
The Transformative Impact of Artificial Intelligence on the Management Consultancy Sector

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Abstract

This paper explores the transformative impact of Artificial Intelligence (AI) on the management consultancy sector over the next five years. Tracing the evolution of AI from its inception in 1956 to recent language and image capabilities, the study addresses the imminent challenges posed to consultancy by AI startups. Examining global legislative approaches, including the EU's strict AI Act, the UK's flexible stance, the self-regulatory approach in the US, and China's targeted regulations, it unveils the legislative ambiguity for software developers. The essay anticipates transformative implications on consultancy firms, emphasizing the war for talent, potential shifts in business models, and the evolving role of consultants as agents of thought. As AI becomes integral, consultancy firms are urged to adapt, incorporating AI into their models while navigating ethical and legal considerations. The paper underscores that while AI will automate mundane tasks, strategic decision-making remains a strength of consultancy firms, ensuring continued relevance in the evolving landscape.

Introduction

In the past two decades, humanity made significant leaps in digital transformation. With the emergence of cloud computing, big data, an increase in processing power, artificial neural networks, and machine learning, the public gained access to technologies that can simulate human intelligence. Artificial Intelligence (AI) is now a revolutionary concept that made an impact on multiple industries.

The AI term was coined in 1956. Since then, scientists studied its application to business problems helping corporations in data modelling and data analysis (Hedberg, 1996). However, the biggest leap forward has been achieved only in the past five years with advances in language and image capabilities (Our World in Data, 2022).

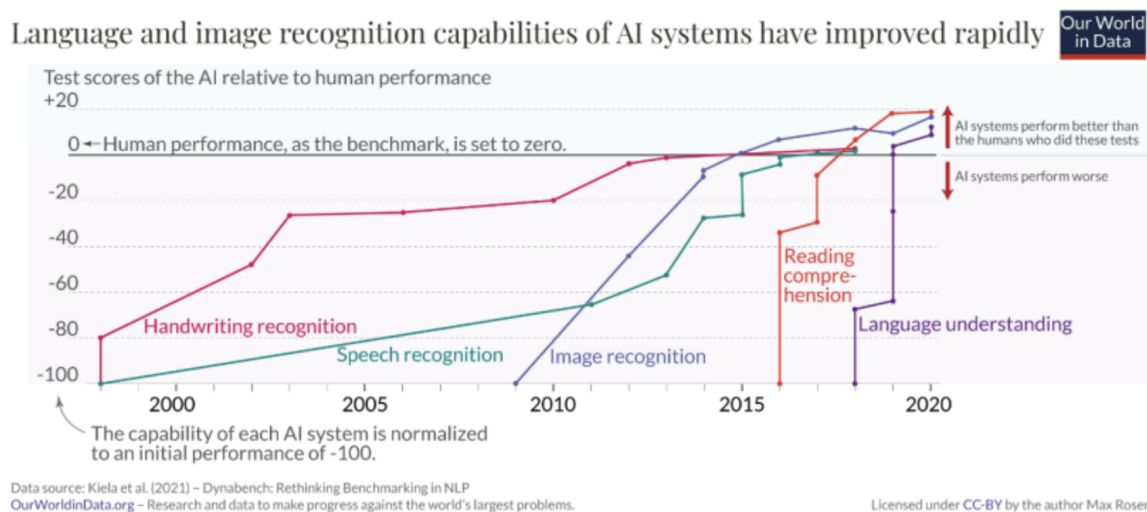


Figure 1 - Capabilities of AI Systems (Our World in Data, 2022)

Amplified by the media, AI startups threatened to replace professions across the sectors. Management consultancy was also on the list of industries challenged by recent technology (HBR, 2017; Economist, 2018; Forbes, 2021).

In this paper, the implications of AI on the management consultancy market in general are explored, as well as consulting firms over the next five years.

