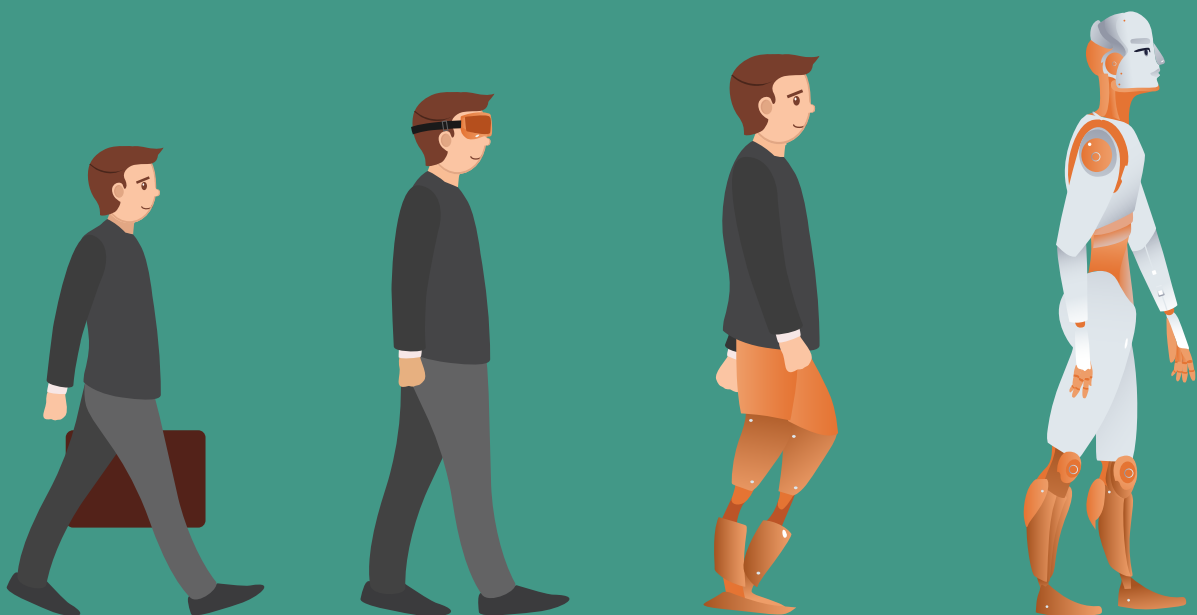


Project Management (PM) Consulting: Will AI disrupt the PM consulting industry?

The growing need for project consultants means companies, large and small, are engaging consultants to provide guidance, process support, PM tools and solutions, and strategic advice. Traditionally, these consultants rely on manual processes to gather and analyse data. Here at Greyfly we believe Artificial Intelligence (AI) will irrevocably change PM consulting and this paper explores how.



Introduction

In this paper we review the current market for PM consulting and why there is a need for change; we introduce the concept of using AI to automate consulting and its processes. We examine how AI in PM consulting has evolved and how this has shaped Greyfly's market offering.

What is the real problem?

The global management consulting market is estimated to reach \$130 billion and has seen an annual growth rate of 4.3% for the last 5 years. The UK consulting industry has grown 5% in 2016 to reach an estimated value of £9 billion. It is mainly dominated by larger firms, such as Accenture and the "Big Four" who attract 78% of all consulting revenues (Consultancy.uk, 2017). The Management Consultancies Association (MCA) forecast up to 2018 the growth rate was 8% to 10%. PM consulting represent £720 million [8%] of the U.K consulting market.

Larger consultancies offer "multidisciplinary" consulting services to many different industries and this feature, along with their "brand" is reinforced by their large pool of expertise. However, complicated internal administration and communication, along with high overhead costs which drive prices upwards, may be a barrier to some clients. According to Greentarget, smaller consultancies have significantly grown with a highly specialised offer that differentiates them in niche markets. This shifting trend shows clients are increasingly looking for the better alternatives to the big names as smaller boutique firms are staffed with senior, experienced and comparable experts with lower fees and potentially greater innovative delivery.

