

‘With advances in artificial intelligence (AI), could traditional project management skills become a thing of the past?’

Artificial Intelligence (AI) is all around us. We see more deployments announced each day and we see positive and negative comments about the prospects for AI to augment what we do as well as potentially to take over people’s jobs. Although many of the techniques from AI that are now being put to productive use have been around for decades, we seem to have just reached the tipping point where computing systems, networks and online accessible knowledge-bases have sufficient power to use in AI that can really assist us. Just in the last year we have seen effective speech driven personal assistants, adaptive machine learning driven applications, capable game playing programs, autonomous vehicles and more.

Project management, planning aids and task achieving agents will become a new wave of deployed AI systems alongside large scale machine learning and adaptive systems, semantic-web knowledge-systems and the speech/voice interfaces seen today.

Some people see AI applications operating in isolation and taking over specific jobs or roles from people. But I see future AI systems more as cooperative agents working alongside people and augmenting their skills. AI Planning, scheduling and constraint-based systems are in regular use across many industries today, and we will see future deployments as the platforms to use these compute-intensive algorithms further improves.

An example is the OPTIMUM-AIV system for assembly, integration and testing of the Ariane spacecraft payload bay for the European Space Agency. This system works alongside the traditional project management tools to deal with the complex constraints and options available, especially to advise on options when fixes are needed in high tempo situations or when tight deadlines apply.

The project management task lends itself to support from a particular type of AI called “Mixed-Initiative Systems” where the unique capabilities of people work alongside the particular strengths of AI systems and each can contribute to improved and effective outcome. A project manager’s tasks relate to people and organisations as well as dealing with the technicalities of the constraints and resources and those roles will not disappear,

So, I don’t believe that the project manager’s role will disappear. But change is coming to many professions. I expect that those of you reading this journal will be amongst those able to take advantage of those changes.

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