AI and Management Consultancy Market

In expanding on the impact of AI on the management consulting market it is essential to understand how various facets of the industry are being transformed. Taking the view that AI is not just a technology tool, it represents a fundamental shift in how consulting services are delivered, adding complexity and opportunity to the market. The following sections will access the impact through the prism of client expectations, market size and legislative development.

Impact on Client Expectations

AI has been on the frontlines of all newspapers for over a year, which has an impact on client expectations. As AI technologies, including tools like ChatGPT, became available to the public, interest in AI grew significantly (Figure 2). Clients worldwide started looking at AI applications and potentially redefining their views on the value

consultants can add. The range could go from near real-time insights and data-driven decisions (KPMG, 2019) to AI start-ups replacing consultancy firms (Economist, 2018).

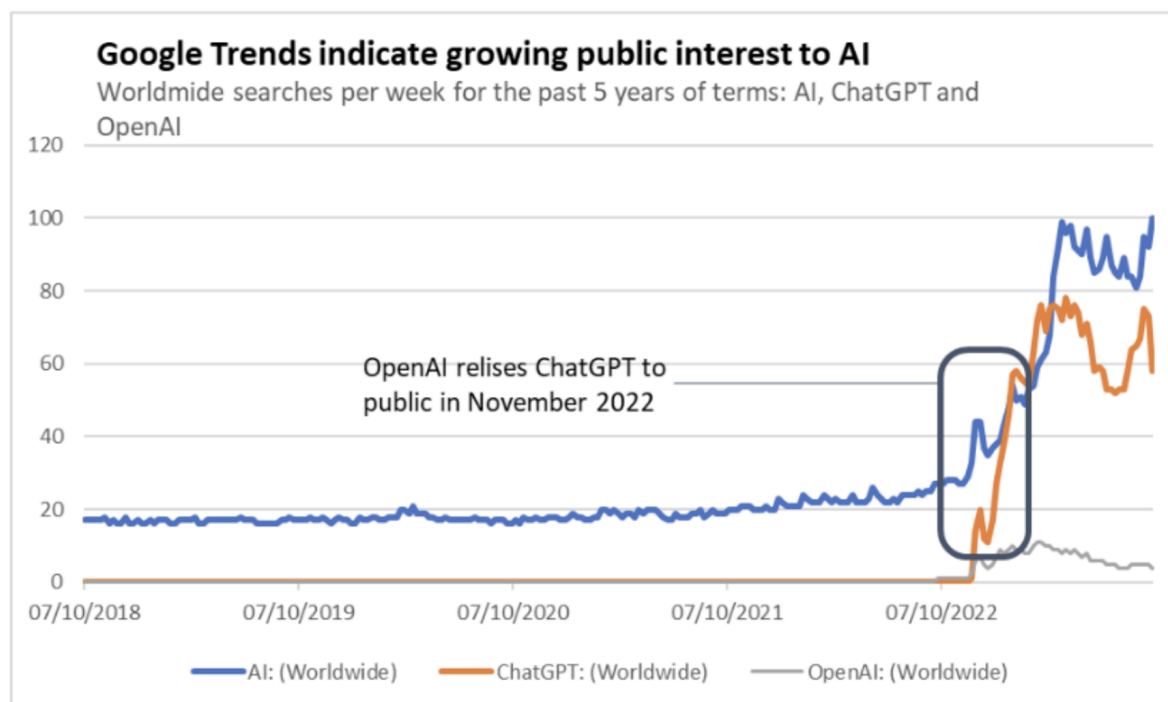


Figure 2 - Google Trends

Clients now expect rapid responses to their questions and challenges. Real-time or near-real-time data analysis and reporting have become the norm, putting additional pressure on the consultants to provide advice and respond to market changes promptly. Generic solutions based on industry norms will become less acceptable; clients will expect highly customized and personalized recommendations.

However, replacing humans completely with AI might prove to be difficult. The success rate of AI projects is only 15% (Via, Cameron, Giannelia, et al., 2023) and there is growing skepticism about AI replacing white-collar professionals (Economist, 2023).

