Adopting Artificial Intelligence in Organisations: A Closer Look

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Abstract: Artificial intelligence (AI) is increasingly being adopted in different types of organisations and is attracting the attention of various actors. In this context, the analysis aims to provide an overview of the most relevant aspects of the adoption of AI technology solutions in organisations. To this end, the analysis adopted the archival research method and carried out a study of recent documents/analyses proposed by leading consulting firms. These players accumulate considerable application knowledge and are, therefore, special sources. To provide an in-depth and up-to-date picture, the analysis considered a range of archival information (such as reports, articles, insights, technical notes, etc.) published by around 15 organisations in the consulting sector since the beginning of 2023. The study highlights the main opportunities/risks associated with the introduction of AI. The findings cover various aspects, including AI investments, classification of organisations adopting AI, main challenges in AI initiatives, most common areas of AI use, and changes in work. The results may have some limitations due to bias in the identification of documents, as they were derived from direct searches and queries on the search engines of the consulting firms' websites. The audience and implications are broad, and this is a value of the work. AI novices studying the adoption and implementation of AI have a picture of the relevant dimensions on which further in-depth studies can be developed. In addition, entrepreneurs, managers, and policymakers will have an overview of the main threats/opportunities of AI and elements to support decision-making.

Keywords: Artificial intelligence, Adoption, Organisation, Archival research

1. Introduction

In the past, new technological solutions have led to breakthroughs and waves of progress. One might cite the internal combustion engine as an example of a technology that contributed to the Industrial Revolution at the end of the 19th century. Although AI is not new - Turing first conceptualised it in 1950 and McCarthy coined the term artificial intelligence in 1955 - we may be on the cusp of a new era that will be shaped by the pervasive impact of artificial intelligence. This can be defined, in the most basic terms, as technological solutions that emulate or imitate human intelligence and behaviour. In other words, machines that perform cognitive functions normally associated with the human mind.

There has been a notable increase in the adoption of AI in recent years. Major companies are investing heavily in AI, and venture capitalists are excited to invest in new disruptive startups. Indeed, it is estimated that investments in AI will approach $160-200 billion globally by 2025 (Goldman Sachs, 2023a). A variety of stakeholders, including practitioners, managers, politicians, and trade unions, are focusing on AI technologies, as evidenced by the growing number of mentions in earnings call transcripts. In the first quarter of 2022, there were over 5,000 mentions, while in the third quarter of 2023, this number had risen to approximately 37,000 (Daugherty et al., 2024). It is therefore unsurprising that some authors view AI as a general-purpose technology (like the steam engine, electricity, etc.), which is developing rapidly and is already pervasive, capable of driving complementary innovations and creating many opportunities.

In this sense, generative AI[1] (GenAI) represents one of the technologies that has the potential to bring about significant advancements. Indeed, some models estimate that the adoption of responsible GenAI could potentially unlock an additional economic value (compared to the expected baseline growth) of $10.3 trillion by 2038 (Shook and Daugherty, 2024). Similarly, a considerable number of managers posit that GenAI has the potential to augment companies' market share in the short term, with growth possibilities reaching 10% or more. Additionally, projections indicate that there will be enhancements in productivity, creativity, and human potential.

The adoption of AI poses several challenges for organisations, which need to consider many issues. Does my organisation need AI? How will AI increase efficiency? Will AI alone deliver certain improvements? How will AI change my organisation? Will AI be reliable? There are, of course, many other questions that could be asked. However, it seems that a common denominator is the way in which organisations can drive and control AI.

[1] GenAI has the potential to create new content and accelerate research and development cycles, as it is based on AI techniques that learn from artefacts and data and generate innovative new creations that are similar but not identical to the original.

With this in mind, this paper seeks to provide an overview of the most salient aspects of AI in organisations by analysing recent documents proposed by leading consulting firms (Accenture, BCG, EY, Gartner, McKinsey, etc.). As these actors possess considerable application knowledge, they represent a valuable source of information on the subject. Consequently, the paper provides valuable insights into the key characteristics of the operational and strategic levels, as well as the potential opportunities and risks associated with the adoption of AI. Accordingly, the analysis covers a variety of aspects, including areas of AI use, the impact of AI initiatives, the classification of adopting organisations and types of projects.

The audience and implications are broad, which represents a valuable aspect of the work. It provides entrepreneurs, executives, and policymakers with an overview of AI and a set of elements to support their decisions on AI adoption. At the same time, researchers who are less familiar with AI may find this a useful starting point for further in-depth studies.

