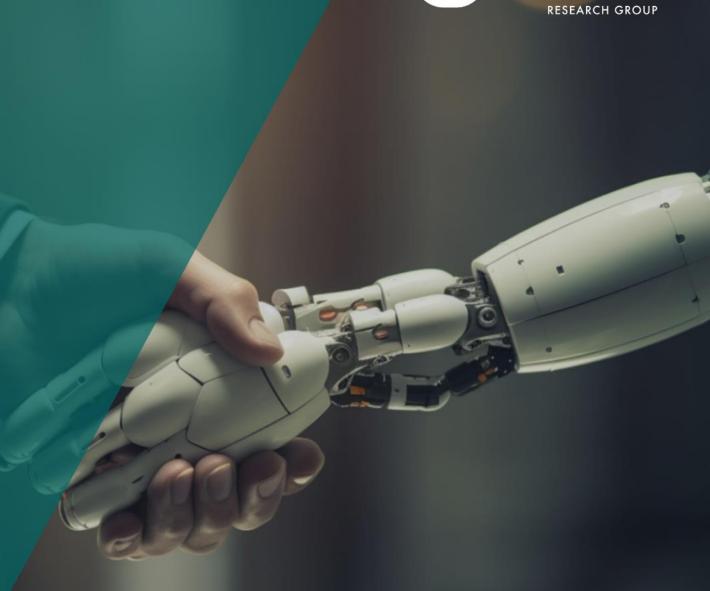
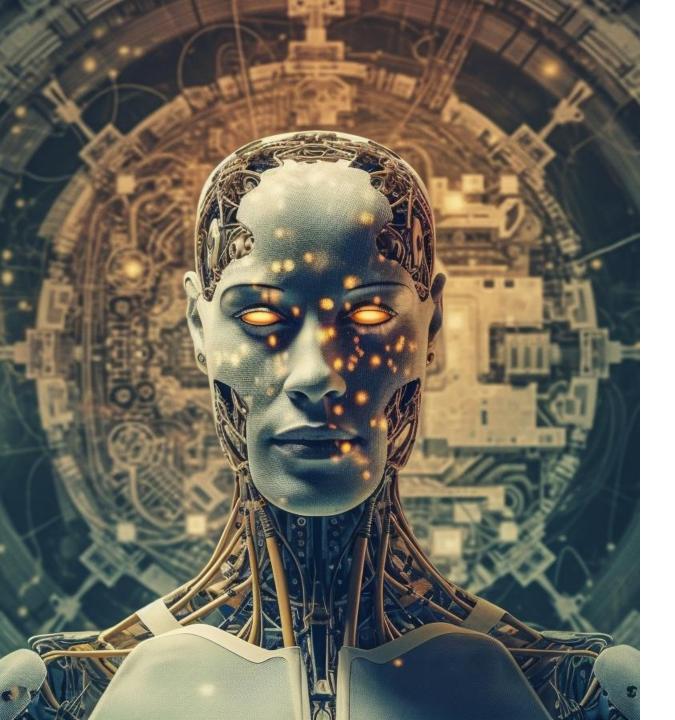


Generative Al & The Management Consulting Industry

Leading Use Cases & Adoption Factors





Our Experience

My initial experience with ChatGPT may be similar to yours. In November 2022, we heard that ChatGPT-3.5 had launched. But it was until over the holidays that I found time to play with ChatGPT and Dalle-2.

"**This could be a game changer**," I thought. But it wasn't clear to me what we could do with it yet.

What was clear was that there were issues. Some of the facts it returned were wrong. Information was dated. I couldn't tell where the information was coming from. We are called Qatalyst Research because we do primary research; it was unclear how this could help us with our own data.