The practical application of AI in management will remain limited to providing input to the individual decision-making process or tasks (Feuerriegal, Shrestha, von Krogh, et al., 2022). The management and consultants will remain accountable for the decisions where the consultant's reputation, relationships and tacit knowledge play significant roles. We will have a closer look at that in the following sections. However, consultancy firms must follow their client's interests and add AI to their capabilities to stay ahead of the curve.

Market Size

AI is already making a significant impact on the size of the consultancy market, potentially leading to both growth and transformation. Smaller organisations, startups, and even individuals can benefit from AI-powered tools and services that were previously available to large enterprises only. According to a recent McKinsey study, "AI adoption has more than doubled" (McKinsey, 2022) with the majority applying AI for service operations optimisation and process automation (Forbes, 2023) to become more efficient (see Figure 2).

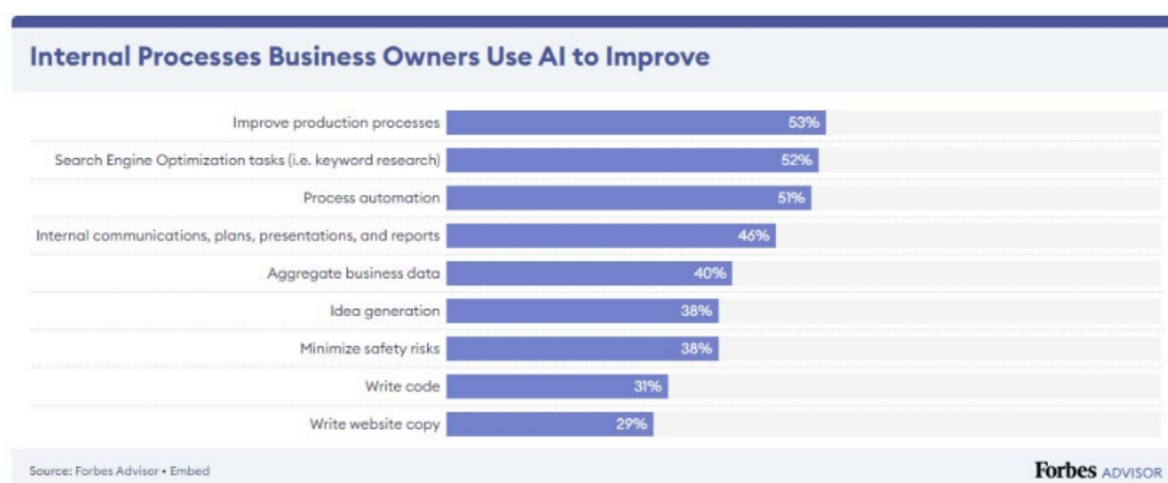


Figure 3 - Business Owners' Use of Ai for Internal Processes (Forbes, 2023)

AI could offer significant growth opportunities leading to a new wave of digital transformation that will change the way business operates (CFRA, 2022). The increased demand for AI creates an opportunity for technology startups to develop software for specific use requirements and for IT consultancy firms to help with implementation.

Management consultant firms will see an increasing number of competitors from large tech firms like Google and Microsoft, and boutique AI consulting firms. While large consulting firms will quickly get the required capabilities through tried-and-tested strategic mergers and acquisitions, it is the smaller businesses and individual practitioners that will have to think creatively to share space with the new entrants.

Legislative Development

The interest in AI advancement has led to increased awareness of its dangers. Governments around the world are recognising the need to regulate AI. Political decisions regarding the formulation and implementation of AI-related regulations can impact the industry. The approach varies across the continents (FT, 2023). For example, Italy has become the first Western country to block ChatGPT over privacy concerns and GDPR compliance (BBC, 2023) sending a warning message to IT companies.

