V.S.B.ENGINEERING COLLEGE, KARUR

Department of Computer Science and Engineering

IBM NALAIYA THIRAN

LITERATURE SUYVEY

TITLE : Artificial Intelligence discourse for Banking Industry

DOMAIN NAME : Artificial Intelligence

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ABSTRACT :

Artificial intelligence (AI) has been a subject of interest in the research field for the past few years. It has now been brought closer to commercial use due to recent technological advances and speedier data accessibility. Its relevance to global business models is underlined by the significant investments in it made by Internet powerhouses including Google, YouTube, Amazon and Facebook. In the banking sector where data is of substantial value, AI has been incorporated in pilot projects but its true applications have yet to see the light of day. In this study, the drivers and barriers to successful AI implementation in the banking sector is analyzed using a panel data of 28 semi-structured interviews with AI experts in the field of banking and finance. AI-oriented role models and process capabilities were revealed to be essential prior to having the trained algorithms reach the level whereby the AI applications can run devoid of human involvement and moral trepidations.

INTRODUCTION :

The digital transformations in various industries have mainly been driven by the development of artificial intelligence (AI) [1]. Over the past four years, there has been a tremendous growth in AI investments worldwide. The 2016 report by Gartner revealed that the actual deployment of AI technology had been undertaken by a mere 9% of organizations, but the number increased to 25% three years later in 2019 with the

Enterprise Digital Research projecting the growth rate to double in the subsequent five years. Also, it is now the number one strategic technology for organizations. Digital transformations now rely on AI riding on the developments in networking and greater data processing [2].

AI is considered as a crucial business solution and basis for capabilities in all types of organizations [3]. The economic growth of various nations is also driven by AI as it provides ample business opportunities. AI applications can improve organizational performance and create competitive advantage [4]. Banks that have adopted AI technology have demonstrated a boost in interest incomes, lower costs and enhanced customer satisfaction. [5]. Despite the benefits generated by its greater computational data power, AI has yet to be conventionally adopted. Many organizations are still at the infancy stage with AI adoption including those in Sri Lanka They are still trying to determine the business case for AI applications as well as the needed skills for evaluating, building and deploying AI solutions [6].

Internet giants like Amazon, Google, YouTube and Facebook are constantly issuing their AI libraries making them accessible to developers in general. Additionally, AI tools are now made available by many prominent software vendors including IBM Watson, Azure Machine Learning and Infosys Nia for the use of organizations [7]. With such developments, AI now permeates all industries including banking and finance.

AI is a direct solution to capturing the value of the ever growing prevalence of big data. AI enables autonomous pattern recognition and smarter data usage, making it easier to capture information about customer and market needs, leading to improved competitive advantage [8]. The potentiality of AI is apparent for the banking service sectors where customer and transaction data as the main resource is constantly collected, sorted, processed and linked [9]. Most banking services are now launching chatbots in their mobile apps and social media. Principally, the business models of banking services can be fully digitized. The current banking sector is now feeling the pressure of the rise of financial technology firms (FinTechs) and increasing customer demands. Hence, this study intends to determine how Sri Lanka's banking service sectors adapt and adopt AI and how they cope with the challenges that come along with it. In answering that question, empirical data was gathered by conducting semi-structured interviews with a panel of Sri Lankan banking AI experts from major software provider companies including IBM, Infosys, Microsoft and Salesforce, supported by interviews with CxO level experts. The study is guided by the TOE framework. After analyzing the key challenges that come with AI implementation, each challenge was addressed using a corresponding guideline i.e. the second tier in this inquiry. The findings reveal the significance of AI in creating competitive advantage for banks who in turn need to resolve the challenges of conservative organizational structures and poor service

mindsets in order to reap the full benefits of AI implementation.

LITEREATURE SURVEY :

In this literature survey several methods have been proposed for detection of car damage.

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