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Managing Intellectual Capital for SMEs' Sustainable Development: A conceptual proposal

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Abstract

This article contributes to the body of literature on intellectual capital (IC) and Islamic work ethics (IWE) in small and medium enterprises (SMEs). It aims to investigate the role of socio-economic factors in promoting sustainable development (SD) and value creation. Ibn Khaldun's theory of development is employed to identify the socio-economic factors underlying IC and IWE that play a role in the sustainable development (SD) of SMEs. The findings reveal five socio-economic activities form the foundation of the proposed conceptual framework which is aligned with three fundamental streams in economics and management studies (Ibn Khaldun's development theory, IC, and IWE).

Keywords: Intellectual capital; Islamic work ethics; SME; Sustainable development

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1.0 Introduction

Over the last two decades, the transition to innovative, competitive, and sustainable development (SD) in the knowledge-driven economy has been epitomized by the concept of intellectual capital (IC) and Islamic work ethics (IWE). IC and IWE play pivotal roles in generating long-term value and improving entrepreneurial performance (Kaukab et al., 2020). This value is essential for sustainability (Jardon & Martínez-Cobas, 2019), contributing to economic development and the well-being of individuals, aligning with the Sustainable Development Goals (SDGs) outlined in the United Nations' 2030 agenda.

Numerous investigations have shifted their focus to examining the utilization of IC and IWE in the implementation of performance management strategies and sustainability within small and medium-sized enterprises (SMEs) (Bansal et al., 2023). Abdelwahed & Soomro (2021) have attested to the development of socio-economic elements as an important factor in fostering SD in SMEs. Favorable socio-economic conditions undeniably contribute to achieving improved and successful entrepreneurial performance (Méndez-Picazo et al., 2021). The attainment of successful entrepreneurial performance requires the implementation of sound economic policies and the establishment of favorable socio-cultural conditions. Scholars generally agree that environmental, social, and economic sustainability are the three primary components of SD (Yadegaridehkordi et al., 2023).

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For the theoretical foundation, Ibn Khaldun's theory of development is employed to identify the socio-economic factors underlying IC and IWE that play a role in the sustainable development of SMEs. The objectives also include outlining a model for the sustainable development of SMEs based on Ibn Khaldun's philosophy of IC and IWE. Ibn Khaldun, a renowned Islamic scholar, extensively delved into the intricacies of human civilization in his book *Al-Muqaddimah*. Within this work, he examined five key factors crucial for sustainable development: Shari'ah, human elements, wealth, the environment, and justice. (Edriyanti et al., 2021). Ibn Khaldun and modern economists agree that the most important variable is human beings' role. Nevertheless, Muslims have laws that have emerged from the Quran and the Sunnah to guide their IC and IWE to achieve environmental, social, and economic sustainability. Ibn Khaldun pointed out that when there is an environment that encourages specialization in economic activities. An entrepreneur is urged to dedicate himself to increasing trade and production. Specialization would happen in an environment where an individual might reap the rewards of his labors (Karatas, 2006).

This article contributes to the rising stream of literature about IC and IWE in SMEs (Mat Zin et al., 2019; Naushad & Faisal, 2023) and in SD initiatives (Phonthanukitithaworn et al., 2023). The objective of the study is to investigate how the socio-economic activities (e.g., entrepreneur practices in SME) are implemented in creating value and promoting business sustainability. Certainly, the research question is: how do socio-economic activities enable IC and IWE to foster SD? By applying a conceptual approach based on the literature analysis conducted, it is possible to understand the significance of IC management in SMEs' capacity to foster SD that yields value creation. As a result, the proposed conceptual framework is based on five socio-economic components of the SME expanse.