The EU Approach

The EU is leading the pack of regulations with the AI Act where Brussels is planning to introduce the strictest use for AI and put the onus on the tech companies. The AI Act is expected to be approved by the end of the year with a two-year grace period (FT, 2023).

The UK Approach

The UK uses its position outside of the EU and is planning a more flexible approach. Understanding the value AI can bring to the economy, it plans to regulate the sector rather than the software or companies (GOV UK, 2023).

The US Approach

Big tech companies signed a set of voluntary commitments to AI safeguards amid fears over the pace of change (Guardian, 2023). This self-regulatory approach was

criticised for being insufficient while the US government was preparing a broad review of AI (FT, 2023).

The China Approach

China has introduced targeted AI regulations which require adherence to “core values of socialism” with more to follow in the coming years. To find a balance between control over information and technology competition with the US, the government approved a handful of Chinese tech companies to release their AI products to the public (FT, 2023).

This high variability in approach places and ambiguity in the legislation landscape for software developers. IT companies will act with caution not to draw too much attention and navigate local rules to avoid legal and reputational risks. Data privacy and intellectual property rights will be one of the main aspects that could slow down the technology development and adoption. However, the experience of social media platforms tells us that there will be years before the regulations will come into force - until then, the AI sector will be left to self-regulation.

Implications on Consulting Firms

It is expected that AI will have a transformative impact on consultancy companies influencing various aspects of their operations and service delivery.

War for Talent

As was mentioned before, many organisations already use AI to create value. However, ready-to-use AI systems are not available that answer bespoke challenges companies face due to the level of maturity of this field (Zhang et al., 2020 in Vial, Cameron, Gianelia, et al., 2023). Consulting firms will need to invest in reskilling and upskilling programmes to equip their workforce with necessary AI-related skills. Consultants will need to acquire proficiency in using AI tools and understand the implications of AI on business processes.

OECD analysed online job platforms and reported a growing number of AI-related job postings across all sectors of the economy (OECD, 2021). Boston Consulting Group (BCG) in their study of workforce supply and demand projected a shortfall in key occupations (BCG, 2021), especially computing. This creates an opportunity for consultants to temporarily fill the gap until business develop the talent required for the new AI era.

It is worth noting the OECD report highlighted another key factor - soft skills related to communication, problem-solving, creativity and teamwork became more important over time to complement engineering and software-related skills. It can be argued that AI is not fully capable of independent implementation and “human-in-the-loop” frameworks will still be required (Feuerriegel, Shrestha, von Krogh, et al., 2022).

Business Model Implications

The question arises if AI could replace the consultant’s traditional way of working. Part of the consultant’s added value is data analysis and presentation which, with the aid of AI, could be done in a matter of minutes. This means management and consultants could get insights faster and at a lower cost than traditional consulting methods. The focus will shift to a more complex strategic input that only senior-level

consultants can offer with their industry knowledge. Clients can no longer afford to spend time on junior consultants' data crunching and should expect more senior-level engagement (Consultancy.uk, 2022).

Consultants might need to adapt their business models which often are based on selling billable hours for labour-intensive work (Gonfalonieri, 2020) to applicable pricing based on market needs such as pay-per-use or performance fees where payment is based on jointly agreed outcomes.

Consultants as Agents of Thought

Management hires consultants to get outside advice on important decisions about the company's future. And often at the end of these decisions are the lives of employed affected by the change. Of course, consultants' expertise plays a significant role in the process. But not least key factor in client-consultant relationships is the development of trust (Nikolova, Möllering & Reihlen, 2015). Organisational change is a complex endeavour, and although multiple frameworks were developed to increase the success rate, human interaction, communication and reasoning play significant roles in creating internal inertia. So far no algorithm can do so.

With advancements in computing power, AI could even take cognitive functions such as the decision-making process from the management and consultant's hands. Scientists over the years studied the concept of decision-making by individuals and organisations (Mayer, David & Schoorman, 1995; Athey & Roberts, 2001; Holian, 2002). The novelty of AI applications does not provide sufficient theoretical background to understand how the delegation of the decision-making will transform from all-human to a human-AI hybrid or AI-only (Feuerriegel, Shrestha, von Krogh, et al., 2022).

