic dynamics, the demand for managers possessing a more diverse and business-oriented educational background surged significantly.

These historical dynamics underscore the paramount importance of aligning management education programs with the ever-evolving industry needs. The capacity to respond with agility and foresight to fluctuations in the socio-economic terrain remains an enduring imperative for business schools. It is their responsibility to equip aspiring managers with the requisite competencies and strategic acumen that will enable them to adeptly navigate the complexities of a dynamic and perpetually evolving business environment. In championing this mission, management education programs assume a pivotal role in molding the future architects of businesses and leaders of industries.

9 Implications for Management Education in a Global Context

Despite being specific to Iran, the findings and model presented in this study offer valuable implications that can be relevant for readers in other countries. These implications revolve around adopting a holistic approach, contextualizing management education, promoting adaptability, conducting cross-cultural studies, and enhancing marketability and employability.

Firstly, the study emphasizes the importance of adopting a holistic approach to management education. This principle transcends geographical boundaries and can serve as a guiding principle for readers in other countries to consider when designing their management programs. By incorporating a comprehensive range of knowledge and skills, programs can better address the diverse needs of managers across different contexts.

Secondly, the study underscores the significance of contextualization in management education. While the specific contextual factors may differ across countries, the overarching concept of aligning education with the local needs of managers remains crucial. Readers can reflect on their own contexts and explore ways to integrate local factors into their programs, ensuring the education provided is relevant and applicable to their specific environments.

Furthermore, the study highlights the importance of adaptability in program development. This notion is universally applicable as educational institutions worldwide face evolving demands and changes in the business landscape. By regularly assessing the learning needs of managers, program developers in any country can stay responsive to the changing requirements and update their curricula and content accordingly.

Additionally, the study suggests the potential for cross-cultural studies to enhance the understanding of diverse learning needs among international students. While conducted in Iran, the adaptive model developed in this study can inspire researchers in other countries to explore similar studies, facilitating

insights into the unique needs of international student populations and informing program adaptation strategies.

The study emphasizes the relevance of designing programs that enhance marketability and employability. While specific needs may vary between countries, the underlying principle of aligning education with the demands of the job market remains pertinent. Readers can conduct thorough needs assessments within their contexts to identify the specific requirements of their target population and tailor programs accordingly, increasing graduates' competitiveness and employment prospects.

While the study's context is Iran, its implications hold relevance for readers in other countries. The principles of adopting a holistic approach, contextualizing education, promoting adaptability, conducting cross-cultural studies, and enhancing marketability and employability can serve as valuable considerations and frameworks for program developers worldwide.

The findings of this study underscore the critical importance of scrutinizing the impact of historical trends and socio-economic developments on the management of organizations and businesses on a global scale. Exploring these historical trends and their implications for necessary adaptations in management education offers a highly promising avenue for future research.

Here, it is important to recognize the significant impact of global socio-economic trends and the need to review and adapt management education programs. Since the early 2000s, events have highlighted the importance of including topics such as professional ethics and financial regulations in management programs. The COVID-19 pandemic has brought about a new era in management education, emphasizing the importance of continuously evaluating priorities in this field. The pandemic has resulted in many businesses adopting remote and home working, alongside the increased use of Artificial Intelligence (AI) in business. These changes have presented both challenges and opportunities and have significantly altered the knowledge and skills needed by managers. To ensure that future leaders are prepared to tackle the challenges of the 21st century, it is crucial to take a proactive approach to reevaluating and adjusting management education programs. Ongoing assessments of managerial training needs and the adaptation of management education to align with the changing demands of the labour market can enhance the quality of life for individuals worldwide. The emphasis on continuous improvement and alignment with current trends is essential for the betterment of organizations, businesses, and society as a whole.

10 Limitations and Future Research Recommendations

It is important to acknowledge the limitations of this study. Firstly, the data collection was based on a survey conducted in a single country, and the sample size was relatively small and limited to specific business schools in Iran. Therefore, caution should be exercised in generalizing the findings to other countries or regions. To address this limitation, future research could include

cross-cultural studies that compare management program content across different national contexts.