The PM Consulting Process

Typically, consultants are engaged when either a client requires specialist subject matter expertise to tackle a problem, are short of internal skills and resources, and/or needs an independent quality check. Traditionally PM consulting has been a manually driven process. Once an engagement has been agreed and the problem defined, extensive data gathering, and analysis is performed to determine the root cause of a problem. There are a variety of methods that can be applied for collecting qualitative and quantitative data:

- Workshops
- Interviews
- Walkthroughs/observations
- Surveys
- Document reviews
- Analysis of internal and external data

By leveraging technology, the data gathering, and analysis phase can be automated, or at least managed by exception, enabling PM consultants to perform tasks more efficiently, gain deeper insights and provide more value to their clients. To take this a step further, the experience of PM professionals could be "embedded" to enable a more rapid diagnosis of problems.

This level of automation in the PM consulting process would enable a consultancy firm to pass on cost savings to their clients and potentially open PM consulting to a wider market.

Artificial Intelligence

AI is the simulation of human intelligence processes by machines, especially computer systems. These processes include learning (the acquisition of information and rules for using the information), reasoning (using rules to reach approximate or definite conclusions), and self-correction. The adoption of AI is beginning to make its mark in industry. Gartner's latest CIO survey of 3,160 CIOs from 98 countries, found that 25% of CIOs are already piloting AI initiatives or have short-term plans for them. Another 21% have medium- or long-term plans.

Automation has started and it is slowly disrupting the domain of PM consulting

There will undoubtedly be an impact on PM consulting. If harnessed correctly, it is likely the impacts will be positive with AI and automation significantly changing how consultancies operate.

UK consumers agreed that the industries likely to benefit most from AI are engineering (45%), administration (40%) and customer service (31%). Finance (29%), sales (26%) and marketing (22%); each deemed 'admin heavy' and therefore apt to benefit from automation. Project management and human resources close the list, with 20% and 16% respectively (Information Age, 2017).

A recent Harvard Business Review article claims that in the future even elite consultants face the risk of getting replaced by AI. In fact, many argue traditional consultancies are doomed. In a recent special report in The Economist it argues that AI providers will increasingly compete with management consultancies.

Over the last few years, consultancies have invested significantly in AI, primarily to advise their clients on AI strategy and implementation, but also to introduce AI into their own business processes to improve front and back office operations.

Types of PM Consulting

In general, and excluding specific skills, for the purpose of this document we categorise PM consulting into the following disciplines:

- **Strategy:** supporting clients to create a long-term vision and plan of action; including devising programmes/projects to achieve strategic objectives.
- **Change Management and Transformation:** assisting clients with the execution of discrete changes within the business or organizational wide changes impacting the business/operating model. Bringing stakeholders on the journey to sustain the outcome of the change/transformation.
- **Assurance:** provision of one-off independent assessment or on-going analysis and reporting to increase the likelihood of project success.
- **Project Delivery:** provision of resources and/or review of current project management processes and capabilities, recommendations for improvements and support in the implementation of new tools, processes, and procedures.

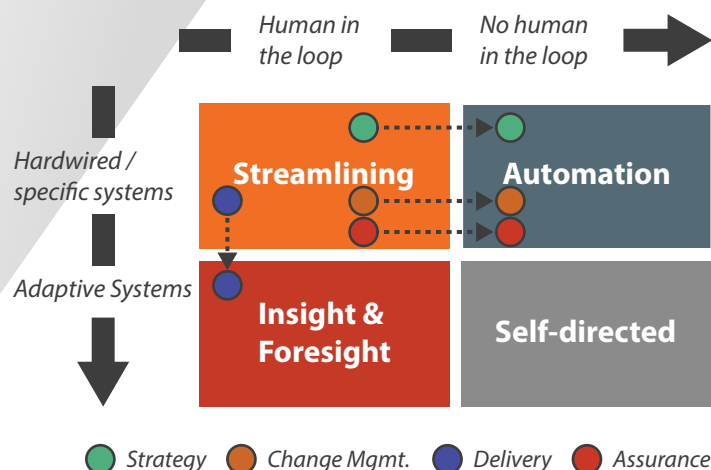
We anticipate AI tools can potentially be deployed for data gathering and analysis in all PM disciplines. The proliferation of corporate data e.g. financial and non-financial information, industry and macro statistics along with advances in machine learning technology means AI can be deployed to access and interpret data, which can be used to produce a clearer picture of an organisation and its external environment.

