

Artificial Intelligence - Why do nothing is not an option anymore

Over the last year, Artificial Intelligence (AI), and especially Generative AI, has emerged as a technological supercharger, enabling massive increases in efficiency, and creating new use cases and opportunities on an almost daily basis. For leaders in major organizations, the adoption of AI is not merely a strategic move; it is an imperative to sustain and amplify their competitive edge. The "wait and see" approach towards AI adoption is no longer viable for several reasons but most importantly AI AI-empowered businesses will out-compete any organization not leveraging AI.

It is equally important to accept that there are risks and challenges to successful AI adoption and given the massive upswing in awareness around AI in Google trends, individuals will be experimenting with AI in their day-to-day activities and this needs to be managed, monitored, and encouraged.

The Competitive Landscape and Al

But first, we must set the scene: high levels of competition are nothing new for modern business leaders, but in today's landscape where the battle for mind and wallet share is so fierce any edge must be considered. At a recent thought leadership event hosted by Computacenter for Chief Technology Officers, the overwhelming sentiment was excitement around the opportunities Al can bring coupled with the need to act swiftly, tempered by pragmatic considerations around ethics, governance, and tangible outcomes.

Generative AI has the potential to be as disruptive as the emergence of the World Wide Web on business processes, capabilities, products, and services. In the late 1990s and early 2000s, we saw several firmly established household brand businesses fail to spot the opportunity the web opened and subsequently ceased trading. These brands are not alone, with the benefit of history we can look back and specifically pinpoint brands who did not move with the times. They stayed static and subsequently because of this, ceased trading, and in their places, disruptive new businesses were born that are still around now as they've managed to be adaptable to the varying marketing conditions and to move with the times.

Remember from our own experience of going out on a Friday night to collect our take-away and to pick up a film to rent for the evening? This now feels like a lifetime ago, as whilst our need for the take-away and the new film to watch on a Friday evening hasn't changed, the way we consume products and the speed of delivery has changed. Life has moved on so much and failure to adapt to change, usually means failure to move forward.

Similar patterns can be seen through all disruptive events in history, offering improvements in efficiency (Lean manufacturing, automation, robotics etc.) or new products and services rewarding the early adopters who rapidly out-competed and gained market share and, in some cases, created whole new markets to dominate.

The Pace of Change

Every day AI is pushing new boundaries in terms of capabilities, ideas, and challenges.

Al is going to push the competition to the extreme and given the nature of its capability be continuously improving the need to be part of the Al journey has never been more important. Organizations simply cannot afford to do nothing while the competition reaps the benefits Al will bring.

Of course, Al adoption is going to have challenges as well as give organizations routes to great benefits and like any new and disruptive trend being informed will be your best way to mitigate those risks whilst reaping the rewards.

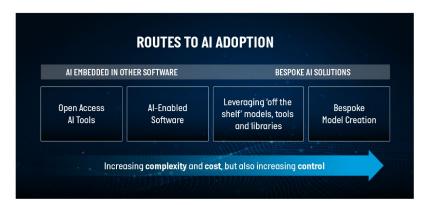
Exploring the four routes to Al adoption

If 2023 was all about the hype surrounding AI, analysts predict that 2024 is set to be the year where many organizations will benefit from leveraging AI capabilities.

Al will continue to innovate at pace through this year and beyond, and we will also see the emergence of Al regulatory legislation. The EU Al act is leading this charge and will impact not just EU member states, but those that want to trade with them, too. As with a lot of the EU legislation, we should expect the Al Act to form the template for other countries to adopt, as we saw with the legislation around GDPR.

Traditional approaches to delivering organizational value will need to have more flexibility when adopting AI, supported by a solid foundation of ethical usage, governance, and security. There are many foundational steps that are needed to ensure a successful AI adoption path. These include establishing ethical and regulatory guardrails in place through establishing a set of AI governance policies and processes, increasing the level of AI literacy across the organization both for AI consumers and AI solution developers, and critically ensuring that the data that will fuel the AI engine is available, trusted, and secure.

However today we are focusing on the key early step of deciding how AI will be adopted in your organization. At an elevated level there are four routes to AI adoption and an organization can apply any or all of them to meet their AI needs:



1. Use of Open Access Al Tools

It is highly likely that people have experimented with generative AI tools either personally or professionally. Individuals across organizations are reaching to these tools to aid their day-to-day activities. This can be a great driver of efficiency gains but can carry a level of risk if the adopters do not understand how these tools work. All open access tools are only as good as the data they have been trained on and users need to understand their limitations as well as their strengths. There are also risks around IP usage and sharing of sensitive information, users need to understand how the tools store data from prompts and if it risks any regulatory challenges. It is crucial that an AI literacy programme is started to provide this understanding to mitigate these risks.

2. Al-Enabled Software Solutions

Many commercial off-the-shelf software solutions are becoming empowered by AI. This can equally apply to Software as a Service (SaaS) platforms as it can to traditional software solutions installed and managed in-house. For example, a SaaS Customer Relationship Management (CRM) package can adopt AI for better forecasting and demand planning in the production cycle.

These software solutions can range from cross-industry capabilities for departments like HR, legal and finance to point solutions addressing domain-specific use cases. One defining type of software solution will

be the growing number of <u>CoPilot applications</u> being adopted. These will act as general assistants or even dedicated specialized software for specific roles or business processes.