One limitation of this study is that the questionnaire, originally designed for business school programs in 1997, may have limited relevance to contemporary management and leadership programs. Nevertheless, we used the same questionnaire in both 2007 and 2017, ensuring continuity and enabling meaningful comparisons over time. Respondents also had the opportunity to suggest and prioritize topics not covered in the questionnaire, enhancing data comprehensiveness. To ensure the research remains current, it's advisable to update the questionnaire to include newer subject areas, such as sustainable business practices, digital transformation, global supply chain management, social entrepreneurship, diversity and inclusion, and business ethics.

To gain a better understanding of why certain subjects are included or excluded in management programs, qualitative research methods could be utilized. Conducting interviews with program directors, faculty members, and industry professionals would provide valuable insights into their decision-making processes. Additionally, exploring the impact of management program curricula on graduates' preparedness for leadership roles through surveys or interviews would yield valuable data for further research.

Conducting cross-cultural research is highly recommended to gain insights into the influence of cultural and contextual factors on management education. Such studies can examine how management education is adapted to meet the needs of different national contexts and how national factors shape students' and educators' expectations and perceptions. The findings from cross-cultural research can inform improvements in management programs at international business schools, allowing them to better cater to the needs of their diverse student populations.

In the dynamic field of management education, our study underscores the need for continuous reassessment of learning needs, especially in the wake of the post-pandemic shift in priorities. To address the challenges and opportunities brought about by the COVID-19 pandemic, we recommend further research into the post-pandemic era, including extensive surveys and evaluations to uncover evolving management education priorities, both locally and globally.

Reassessing the learning needs of managers in light of the rapid application of artificial intelligence (AI) in organizations is a vital research area for the future. This research will provide essential insights into the evolving dynamics of learning needs, ensuring that management educational programs stay responsive to our rapidly evolving business landscape. Furthermore, future research should continue to monitor the changing landscape of management programs at business schools. Staying informed about trends and changes in management education is crucial to ensure that students receive the necessary education and training to succeed in their careers.

While this study employed quantitative methods, it is recommended to supplement future research with qualitative approaches to delve deeper into the reasons behind subject inclusions or exclusions in management and leadership programs. Conducting cross-cultural studies and monitoring the evolving

landscape of management programs will provide valuable insights for program developers and educators.

11 Insights and Future Directions for the Transformation of Global Management Education

The integration of management education with the ever-evolving needs of the job market has far-reaching implications that extend beyond individuals and institutions. It not only has the potential to stimulate global economic growth but also to bridge the skills gap, and bolster the success of organizations on a worldwide scale. To achieve these benefits, policymakers should consider revising the curricular structure, investing in faculty development initiatives, and fostering collaboration between educational institutions and the global business community. To ensure that graduates are well-equipped with the essential skills and knowledge necessary for thriving in the dynamic business landscape, stakeholders must work together to harmonize education with industry requirements. This approach will not only make significant contributions to the broader well-being of society but will also help to create a skilled workforce that can drive innovation and productivity. Therefore, future research endeavours should encompass longitudinal studies, international comparative analyses, and rigorous evaluations of policy transformations. By aligning management education with the demands of the job market, stakeholders can create a win-win situation for both graduates and organizations. Graduates will be able to secure meaningful employment opportunities and contribute to the economy while organizations can benefit from the valuable skills and knowledge that graduates bring to the table. This approach will undoubtedly foster sustainable economic growth, bridge the skills gap, and bolster the success of organizations on a global scale.

In conclusion, this study underscores the importance of aligning management education with the demands of the job market, not only within a single country but also on a global scale. By considering the policy implications and future research directions, stakeholders in management education can work collaboratively to ensure that educational programs empower graduates with the skills and knowledge demanded by the dynamic business landscape worldwide, ultimately contributing to broader societal well-being on a global level.

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