Chapter 9
Maximising the Potentials of Small and Medium Scale Business Enterprises in Developing Nations Through the Use of Artificial Intelligence:
AI Adoption by SMEs in the Developing Nations

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ABSTRACT

The modern human society has seen the drastic impact of modern technologies and it is an undeniable fact that these new tools have significantly affected all facets of human interaction and have tremendously impacted human activities, either by causing mild alteration in the nature and structure of the contemporary world, or directly revolutionizing all the sections and sectors of human endeavors. In fact, one area the effects of technologies have been felt is the economy and the commercial sector. Technologies have continued impact and improve businesses across the world, and commercial activities have drifted towards the power and whims of the contemporary technological realities. Hence, many big businesses are adjusting their operations to utilise these new tools for productivity and profitability; affording them enormous competitive advantages. However, studies have showed

that SMEs cannot afford expensive technologies or lack the financial wherewithal to adopt technological innovations. Worse still, SMEs in the developing nations contend with several challenges, and it has been determined that more than 80% of SMEs collapse or die during their first three years. The informal sector in every nation is key to the survival of every country, and if struggling nations continue to experience high business mortality in the informal sector, then the economy of the developing countries will continue to nosedive. Therefore, this work recognizes the transformative power of artificial intelligence and its potentials to improve SMEs. Therefore, this work seeks to examine how the developing nations can utilise AIs for more productivity, performance, engagement, business optimization and profitability amidst stiff challenges and the overwhelming influences of big businesses and multinationals.

INTRODUCTION

The modern society is currently witnessing a drastic shift in the way things were done previously. The emergence of technology and adoption of new tools have continued to influence every facet of human endeavours, particularly in completing difficult tasks with faster and more quality output. The transition from web 2.0 to web 3.0 has brought about improved and enhanced content through the manifestation of collaborative technologies and other generative tools (Sinha, 2023).

The transition from 2.0 which mainly facilitated internet communication and collaboration, opened the way for a more interactive, immersive and highly sophisticated decentralized platform, which paved way for more user-generated content, artificial intelligence, and faster data transfer with higher fidelity. To add to the beauty of this new reality, web 3.0 has been adjudged to exemplify the new digital revolution (Chintan, 2023; Kumari, 2019). Largely, data personalization and customization, as well as seamless integration of platforms have become the new definer of online businesses (Kuppusamy, 2024)

Many organisations are currently trying to adjust their operations in order to see the best way to take advantage of these new opportunities to enhance their business models, increase efficiency, and create new prospects for growth (Chintan, 2023). To attain maximum performance in today's business climate and the fast-paced nature and complex needs of market demands, several enterprises are looking to adopt new technologies to address the ever-increasing competitive market challenges; prompting organisations to reconsider how they do business, hence, impressing the need for creative practices and innovations (Gochhait, 2010).

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