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The Age of WITH

AI with purpose

Ireland's vision for artificial intelligence

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AI: Advancing Ireland

> Ireland is well positioned to be a leader in AI through its innovative culture, adaptable capability and tech-savvy workforce.

As Ireland announced its first AI Ambassador and the Department of Trade, Enterprise and Employment set an ambition for 75% of all enterprises to be using AI, cloud and big data by 2030, we look at Ireland's AI strategy in detail. In July 2021, the Irish Government released its AI Strategy "AI - Here for Good", outlining a comprehensive set of initiatives that set an ambition to be an international leader in using AI which will benefit our economy and society[1]. It is a positive step towards further realising the significant benefits from AI and associated technologies. Deloitte supports the Government's strategy and echoes the clear need for a step change in adoption of, and investment in, AI-powered solutions.

Ireland is well positioned to be a leader in AI thanks to its innovative culture, adaptable capability, and tech-savvy workforce. Globally, Ireland is well regarded in its AI readiness, ranking 17th (out of 160 countries) in the Oxford Insight AI Readiness report 2021[2]. Significantly, a Eurostat report in 2021 indicated that Ireland has the highest share of enterprises in Europe using AI[3]. This is a key element to meeting our goals, as adopting AI across the enterprise is a critical component of realising our national ambition. It is within organisations and businesses that AI's theoretical capability is combined with industry knowledge to create powerful solutions that can make a meaningful impact on our economy, our society, and our lives.

In this article, we highlight why AI is important, how Ireland can become AI fuelled by drawing on Government support, and why enterprises across industries are key to the success of this strategy. Now that the strategy is defined, we must build on the momentum to make that step change in AI adoption.

Why is AI important?

Artificial intelligence is the underpinning technology needed to create smart systems that enable people to analyse and draw insight from enormous quantities of data, automate decision making and mimic human capabilities. AI is impacting the future of virtually every industry and every person. AI is already being used to transform businesses, provide competitive advantages, enable new products and services, improve customer experience, reduce costs and increase efficiency.

AI and advanced analytics systems are integrated into our day-to-day lives. For example, tools like Siri and Google Assistant use AI to process and produce speech; driverless cars use it for recognising objects, or it helps entertainment platforms like Netflix and Spotify recommend personalised content for customers. These products and services wouldn't be possible without AI to help navigate and make sense of the vast volumes of complex information that people, and systems generate every second of every day.

How AI can make a tangible impact to business outcomes:

Reducing admin overhead[4]:
By applying intelligent automation solutions which mimic time-consuming repetitive human tasks quickly and efficiently the administrative burden in the Irish Public Sector was reduced by over **14,800** working days across a calendar year.

Read full article here.

Identifying cost savings[5]:
By applying AI technology to significantly increase fraud detection rates inspectors were able to target and assess the most likely cases of fraud quickly and effectively. This resulted in **tens of millions** of euros of savings while ensuring that government benefits were getting to the right people.

Read full article here.

Supporting sustainable fishing practices:
By using Vision AI to automate the identification of fish species and populations maritime regulatory enforcement could more effectively monitor commercial fishing to ensure sustainable fish populations. Applying AI has the potential to **save costs of 1-5M$** by reducing time reviewing marine video and image data and extracting greater insights.

Driving better customer interactions:
Working with a large retail restaurant chain AI is used to redefine how customers interact with the company. An Edge AI platform was deployed which provided a futuristic experience with a resilient in-store conversational AI to reduce wait time and facilitate real-time order management. In addition to a reimagined customer service this approach is expected to produce **savings of over $5M.**

How can Ireland become AI-fuelled?

The Government's strategy sets out an ambition for Ireland to be an "international leader in using AI to benefit our economy and society, through a people- centred, ethical approach to its development, adoption and use". It set out eight strands for how it will drive and support the adoption of AI in ethical and transparent ways, educate the public and its workforce, invest in innovation and research and drive adoption of AI across sectors and industries. These ambitions are significant in recognising that AI is pervasive now and will be present in our future. It also recognises the complexity of what is involved and the breadth of initiatives that are required to enable AI. These initiatives span talent, ethics, and infrastructure, as well as public and corporate awareness training.