The paper is structured as follows. The second section provides an overview of the knowledge base concerning the adoption of AI in organisations. The third section presents the main transformations and impacts that AI solutions bring about in organisations. In the concluding section, the findings are presented in the form of recommendations and suggestions for supporting the adoption of AI in organisations.

2. AI in Organisations: Some Basics

The lack of a universally accepted definition of AI has the potential to confuse those without expertise in the field. The term itself is broad, and therefore defining it may prove challenging. Firstly, it is useful to acknowledge that AI is not merely a technology, but also a discipline. In particular, it is a branch of computer science that aims to develop machines with the capacity to perform tasks through problem-solving, learning and understanding natural language. This implies the processes of perception, reasoning, and decision-making, and the capacity to act. As a result, AI draws on a range of subfields and techniques, including machine learning, neural networks and deep learning, which are essential for the realisation of AI systems.

As a technology, "artificial intelligence refers to systems that display intelligent behaviour by analysing their environment and taking actions – with some degree of autonomy – to achieve specific goals. AI-based systems can be purely software-based, acting in the virtual world (e.g. voice assistants, image analysis software, search engines, speech and face recognition systems) or AI can be embedded in hardware devices (e.g. advanced robots, autonomous cars, drones or internet of things applications)" (European Commission, 2018, p.1). In what follows, the analysis views AI as a technology and uses the term AI to refer to all AI-based technologies. It is inaccurate to view AI as a single technology; rather, it should be regarded as a constellation of technologies that collectively enable designed solutions to sense, comprehend, learn, and act, resembling that of human capabilities.

There are numerous applications of AI, which can be classified in a variety of ways. In summary, applications can be classified as either "weak AI" (artificial narrow intelligence), which is designed and trained to perform specific tasks (e.g., voice recognition), or "strong/full AI" (artificial general and superintelligence), which is characterised by cognitive abilities equal to or greater than those of humans. The latter category gives rise to concern, as some experts claim that there is a potential for AI to surpass human intelligence. Considering this calls for new regulations are becoming increasingly prevalent, and new concepts are emerging, such as responsible AI[2].

However, when considering AI as a technology, the literature can be broadly divided into two distinct streams: those dealing with the design and development of AI solutions and those dealing with the adoption and use. As the latter stream is the focus of this paper, the current analysis refers to the literature on the diffusion of innovation theory, the technology acceptance model, and the technology-organisation-environment framework.

A considerable body of economic literature has focused on the characteristics of firms that facilitate the adoption of new technologies. These include factors such as organisational size, readiness, workforce skills, adoption of complementary technologies, sector of activity, and competitive pressure. However, technology features also exert an influence on the adoption. These include perceived usefulness, which is the perception of the extent to which the use of a particular technology improves performance, and perceived ease of use, which refers to the extent to which individuals believe that using a particular technology is effortless (Davis,

[2] This refers to the process of developing and using AI solutions in accordance with ethical values and organisational objectives

1989)[3]. These factors elicit cognitive responses that contribute to the formation of a positive attitude and behavioural intention to adopt a particular technology (Davis, 1989).

In summary, the more a technology is perceived as straightforward to utilise, the more probable it is that the user will perceive it as beneficial, and the more likely it is that the technology will be adopted. This is also the case with AI, as indicated by Kelly et al. (2023, p.1), who reviewed the literature on the acceptance of AI solutions and claimed that "perceived usefulness, performance expectancy, attitudes, trust, and effort expectancy significantly and positively predicted behavioural intention, willingness, and use behaviour of AI across multiple industries".

Other factors may hinder the adoption and utilisation of technologies, such as infrastructure and regulatory gaps or lack of data. When viewed as systems, AI solutions typically comprise four key components. These are energy, computation, data and models. This allows for further considerations to come to light. Energy is a fundamental ingredient in the training and operation of AI systems. There is an increasing demand for computation, yet the supply is sometimes inadequate. There is also an increasing demand for data, as data is essential for any form of computation, particularly for AI. Large and small models (such as GPT-4, Bard, Falcon, etc.) are evolving and it is useful to link them to more resources to increase their potential. It is regrettable that the factors affecting the adoption and utilisation of AI are numerous, making it impractical to present them in this paragraph. Accordingly, this overview is provided as an initial introduction to the subject matter.

2.1 AI as a General-Purpose Technology: Laggards and Transformers

Historically, new technological solutions that have resulted in significant breakthroughs and waves of progress have typically followed an S-shaped pattern. In the view of some authors, AI will play a similar role to that of steam in the first industrial revolution, thereby characterising the fourth[4]. Indeed, AI exhibits numerous similarities with preceding disruptive general-purpose technologies. Firstly, AI has demonstrated a remarkable capacity for rapid improvement. The growth of AI has been exponential, as is its ability to process data. Furthermore, as many surveys have demonstrated, AI is pervasive. Finally, AI can foster complementary innovation by allowing users to recombine and exploit existing technologies and knowledge to create new solutions.

