

An Analysis of the Efficacy of South African MBA Programmes in relation to the 4th Industrial Revolution

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Abstract

Background: MBA programmes are considered flagship business programmes for business individuals. Business schools are often revered for being cutting-edge and critical business thought centres. However, over the years, programmes such as the MBA have been criticised due to their relevance. Changes such as the Covid-19 pandemic, the 4th Industrial Revolution, and increasing global political instability have resulted in harsher trading environments for business. As the business landscape evolves, so too are business schools' programmes, such as the MBA, required to evolve.

Purpose: This study explored the efficacy of a sample of South African MBA programmes concerning their perceived efficacy in developing leaders fit for the 4th Industrial Revolution.

Methodology: The study conducted a series of semi-structured qualitative interviews with identified stakeholders relating to the business school ecosystem to explore perceived opinions of the efficacy of business schools in programmes such as the MBA.

Findings: The analysis from the interviews revealed that MBA programmes in South Africa need to enhance their focus on aspects such as technology-linked technical skills, as this is a key driver that continues to shape the business landscape.

Keywords: business schools; education; 4th Industrial Revolution; relevance; MBA; skills for future

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Introduction

The business landscape is evolving at an unprecedented rate. Aspects such as the Covid-19 pandemic, international political instability, the threat of a looming global recession, and the progressively prominent role of new technologies have resulted in an increasingly complex business operating environment. New technologies, such as artificial intelligence (AI), robotics, and the “internet of things” are tenants of a new world of work propelled and fuelled by the 4th Industrial Revolution (4IR) witnessed across industries. Walker and Lloyd-Walker (2019) suggest that the new world of work is characterised by several changing variables, including increased competition, increased technological development, and changing demographics.

As the business landscape moves into a world of increasing complexity, the skills required in the future will be essential in terms of an organisation’s success. The World Economic Forum (WEF 2016) adds that the skills required for the 4IR range from technical expertise to cognitive expertise. Bughin et al. (2018) add that the most relevant skills for the future world of work include digital skills, leadership, and entrepreneurship, as organisations must be far more agile in much more complex operating environments.

Business schools have a significant role to play in developing and cultivating the skills required for the future. Sewchurran (2019) contends that the traditional Masters in Business Administration (MBA) degrees have decreased in stature due to being removed from the realities of the current and future world of work. White (2018) and Seedat (2019) propose that the modern MBA should move away from the traditional focus, develop the skills required for the future world of work, and consider the changing business landscape.

This paper will follow a framework that includes an overview of the problem under investigation and the specific research objectives. Additionally, relevant literature related to the topic will be explored, followed by an explanation of the research methodology employed for this study. Subsequently, the study will present its findings and conclude by discussing recommendations and acknowledging any limitations encountered during the research.

Problem Investigated

As the world of work continuously changes due to factors such as the 4IR and the Covid-19 pandemic, the skills required for the future world of work may differ from previous periods. Business schools are perceived to play a critical role in developing the skills and competencies required for the working world. This study investigated the efficacy of MBA programmes in developing leaders fit for the 4IR from a sample of South African business schools.

Research Objectives

This study explored literature relating to the 4IR, the skills required, and the role and value of the MBA programme in the 4IR. In addition, the study that informed this article conducted 50 semi-structured qualitative interviews with stakeholders relating to the business school ecosystem to identify their perceived opinions on the efficacy of the current MBA programmes offered by South African business schools. The research objectives of this study could be defined and presented by the following research questions explored:

1. Is the MBA offered by South African business schools currently developing leaders fit for the 4IR?
2. What are the most critical skills required for leaders in the 4IR according to a sample of South African business school stakeholders?

Using data analysis software, the findings of the interviews were investigated and provided emergent themes and opportunities for current business schools to enhance the relevance of their MBA curriculum.