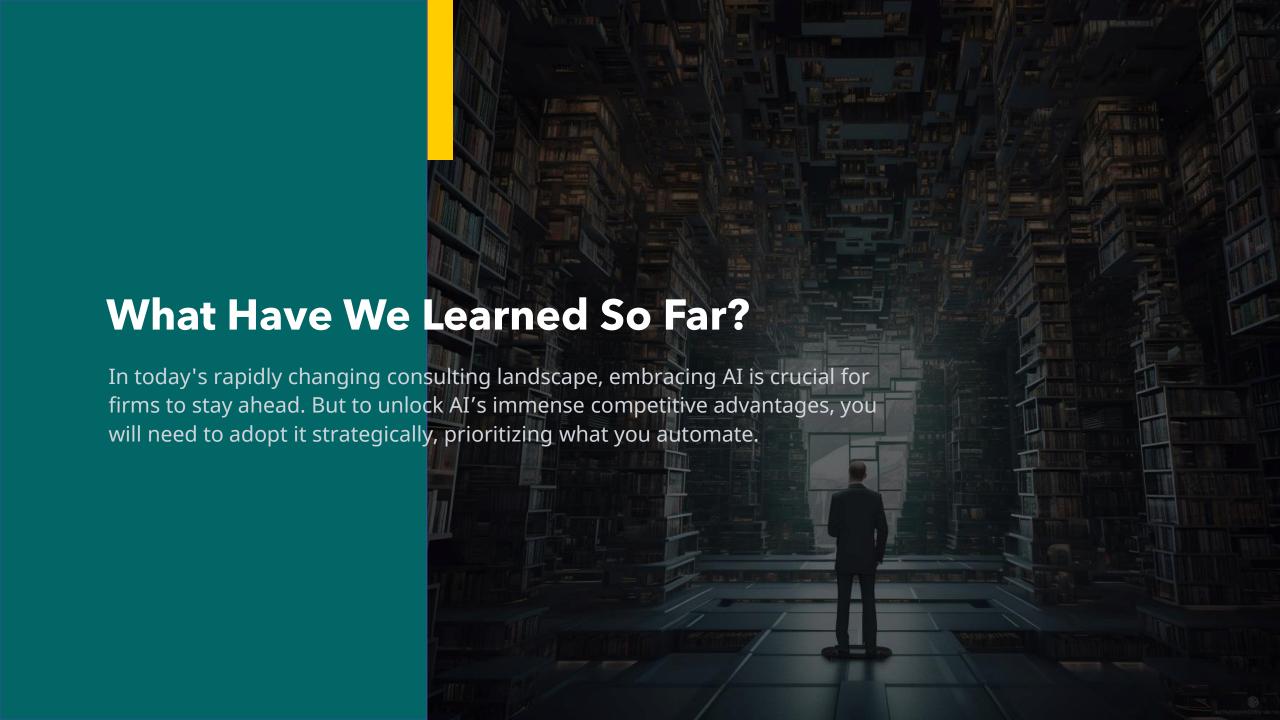


This technology is too important not to research further.

So starting this year, we:

- Subscribed to OpenAI, Midjourney and other services.
- Dedicated staff time to researching AI.
- Watched hours of YouTube videos regarding use cases, new apps, and developments such as Microsoft Co-Pilot.
- Tested AI in various applications and developed a few of our own apps.
- Leveraged research we were conducting on AI for clients at the federal and provincial levels.

This article summarizes what we learned about AI, why consulting firms need to begin adopting it, and what factors are slowing adoption.





Every consulting firm should proactively examine how to apply AI in their business.

AI is the most disruptive technology to ever come to the management consulting industry. It's not just a shiny new software tool. AI will change the markets we serve, the services we provide, how we deliver them, and who we hire. It will change the competitive dynamics of our industry.

AI can quickly conduct research, analyze vast amounts of data using advanced statistical techniques where needed, summarize the results, brainstorm potential options, and present findings in a variety of formats. It can automate repetitive, time-consuming tasks, allowing consultants to focus on more strategic and creative aspects of their work. The ability of firms to combine the strengths of AI (e.g., data analysis, automation) with the strengths of human consultants (e.g., strategic thinking, relationship building) in delivering existing and new services will soon be a major competitive variable.



The world of AI is unfolding at a dizzying pace.

Generative AI is being incorporated into virtually every software product we already use in our practices, and thousands of new apps are being developed. I listen to three podcasts and YouTube subscriptions (<u>Last Week in AI</u>, <u>Andy Stapleton</u>, and <u>Lisa Crosbie</u>) weekly just to try to keep abreast of major new developments and I still can't.