Although AI is not a novel concept, it has only become mainstream in the last few decades as large technology companies have started to integrate AI into various products[5]. That said, the recent evolution of AI can be divided into three phases (Shook and Daugherty, 2024). The first phase, the diagnostic phase, is characterised by the introduction of machine learning. The second phase, the predictive phase, is focused on forecasting. The third phase, the generative phase, is distinguished by AI's ability to not only accurately predict but also to create new content and offer customised suggestions.

However, the adoption of AI has not been uniform. A considerable number of organisations have invested in numerous standalone use cases that have frequently demonstrated the value of AI, yet only a small proportion of initiatives can be considered to have reached a fully developed stage. Consequently, current AI projects exhibit a range of levels of maturity. On this basis, it is possible to categorise organisations as follows:

- Laggards, those who have not yet taken the necessary steps to adopt AI,
- Enthusiasts, organisations equipped with the basic technology to experiment with AI,
- Organisations on the journey, those with the technology and expertise to initiate AI projects,

[3]This factor is similar to the complexity factor that characterises the innovation diffusion literature, which refers to the level of difficulty people perceive in understanding and using new technologies.

[4]The first industrial revolution commenced at the conclusion of the 18th century, propelled by the advent of coal and the subsequent transformation of our economy from an agrarian to an industrial base. The second industrial revolution began at the end of the 19th century. It was driven by new sources of energy, namely electricity, gas and oil, and the invention of the combustion engine. The third industrial revolution started in the second half of the 20th century. It was characterised by the emergence of nuclear energy and the development of electronics and telecommunications. The fourth industrial revolution commenced at the beginning of the third millennium. It is characterised by the acceleration of digital technologies and the internet (including the cloud technology, Internet of Things and AI), as well as a shift towards renewable energy.

[5]Apple is a noteworthy example, having introduced Siri, a voice assistant that uses AI to understand language, in 2011.

- Apprentices, those who have the technology and need to improve their skills to make AI projects fully operational, and
- Cutting-edge adopters, organisations that have the technology and expertise to successfully implement and deploy AI.

In particular, an analysis of organisations that have adopted AI reveals four distinct categories based on the number of AI applications that have been fully deployed and the high-level outcomes achieved (Mittal et al., 2022). These categories are as follows: a) Starters (limited applications deployed and low outcomes achieved), b) Underachievers (high deployment and low outcomes achieved), c) Path seekers (limited applications deployed and high outcomes achieved, which implies success in fewer initiatives), and d) Transformers (high deployment and high outcomes achieved). Numerous transformers are demonstrating superior performance in a multitude of domains when compared to their competitors. Furthermore, the discrepancy between the leading transformers and the laggards is increasing as the capabilities in which the former have invested continue to enhance. Consequently, there is a possibility that the laggards, particularly small and medium-sized enterprises, may be unable to maintain pace.

2.2 Main Challenges and Applications

The adoption of AI solutions presents several significant challenges, and organisations must therefore be prepared to address specific pivotal aspects:

- Supply chain. With the exponential growth in demand for data, organisations need actionable data and internal collaboration, given that the mapping, monitoring and management of supply chains can be complex,
- Strategy. AI projects need advocacy and accountability from top management. Without strategic guidance, AI solutions can be misaligned, and AI initiatives can stall,
- People. As AI requires skilled people, there may be a mismatch between the skills required and the current workforce. This can create a challenging situation where there is uncertainty about the skills required, the availability of talent is limited, and upskilling and training programmes are required, and
- IT. AI requires the right infrastructure and the right environment. Inadequate resource allocation and technology architecture can therefore hamper AI initiatives. A typical case is where IT departments have small teams with insufficient resources.

The most prevalent use cases for AI in organisations are the automation of IT tasks, cybersecurity, fraud detection, business processes and workflow automation. These are the areas in which organisations are currently utilising or planning to utilise AI in the future. While some tasks will not be affected by AI, much of the work will be assisted and automated. As a result, humans working with AI co-pilots will increase the tasks performed and the results achieved. In this regard, it is beneficial to differentiate between two principal applications of AI in organisations, namely automation and augmentation.

The concept of automation implies that AI performs a human task (in this case, humans delegate tasks to AI with little or no involvement), whereas the concept of augmentation implies that humans work closely with (and are assisted by) AI to perform tasks. In this case, humans and AI are not adversaries, and their relationship is no longer seen as dichotomous. On the contrary, they interact constantly.