Literature Review

Changing World of Work and the 4th Industrial Revolution

According to a study published by Bughin et al. (2018), the skills required for the 4IR and the future world of work vary significantly from those required a decade ago. The Fourth Industrial Revolution (often referred to as 4IR) is defined as a transformative phase of industrial and technological development characterised by the enhancement and increased prominence of disruptive digital technologies in society and industry (McKinsey and Co. 2022). Bughin et al. (2018) argue that skills which require basic cognitive ability, such as data processing, will sharply decrease, and skills such as adaptability, critical thinking, creativity, and entrepreneurship will increase greatly. Kazancoglu and Ozkan-Ozen (2018) found that the 4IR-era workforce will require much more focus on teamwork, problem-solving, and opportunity identification.

Morgan (2020) found that business complexity has continued to increase as there are several unknown variables that businesses must contend with to succeed. The occurrence of the novel Covid-19 pandemic resulted in increased disruption to business for many organisations, even further emphasising that change is needed in how we do business and the type of skills taught. The Board of Innovation (2020) regards this as the new state of the economy for the modern world. The Covid-19 pandemic altered how business is done. It resulted in reduced physical interactions, physical distancing, travel bans, limitations on gatherings and imposed lockdowns, and ultimately shutting down business as we know it in certain areas. All of this resulted in a new low-touch economy. Even though the introduction of vaccinations has reduced the magnitude of the virus, the result thereof significantly changed how business is done. Some say the pandemic even fast-tracked the progression of the 4IR.

Skills Required for the Changing World of Work and 4IR

As the world of business changes, new skills and competencies are required in the workplace. Business schools need to understand the changing world of work and produce future-fit students who can function optimally in a changing business landscape. Deloitte (2018) suggests that the skills landscape of the 4IR era differs greatly from the skills set required a decade ago. Human-centred aspects such as creativity, automation, leadership, and negotiation are growing as core skills required for the future world of work. Deloitte (2018) classifies the skills required for the 4IR into four broad categories: readiness skills, soft skills, technical skills, and entrepreneurship.

Deloitte (2018) contends that leaders will need to understand core technical skills that drive innovation in the period of the 4IR. These skills need to be understood from a functional perspective instead of a deep specialised level for leaders and managers, as the 4IR era requires digitally capable and interdisciplinary managers. Entrepreneurial traits are also considered a critical skill for the 4IR. Deloitte (2018) defines entrepreneurship in the context of 4IR as the abilities, competencies, and capabilities required to identify and nurture opportunities or ideas for business or social success. The skills required to foster entrepreneurial capability include aspects such as initiative, innovation, resilience, creativity, curiosity, and risk appetite.

Value of a Business School in 4IR

Business schools have been a resounding pillar of the knowledge economy for the last decade. They have assisted in progressively developing leaders who can cope and succeed in complex working and trading environments. Trkman (2020) suggests that while the business model of business schools has not changed significantly over the last 30 years, business schools remain credible institutions that provide immense public and social value to the communities they operate within and serve. This value is further characterised by teaching and learning activities as well as through research output. Koris and Aav (2019) assert that business schools and business education are believed to develop critical skills required to succeed in the world of business. They provide a foundation through various theories and case studies, allowing graduates to better understand the world of business.

Soni (2020) asserts that the business landscape is changing due to the introduction of 4IR, and, therefore, the role that a business school plays should also change. Furthermore, in times of uncertainty, as witnessed by the event of the Covid-19 pandemic, the focus of business schools should also change. There is a need for a paradigm shift in business schools as the competencies and activities focused on in the 20th century are becoming irrelevant. Soni (2020) believes that the role of a business school in the context of 4IR is to develop graduates who understand new disciplines related to the changing times and business needs. Business schools should develop

intellectual ability across disciplines and provide students with a globally focused mindset of best practices, while remaining flexible to local contexts.

Value of an MBA in 4IR

Marino, Rivero, and Dabos (2019) found that the MBA is regarded as a key developmental tool that provides professional competencies that allow individuals to be more successful in the business world. Muposhi et al. (2019) contend that the MBA is seen as a flagship programme by several business schools worldwide and similarly has the most gravitas of all business school degrees. Similarly, Marino et al. (2019) uphold that the reputation of the MBA is widely recognised across the business world. Fisher (2019) adds that the MBA maintains a significant legacy as the qualification has existed for over 100 years. It is considered the leading business management programme for senior and executive managers. While exact figures are vague and ambiguous, it is anticipated that over 500 000 professionals graduate from an MBA programme each year (Fisher 2019).