Al takes time to adopt effectively.

In the coming months, AI will become even more visible in many of our software tools. As we develop our understanding of the application and prompt engineering, we will quickly start to use some of the functionality that AI supports. For example, we will regularly use AI in a literature search and summarization or to quickly analyze a primary dataset to respond to specific questions. This will take some time to implement; we and our staff will need to understand the strengths and weaknesses of the AI tool and then learn how to be effective human co-pilots.

However, by far the greatest gains in efficiency and effectiveness will be achieved when we automate recurring functions (not just one-time requests) that we regularly implement as part of our practice. This will take more time; we need to understand both the tools and our business processes, determine what is needed to automate those processes, and then make it happen.

Right now, mainstream software development (e.g. Microsoft Co-pilot) is focused mostly on the first example (one-time applications). Automating recurring functions will require customized apps with capabilities designed for specific use cases.



The key is customized automation.

Customized apps open up new use cases and dramatically enhance the usability and impact of Generative AI models. On its own, Generative AI is a powerful tool. But what fully harnesses that power will be customized apps developed for specific applications or use cases. We have learned that we can write code to automate some of our key business processes, which we can then inexpensively run again and again.



The code takes a specific business process (e.g., analyzing the results of a survey) and breaks it down into a series of tasks, some of which will send and receive data through OpenAI's API or pass through another AI Model.

A simple example is that we can take a transcription from a meeting in Teams (an hour meeting may generate a 30 page transcript), break the text down into a series of chunks that can be privately shared with OpenAI, ask for an initial summary (specifying the level of detail we want), and then ask a series of follow-up questions about the meeting (some of which are built right into the code and some of which can be entered by the human co-pilot). The results can then be output as Word file and then be edited by the consultant who was participating. Similar approaches can be used to analyze text responses from surveys and interviews or conduct a review of documents that you have collected that you want to incorporate into a literature review.

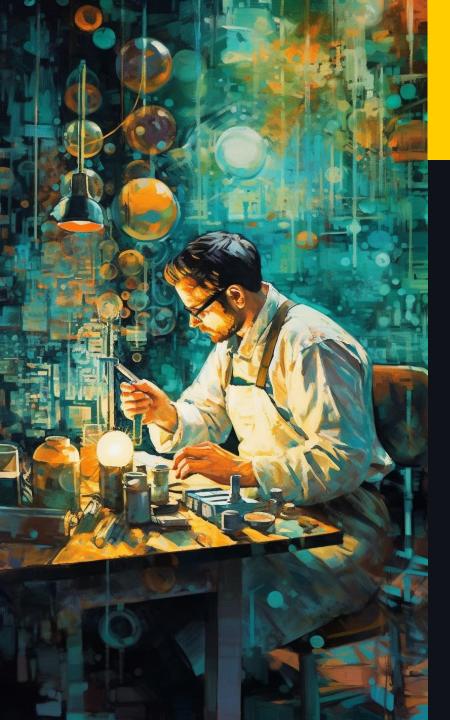
The challenge is to define that recurring process, define the role of AI and human co-pilot in the process, develop a customized app, test it, and refine it until you have a process that meets your standards and produces a quality output. While coding requires skill, it is the design of the process that is appropriate for your practice that will be the most difficult part.



AI will be built into every facet of our business.

Generative AI is a productivity tool that will support and work alongside our staff members, whether those staff members are involved in consulting, research, sales, marketing, or software development. Our "shortlist" of use cases that we are pursuing includes:

- Developing marketing content (including this series)
- Harvesting and summarizing potential RFPs we may be interested in
- Preparing the first draft of proposals
- Conducting literature reviews
- Summarizing and/or analyzing the results of surveys and meetings
- Proofreading
- Translation
- Option generation (brainstorming) and assisted decision-making
- VUpgrading profiles of our past studies
- alidation and fact-checking
- Producing reports, presentations, infographics and other media
- Automating internal tasks such as scheduling meetings and accounting



Validation is critical.

