Artificial Intelligence: A Diffusion Of Innovation View Of The Manufacturing And Healthcare Industries

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Abstract

Artificial Intelligence (AI) systems are rapidly expanding into organizations and present significant challenges to positions and processes performed by humans. Using a case-based methodology, this paper explores AI in a highly competitive and turbulent industries where innovation is the "coin of the future realm." This paper applies the diffusion of innovation to the manufacturing and healthcare industries by examining organizational practices of AI integration, Topics included are capabilities of AI, limitations of AI, the speed of innovation and adoption. Driven by economic factors, cases in two industries are presented to demonstrate the speed and impact of AI. Additional areas covered are productivity, leveraging of existing technology and human resources, demonstrated reduction of strategic and operation errors, and reduce costs. The paper reviews the history of AI and projects its future in the workplace, the generational resistance, the adoption rates across the additional industries.

Keywords: Artificial Intelligence, diffusion of innovation, manufacturing industry, healthcare industry, challenges, productivity, technology disruption, adaptation, adoption of innovation.

Relevance to Marketing: Educators, Researchers, and Practitioners:

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