First, maintaining the well-being of people to develop capabilities and intellect for SME entrepreneurs and stakeholders is intended as human capital. Zainuddin et al. (2020) demonstrated that companies with dedicated personnel, addressing employee needs, would indirectly foster motivation among employees, propelling them towards collective business success. SMEs should invest in competent HC, devise flexible strategies, and conduct thorough analyses of the surrounding turbulent business environment (Dwikat et al, 2023). Second, promoting a sense of solidarity and group feeling by taking care of their surrounding which is susceptible to development; is reported in the relational capital. To integrate sustainability across all operational aspects, SMEs can enhance collaboration both internally and externally. This involves fostering cooperation with customers and employees who likely possess a wealth of ideas that could contribute to making their business more environmentally friendly (Danso et al., 2020). Third, distributing resources equally in terms of technological and intellectual enhancements is implied to the organizational capital and technological capital. SMEs can enhance the innovative intellectual potential of their companies by promoting the acquisition of information and knowledge, as well as by improving processes and systems. This effort contributes to the development of Information and Communication Technologies (ICTs) and innovation capabilities, thus ultimately making SMEs more capable of achieving various SDGs (Wu et al., 2018). Fourth, executing the Shari'ah which guides human beings to what is good in it the religious and worldly aspects is signified to the spiritual capital. It has been demonstrated that SMEs' business excellence is positively impacted by the business (trustworthiness, honesty, and truthfulness), and the spiritual dimensions of Islamic entrepreneurship (Taqwa (piety), good intentions, and adherence to religious obligation). Islamic entrepreneurship is rooted in principles that adhere to Islamic Shariah (Ramadani et al., 2015). Fifth, advocating justice and the primacy of morality is referred to as Islamic work ethics. SMEs' ethical principles derive from Islamic beliefs, emphasizing societal care and responsibility rather than the pursuit of wealth and luxury. As Muslims, entrepreneurs should espouse fairness, honesty, and justice in all human affairs, including business transactions (Mazharul Islam & Alharthi, 2020).

Our study contributes theoretically to the growing body of literature on IC within SMEs (Bansal et al., 2023; Harahap et al., 2023). We explore specific socio-economic activities as novel practices that companies can adopt to facilitate sustainable development. Our focus is on providing fresh insights to offer practical guidance to SME entrepreneurs, enabling them to create shared values among diverse stakeholders involved in decision-making processes, ultimately enhancing the sustainability of the industry. This conceptual paper also holds managerial implications for practicing IC and IWE to bolster sustainability. It is important to note that while IC and IWE are significant factors, we acknowledge that they are not the only determinants in the SME SD process, representing a limitation in our conceptual framework.

The structure of the article is outlined as follows: following this introduction, Section 2 reviews the theoretical background of the conceptual paper. Section 3 outlines the methodology employed in the study. In Section 4, a conceptual framework for the management of IC and IWE in SMEs is defined, accompanied by the presentation of the main results. Section 5 engages in a discussion of the findings and explores their main implications. Concluding remarks are presented in Section 6.

2.0 Theoretical background

2.1 Sustainability development in SMEs

Sustainability involves assessing performance based on environmental, social, and economic dimensions (Fauzi et al., 2010). When evaluating and measuring sustainability, one must consider aspects beyond economic welfare generation, emphasizing the equal importance of environmental and social responsibility (Wu et al., 2015). SD acts as a competitive strategy for enterprises. Severo et al. (2017) emphasized that SD can confer a value-added and competitive advantage over competitors.

However, it is worth noting that many SMEs may not be fully aware of these advantages (Lawrence et al. (2006). In contrast to large corporations, SMEs often lack a well-defined financial organizational framework to implement SD (Nicholas et al., 2011). Additionally, SMEs generally possess limited awareness of the environmental impact associated with their operations. They also lack a comprehensive understanding of the advantages of SD and the tools available for crafting sustainability strategies and practices (Aykol & Leonidou, 2015). Due to SMEs' financial constraints, limited knowledge base, and fewer human resources, it is advisable for academia

to conduct practical research aimed at identifying implementable methods and key strategic factors. Therefore, this paper endeavors to enhance the conceptualization of managing IC and IWE for SMEs' business sustainability.