Seedat (2019) asserts that an MBA qualification could be of tremendous value in the 4IR if it allows individuals to upskill in a multidisciplinary approach while fostering an understanding of digital and new technologies. This is, however, based on whether the MBA has been designed based on future-focused content and relevance. Business has changed, and for an MBA to be relevant, it needs to align with these changes. Shimpi (2019) purports that the value of the MBA in 4IR needs to be achieved by reviewing the current curriculum and redesigning the content specific to the changes in business, thus creating an MBA 4.0.

Business schools and the MBA are still seen as potentially valuable aspects as they are positioned to deliver change. However, for the MBA to provide the value it warrants in the 4IR, it needs to be relevant, practical, and future-focused.

Criticisms of the Relevance of MBA Programmes

Tan and Ko (2019) believe that the key criticism levied against MBA programmes is that they are largely becoming irrelevant. The MBA in the 21st century is developing skills that were required in the 20th century and could, therefore, be perceived as being misaligned with the needs of the current business environment. In a study by Nakavachara (2020), the success of CEOs with MBAs was considered in comparison to CEOs without MBAs. The findings presented were that CEOs with an MBA do not perform better than CEOs without one. These findings called into question the relevance of the MBA in the 21st century, as the skills developed did not significantly assist individuals to outperform their counterparts without the MBA skills attained.

Jing et al. (2019), comparing international branches of business schools, found that the curricula provided in programmes such as the MBA in developing countries are almost a replica of curricula in developed countries. While it is commonly understood that these

business landscapes differ, having the same curricula often raises questions of relevance for programmes such as the MBA. Muposhi et al. (2019) and Seedat (2019) have also criticised the MBA for its perceived lack of focus on technology and, at times, African relevance.

Assessing the Efficacy of MBA Programmes in South Africa

Efficacy may be defined as the sought-after outcome or effectiveness inherent in a specific product, procedure, or provision. Consequently, the efficacy of an MBA programme resides in its ability to impart and equip the essential competencies required for individuals to succeed in business in the modern world. According to Deloitte's research findings in 2018, the skill set demanded by the 4IR diverges from prior business eras, primarily attributable to technological advancements. This era necessitates the acquisition of innovative proficiencies such as technological acumen and entrepreneurial prowess. Consequently, scholars such as Soni (2020) contend that programmes such as the MBA could potentially serve as valuable instruments in equipping individuals with the necessary skills to thrive in the 4IR. However, it is worth noting that authors such as Jing et al. (2019), Muposhi et al. (2019), and Seedat (2019) have previously voiced criticisms, both on the global and local scales, regarding the relevance of the MBA programme to contemporary business practices.

In the following section, this article aims to delve into the research methodology adopted to assess the efficacy of MBA programmes in South Africa. This assessment was conducted using a qualitative approach, involving the analysis of responses regarding the efficacy of MBA programmes from key stakeholders within the business school community from a sample of South African business schools.

Research Methodology

This study adopted a qualitative research approach and conducted semi-structured interviews with stakeholders relating to the business school ecosystem. According to AACSB (2010), the most pertinent stakeholders of a business school are industry representatives, prospective students, academic leaders, and current and previous students. Interviews were, therefore, conducted with representatives from each of these groups to understand whether and to what extent business schools in South Africa are developing leaders fit for the 4IR. The research design is presented below in table 1.