Tensions may occasionally emerge when organisations are required to select between automation and augmentation. However, some authors argued that organisations should prioritise augmentation, as it can deliver superior performance. Other authors suggested that organisations should adopt an approach that includes both automation and augmentation, as this allows for complementarities that are beneficial to the business (augmentation can increase the level of automation). In addition, some authors have argued that automation and augmentation cannot be neatly separated.

AI can be used to achieve many benefits (such as increasing efficiency, customising or improving existing products/services, predicting demand, detecting fraud, managing risks, and more). Consequently, there exists a diverse array of potential application areas. At present, some organisations prioritise productivity objectives and utilise AI primarily to automate/augment front and back-office operations. Some exclude the use of AI in front of customers and only employ it internally, whereas others pursue the full use of AI by adopting it across the entire organisation. To categorise AI applications, Gartner proposed three types of use cases (Wiles, 2023):

- Quick wins. Such initiatives tend to be task-specific, easy to buy, easy to launch, and easy to pilot. The implementation of a productivity assistant, such as Microsoft 365 Copilot, is a typical example. These solutions can help organisations gain a competitive advantage. Their time-to-value is short (typically within a year), and the improvements can be a source of differentiation, but they diminish over time,
- Differentiating use cases. These initiatives offer a more defensible advantage than in the previous case, as they allow organisations to improve processes by using data in unique ways. They may involve a process redesign, skill upgrading, and risk management, making costs and risks more unpredictable. However, the direct and indirect benefits generally outweigh the costs, and the time-to-value is medium (generally between one and two years), and
- Transformative initiatives. These projects have the potential to deliver greater benefits but are difficult to value in financial terms. Although ongoing developments in AI are reducing the cost of deployment, executives and boards tolerate more risk and a longer time to value (also more than two years) in exchange for a first-mover advantage.

3. Impacts, Risks, and Transformations Across Organisations

The deployment of AI projects can necessitate considerable resources. However, it is probably not the size of the investment that is the primary obstacle, but an investment with less transparent benefits and costs, such as the cost of people, the cost of the infrastructure required, or the cost of using specific AI solutions, and therefore the uncertainty regarding the return on investment. In light of this, the following findings from a recent global IDC study (Jyoti and Schubmehl, 2023) are worthy of note: a) 92% of AI deployments require one year or less, b) on average, organisations realise $3.5 in return for every $1 invested in AI, c) on average, organisations realise a return on investment within 14 months of deployment and d) 43% of organisations intend to reduce spending in other business areas to reallocate to AI within 24 months.

