

Chapter 11

Metaverse Platforms and Entrepreneurs' Emotional Intelligence and Co-Creation Towards Quality Delivery in the Service Industry: New Normal

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ABSTRACT

The industrial revolution is facilitated by metaverse platforms, which encompass and integrates artificial intelligence (AI), machine learning methodologies (ML), augmented and virtual reality (AVR), industrial internet of things (IIoT), digital business transformation, and cloud computing services in the oil and gas service industries. The researchers conducted a literature analysis, analyzing case studies and concept studies from original equipment manufacturers (OEMs) and oil and gas operational service businesses. This research investigates the correlation between metaverse platforms, emotional intelligence, co-creation, and autonomous systems in relation to project quality and delivery throughout the Industrial Revolution. Scientists undertook an empirical investigation to comprehend the effects of metaverse platforms and entrepreneurs' emotional intelligence in the oil and gas industry during the Industrial Revolution.

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INTRODUCTION

The transition from Industry 5.0 to Industry 6.0 during the Industrial Revolution marked the beginning of the oil and gas services sector's adoption of a metaverse platforms and autonomous system that incorporates 3D system, robots and drones. Industry 6.0 will witness a transition in robotics from Industry 5.0 and subsequent iterations (Chourasia et al., 2022). The co-creation and emotional intelligence (EQ) among MSME entrepreneurs aims to enable the development of adaptable business strategies to address organizational challenges (Pralhad & Ramaswamy, 2004). An autonomous system operates independently to fulfill its assigned responsibilities, ensuring the efficient operation of the facility and meeting client requirements, without the need for human intervention. The metaverse platforms and autonomous system improves plant efficiency, safety, operational reliability, and delivery of high-quality products. Metaverse platforms utilize digital twin technologies, including cloud computing, augmented reality (AR), Virtual reality (VR), blockchain, virtual reality, augmented reality, artificial intelligence, machine learning, and Industry Internet of Things (IIoT). Metaverse platforms and Autonomous systems have been implemented by operational organizations in certain parts of the oil and gas service sector, as discovered by researchers. An entrepreneur's emotional intelligence plays a significant role in comprehending the client's wants and the organization's capital expenditure requirements. The primary idea is to integrate the digital and physical domains with the aim of eliminating human dependence in the oil and gas services industry. Researchers focus on predicting the current progress of metaverse platforms and autonomous systems in Original Equipment Manufacturers (OEMs) and oil and gas service operating companies by analyzing existing literature, case studies, and conceptual studies. Given the present circumstances, researchers recommend that the government and MSME enterprises address the existing disparities and provide opportunities for further investigation.

DEFINITION, LITERATURE REVIEW AND METHODOLOGY

Oil and Gas Service Industry

The upstream, midstream, and downstream sectors are the three main divisions of the oil and gas services industry. Oil prices dropped from \$147 to \$69 as a result of international business and political factors. The operating company's main goal is to maximize its projected CAPEX and use the newest digital technologies to optimize operations and save costs. Fig. 1 shows energy consumption from 1965 up to 2035. Robots and drone applications in the Oil and gas industry (Onshore and Offshore) are shown in Fig-2.

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