**LEVEL 0 SUMMARY**

* **Name of student:** GU Yangmei
* **Name of your Level 1:** Mohamed Anissat
* **Source (e.g. scholars.google.com):** Google scholar
* **Paper title:** Implementation of Artificial Intelligence (AI)\_ A Roadmap for Business Model Innovation
* **Keywords specific to the paper:** “AI”, “business models innovation”

**Summary of the main contributions (Use text paragraphs, tables and if necessary, figures):**

This article evokes the implementation of artificial intelligence as a catalyst for business model innovation. As AI technologies advance, they are disrupting many industries and offering new opportunities for companies. However, there is limited academic guidance for managers on how to successfully implement AI in their organizations. The authors conducted a literature review on AI, business model innovation (BMI), and digital transformation to develop insights on how companies can transform their business models using AI while managing risks. They identified four key steps in a roadmap for AI implementation: Understand AI and organizational capabilities needed for digital transformation. Companies must evaluate their data infrastructure, digital processes, and technical/strategic capabilities to support AI. Challenges like lack of transparency, trust in AI, analog workflows, and misunderstandings of AI's potential must be addressed. Pilot projects and training can build understanding of AI's benefits and impacts. Understand the current business model, potential for BMI, and role in the business ecosystem. Firms must examine how they create, deliver, and capture value currently and how AI could enhance customer value. They must also understand their position within networks of collaborating companies and how surrounding firms complement their offerings. This clarity avoids potential misunderstandings about AI's applications. Develop and refine capabilities required to implement AI. Capabilities in areas like data management, security, digital strategies, and AI expertise must be strengthened based on the firm's ecosystem role and preconditions understood in prior steps. Companies decide whether to be first developers or followers of new technologies. Benchmarking other firms' solutions inspires technical and strategic development. Reach organizational acceptance and develop internal competencies. Social aspects are critical to AI implementation success. Activities like pilot projects, multidisciplinary AI teams, broad training, feedback loops, and performance evaluation build internal knowledge and address risks from lack of transparency and trust in AI. External engagement also fosters ecosystem-wide understanding of AI applications. The roadmap presented aims to provide practitioners with a systematic guide on challenges, opportunities and prerequisites in transforming businesses through AI. However, the framework is relatively generic. This document recommends further research on measuring digital maturity, case studies of transformations to AI, competencies across ecosystem roles, and business models linking AI to service. Overall, the review develops insights to assist managers in leveraging AI for business model innovation while navigating technical, organizational and social factors critical to implementation success. Clarifying a company's position in transforming industry networks through collaborative technologies like AI positions them to capture emerging opportunities.

* **AI model used (e.g. Neural network, etc.)**

The document does not really mention the type of AI that is being discussed. But based on the context and topics covered, it is referring broadly to artificial intelligence technologies in general, as an umbrella term, rather than focusing on any type.

Some key points:

It refers to AI as an umbrella term covering technologies like deep learning, machine learning, and neural networks. This suggests it is not focused on a specific type.

It discusses challenges like transparency/interpretability and the "black box" problem, which are common issues with many AI systems, not limited to any one type.

It focuses on implementation of AI more broadly to drive business model innovation, digital transformation, etc. rather than a particular application.

The roadmap and recommendations provided are intended to be generic and applicable across a wide range of businesses, not tailored to a specific AI technique.

So, while it acknowledges different technologies under the AI umbrella, the document does not delve into any one type (like expert systems, computer vision, natural language processing etc.) but rather sees AI as an enabling technology in general terms. The scope is AI implementation at a strategic level rather than a technical deep dive.

* **Introduce the AI models.**

AI models are computational algorithms and statistical models that enable machines to simulate human-like cognitive functions, such as learning, problem-solving, and decision-making. These “models” are designed to process and analyze large volumes of data to identify patterns, make predictions, and automate tasks. Some common AI models include neural networks, decision trees, support vector machines, and deep learning models like convolutional neural networks (CNN) and recurrent neural networks (RNN). These “models” are used in various AI applications such as natural language processing, image recognition, recommendation systems, and predictive analytics.

* **How do they contribute the idea proposed by the paper?**

This document evokes the implementation of artificial intelligence as a catalyst for business model innovation. AI models contribute to this idea by providing the technological foundation for decision support through valuable insights and results collected from large and complex data sets. These models enable the compression of data into a manageable scale, allowing businesses to extract meaningful information and make informed decisions. Additionally, AI models play a crucial role in solving complex problems based on large data sets, which is directly connected to business model innovation (BMI). By leveraging AI models, businesses can refine or expand their current product offerings, enhance customer value, and optimize their business models to capitalize on the technology through innovation. Therefore, AI models are instrumental in enabling the transformation of business models and driving value creation, as highlighted in the paper.

* **Supported by a software application? (If yes, provide more details)**

The context seems not supported by a software application.