

Artificial Intelligence and Business Value: A Literature Review

The document "Artificial Intelligence and Business Value: A Literature Review" delves into the integration of artificial intelligence (AI) within organizations to foster business value and secure competitive advantages. It identifies key enablers, inhibitors, and diverse use cases of AI, highlighting the transformative impact of AI on business processes and organizational performance.

Summary:

- **Enablers and Inhibitors:** The study categorizes the facilitators and barriers to AI adoption into technological, organizational, and environmental factors. Technological aspects include the necessity for advanced computing infrastructure and rich data sets. Organizational factors emphasize the importance of culture, top management support, and organizational readiness for AI integration. Environmental factors cover ethical, legal, and regulatory considerations, as well as competitive and customer pressures.
- **AI Use Cases:** AI applications are broadly classified into automation and augmentation, serving internal and external business purposes. Automation involves replacing or assisting human tasks to improve efficiency, while augmentation enhances human decision-making capabilities with insights derived from AI.
- **Impacts of AI:** The document explores AI's impacts at both the process and firm levels, including efficiency improvements, insight generation, and business process transformation. It also discusses the strategic implications of AI, such as the introduction of new products and services, enhanced product quality, and the potential for AI to drive innovation and sustainable competitive advantage.
- **Research Agenda:** A comprehensive research framework is proposed, addressing gaps in understanding AI adoption, socio-organizational change, AI-driven value propositions, competitive value of AI, and AI's role in extended organizational boundaries and partnerships. The agenda calls for in-depth exploration of AI governance, the influence of AI on organizational culture and structure, and the broader societal and ethical implications of AI deployment.

Implications for Management:

- Organizations must assess and adapt to technological, organizational, and environmental enablers and inhibitors to leverage AI effectively.
- Strategic considerations should guide the application of AI technologies, whether for automation or augmentation, to align with business goals and enhance competitive positioning.
- Understanding the multifaceted impacts of AI is crucial for managers to harness its potential for business process innovation, market differentiation, and sustainable growth.

Research Agenda Highlights:

- Investigating the challenges and cultural obstacles to AI adoption and deployment within organizations.
- Exploring AI governance and ethical considerations in AI application development and deployment.
- Understanding the dynamic relationship between AI adoption and organizational change, including cultural shifts and structural adjustments.

The document underscores the critical role of AI in shaping future business strategies and operations, advocating for a balanced approach to harnessing AI's potential while navigating its complexities and ethical considerations.

Blind Spot: The potential negative impacts and ethical considerations of AI deployment may be overlooked. Organizations must address these concerns proactively to ensure responsible use of AI and maintain trust among stakeholders.