These tools will create huge opportunities to equip employees with capabilities that enable them to be more creative, and efficient whilst being part of the Al journey. However, as with all modern technologies, there is a need for care and education coupled with a real assessment of the data the tools will use and store to support their user base.

It is likely that adoption of these tools will become accepted good practice across industry, and it may become mandatory for organizations to adopt them to remain competitive.

Given the emerging AI regulatory legislation that holds organizations accountable for the ethical use of AI, it is extremely important that the use of AI-enabled software is captured across and monitored. The ease of use of these technologies means they are prone to the risks of shadow IT adoption and again an AI literacy programme highlighting these risks paired with a pragmatic process to support rapid experimentation and adoption mitigates this.

3. Leveraging Open-Source AI and off-the-shelf AI tools

If organizations choose to develop their own AI solutions, they can leverage open-source tools, libraries, and models. In addition, many hardware and cloud providers are creating tools and libraries that accelerate the development of AI solutions. This includes off-the-shelf models, use case-specific playbooks, and tools around AI-driven capabilities such as computer vision and natural language processing.

One important subset of this will be the use of foundational models. A foundational model is a pre-trained large language model (LLM) that can be extended with further protected training with your own data. Using this adoption path can provide the best of both worlds with the foundational model having a wealth of public, verified and trusted data points coupled with your ring-fenced data that provides a competitive edge.

Care must be taken to ensure that the foundational model not only supports your needs for the solution but also meets your security and regulatory requirements. With AI regulation coming, the solutions will need to be explainable and traceable – effectively so they can show their work by explaining how they achieved their result.

If organizations choose this adoption path, they will need to invest in enabling the solution teams with both AI skills and the tools to develop paired with solid standards and processes for building and deploying their creations. Given the already challenging skills shortage in AI expertise, it is critical that an AI enablement and literacy plan is put in place to build your skills in-house.

4. Custom Al Model Development

If organizations do not wish to adopt commercially available models, you can build your own custom AI. There is a huge advantage in that your solutions will be bespoke to your organization's needs and will offer high levels of competitive advantage, potentially at the expense of slowing down your route to value whilst building a technical debt that can be hard to regulate and maintain.

In Conclusion

Al Adoption will be a critical route of value for many organizations and understanding both what the value cases are for your industry as well as what route is best suited for each of these opportunities is a critical step in forming your Al strategy and roadmap.

None of the aforementioned approaches discussed here are mutually exclusive and it is likely that, as your Al adoption progresses, you will leverage multiple approaches. This, coupled with the pace of Al technology evolution, means your adoption strategy will need regular review as will the available value cases for you to adopt.

There are many other building blocks needed for successful AI adoption, all of which will require a commitment to evolve the skills and capabilities of your people. You can immediately ease the journey by starting an AI literacy programme to both educate key stakeholders about the opportunities AI will bring as well as to drive good adoption practices to accelerate value and mitigate AI risks. This will enable you to adopt an iterative approach to AI value creation that will deliver a consistent pipeline of benefit realization through AI.

AI SOLUTIONS FOR EVERY INDUSTRY

Several key AI and AGI trends are shaping the public sector:

- 1. **Automation of Administrative Tasks**: All is increasingly used to automate repetitive administrative tasks in the public sector, such as data entry, document processing, and customer service. This frees up human resources for more complex and value-added work.
- Predictive Analytics for Decision-Making: Governments are leveraging AI to analyze large datasets and gain insights for better decision-making. Predictive analytics helps in forecasting trends, identifying potential risks, and optimizing resource allocation in areas like healthcare, transportation, and public safety.
- 3. **Citizen Services Enhancement**: Al-powered chatbots and virtual assistants are being deployed to enhance citizen services. These Al systems provide quick and personalized responses to citizen inquiries, streamline service delivery, and improve overall citizen satisfaction.
- 4. **Smart Governance and Urban Management**: Al technologies are integral to smart governance initiatives aimed at improving urban management. Al-enabled systems monitor traffic, manage energy consumption, optimize waste management, and enhance public safety through advanced surveillance and predictive policing.
- 5. Ethical Al Governance and Regulation: With the increasing adoption of Al in the public sector, there's a growing focus on ethical Al governance and regulation. Governments are developing frameworks and standards to ensure transparency, accountability, fairness, and privacy in Al systems used for public services.
- Al in Healthcare and Public Health: Al is revolutionizing healthcare delivery and public health management. From diagnosing diseases and predicting outbreaks to optimizing treatment plans and analyzing population health data, Al is driving innovation and efficiency in healthcare services.
- 7. Cybersecurity and Al Defense Systems: Governments are investing in Al-driven cybersecurity solutions to protect critical infrastructure and sensitive data from cyber threats. Al-based defence systems can detect and respond to cyber attacks in real time, enhancing the resilience of public sector networks and systems.
- 8. **Al in Education and Skill Development**: Al technologies are being utilized in education and skill development programs to personalize learning experiences, provide adaptive tutoring, and identify areas where intervention is needed. This helps in improving educational outcomes and addressing skill gaps in the workforce.

These trends indicate a growing integration of AI and AGI technologies across various domains within the public sector, leading to improved efficiency, effectiveness, and responsiveness in government operations and service delivery.