2.2 Developing sustainable intellectual capital and Islamic work ethics in SMEs

SMEs in developing countries exhibit lower engagement in environmentally friendly practices. This can be attributed to several factors, including limited financial resources, ineffective enforcement of environmental regulations, a lack of collaborative knowledge-sharing on green initiatives among SMEs, and deficiencies in environmental management systems within industries (Chaowanapong et al., 2018). Ali et al. (2021) stressed that managers of manufacturing SMEs and policymakers are encouraged to address environmental degradation and work towards sustainable development by leveraging green IC. IC is essentially knowledge-based capital that exerts influence on economic growth and development (Bontis, 2001). Huang et al. (2021) have considered IC as a factor strictly related to knowledge sharing to promote innovation. Following the authors' conceptual proposal, we explore the concept of IC as knowledge that can be converted into competitive advantage and value, thus influencing sustainable development. Moreover, the primary objective of the SME's operation is the development of intellectual capital, considering the value it contributes not only to the owners, managers, and employees but also to the country as a whole.

To clarify the concept of IC, we adopt five dimensions, namely human capital (HC), organizational capital (OC), relational capital (RC), spiritual capital (SpC), and technological capital (TeC) (Mat Zin et al., 2019). Additionally, we incorporate Ali's (1988) IWE measurement, establishing a connection between an organization's prosperity and continuity and societal welfare.

2.3 Theoretical speculations

Our objective was to investigate the integration of IC for fostering sustainability within SMEs. The pivotal connection between sustainability and the execution of socio-economic activities is essential to the rejuvenation strategy for SMEs. To ensure sustained economic development and enhance socio-economic welfare, it is imperative to invest in economic incentive, education and training, information infrastructure, and innovation system (Sharma, 2017). Theoretical conjectures presented here can aid in formulating a conceptual framework for various aspects of intellectual capital by highlighting the role of socio-economic activities as enablers of sustainability.

With regard to HC for sustainability, individual actors must be able to generate value, improving quality, and maintain sustainability. In the theory of development proposed by Ibn Khaldun, the individual plays a crucial role. According to his perspective, the fundamental strength of humans lies in their capacity for reflection and deliberation. Ibn Khaldun delineates various essential abilities that serve as the pillars of economic vitality. Individuals possessing special skills can more readily generate income by leveraging opportunities in alignment with prevailing circumstances to fulfill their needs (Mauludiyah & Warsidi, 2023). Moreover, incorporating green IC practices, such as eco-friendly employment and selection processes, environmental awards, and sustainable organizational structures, can positively impact the overall sustainability of companies (Malik et al., 2020).

With regard to RC for sustainability, entrepreneurs must take measures to ensure that their employees understand the influence of their work, products, and services on the natural environment and the local community. Moreover, systems connection, strategic leadership, and team learning were positively correlated to organizational performance (Hussein, et al., 2016). Therefore, it is crucial to enhance their awareness and knowledge in SD through meetings, training sessions, or other activities designed to promote these perspectives (Gross-Golacka et al., 2020). Equally important is fostering dialogue and maintaining positive relations between the enterprise and its stakeholders. As social beings, humans depend on each other, and especially on a healthy environment (Khaldun, 2015). Ibn Khaldun emphasizes that when an individual's power alone is insufficient to attain necessities, such as food, cooperation becomes essential. Through collaboration, the combined efforts of multiple individuals can satisfy the needs of a larger group far beyond what one person can achieve alone (Amirabedini, 2013).

Sustainable OC and TeC can be conceptualized as organizational resources encompassing various elements such as management systems, computer systems, organizational processes, management philosophy, organizational culture, patents, copyrights, brands, information technology, or management mechanisms. These resources are specifically linked to environmental protection or ecological innovation within the firm (Yusliza et al, 2020). Moreover, unused and ignored data, commonly known as dark data, represents a valuable asset that can be harnessed to sustain a business successfully (Ajis et al., 2023). Shari'ah views that Muslims must ensure sustainable, just and balanced development because the needs of the current and future generations cannot be met unless there is respect for natural system and protecting core economic, social and environmental values (Muhammad, 2020).