Table 1: Tabular representation of research design

| Industry Representatives | Prospective MBA Students | Academic Leaders | Current MBA Students | Previous MBA Students/Alumni |
|---|--|---|--|--|
| <ul style="list-style-type: none"> Industry representatives who are regarded as experts in business. This includes business owners, independent business analysts, consultants and or independent contractors. 10 industry representatives were interviewed | <ul style="list-style-type: none"> Prospective students interviewed and accessed through existing networks within higher education environment and willingness to partake in study. 10 prospective MBA students were interviewed | <ul style="list-style-type: none"> 5 business schools were approached to participate in this study 10 academic leaders from participating business schools were interviewed | <ul style="list-style-type: none"> Current students that are currently enrolled in an MBA programme at a registered South African business school 10 current MBA students were interviewed | <ul style="list-style-type: none"> Previous students that have completed an MBA in less than 24 months 10 previous MBA students were interviewed |

A total of 50 individuals were identified and interviewed for this study. The data collection for this study was conducted in a phased approach based on the approval of relevant ethical clearance requirements.

This study adopted the highest levels of ethical adherence and followed the principles identified by Saunders, Lewis, and Thornhill (2009), as well as Stenfors, Kajaama, and Bennet (2020). This included ensuring full confidentiality for research participants and anonymity of institutions, integrity in research generation and collection, and honesty in research analysis. This study also affirmed that contributions to the study were completely voluntary and that none of the research participants was coerced into this study (Saunders et al. 2009). Ethical clearance was obtained for this study from the host university's Research Ethics Committee:

- Phase 1: Industry representatives and prospective students.
 - Ethical clearance code: 20SOM37.
- Phase 2: Academic leaders and current MBA students.
 - Ethical clearance code: 20SOM37.
- Phase 3: Previous MBA students/alumni.
 - Ethical clearance code: 20SOM37.

In addition, ethical clearance was sought and provided by participating institutions. Due to anonymity, the ethical clearance codes and names of participating universities are withheld.

Population

The population and the rationale for selecting the interview groups were as follows.

Academic Leaders

Academic leaders from various business schools were selected for this study as they represent an institutional view of the intended outcome of programmes such as the MBA. These representatives were involved in the management or leadership of MBA programmes at their respective institutions. Academic leaders also provided insight from an institutional perspective as to whether programmes such as the MBA are developing individuals for the future world of work.

Industry Representatives/Experts

Industry representatives/experts provided insight into whether the intended outputs and outcomes of the MBA align with the skills and competencies required by organisations to deal with the changing world of work.

Prospective MBA students

This group provided insight into the skills they would like to acquire from an MBA and their expectations. This provided an unbiased view of the primary motivators for pursuing an MBA. The data generated were compared and analysed regarding the other target groups of this study.

Current Students

Current students provided a snapshot of the present reality and whether they believed programmes such as the MBA were better for developing them for the future world of work.

Alumni

Alumni provided a lived experience of whether an MBA adequately provided the skills required for the changing world of work. Similarly, they provided insight into the key areas of the MBA efficacy of the programme regarding the 4IR.

A non-probability sampling method based on purposive and convenience sampling was adopted for this study. Palinkas et al. (2015) purport that purposive sampling is a widely used and effective research tool that involves identifying individuals with a rich understanding of a phenomenon.

Data Collection

The primary method of data collection utilised for this study was interviews. Bartholomew et al. (2021) contend that interviews are useful for focusing on individual experiences and gathering insightful data from participants. This data collection

procedure is often used in qualitative studies wherein an in-depth analysis is required to understand a particular phenomenon. Non-standardised one-on-one, face-to-face, or virtual interviews were selected as the primary modes of collecting data for this study. DeJonckheere and Vaughn (2019) assert that non-standardised interviews are often referred to as semi-structured, in-depth interviews. This interview method is useful in exploring participants' thoughts, feelings, experiences, and emotions about a particular subject or area. Furthermore, this method allows researchers to gain a deeper insight into specific research objectives.

Data Analysis

Rich data were generated from the 50 interviews conducted. This resulted in 17 hours of audio-recorded interviews and over 415 pages of transcribed interviews. The analysis followed an inductive approach with the assistance of ATLAS.ti to identify emergent themes from the data. The themes identified were reviewed holistically and grouped into broader thematic areas per stakeholder group and across stakeholder groups. This process ensured that common themes across all stakeholder groups were identified, as well as pertinent themes per stakeholder group. This approach provided a holistic view of the emergent themes across the entire business school ecosystem.

