

Managing Project Teams with Artificial Intelligence

Stand Alone Poster Research Proposal

Abstract

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Abstract

Artificial Intelligence (AI) is becoming more and more prevalent in today's business world. According to an article in *The Economist* (2016), "technology giants are speeding to increase their AI activities and spent \$8.5 billion dollars on research, deals, and jobs." AI spending is not isolated to the United States companies, but globally there is an increase in AI spending. He (2016) showed China's growing AI innovations and investments in AI research and development labs. Increasingly, technology companies are incorporating the use of AI and the development of new products using AI. Companies are employing project managers to manage technology projects with automation, smart machines, expert systems, robots, and other forms of artificial intelligence. Project managers are thrust into complex projects using artificial intelligence systems and they do not know how to utilize artificial intelligence to its full capacity without employees feeling intimidated or threatened. Nonetheless, employees can work with artificial intelligence as a team to excel. If employees have deficiencies, artificial intelligence can fill in the gaps to build upon strengths of artificial intelligence and strengths of employees to create a high performance team with the skills to solve our complex problems. Maher, Rosenman, and Merrick (2007) explain artificial intelligence can "provide functionality needed to support collaboration in multidisciplinary design teams." As artificial intelligence usage grows it will be an integral part of the workforce team. Employees and artificial intelligence will thrive through collaboration, interaction, utilizing corresponding strengths, and learning from each other for improved workforce performance. Employees will work with artificial intelligence to produce goods and services to meet company revenues and client and management expectations.

Artificial intelligence can help us solve our most complex problems and extend our lives while making it easier and more productive. Agar (2016) notes new technology can improve

human cognitive abilities to help solve complex problems. In today's society, we have many complicated problems such as global warming, unpredictable weather disasters, incurable physical and mental diseases, hunger, poverty, social, and political issues. Artificial intelligence can help solve these problems. Notably, expert systems, which McCudden (2017) defines as a system that "simulate a human expert's ability to solve problems and answer questions; uses a set of rules as knowledge base; these may or may not use machine learning." Expert systems are used in the medical field for diagnosis, detection, and control. The agricultural sector uses expert systems for pest control, weather damage recovery, and diseases. The business sector uses expert systems for knowledge transfer, investing, sales and marketing. Other sectors use expert systems to solve complex problems and as computing power and storage costs decrease, the ability for the government and nonprofit organizations to utilize these expert systems increases to help solve society's complicated problems.

Project managers implement expert systems and other artificial intelligence systems for organizations, increasingly in the last few years. These projects require knowledge of the system features and training for end users and the technical staff. Project managers must formulate solutions for handling bottlenecks from the artificial intelligence system and employees to implement and utilize the system to its full capability. Artificial intelligence will eliminate manual work and some current jobs when used effectively and efficiently. This new found cost savings will have organizations focused only on artificial intelligence initiatives, but project managers must incorporate human guidance, creativity, intuition, and common sense so employees and artificial intelligence improve organizational effectiveness together. The proposed research project seeks to explore employees' insecurities with artificial intelligence, unveil the mystery of artificial intelligence, describe the modern-day team, show implications for research

and practice, and illustrate ways artificial intelligence and employees can work together to benefit the organization.

Keywords: Artificial Intelligence, Expert systems, Project Management, Teams

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