Developing AI solutions means working in new ways with machine-based systems in a human-centred way to deliver faster, more consistent, and insightful outcomes to the benefit of organisations, people, and society. For Ireland's AI strategy to be a success, organisations must adopt, use, drive, and benefit from it. This starts with organisations recognising AI's value now and into the future and by making a concerted effort to break down external and internal barriers to its adoption. In the remainder of this paper, we set out some of the key areas of focus that can support businesses in building their AI capabilities in line with the Government's strategy.

Awareness

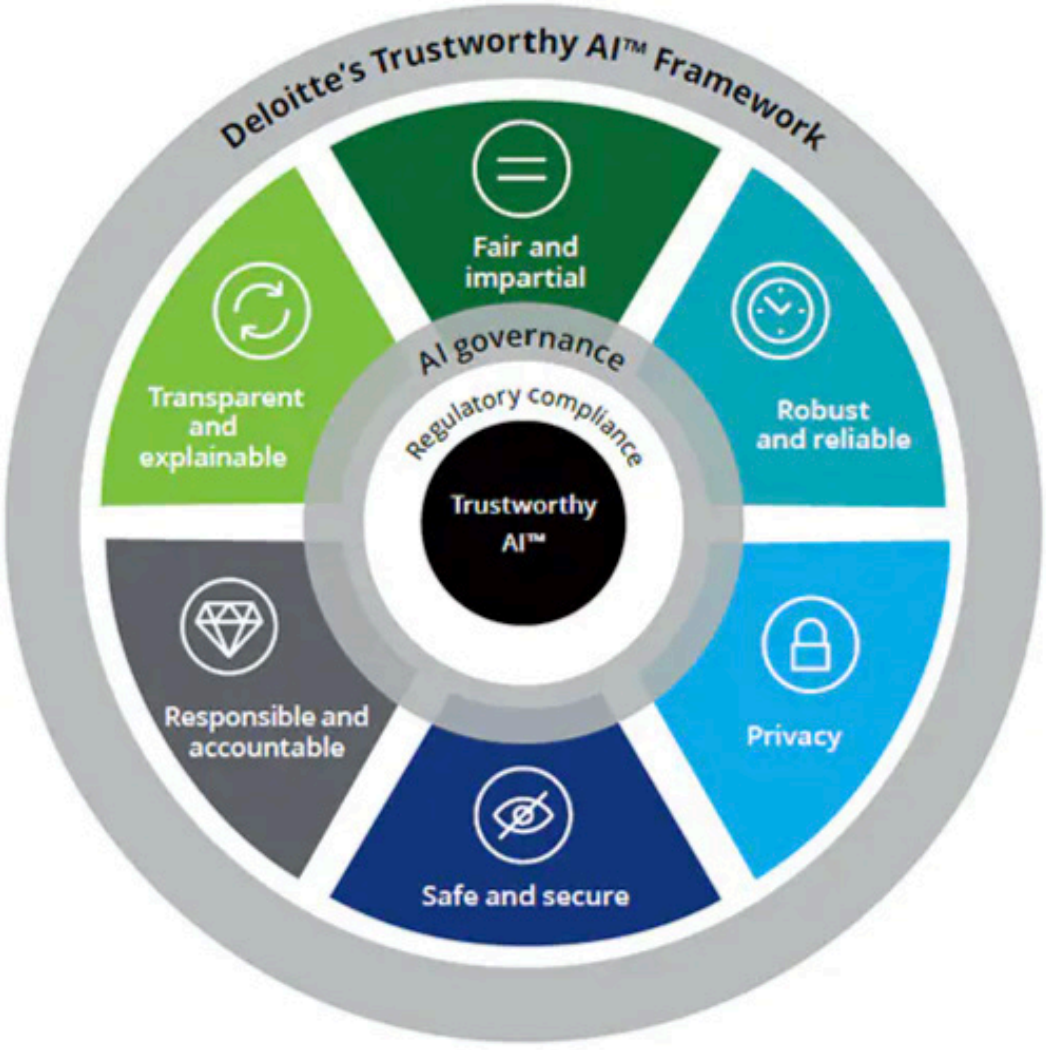
Irish organisations may be missing significant opportunities in AI while their competitors are investing heavily. A recent Deloitte pulse survey undertaken with The Analytics Institute of Ireland found that nearly 40% of respondents indicated that key decision makers had limited understanding of AI, while a further 40% had a good understanding of AI but lacked clarity as to how it could benefit their organisation. Globally, AI adopters say they are realising competitive advantages now and expect AI-powered transformation to happen for both their organisation and their industry in the next year. Over 70% of these AI adopters were increasing their AI spend by over 26% in 2021.[7] Hence, engaging with leadership teams across industries must be a key step as part of the Government's multi-pronged approach for AI adoption. This can be through education sessions, demonstrations and 'show not tell' sessions, practically demonstrating how AI works, why it works, and the value it can bring.