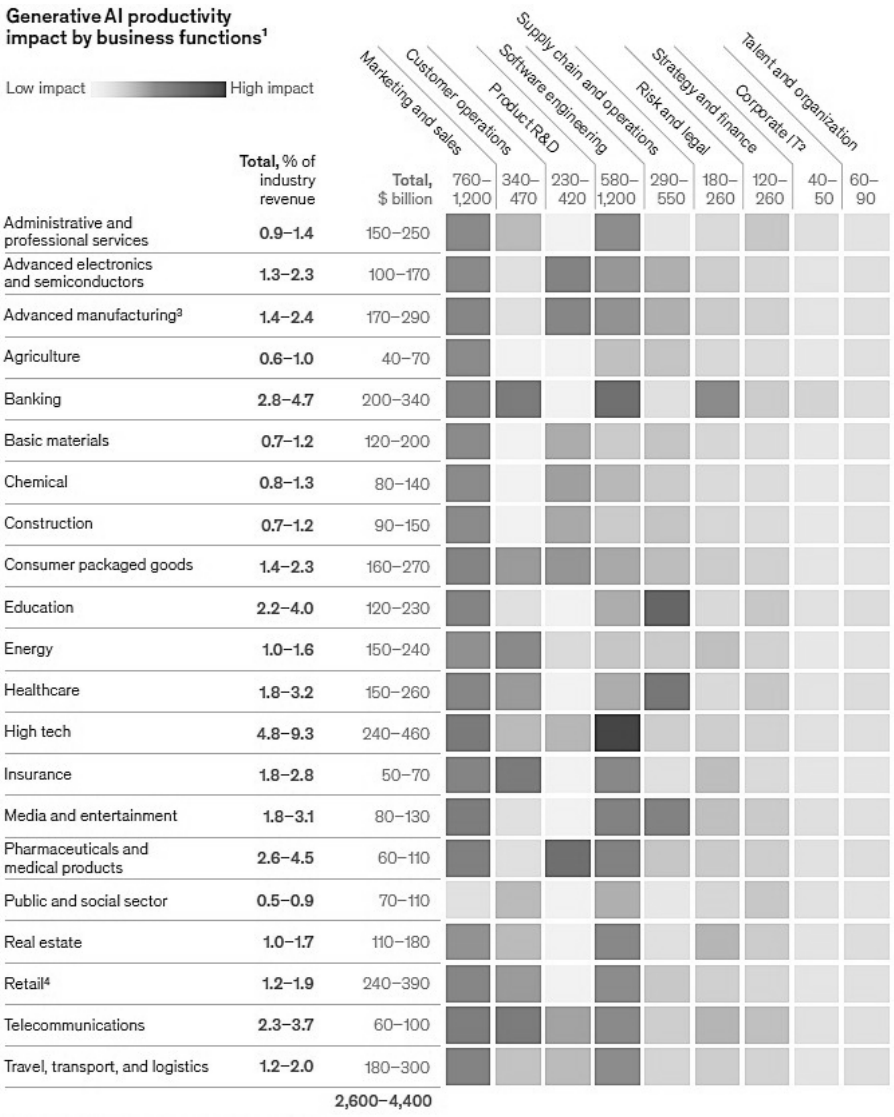
However, the impact of AI on organisations can vary, but in many cases, it can be significant. In particular, given the wide range of tasks that GenAI can perform, organisations have high expectations for this type of solution. In this regard, a McKinsey report (2024) posits that, based on 63 GenAI use cases, these initiatives have the potential to generate between $2.6 trillion and $4.4 trillion in revenue across industries (Figure 1). Furthermore, the utilisation of AI can also lead to significant cost reductions (Figure 2). For instance, Goldman Sachs (2023b) indicates that approximately 25% of the current workload in the United States and Europe could be automated. A differentiated impact of AI can be influenced by the automation/augmentation of work across sectors and countries. In this regard, Shook and Daugherty (2024) present estimates of the proportion of working hours that could be affected by automation or augmentation through GenAI, broken down by country. These estimates range from 31% in India to 47% in the UK. Estimates by Bain & Company (2023) corroborate this view by delineating roles that can be automated and augmented by GenAI (Figure 3).

Looking ahead, Statista (2023) (based on estimates from Accenture and Frontier Economics) notes that AI has the potential to increase labour productivity. In developed countries, the impact is expected to range from +11% in Spain to +37% in Sweden by 2035.

However, it would be erroneous to conclude that the advent of AI in organisations is wholly positive. Indeed, there are some risks associated with its implementation. When considering AI, inaccuracy, cybersecurity, and intellectual property infringement are the most frequently cited risks (McKinsey, 2023)[6]. This underscores the rationale behind the establishment of policies to govern the use of GenAI and the efforts to mitigate the associated risks. Some AI solutions (such as foundation models) comprise innumerable parameters and are trained on petabytes of data. Consequently, if the data used to train the model is biased, the resulting output may also be suboptimal. Additionally, models have the potential to generate misleading information, a consequence commonly referred to as “hallucinations”. Consequently, organisations must be aware of the necessity to oversee model training and assess the results, as AI solutions may require adjustment before they are used.

It is of particular importance to assess the ethical and legal implications of the outputs produced by AI. For instance, AI could potentially lead to discriminatory outcomes and inadvertently infringe the copyright of third parties. Furthermore, the use of big data and cloud computing may violate data protection regulations. It is essential to exercise caution not only with regard to the utilisation of data, but also with respect to its storage.

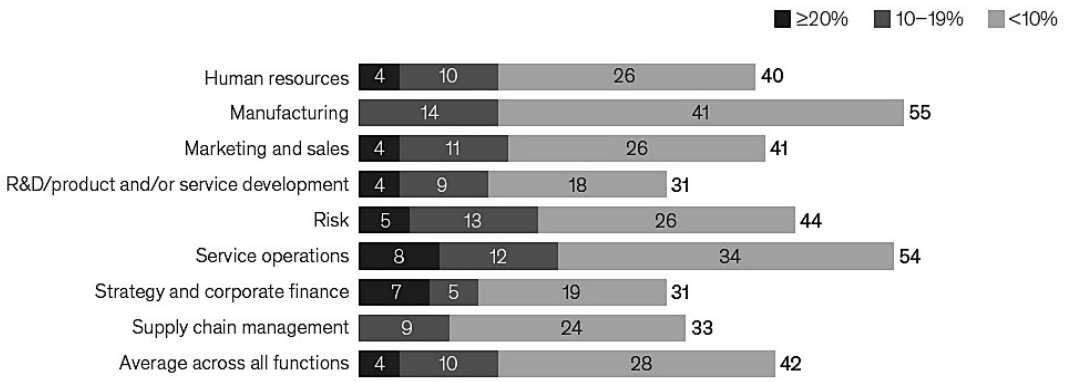
[6] The survey was conducted on a sample of 913 respondents.



