Chapter 1 Symmetry and Asymmetry: A Novel Insight Into the Relationship Between Artificial Intelligence and Business

Faerozh Madli

Universiti Malaysia Sabah, Malaysia

Dean Nelson Mojolou

Universiti Malaysia Sabah, Malaysia

Nor Afifah Yusof

Universiti Malaysia Sabah, Malaysia

Ng Yen Phin

https://orcid.org/0000-0003-2833-4160 Universiti Malaysia Sabah, Malaysia

ABSTRACT

"Businesses will gain numerous advantages by using artificial intelligence in their daily operations," claims one individual. On the other hand, another individual argues that "only certain parties will benefit from using artificial intelligence in their businesses." These statements highlight the concepts of symmetry and asymmetry. While these concepts are applicable across various fields, this study contextualizes them within the realm of business. However, this study narrows its focus to the intersection of artificial intelligence and business operations. Emphasizing AI is critical due to its rapid adoption, which raises numerous questions about its application. This research addresses these questions by providing a thorough discussion based on the concepts of symmetry and asymmetry. The findings of this study will offer new insights into the relationship between AI and business. Moreover, these findings will benefit a range of stakeholders, including businesses and organizations that aim to integrate AI into their daily operations.

DOI: 10.4018/979-8-3693-6392-8.ch001

INTRODUCTION

The development of the digital world today is rapidly advancing. Unnoticed by many parties, the era of digital technology has now progressed into a relatively new phase which is involving artificial intelligence (Ahmad & Ghapar, 2019). Technology of artificial intelligence (AI) is utilized by various parties, including individuals, organizations, and businesses (Abdullah et al., 2021; Madli et al., 2024). Nawi et al., (2024) reports a drastic increase in the acceptance and usage of AI globally. There are several reasons for this high acceptance of AI, one of which is that it serves as a comprehensive source of information and is convience to use (Abdullah et al., 2021; Madli et al., 2024). In the business context, the reasons for the high acceptance of AI are similar to those mentioned earlier, with the addition that businesses aim to continually adopt new technology in line with their competitors (Geetha et al., 2024). Furthermore, there are many types of AI platforms available, with conversational AI being one of example.

The drastic or extremely high acceptance of AI worldwide has given rise to two distinct scenarios. These scenarios can be described as follows: a) The first scenario involves individuals expressing the view that AI offers numerous benefits and advantages to its users; b) The second scenario involves individuals expressing the view that AI does not benefit everyone, but rather only certain individuals or groups. These two scenarios clearly demonstrate a contradiction or lack of alignment between them. Additionally, both scenarios can be directly linked to the concepts of symmetry and asymmetry as same explain in line with several previous studies (Liwan et al., 2019; Prince et al., 2024). The first scenario aligns with the concept of symmetry, while the second aligns with the concept of asymmetry.

Both concepts have been extensively discussed in various contexts related to society, including business. The concept of symmetry is the counterpart to the concept of asymmetry (Prince et al., 2024). In detail, the concept of asymmetry refers to a subjective notion and a lack of equality. Asymmetry can also be characterized by 'status inequality,' which means there is a difference in knowledge or formal power (Lin, 2015)). However, despite the widespread discussion of this concept in various contexts, it has been found that there is still a lack of discussion using this concept in the context of AI-related business. Therefore, this study focuses on providing a detailed and comprehensive explanation of the concepts of symmetry and asymmetry applied to the context of business and AI. Additionally, the application of these two concepts in studying business contexts is very practical and useful because it accommodates and clearly explains the business cycle process (Bronner & Hoog, 2017). Moreover, the reasoning behind why this study focuses on and applies these concepts to business and AI is that both concepts are based on how a person thinks, which relatively involves both parts of the human brain and directly influences a person's behavior or attitude (Hugdahl, 2005). To achieve the main objectives of this study, the discussion is divided into several key sections, starting with the concepts of symmetry and asymmetry, followed by several sections discussing key business areas related to these concepts. The next section discusses suggestions to resolve this issue, followed by the conclusion.

Marketing and sales: Symmetry and asymmetry

The development of Artificial Intelligence (AI) has significantly impacted the marketing and sales of a business. Due to these changes, a paradigm shift has occurred in how businesses interact with consumers and generate revenue. AI can automate intricate processes, predict consumer behavior, and process vast data. Customer engagement is significant for a business. The emergence of AI has transformed marketing personalization by customizing experiences to preferences and customer behaviors

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/symmetry-and-asymmetry/366879

Related Content

The New Automation: Artificial Intelligence and the Archives Discourse

Victor Nduna (2025). *Artificial Intelligence in Records and Information Management (pp. 273-304).* www.irma-international.org/chapter/the-new-automation/375172

On Being a Peer: What Persuasive Technology for Teaching Can Gain from Social Robotics in Education

Lykke Brogaard Berteland Dorte Malig Rasmussen (2013). *International Journal of Conceptual Structures and Smart Applications (pp. 58-68).*

www.irma-international.org/article/on-being-a-peer/100454

A Review of Four Persuasive Design Models

Kristian Torning (2013). *International Journal of Conceptual Structures and Smart Applications (pp. 17-27).* www.irma-international.org/article/a-review-of-four-persuasive-design-models/100450

Human-Machine Interaction: Ethical and Legal Considerations

Ananya Pandeyand Jipson Joseph (2025). Exploring Al Implications on Law, Governance, and Industry (pp. 177-200).

www.irma-international.org/chapter/human-machine-interaction/373412

A Bayesian Network for Predicting the Need for a Requirements Review

Jose del Sagrado Martinezand Isabel Maria del Aguila Cano (2010). Artificial Intelligence Applications for Improved Software Engineering Development: New Prospects (pp. 106-128).

www.irma-international.org/chapter/bayesian-network-predicting-need-requirements/36444