On the other side are the consultants themselves. In their paper, Cemaloglu, Chia and Tan (2019) explored how "thinking agency" and "executional agency" can be affected by the increased adoption of AI. In their study of three different consulting firms: boutique insights, management consultancy, and professional services, they discovered that consultants could accept that their execution agency is partially reduced by AI, but no compromises were accepted for thinking agency to be influenced or interfered with it.

We can argue that there will be strong resistance to fully outsourcing all consulting work to AI from both the client and consultant sides in the coming years. The focus will be on automation and process improvement while decision-making will remain with the human side.

In summary, consultancy firms will need to embrace AI as a core component of their business models. This includes not only incorporating AI tools into service offerings, but also evolving their strategies, skill sets, and client engagement approaches to thrive in the AI-driven landscape. Those who successfully navigate these changes can position themselves as leaders in the evolving consultancy industry. Big Four consulting firms already made steps in this direction as KPMG and Microsoft announced an extended partnership in the AI segment (Microsoft, 2023), while PwC partners sacrificed millions in annual payouts to invest in AI technology (The Times, 2023).

Conclusion

In conclusion, the adoption of AI in management consulting offers significant benefits, but it also poses potential risks. Consulting firms need to be aware of the ethical and legal implications of using AI and invest in regulatory compliance to avoid legal challenges and reputational damage. Additionally, they need to ensure that they have the necessary skills and expertise to implement and integrate AI solutions effectively to avoid the displacement of human consultants. Despite the challenges, AI is likely to become an increasingly important tool in consulting industry as firms seek to deliver more value to their clients. While strategic decisions will remain the strength of the consultancy firms that can bring value to their clients. AI will not supersede human interaction but rather automate some of the mundane tasks, to help focus on the employee side of the business.

References

- Athey, S. and Roberts, J. (2001) *Organizational Design: Decision Rights and Incentive Contracts*, 91(2).
- BBC (2023) *ChatGPT banned in Italy over privacy concerns*. Available at: <https://www.bbc.co.uk/news/technology-65139406>. (Accessed: 27 September 2023).
- BCG (2021) *The Future of Jobs in the Era of AI*. Available at: <https://www.bcg.com/publications/2021/impact-of-new-technologies-on-jobs>. (Accessed: 27 September 2023).
- Cemaloglu, C., Chia, J. and Tam, J. (2019) Agency and AI in Consulting: Pathways to Prioritize Agency-Enhancing Automations. *Ethnographic Praxis in Industry Conference Proceedings*. [Online] 2019 (1), 533-553. Available at: doi: 10.1111/1559-8918.2019.01306.
- Consultancy.uk (2022) *5 trends shaping the future of management consulting*. Available at: <https://www.consultancy.uk/news/30507/5-trends-shaping-the-future-of-management-consulting>. (Accessed: 30 September 2023).
- Economist (2018) *AI providers will increasingly compete with management consultancies*. Available at: <https://www.economist.com/special-report/2018/03/28/ai-providers-will-increasingly-compete-with-management-consultancies>. (Accessed: 27 September 2023).
- Economist (2023) *Don't fear an AI-induced job apocalypse just yet*. Available at: <https://www.economist.com/business/2023/03/06/dont-fear-an-ai-induced-jobs-apocalypse-just-yet>. (Accessed: 6 October 2023).
- Feuerriegel, S., Shrestha, Y.R., von Krogh, G. and Zhang, C. (2022) Bringing artificial intelligence to business management. *Nature Machine Intelligence*. [Online] 4 (7), 611-613. Available at: doi: 10.1038/s42256-022-00512-5.
- Forbes (2021) *The End of Consulting As We Know It*. Available at: <https://www.forbes.com/sites/forbestechcouncil/2021/08/11/the-end-of-consulting-as-we-know-it/>. (Accessed: 27 September 2023).
- Forbes (2023) *How Businesses Are Using Artificial Intelligence in 2023*. Available at: <https://www.forbes.com/advisor/business/software/ai-in-business/>. (Accessed: 27 September 2023).
- FT (2023) *The global race to set the rules for AI*. Available at: <https://on.ft.com/44VUyT7>. (Accessed: 27 September 2023).
- GOV UK (2023) *A pro-innovation approach to AI regulation*. Available at: <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach>. (Accessed: 27 September 2023).
- Gonfalonieri (2020) *AI & The Future of Consulting: Will Data Scientists Become Consultants?* Available at: <https://towardsdatascience.com/ai-the-future-of->