With regard to SpC for sustainability, entrepreneurs must submit to Allah SWT and comply with Shari'ah rules. The understanding of Shari'ah enforcement encompasses a comprehensive commitment to adhering to the rules of Allah across the entire political, social, and economic systems (Obalowu & Rahim, 2023). Ibn Khaldun's theory of development centers around the Shari'ah, which constitutes the entirety of Islamic law (Amirabedini, 2013). The generation of IC for value creation should be seen as the outcome of human labor blessed by Allah SWT. This, in turn, is meant to be distributed to both internal and external stakeholders of the company, taking the form of profit sharing for shareholders. Additionally, it involves providing support to the less fortunate, including the poor, orphans, and those suffering from hunger, while also contributing to environmental preservation and serving a higher purpose in devotion to Allah SWT (Qardhawi, 2016).

With regard to IWE for sustainability, promoting positive moral values rooted in the principles of sustainable development and encouraging all stakeholders to contemplate their individual moral values can pave the way for a more sustainable development path. Islam holds a significant role in Ibn Khaldun's development theory. According to him, Islam ensures the establishment and assurance of collective morality, virtue, and civic obedience, while simultaneously eliminating savagery, individual ambition, and civic discord

(Amirabedini, 2013). Muslim entrepreneurs derive their ethical principles from Islamic beliefs, which prioritize societal care and responsibility over the pursuit of wealth and luxury. An example is found in the Holy Qur'an in Surah 5 and Ayah 8, which advocates for fairness, honesty, and justice in all human affairs, including business transactions.

3.0 Method: a conceptual approach

Nowadays, companies prioritize specific aspects such as consumers' environmental awareness and the reputation gained through activities promoting more sustainable production. The capacity of companies to address the sustainability challenge could significantly impact their profits or even their survival. Consequently, organizations are actively enhancing their sustainable performance by optimizing various forms of capital and efficiently managing their IC (Del Giudice et al., 2022). In this section, we employed a conceptual approach with the goal of achieving a comprehensive understanding of SME sustainability mechanisms, drawing on the work of Huang et al. (2021). We have reviewed key existing studies to uncover the foundational origins and dynamics driving the SME sustainability development. Although we did not employ a systematic literature methodology, our focus was specifically on scrutinizing papers that initiate discussions regarding the fundamental connection between SME sustainability, IC and IWE. Thus, the initial step of our research method is directed towards a thorough review of SME sustainability studies.

The initial review of prior studies started by framing the SD concepts of SMEs and categorize them from IC and IWE perspectives. Our conceptual approach involves empirical researching of recent SME strategies to sustain and promote SD. In other words, we establish a framework that provides evidence about IC components and IWE serving as drivers for more effective knowledge of SD in SMEs.

4.0 A conceptual proposal for managing IC and IWE in SMEs

As portrayed in Fig. 1, a conceptual proposal for managing IC and IWE to attain a thorough comprehension of sustainability mechanisms in SMEs is emulated from the work of Huang et al. (2021).

4.1 Develop people's well-being as human capital (HC)

HC encompasses the know-how, information, relationships, and general capabilities that individuals contribute to the firm through the employment relationship. HC is necessary for SME entrepreneurs and stakeholders to develop sustainability in the firm (Šlaus & Jacobs, 2011). SMEs should make investments in human capital by providing opportunities for both formal and informal education, implementing on-the-job training, establishing robust healthcare and safety systems, and retaining highly qualified employees actively engaged in organizational strategies (see Fig. 1). SME entrepreneurs value knowledge, skills, and experience as crucial components of HC, while prioritizing stakeholders' soft skills and attributes (e.g., attitude, willingness and ability to learn and develop, and enthusiasm about their work). SMEs' understanding of and attitudes towards HC and well-being are crucial factors that influence the business performance of their organizations, thus will lead to SD.

4.2 Promoting sense of solidarity and group feeling in the surrounding as relational capital

In addition to concerns related to products, prices, or services, stakeholders are increasingly emphasizing organizations' sustainable environmental practices. An organization's environmental behavior can significantly influence how its clients perceive it. Therefore, it can be argued that sustainable relational capital is built on interactive relationships between the organization and its customers, suppliers, and other partners, with a specific focus on environmental aspects. This strategic emphasis may provide such an organization with a substantial competitive advantage and SD (Yusliza et al., 2020).