Findings and Discussion

This section presents the findings and emergent themes from the data analysis process. The focus of this section aligned with the emergent themes of stakeholder groups discussed across stakeholder groups under the following research questions:

- Is the MBA offered by South African business schools currently developing leaders fit for the 4IR?
- What are the most critical skills required for leaders in the 4IR according to a sample of South African business school stakeholders?

These two questions will be explored individually, and the findings per question will be presented with potential managerial recommendations.

Is the MBA Offered by South African Business Schools currently Developing Leaders fit for the 4IR?

The research and interview findings suggested that the role of a business school is to develop leaders capable of dealing with the changes ushered in by the 4IR. Researchers such as Nakavachara (2020) and Tan and Ko (2019) have previously criticised the MBA for being irrelevant to the current and future world of work. This is largely due to the focus of the MBA still being anchored in traditional skills and not adequately preparing leaders for the 21st-century working world. To explore a modern variation of this question in relation to the 4IR, this question was presented to all 50 interview participants across all stakeholder groups. This was done to provide a holistic view of

this question across the business ecosystem. The findings from the interviews are presented in figure 1.

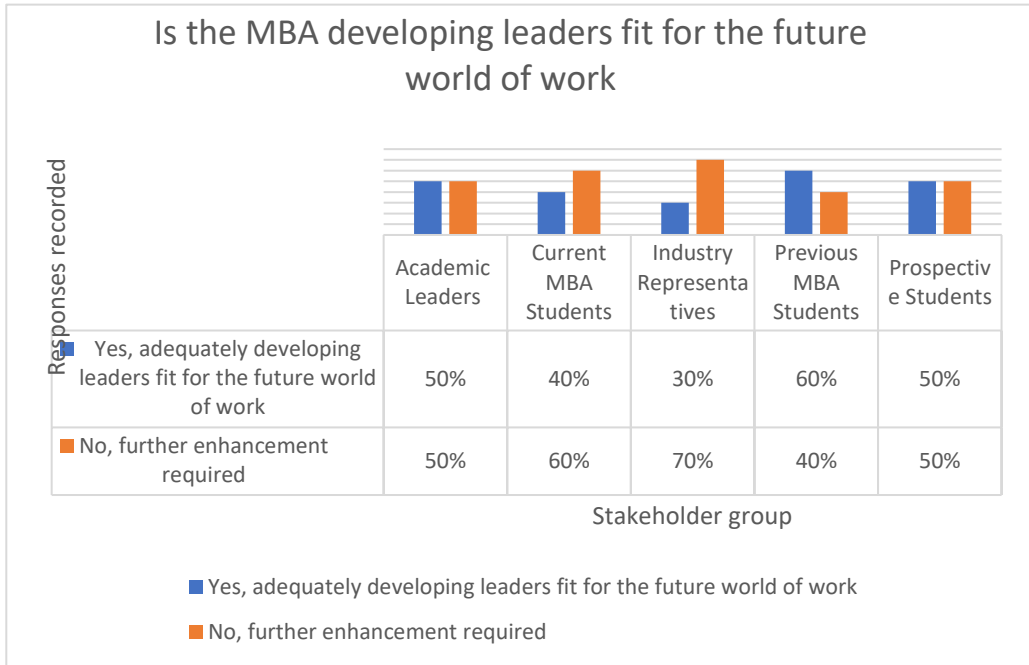


Figure 1: Is the MBA developing leaders fit for the future world of work—interview responses

As witnessed in figure 1, there were varying responses as to whether the MBA is developing leaders fit for the future world of work.

Upon reviewing all responses across all five stakeholder groups interviewed, it was evident that the collective majority of interviewees believed the MBA is currently not adequately developing leaders fit for the future world of work. This creates a discrepancy between the literature and interviews, suggesting that a business school’s role in the 4IR is to equip, empower, and develop leaders capable of dealing with the challenges and complexity of this era and the future world of work. This finding responds to the primary research objective of this study. It suggests that while there is value in the current focus of South African business schools, they are also not adequately equipping leaders with the skills required for the 4IR.