At times, ChatGPT will hallucinate (making unfounded inferential leaps) or make simple errors in interpretation. As such, a core function of the human copilot is to validate what they are being told by the AI. If we can't validate it, we can't use it.

It is easier to validate if you are able to build a direct link between what's being generated and where that information came from. We have been testing various techniques to make that easier to do. It should be noted that the models are good at finding their own errors, as long as they are pushed by the app or guided by the human co-pilot to revisit the data and update their summary.



We need to be selective about what apps we develop internally.

The landscape is changing incredibly quickly. Major software products, including Microsoft Office, are building AI capabilities directly into their programs. In addition, many new apps are being developed which can be used by the management consulting industry.

We do not want to develop our own apps where there is no recurring use case, a high degree of customization is not required (an off-the-shelf product will work fine), or better options will be available (assuming they are affordable).

We predict that software companies will address some of the more complex applications, such as improving data collection (e.g., using Chatbots to conduct surveys or interviews) and performing advanced quantitative analyses. We will wait for their products before deciding how to adapt our processes.

In the meantime, we are focusing on applications which are easier to develop (e.g. text analysis) and can be directly aligned with our business processes.



The first step is to streamline our existing processes.

Initially, we will continue to do what we have always done. But developing AI applications will allow us to do it faster and better.

Soon we will have to redefine our processes to take advantage of the new technology.

AI will create a series of new client expectations with respect to how data is collected, analyzed and reported. Firms will have to adapt their strategies to streamline operations, increase productivity, and add value to their services.



Factors Slowing Down Adoption of Al

The next two articles in this series will focus on lessons we can learn about AI from reviewing the impact of previous digital technological advancements as well as reviewing the major technological revolutions of the last 250 years.

One of those lessons is that the speed of adoption of new technology varied widely across firms, and earlier adopters were able to gain significant competitive advantage. Our discussions so far with other consulting firms suggest that this will be true in the consulting industry as well.

What factors may slow the adoption of AI?

According to input from various sources including our own research, conversations with some other consulting firms, and ChatGPT, adoption will be slowed by a range of factors: lack of awareness, complexity, lack of trust, the need to train models and human co-pilots, uncertainty about future regulations, cost, and resistance to change.



Low awareness of how Generative AI can be implemented in their firms.

AI is a complex technology, and not all businesses clearly understand what it can and cannot do. Given competing priorities for their time, only a small percentage have likely given much consideration to how they could incorporate AI. Even fewer have made significant steps in that direction.

Complexity of implementation

AI systems need to be integrated into existing processes, which can be challenging. Some businesses may lack the necessary technical expertise to do so.



Concerns about the use of AI

These concerns, which can be addressed through effective design of processes but are not necessarily easily addressed, can include:

- **Data Privacy**: AI systems often require access to sensitive data to be effective. This can raise concerns about data privacy and security.
- Hallucinations: Generative AI can sometimes generate inaccurate information, and there is currently no built-in mechanism to signal this to the user or challenge the result.
- **Systemic Biases**: These systems draw from massive amounts of data, which might include unwanted biases that need to be addressed
- Intellectual Property: When a generative AI model produces text, designs or images, there are unresolved questions about who can lay claim to it and what happens when a model plagiarizes sources based on its training data.

There can also be broader ethical considerations regarding AI such as concerns about its impact on politics, social systems, employment and the economy.



The need to train the models in your environment and train human co-pilots

In this partnership with AI, staff need to understand and be able to effectively execute their role. Key skills such as prompt engineering and validation need to be learned.

Uncertainty regarding the future regulatory environment

The development and deployment of AI models and the use of AI needs to be carefully regulated. The regulatory environment is still developing, which may create a level of uncertainty that may deter some businesses from fully embracing AI.



Cost

There is considerable uncertainty regarding the cost of AI-driven software, access to AI models, and access to the computer power needed for applications. There is also the cost of customizing applications to the firm's specific needs. Adoption of AI can be a very time-consuming process. Smaller consulting firms may not have the necessary resources to invest in AI.

Resistance to Change

Like any new technology, AI may face resistance from management and staff accustomed to working with existing systems and processes. Clients may also be resistant to the use of AI in their projects.