Source: McKinsey (2004)

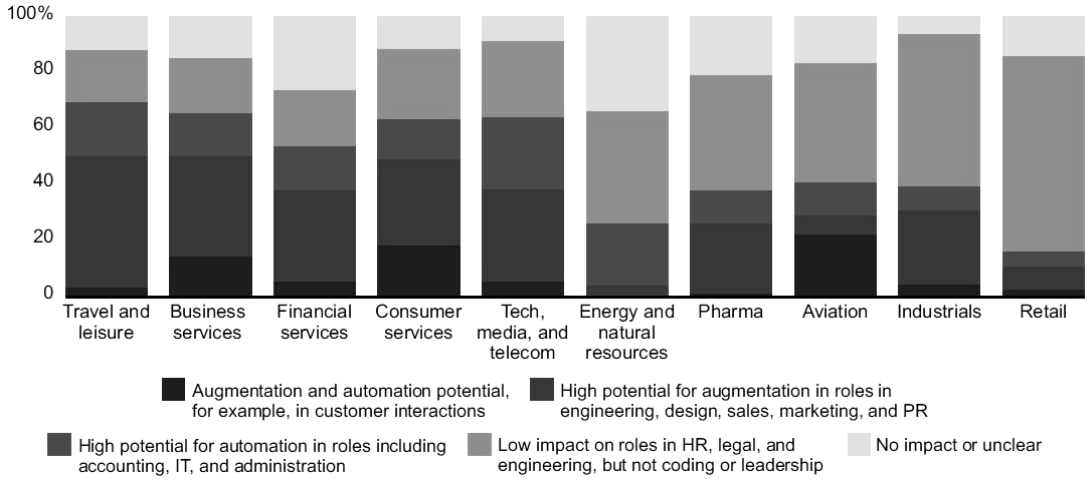
Figure 1: Impact on business functions across industries of different GenAI use cases

Notes: Figures may not sum to 100%, because of rounding. [1] Excludes implementation costs (e.g., training. Licenses); [2] Excludes software engineering; [3] Includes aerospace, defence, and auto manufacturing; [4] Includes auto retail.



Source: McKinsey (2023)

Figure 2: Cost decreases from AI adoption in 2022 (% of 1,684 respondents)



Source: Aura, Bain analysis (Bain & Company, 2023)

Figure 3: Impact of GenAI depending on automatable and augmentable roles (% of employees by function level of automation/augmentation potential)

There are also other consequences to consider. To illustrate, GenAI requires substantial electrical power. Although not all automated tasks will lead to layoffs, there are concerns about the potential unemployment caused by AI. Those tasks which are characterised by high accuracy and low context variability (such as data entry) are at risk of automation. In addition, tasks with moderate creative difficulty, context variability and accuracy are well suited to GenAI. For these reasons, 58% of workers[7] have expressed concern about job security (Shook and Daugherty, 2024).

This potential risk could be mitigated by the emergence of new AI-related occupations (data scientists, software and data engineers, software developers, etc.), as historical evidence indicates that technological innovation has consistently led to the creation of new job roles[8]. This is evident from the growing demand for technical expertise and the significant increase in job postings since 2018. Nevertheless, it is difficult to evaluate the overall impact, as a proportion of employees will undergo reskilling and new technologies will facilitate these changes.

The advent of AI (especially GenAI) will require significant changes in organisations, compelling them to modernise their technological architectures to determine the optimal organisational configuration and to ensure the responsible use of AI. AI will have a transformative impact on the way work is done. To cite one example, in the area of monitoring and control activities, organisations will be able to use more effective descriptive KPIs, as well as new and improved predictive and prescriptive metrics. The application of AI will facilitate the ongoing refinement of existing metrics, and given the complex interplay between performance drivers, AI will ensure a more comprehensive understanding of the relationship between KPIs, thereby enabling the development of new interpretations of the relationships between operational drivers, contextual variables, and results.

In summary, organisations that adopt AI are more likely to enhance their performance in terms of efficiency and effectiveness. However, if they are unable to overcome typical obstacles (such as a lack of skilled staff, difficulty in identifying relevant use cases, unavailability and/or poor quality of data, etc.), transformational outcomes (such as business model innovation) may be delayed.