Talent/skills

AI solutions are multi-faceted, which calls for a wide range of skills such as statistics, programming, data science, technology infrastructure and software development. In our pulse survey, 45% of respondents will not have sufficiently educated practitioners in Ireland to meet their AI needs. It identified the main skills gaps as Data Scientists, Data Engineers, Data Architects and Business Analysts (for AI). In addition, 40% were relying on external programmes to educate their workforce on AI. While the Government sets out a wide range of plans to upskill the existing and incoming workforce, there is an already pent-up demand to be met. While remote working can help draw international talent and may alleviate the current skills shortage, it is a double-edged sword, as international organisations will draw on our already stretched talent pool. Organisations with strong AI programmes will create feedback loops that will attract the talent who want to work on creative and innovative AI solutions. The war for talent will be won by those who invest in exploiting their data to the maximum while integrating AI solutions as one of the strategic tools in their technology toolbox.

Governance and ethics

Ethical and legal concerns over AI solutions exist not only in the media but also for regulators in all industries. Our pulse survey indicated that c. 30% of those surveyed did not have an internal framework to consider the Ethical implications of AI solutions prior to adoption. The Government has committed to publishing guidelines on the ethical use and governance of AI in concert with the EU's proposed "Artificial Intelligence Act[8]". Nonetheless using existing frameworks such as Deloitte's Trustworthy AI™ will help bring governance and regulatory compliance throughout the AI lifecycle from ideation to design, and from development to deployment. This approach is anchored around six dimensions which see AI solutions being - transparent and explainable, fair and impartial, robust and reliable, respectful of privacy, safe and secure, and responsible and accountable.[9]



Driving the AI agenda: over to you

Now that the Government has outlined its strategy, it is imperative that businesses take a lead role in AI adoption. This does not mean adopting AI altruistically for the good of the community and country, but adopting AI solutions that lead to more efficient and effective services, new products and offerings, and better customer experiences which will ultimately benefit our society

As well as building their own AI solutions, organisations can contribute nationally by, for example, sharing their own data. Data is the cornerstone of AI solutions. The larger the data set, the more accurate the output. Open data and data sharing remain hot topics.

Data sharing made easy

As highlighted in our 2022 Tech Trends[12], certain industries have a clear business case to pool their data to capitalise on far larger datasets than any one company could capture alone and without infringing on its customers' rights. Shared data can be used, for example, to enhance know-your-customer and anti-money-laundering challenges[13] or improve fraud detection in financial services by looking for signals across the industry. Life sciences and healthcare organisations can use shared data to build better models with the right diversity, edge cases and breadth. As data becomes increasingly critical to problem-solving, governments are exploring ways to enhance data sharing so that it can add greater value, save time, money, and even lives[14]. During the COVID-19 pandemic, governments shared data widely; for example, the EU enabled a secure information exchange between different national contact-tracing apps and the US National Institutes of Health established a centralised repository of COVID-19 health records for facilitating research and discovery.

Thankfully, there are now a host of new technologies promising to simplify the mechanics of data sharing between organisations while preserving privacy[10].

AI is already here and growing as we look to a future of higher value work being completed by humans in concert with AI powered tools. Adopting AI and driving it across all aspects of Irish society will ensure that we understand it, manage it and will be leaders in AI globally.

Businesses and public sector agencies must lead its adoption. Their initial focus should be to "set a clear enterprise- wide strategy at the top that enables leaders to harness AI capabilities and drive new opportunities and competitive advantage[11]." Our future as an AI hub depends on it.

At Deloitte, we are committed to playing our part by developing AI solutions with our clients, drawing on our deep industry and sectoral knowledge, and combining it with our experience and expertise in cloud, data and AI technologies. Contact us now to find out how we can help you be part of building an Ireland where AI is 'here for good'.

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Endnotes

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