The Impact of AI

In our previous article, "Using AI to overcome the Project Delivery problem", we explored the evolution of AI tools in the Project Delivery process and identified four phases:

- **Streamlining:** improving existing processes through better integration and collaboration.
- **Automation:** the computer is actually "doing"; replacing human aspects of the project management process i.e. performing simple repetitive tasks.
- **Insight & Foresight:** the computer is assimilating project data and providing insights and recommendations to enable prediction of outcomes and better decision-making.
- **Self-directed:** the computer is autonomous; making project decisions and remediating project issues that occur.

These four phases could also be applied to tools developed to enhance the PM consulting process. For each PM consulting discipline the following diagram shows the current AI evolution stage and Greyfly's prediction of the stage that discipline is likely to reach in the medium term:



All PM consulting disciplines will benefit from the application of AI, however the opportunity for gaining insight and foresight can be more quickly achieved in the Assurance discipline.

In the longer term, as Strategy and Change Management are more 'human' and less repetitive/predictable it is likely they will move slowly toward Insight and Foresight and eventually Self-directed.

Using AI to assess Project Maturity

Cyclops, Greyfly's first offering is a Project Maturity Assessment tool, which is used as part of Assurance and/or Capability Development engagements to automate the consulting process and provide insight on how a project, portfolio or enterprise is progressing. We work with clients to develop strategies to minimise the likelihood of project failure. We are capturing input from the host organisation and comparing this to the "gold standard" and the knowledge of our PM Professionals in analysing maturity and determining their impact on success. This allows us to provide a prioritised set of remedial actions. As we increase the volume of clients and system sophistication, methods for data capture, analysis and conclusion are increasingly richer. For example, Deep learning in voice recording software is used to capture input and key word search and classification to reduce/remove hours of reading and analysis.

In addition, Greyfly partner with clients to prepare their existing project data for Machine Learning and develop bespoke techniques to address specific project problems. One of the common assumptions is that finding the correct

Machine Learning algorithms is the difficult part – it's not. Understanding the quality of the data and building models for trusted data is the difficult part. Projects generate vast quantities of data; however, it can be subjective (over optimistic) or inconsistent (data is recorded in different ways for different projects within the same organisation).

Conclusion

AI in PM consulting is in the early phases of adoption. As AI tools become the norm, the next generation of consultants will need a new skill set and to work better and smarter. AI will enable consultants to exercise enhanced judgement based on broader and deeper information. Greyfly are one of the few consultancies exploring solutions in this space.

Greyfly has developed Cyclops to tackle the real problem of how to reduce the uncertainty in project delivery and improve the speed of delivering real insight. Cyclops captures the combined knowledge of our Programme/Project Management experts and utilises that knowledge to aid our clients gain new insights from critical information to inform their decision-making.

Author



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Chief Executive Officer, Greyfly Ltd.

Lloyd is a project professional with 25 plus years of experience working in multiple sectors and projects in both support and delivery roles. In latter years he programme managed major transformations programmes underpinned by infrastructure refresh.

For the last 2 years he has been the leading the formation of Greyfly including investigating the use of AI in project management and developing the market offer.

Seven Foundations for Project Success

Based on this extensive research, Greyfly has established seven foundations for project success.



The Greyfly assurance and delivery framework are built on these seven Foundations to improve confidence in, and the likelihood of, project success.

As well as providing bespoke assurance services, Greyfly also:

- Provides the support and guidance required to deliver assurance improvement plans;
- Assess overall and specific skills to help improve internal capability;
- Supply knowledge and expert resources, supporting delivery.

Greyfly's increasing development and adoption of Artificial Intelligence (AI) is also enabling faster and better value assessments of assurance and capability.

GREYFLY SELECTED FOR BBC PM CONSULTANCY FRAMEWORK

"We are so pleased to have been successful in our bid to the consultancy framework and look forward to working with the BBC to provide value for money, experienced, results driven consultants who use innovative systems and processes to assure project success."

Lloyd Skinner, Founder & CEO of Greyfly