4. Recommendations and Final Remarks

At present, few organisations use AI to its full potential. This raises the question of whether organisations are adequately prepared for a new digital transformation. Many reports show that there are not just technical, but also cultural, collaborative, coordination and communication obstacles to overcome.

[7]The research ("Accenture Change Workforce Survey") is based on 5,000 workers.

[8]Autor et al. (2024) estimate that around 60% of today's workers are employed in jobs that didn't exist in the 1940s.

To assess the viability of AI projects, organisations must consider several specific dimensions. These include: a) technical feasibility, which pertains to the capacity of organisations to acquire and deploy AI solutions, b) internal readiness, which concerns the receptivity and capability of organisations to utilise and harness the potential of AI, and c) external readiness, which relates to the degree of acceptance of AI among key stakeholders, including customers, suppliers, and other external parties.

There is a notable lack of preparedness, particularly when considering a disruptive solution such as GenAI. Indeed, 78% of the leaders surveyed[9] believe that their organisations are not adequately prepared to address talent issues. This sentiment is echoed by 75% of respondents in relation to governance and risk concerns. Moreover, 66% of respondents perceive deficiencies at the strategic level, while 59% indicate constraints in the technology infrastructure (Dutt et al., 2024).

Challenges also vary according to the phase of the AI project. For instance, during the initial stages of an AI project, the primary challenge is to demonstrate the business value of the initiative. Subsequently, during the scale-up phase, projects can be influenced by factors such as risk management, AI maintenance, or integration requirements. Thus, the development of an AI-enabled organisation is significantly influenced by clear leadership, discipline, and effective investment.

Given the difficulty of providing a complete guide, this analysis offers suggestions and recommendations for supporting AI adoption in organisations.

In order to ensure the effective orchestration and development of AI initiatives, it is of the utmost importance that organisations possess the necessary capabilities to mobilise resources and acquire relevant skills. This is essential to prevent the emergence of disjointed and misaligned projects and to ensure that AI is used in a beneficial and responsible manner. It is therefore recommended that organisations be prepared in terms of the following:

- Strategy. An effective strategic roadmap can facilitate the alignment of management on AI projects and enable appropriate investments that create a competitive advantage.
- Talent. The availability of the appropriate combination of qualified personnel is essential for the development of innovative applications of AI, as it enables the understanding of business models and data.
- Operating model. The development of an appropriate operating model enables cross-functional teams to function more effectively, thereby increasing the productivity of the organisation.
- Technology. A distributed technology environment that facilitates access to data, applications, and software development tools has the potential to accelerate the pace of innovation.
- Data. Given that data are typically a source of risk, it is more likely to be dangerous if organisations focus solely on the volume of data. To mitigate risks, it is prudent to invest in identifying data needs, but most importantly, data quality must be prioritised. Furthermore, ongoing data enrichment and the development of a data architecture that focuses on packaged and reusable data will facilitate access to and use of data, thereby enhancing business performance.
- Change management. Planning, resourcing and managing transformation enable organisations to adopt and scale AI solutions and optimise value capture.

It is probable that, initially, few organisations will be able to meet all the requirements. Consequently, to avoid becoming a “laggard” or remaining a “starter”, it would be advised that they adopt a two-speed AI approach, based on the logic of “start small” and “develop later”. The “start small” option may entail the implementation of modular, low-impact projects with minimal investment and tangible results in the short term. Indeed, many consulting firms often recommend starting with a limited scope to facilitate the successful implementation of AI. This involves carefully selecting use cases and trying to understand the impact and implications of AI adoption within the context of the business and the organisation. In this sense, “quick wins” projects are the typical examples of “start small” decisions. As the benefits of these projects become apparent, the initial “start small” initiative is evaluated and may evolve into more complex projects (“develop later” option) through appropriate capital allocation and strategic orchestration.

[9]The survey was conducted on a sample of 2,835 respondents, and the aforementioned percentages represent the sum of responses indicating a lack of preparation (“not prepared”), a slight level of preparation (“slightly prepared”), and a moderate level of preparation (“moderately prepared”).