What are the most Critical Skills Required for the 4IR according to a Sample of South African Business School Stakeholders?

The skills required for the 4IR are notably different from those required in previous revolutions. While some of the skills may still be applicable, such as traditional management technical skills and soft skills, leaders need to understand aspects such as

technology and entrepreneurship to leverage the opportunities presented by these skills into business success. Researchers such as Kazancoglu and Ozkan-Ozen (2018) contend that the skills required for the 4IR include both technical and soft skills, as well as emerging skills, such as complex and critical thinking, to deal with the changing world of work. Persuad (2019) adds that technical skills in terms of understanding and effectively using new technologies are important skills for leaders in the 21st century, as the 4IR has ushered in a new wave of technology that is shaping and influencing the way that business is done.

All five stakeholder groups also explored the skills required for the 4IR. The analysis of the findings is presented in figure 2 below.

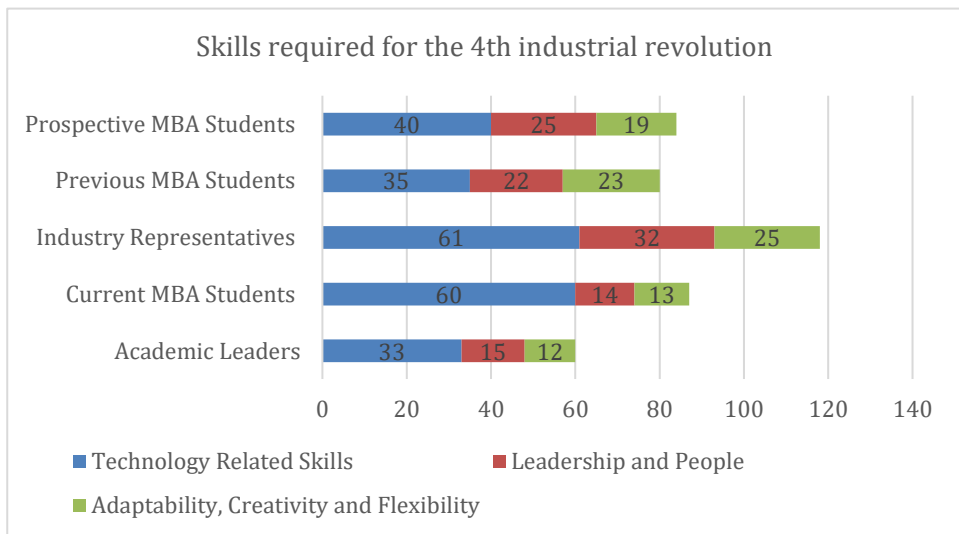


Figure 2: Frequency of mentions and skills required for the 4IR

After analysing the interviews, the skills required for the 4IR were organised into three categories: related technology skills; leadership and people skills; and adaptability, creativity, and flexibility. Figure 2 records the frequency of these skills mentioned across all 50 interviews with this study's five key stakeholder groups. According to the interviewees, it was evident that the most critical skill required for the 4IR was technology-related skills. These skills include understanding and effectively using new technologies introduced by the 4IR for business success. Respondents provided examples of the types of technologies they believed important to understand, including aspects such as artificial intelligence, robotics, and data analytics. Interviewees felt that introducing new technology would characterise the 4IR. To succeed in their businesses, leaders need to understand these skills and how to use them in their business. During the stakeholder interviews, a recurring theme was that the respondents believed they did

not need to become technical experts in emerging technology areas. However, they desired a baseline understanding of these technologies as they are becoming or would become intricately involved in the world of business.