4.3 Distributing resources equally as organizational capital and technological capital

Sustainable organizational and technological capital can be conceptualized as organizational resources, including management systems, computer systems, organizational processes, management philosophy, organizational culture, patents, copyrights, brands, information technology, and management mechanisms. These resources should be specifically linked to environmental protection or ecological innovation within the firm (Yusliza et al., 2020). Moreover, green organizational capital has a significant relationship with green product innovation. These two elements are important to achieve sustainability.

4.4 Executing the Shari'ah as spiritual capital

Spiritual capital plays a crucial role in fostering a sustainable world by nourishing and sustaining the human spirit. Essentially, it resides in the soul of an organization, shaping its fundamental core values and purpose. As such, spiritual capital serves as the foundation for realizing an organizational vision of sustainability. The objectives of both Shari'ah and SDGs include maintaining the sustainability of resources through the conservation of seas, oceans, climates, ecosystems, water, and energy. Additionally, they aim to promote economic growth, industrialization, safety in cities, cooperation among all stakeholders, and the adoption of sustainable consumption patterns (Al-Ahsan, 2015).

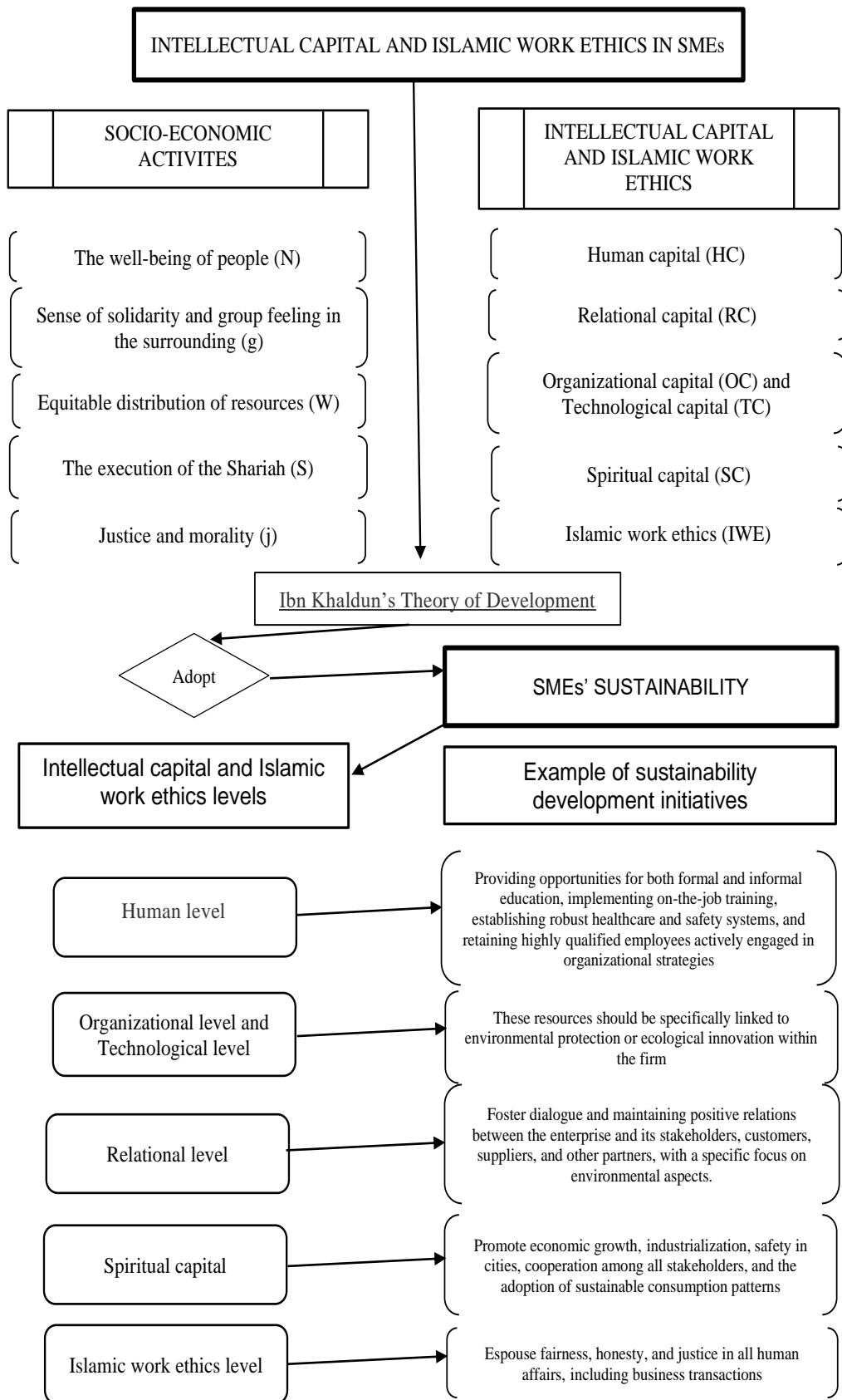


Fig. 1: A conceptual framework for managing intellectual capital and Islamic work ethics in SMEs

4.5 Advocating justice and primacy of morality as Islamic work ethics

Businesses would benefit from making well-informed decisions regarding eco-friendly practices, with a particular focus on sustainable design. This approach is crucial for achieving social sustainability performance and effectively implementing Islamic work ethics (Asha'ari et al., 2023). SME entrepreneurs must adopt fairness, honesty, and justice in all human affairs, including business transactions.

5.0 Discussion and implications

This study seeks to contribute to the management literature by delving deeper into SD studies, particularly focusing on the utilization of IC and IWE to foster sustainability in SMEs. Following the structure of Huang's et al. (2021) conceptual paper, it explores the existing IC and IWE literatures, with a specific emphasis on studies related to five socio-economic activities (uncovered in Ibn Khaldun's theory of development) that correspond to different IC (human, organizational, technological, relational, spiritual) and IWE levels. Our aim is to formulate research propositions that build upon previous studies and offer future directions in these research fields. This approach provides a more robust conceptualization for managing IC in SMEs compared to previous studies and contributes value to the ecosystem. We present a conceptual framework for further advancements in this research field. Thus, this article offers a theoretical contribution to prior studies on the management of IC in SMEs, expediting and promoting the adoption process in the entrepreneurial context.