consulting-will-data-scientists-become-consultants-f6938ab14bcc. (Accessed: 30 September 2023).

The Guardian (2023) *Top tech firms commit to AI safeguards amid fears over pace of change*. Available at: <https://www.theguardian.com/technology/2023/jul/21/ai-ethics-guidelines-google-meta-amazon>. (Accessed: 30 September 2023).

Harvard Business Review (2017) *AI May Soon Replace Even the Most Elite Consultants*. Available at: <https://hbr.org/2017/07/ai-may-soon-replace-even-the-most-elite-consultants>. (Accessed: 27 September 2023).

Hedberg, S.R. (1996) *AI tools for business process modelling*.

Holian, R. (2022) *Management decision making and ethics: practices, skills and preferences*. [Online] 31 ((2)), 232-245. Available at: doi: 10.1108/00251740210442422.

Holt, D. and Kalaiselvam, N. (2022) *Industry Surveys IT Consulting & Other Services*.

KPMG (2019) *Audit 2023 technology fit for the future*. Available at: <https://www.youtube.com/watch?v=PXqTAK80ylw>. (Accessed: 30 September 2023).

Mayer, R.C., David, J.H. and Schoorman, F.D. (1995) An Integrative Model of Organizational Trust. *The Academy of Management Review*. [Online] 20 (3), 709. Available at: doi: 10.2307/258792.

McKinsey (2022) *The state of AI in 2022 - and a half decade in review*. Available at: <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2022-and-a-half-decade-in-review>. (Accessed: 27 September 2023).

Microsoft (2023) *KPMG and Microsoft enter landmark agreement to put AI at the forefront of the professional services*. Available at: <https://news.microsoft.com/2023/07/11/kpmg-and-microsoft-enter-landmark-agreement-to-put-ai-at-the-forefront-of-professional-services/>. (Accessed: 30 September 2023).

Nikolova, N., Möllering, G. and Reihlen, M. (2015) Trusting as a 'Leap of Faith': Trust-building practices in client-consultant relationships. *Scandinavian Journal of Management*. [Online] 31 (2), 232-245. Available at: doi: 10.1016/j.scaman.2014.09.007.

Our World in Data (2022) *The brief history of artificial intelligence*. Available at: <https://ourworldindata.org/brief-history-of-ai>. (Accessed: 27 September 2023).

Squicciarini, M. and Nachtigall, H. (2021) *Demand for AI skills in jobs: Evidence from online job postings* [Online]. Available at: doi: <https://dx.doi.org/10.1787/3ed32d94-en>.

The Times (2023) *PwC partners sacrifice payouts to invest £100m in AI technology*. Available at: <https://www.thetimes.co.uk/article/pwc-partners-sacrifice-payouts-to-invest-100m-in-ai-technology-w0bbjjdjg>. (Accessed: 30 September 2023).

Vial, G., Cameron, A.F., Giannelia, T. and Jiang, J. (2023) Managing artificial intelligence projects: Key insights from an AI consulting firm. *Information Systems Journal*. [Online] 33 (3), 669-691. Available at: doi:10.1111/isj.12420.