



## Relevance of IT industry-specific knowledge in academic curriculum of management graduates in India

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### Abstract

This research paper investigates the views of employers in the management sector regarding the inclusion of industry-specific knowledge in academic curricula. The study analyses a dataset containing responses from employers and discusses the implications of the findings for educational institutions. The research highlights the importance of aligning academic programs with industry requirements to enhance graduate readiness for the workforce. By analysing survey data, the study seeks to identify the strengths and gaps in current educational programs and propose recommendations for bridging the divide between Academic preparation and industry expectations.

**Keywords:** Skill gap, key competencies, management graduates, recruiters

### Introduction

In today competitive job market, the relevance of academic curricula in preparing students for industry-specific roles is a critical consideration. Employers expect graduates to possess not only theoretical knowledge but also practical skills that are directly applicable to their respective industries. This research aims to explore the perceptions of employers in the management sector regarding the inclusion of industry-specific knowledge in academic programs. By analysing the dataset provided, this study seeks to identify the extent of alignment between academic curricula and industry expectations. The rapid evolution of industries and the increasing demand for specialized skills necessitate an academic curriculum that is responsive to these changes. The alignment of academic programs with industry-specific knowledge is critical in ensuring that graduates are adequately prepared for the workforce. This paper investigates the perceptions of employers and management graduates regarding the relevance of academic curricula in providing Industry-specific knowledge.

### Literature review

The importance of aligning academic curricula with industry needs has been a subject of extensive research. Previous studies have emphasized the necessity for educational institutions to integrate practical and theoretical knowledge to produce job-ready graduates.

However, the extent to which current curricula achieve this integration remains debatable.

**Introduction to Curriculum Relevance** The relevance of academic curricula to industry-specific knowledge has been a focal point of educational research and policy discussions. As industries evolve and new technologies emerge, the gap between academic training and practical application becomes more apparent. Scholars argue that higher education institutions must continuously adapt their curricula to meet the demands of the labour market (Yorke

& Knight, 2006) [48]. This adaptation is essential not only for enhancing employability but also for ensuring that graduates possess the necessary skills to contribute effectively to their respective fields.

### Theoretical framework

Several theoretical frameworks support the need for aligning academic curricula with Industry needs. The Human Capital Theory posits that education increases the productivity and efficiency of individuals, which in turn benefits the economy (Becker, 1964) [7, 10]. According to this theory, the alignment of academic programs with industry requirements ensures that the abilities and information conveyed to students are straight appropriate in the workforce.

Additionally, the Experiential Learning Theory by Kolb (1984) [24, 25] emphasizes the importance of learning through experience, suggesting that practical, hands-on training is crucial for effective knowledge transfer and skill development.

### Industry-academia collaboration

Collaboration between academia and industry is frequently highlighted as a key strategy for ensuring curriculum relevance. Studies indicate that partnerships between educational institutions and industry players can lead to the development of more relevant and up-to-date curricula (Rothwell & Arnold, 2005) [41]. Such collaborations can take various forms, including internship programs, industry-led workshops, guest lectures by industry experts, and joint research projects. These initiatives provide students with exposure to real-world challenges and the latest industry practices, thereby enhancing their readiness for the job market.

### Skill gaps and graduate employability

Research has consistently shown that skill gaps remain a significant concern for employers across various industries.

A study by the World Economic Forum (2020) [47] identified serious thinking, problem-solving, and methodological ability as some of the key skills in demand. However, many graduates reportedly lack these skills upon entering the workforce, indicating disconnect between academic training and industry expectations. The study underscores the need for educational institutions to incorporate these skills into their curricula to improve graduate employability.

**Curriculum design and pedagogical approaches**

Innovative curriculum design and pedagogical approaches play a crucial role in bridging the gap between academic knowledge and industry requirements. Active learning strategies, such as project-based learning, case studies, and simulations, have been shown to enhance students & critical thinking and problem-solving abilities (Prince, 2004) [35]. Moreover, integrating interdisciplinary studies can help students develop a holistic understanding of their field and its applications. For instance, combining business management courses with technology and data analytics can prepare graduates for the increasingly digital and data-driven business environment.

**Continuous curriculum improvement**

Continuous improvement of academic curricula is essential to maintain their relevance in a rapidly changing world. The Tuning Project, an initiative by the European Commission, provides a framework for the development of curricula that meet the demands of the labor market while ensuring academic standards (Tuning Educational Structures in Europe, 2006).

The project emphasizes the importance of regular reviews and updates to curricula based on feedback from employers, alumni, and other stakeholders. This iterative process helps ensure that educational programs remain aligned with industry needs and technological advancements.