We examined particular socio-economic activities as a novel approach that businesses can embrace to promote sustainable development. Our emphasis is on presenting new perspectives to provide actionable advice for SME entrepreneurs. This aims to help them foster shared values among various stakeholders engaged in decision-making processes, ultimately contributing to the industry's sustainability. Additionally, this conceptual paper carries managerial implications for the implementation of IC and IWE practices to strengthen sustainability. SME entrepreneurs would be able to utilize these strategic resolutions that prioritize human interests, combining intangible resources with socio-environmental dedication by integrating environmental, social, and economic sustainability components. Grounded in knowledge and ethical values, such an approach aids in fortifying SMEs' capabilities to establish competitive advantages.

6.0 Conclusion

This paper aims to construct a conceptual framework to guide researchers and practitioners in gaining a profound understanding of the SMEs' sustainability process. It facilitates a more effective exploration of the dynamics and mechanisms associated with the SD process. In brief, this paper contributes in three significant ways. First, it offers insights into the factors influencing SMEs' decisions in adopting and managing IC and IWE. Second, the study broadens the generalizability of similar research that has delved into this content without providing a comprehensive interpretation of the entire SME sustainability system. Third, it can assist management in clearly understanding the relationships between strategies, IC and IWE in driving sustainability. However, the study has its limitations. The broader picture presented is based on the configuration of IC and IWE. While these two are relevant factors it is acknowledged that they are not the only factors involved in the SD process.

Paper Contribution to Related Field of Study

The significant contribution of this paper is at the level of the theoretical part of managing intellectual capital and Islamic work ethics. Ibn Khaldun's theory of development is employed to identify the socio-economic factors underlying in IC and IWE that play a role in the sustainable development of SMEs. The findings uncover five socio-economic activities form the basis of the proposed conceptual framework which is aligned with three fundamental streams in economics and management studies (Ibn Khaldun's development theory, IC, and IWE).

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