These two options can be linked to two types of investment. The first type is the “no regret” investment, which focuses on a specific objective, such as productivity gains. The second type is the “strategic bets”, which aims to create new competitive advantages. The value of a two-speed AI approach does not lie in the provision of two alternatives, but rather in the benefits of their integrated design. To exemplify, it is essential to demonstrate the value of AI initiatives during the initial stages. Consequently, from a “start small” perspective, organisations can choose to establish an AI value realisation office through a management office with a limited scope, which could be considered a “no regret” investment. Subsequently, when the advantages of AI are evident and well-established, this office can evolve into a kind of control centre (“strategic bets”). This could take the form of an office with greater credibility, a broader scope, more resources, and greater autonomy and responsibility, not only for establishing specific AI projects but also for workforce reskilling plans, data infrastructure upgrades, and ecosystem strategies. Such an approach helps organisations in both incremental thinking and the development of an AI vision. Consequently, “start small” decisions should not only be regarded as initiatives to enhance efficiency and/or effectiveness. They should also be perceived as opportunities to prepare organisations for the advent of the AI era.

Effective communication and a high level of transparency are essential from the outset of AI projects. It is vital that employees are informed of the potential impact of AI on employment, including both the creation of new roles and the loss of existing ones. Furthermore, they should be made aware of the training plans in place to prepare them for future roles. However, it is not sufficient to focus solely on internal matters. For example, prioritising the relationship between AI and humans also entails monitoring other aspects, such as how customers perceive and feel about AI. In conclusion, providing individuals with the appropriate support (for example, by facilitating tailored learning pathways that meet each employee's aspirations and needs) can prove beneficial in terms of revenue, productivity, creativity, and human potential (Shook and Daugherty, 2024). Such an approach facilitates the creation of an AI-friendly culture. This is a significant element in fostering a positive attitude among employees and teams. It is therefore crucial to conduct a thorough analysis of the AI implementation to ascertain the factors influencing employee trust.

It is likely that retraining will necessitate considerable effort, and older workers may be less inclined to participate. Consequently, it is vital to address any potential prejudice against AI among employees. From this standpoint, it is important to recognise that AI can offer opportunities and advantages. Nevertheless, any change requires guidance, and those occupying positions of technological leadership have a pivotal role to play in the AI revolution. Lessons learned from previous technology innovations (cloud, internet, etc.) are available, but are they enough? The accelerated pace of AI development presents a challenge in considering all relevant aspects (technical, ethical, legal, and reputational). A new risk landscape is emerging, training plans must be defined and implemented, technology functions and architectures need to be rethought and upgraded, human resource (HR) functions must be enhanced and renovated. As a result, the nature of decision-making is evolving, becoming increasingly structured and impactful. The HR function deals with a variety of demands and plays a crucial role. It is therefore a narrow perspective to view the role of HR as solely redeploying existing talent and/or attracting the right talent (which can be challenging in an increasingly competitive market). The HR function will be involved in setting the vision for the entire organisation, building learning and development capabilities through training programmes, evaluating the effectiveness of retraining, and ensuring that AI does not threaten employee well-being.

In general, the level of complexity will increase, and organisations may find themselves at turning points depending on the circumstances (e.g. large investments, unbundling of corporate function, business process outsourcing, staff reductions, etc.). Clear leadership and governance are essential, but do organisations already need new executives? A significant number of organisations are still considering where the responsibility for AI initiatives lies. This has resulted in the emergence of a multitude of roles and labels, which can be challenging for those seeking to gain an understanding of the optimal organisational structure. Examples of these include Chief Digital and AI Officer (CDAO), Chief AI Officer (CAIO), and Chief Information Security Officer (CISO), amongst others.

In the initial stages of AI implementation, a head of AI (not necessarily at the C-suite level) may be able to drive transformation, provided that he or she possesses both business and technical leadership skills and a comprehensive understanding of AI. This enables him or her to effectively assess the alternatives, strengths and weaknesses associated with AI. However, the number of tasks and responsibilities is increasing. Leaders must pursue continuous innovations and updates, evaluate investments, and maximise organisational benefits by reallocating resources, monitoring data and security breaches, assessing skill readiness, defining a talent strategy, optimising the use of AI, and so forth. Furthermore, they are involved in the establishment of rules,

policies, and processes to minimise the risk of harmful actions arising from the misuse of AI. This suggests that the role of leaders will become increasingly multifaceted.

However, is the personal and professional growth of leaders sufficient to address the evolving business landscape? It may not be sufficient to staff a new AI executive. In this new era, organisations need to evolve in order to fully leverage the potential of AI. To achieve this, it is recommended that a cohesive, organisation-wide approach be developed. In particular, organisations must commit to setting a vision, defining AI plans, and communicating the benefits and risks. By continuously monitoring the latter, they can be prepared and mitigate potential impacts before it is too late. As a result, organisations must build teams to manage complexity and increase collaboration and sharing in order to avoid making misguided decisions, be accountable, and provide an appropriate level of transparency to stakeholders.

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