**Challenges in aligning academic curricula with industry needs**

Despite the recognized importance of aligning academic curricula with industry requirements, several challenges persist. One major challenge is the lag between industry changes and curriculum updates. The rapid pace of technological advancements often outstrips the ability of educational institutions to adapt their programs accordingly (Wesselink *et al.*, 2007) [46]. Additionally, resistance to change within academic institutions, due to traditional pedagogical approaches and bureaucratic inertia, can hinder curriculum reform efforts. Another challenge is the variability in industry needs across different sectors and regions. This diversity makes it difficult to develop a one-size-fits-all curriculum that addresses the specific requirements of all industries. Educational institutions must therefore adopt a flexible approach, allowing for customization and specialization based on regional and sector-specific demands.

**Case studies**

Several case studies illustrate successful initiatives to align academic curricula with industry needs. For example, the partnership between Stanford University and leading tech companies in Silicon Valley has resulted in a curriculum that incorporates cutting-edge technologies and industry practices (Etzkowitz, 2002) [14]. Similarly, the German dual

education system, which combines classroom learning with apprenticeships, has been praised for its effectiveness in preparing students for the workforce (Busemeyer & Trampusch, 2012) [8].

**Conclusion of literature review**

The literature underscores the critical importance of aligning academic curricula with industry-specific knowledge requirements. While important evolution has been completed in some areas, ongoing efforts are needed to ensure that educational programs remain relevant and responsive to the evolving demands of the labour market. By fostering closer collaboration between academia and industry, adopting innovative pedagogical approaches, and committing to continuous curriculum improvement, educational institutions can better prepare advances for effective professions in their selected arenas.

**Research methodology**

The research methodology for this study encompassed collecting responses from both employers in the management sector and management graduates through a structured survey.

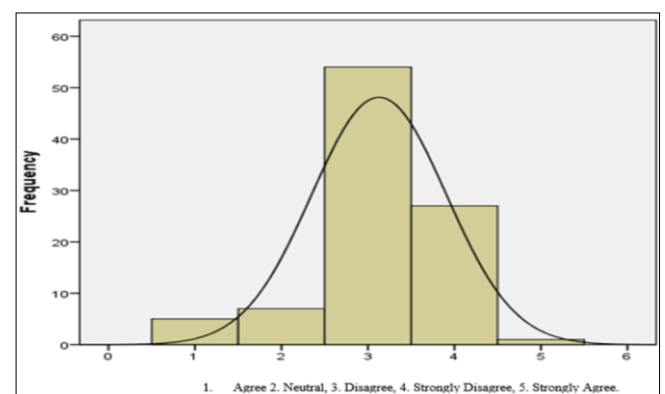
The survey responses were then categorized into five levels for recruiters: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree, and three levels for management graduates:

Yes, No, and Can't Say. The dataset included a total of 94 recruiter responses and 556 management graduate responses, which were subsequently analysed to ascertain the prevailing sentiments among employers regarding the importance of industry-specific knowledge in academic curricula.

**Data analysis**

**IT Recruiters' Responses**

Does the academic curriculum include relevant industry-specific knowledge?					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	5	5.3	5.3	5.3
	Neutral	7	7.4	7.4	12.8
	Disagree	54	57.4	57.4	70.2
	Strongly Disagree	27	28.7	28.7	98.9
	Strongly Agree	1	1.1	1.1	100
	Total	94	100	100	



Based on the survey data, most respondents do not believe that the academic curriculum includes relevant industry-specific knowledge. Here's a detailed breakdown:

- **Strongly Agree:** Only 1 respondent (1.1%) strongly agrees that the academic curriculum is relevant to industry needs.
- **Agree:** A small number of respondents, 5 (5.3%), agree with the statement.
- **Neutral:** 7 respondents (7.4%) are neutral, indicating neither agreement nor disagreement.
- **Disagree:** The majority, 54 respondents (57.4%), disagree with the statement.
- **Strongly Disagree:** A significant portion, 27 respondents (28.7%), strongly disagree.

When combining the ‘Disagree’ and ‘Strongly Disagree’ responses, we have a total of 81 respondents, which accounts for 86.1% of the total responses. This overwhelming majority indicates a clear consensus that the academic curriculum does not include relevant industry-specific knowledge.