The second most notable skill recorded was leadership or people skills. It was understood across all stakeholder groups that these skills remain critical to an organisation's success. Ultimately, as technology progresses and changes the way business is conducted, humans are still believed to be the driving force of an organisation. Notably, people skills such as empathy, communication, and problem-solving were among the top skills mentioned and are believed to be essential for the 4IR. Similarly, leadership was regarded as an essential skill. The ability to lead, inspire, and motivate individuals in difficult times of change was seen as a critical skill required for a successful leader in the 4IR.

The third skills category included adaptability, creativity, and flexibility. These skills could also relate to entrepreneurial skills and were manifest across all stakeholder interviews. Respondents identified periods of complex business difficulties, such as the Covid-19 pandemic, and related that skills such as adaptability and flexibility were required to successfully pivot their businesses into the digital world as this was necessary for business continuity. Creativity is seen as an important skill as it allows leaders to approach complex challenges and problems from a different perspective. As the world of work grows increasingly complex, leaders are required to find new creative solutions to emerging problems.

The interviews support that technology-related technical skills are the most critical skills required for the 4IR. Seedat (2019) and Maposhi et al.(2019) criticise the South African MBA for its generalist focus and lack of focus on aspects such as technology. However, according to the interviews and literature, a focus on technology-related technical skills should be seen as an important aspect for both South African and African business schools. According to Rodrik (2018), technology could be used in developing countries to improve social conditions and lead to sustained national GDP growth. In contrast, in the Cisco Global Digital Readiness Index, South Africa ranks 78 out of 141, and the index reports that aspects such as technology adoption and technology infrastructure in South Africa are still left wanting (Mzekandaba 2020). A renewed focus on technology-related technical skills in South African business schools could assist in increasing the technology adoption rate and the potential use of technology for further growth and development.

This conclusion draws significant consideration relating to the efficacy of South African business schools in developing leaders fit for the 4IR. The findings indicate that South African business schools need to identify ways to enhance and ensure that their curriculum and programmes, such as the MBA, are aligned with the needs of the changing business environment and current and future stakeholders.

Recommendations and Managerial Implications

This study found that across a sample of business school stakeholders, the majority of respondents believed that the South African MBA was not adequately developing leaders fit for the future world of work. In addition, this study found that the most pertinent skill for success in the 4IR cited by stakeholders was technology-related technical skills. This skill may be underrepresented in South African MBA programmes; therefore, this study recommends a review of the current South African MBA curriculum and a process to usher the inclusion of critical skills related to the 4IR, such as technology-linked technical skills, into the current MBA curriculum to enhance the efficacy and relevance of the programme.

Limitations and Future Research

Two primary limitations were identified in this study, the first being the sample size. This study involved a qualitative approach to identifying the lived experiences of current, future, and past business school stakeholders and focused on five participating business schools. This approach yielded rich results; however, there could be value in approaching this study from a quantitative perspective, thus increasing the potential sample size of the participating population both from an institutional and a stakeholder perspective. This will allow the study to gain better insight into the skills required for the 4IR by a large segment of the population related to a business school, as well as provide statistical inferences regarding the efficacy of the business school model.

The second limitation identified by this study was the geographical focus of this research. This study focused purely on the South African business school environment. This could be noted as a limitation as there may be value in expanding the study to other African regions and contrasting findings per region/country. This would provide valuable insight into the different permutations of the business school environment in the 4IR based on geographical and/or other contextual conditions.

Conclusions

The business environment is changing rapidly due to external factors such as the Covid-19 pandemic, global political instability, and the advancement of technology ushered in by the 4IR. Business schools have a strategic role in developing leaders who can respond to the changing business landscape to achieve business success. Programmes such as the MBA are regarded as flagship business offerings for executives and leaders to enhance their abilities and capabilities. Based on the literature and interviews conducted, this study found that while there is significant perceived value in the current MBA offered by South African business schools, there are critical gaps in the approach adopted. This includes a lack of adequate focus on aspects such as technology-related technical skills. This study, therefore, recommends a review of the current focus of the MBA programme with a lens to include specific focus areas on technology-related

technical skills. This will assist in cultivating leaders equipped with the necessary skills, competencies, and abilities to deal with the changing world of work and the 4IR.

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