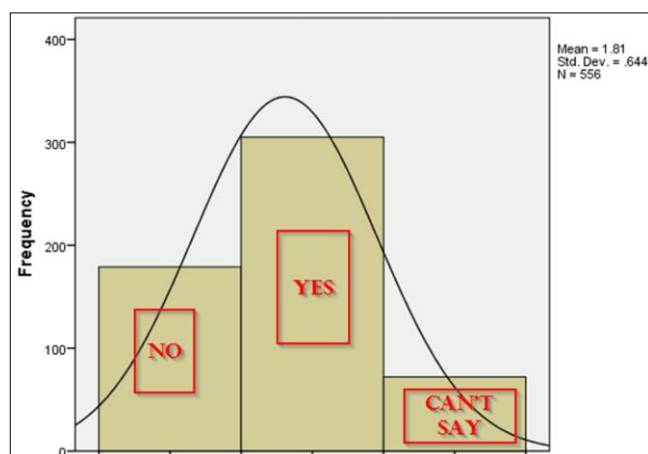
In conclusion, a combined total of 86.1% of respondents (Disagree and Strongly Disagree) indicate a negative perception of the relevance of the academic curriculum to industry-specific knowledge. According to this survey group, this suggests a substantial gap between what is taught in academia and the practical knowledge required in the industry. Only a very small fraction, 6.4% (Agree and Strongly Agree), believe that their academic curriculum aligns well with industry needs.

This significant result suggests that there is a substantial disconnect between academic teachings and the practical, applicable knowledge needed in the industry. It highlights an area for potential improvement in curriculum development to ensure that academic institutions provide relevant and beneficial education for Management graduates’ future careers in their respective industries.

This result along with feedback could be valuable for educational institutions looking to improve their curricula to better prepare Management graduates for industry challenges.

**Management graduates’ response**

Does the management curriculum support the key skills selected by you in the previous question?					
	Response	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	179	32.2	32.2	32.2
	No	305	54.9	54.9	87.1
	Can't Say	72	12.9	12.9	100
	Total	556	100	100	



The survey data indicates respondents’ views on whether the management curriculum supports the key skills they selected in a previous question. Here’s a detailed interpretation:

- **Yes:** 179 respondents (32.2%) believe that the management curriculum supports the key skills.
- **No:** The majority, 305 respondents (54.9%), do not believe that the management curriculum supports the key skills.
- **Can’t Say:** 72 respondents (12.9%) are unsure or do not have a definitive answer.

In conclusion, more than half of the respondents (54.9%) feel that the management curriculum does not support the key skills they consider important, which suggests that there may be a gap between the curriculum and the skill sets perceived as necessary by these individuals. A significant number of respondents (32.2%) do believe there is support, indicating some alignment, while a smaller group (12.9%) cannot determine if there is support or not.

This feedback could be instrumental for educational institutions in evaluating and potentially restructuring their management curricula to better align with the skills that Management Graduate and employer professionals deem essential.

**Recruiters and management students’ responses put together**

Does the academic curriculum include relevant industry-specific knowledge?					
	Employer's Data			Management Graduates	
	Responses	Frequency	Percent	Frequency	Percent
Valid	Strongly Agree	1	1	100	0
	Agree	5	5	79	14
	Neutral	7	7	72	13
	Disagree	54	57	236	42
	Strongly Disagree	27	29	69	12
	Total	94	100.0	556	100

The dataset analysis reveals that most employers (57%) disagreed with the statement that academic curricula include industry-specific knowledge. Specifically, 29% of employers strongly disagreed, highlighting a significant gap between academic offerings and industry expectations. Only 1% of employers strongly agreed that industry-specific knowledge was adequately integrated into educational programs. These findings underscore the need for academic institutions to reassess and revise their curricula to meet the demands of the management sector better.

**Findings**

The research findings suggest a notable disparity between employer perceptions and the current content of academic programs in the management sector. The data indicates a clear call for action to enhance the alignment between academia and industry. Employers' feedback underscores the importance of integrating industry-specific knowledge, practical experiences, and industry partnerships into academic curricula to bridge the existing gap and better prepare students for the workforce.

## Conclusion

In conclusion, the research underscores the significance of incorporating industry-specific knowledge into academic curricula to ensure the readiness of graduates for industry roles. The findings highlight the urgent need for educational institutions to collaborate with industry partners, review their curricula, and provide practical experiences to equip students with the relevant skills and competencies sought by employers. By heeding the insights from employers, academic institutions can enhance the quality and relevance of their programs, ultimately benefiting both students and the industries they aspire to join.

The combined analysis of responses from recruiters and management graduates offers a comprehensive view of the perceptions and sentiments surrounding the incorporation of industry-specific knowledge in academic curricula. By considering the viewpoints of both employers and graduates, educational institutions can gain valuable insights into the effectiveness of their existing programs and make informed decisions to bridge any gaps in preparing students for careers in the management sector. The findings from this dual analysis can serve as a foundation for enhancing curriculum development and promoting greater alignment between academia and industry.

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