

PwC 2019 Irish AI Priorities

Six AI priorities you can't afford to ignore



PwC and Analytics Institute 2019 Irish AI Priorities

Six AI priorities you can't afford to ignore

Insights on where business leaders are focusing their AI efforts in 2019 and the six priorities that should drive their AI strategy.



100

AI-savvy executives
and practitioners in
Ireland



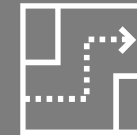
46%

C-level, president,
or partner



66%

Irish HQ Organisations



93%

Functions
outside of IT

This year, we're not just highlighting what is likely to happen with AI. Instead, we call out what business leaders **must make happen.**

Our big prediction for 2019? Those companies that focus on these six priorities will be leading the pack this time next year.



What is Artificial Intelligence?

Umbrella term covering technologies that refer to machines and humans working together, machines **thinking like** humans, **learning** and then **mimicking** the actions of humans.



Deep Learning

- Close to “true” AI
- Leans complex tasks
- Black Box approach

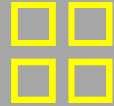


Image Recognition

- Image & Video Processing
- System “Recognises” objects
- Also recognises faces



Chatbots

- Digital Assistants
- “Talks” to humans and responds
- Can be text or speech based



Natural Language Processing

- Analyses text from documents
- Understand context of word or phrase
- Multi-lingual



Digital Twins

- Digital copies of a real world thing
- Processes or physical objects
- Simulations



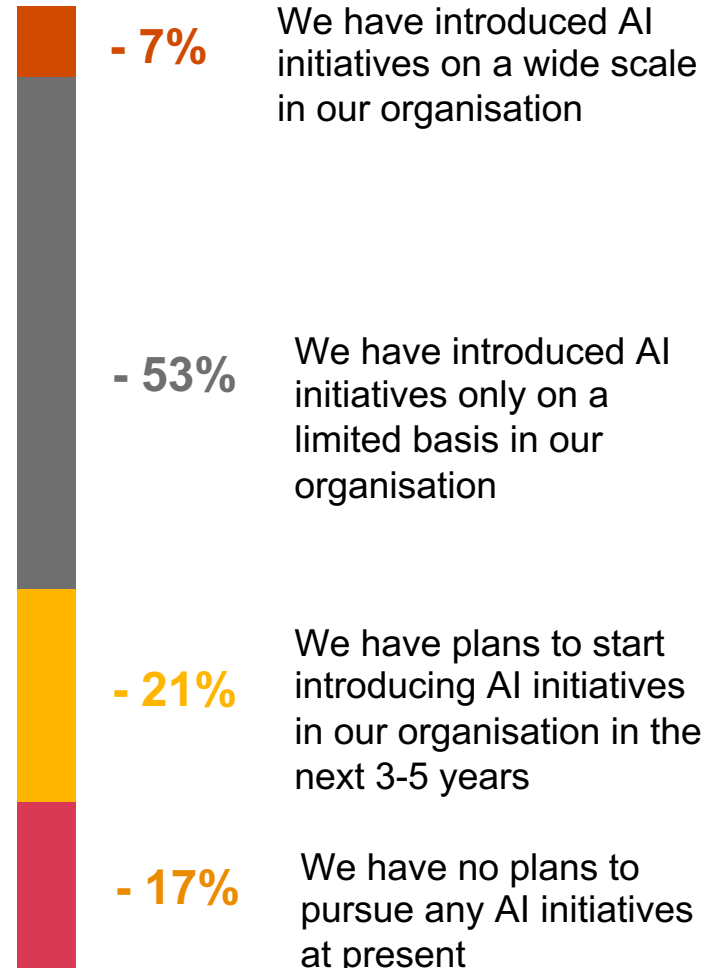
Machine Learning

- A set a predictive techniques
- System “learns” patterns from data
- Neural Networks most common

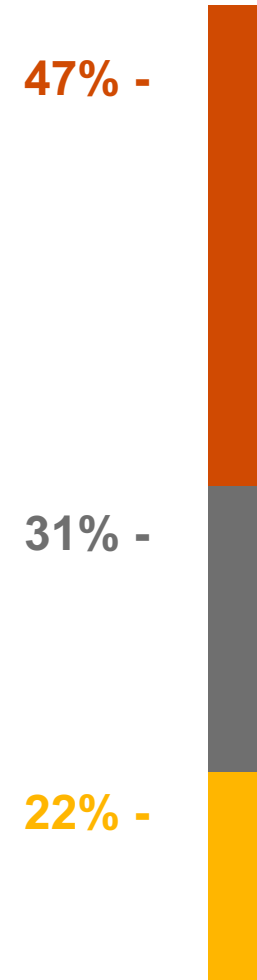
Few organisations have adopted AI widely: 7% say their companies have rolled out AI on a large scale.

How would you describe your businesses adoption of AI to date?

Ireland



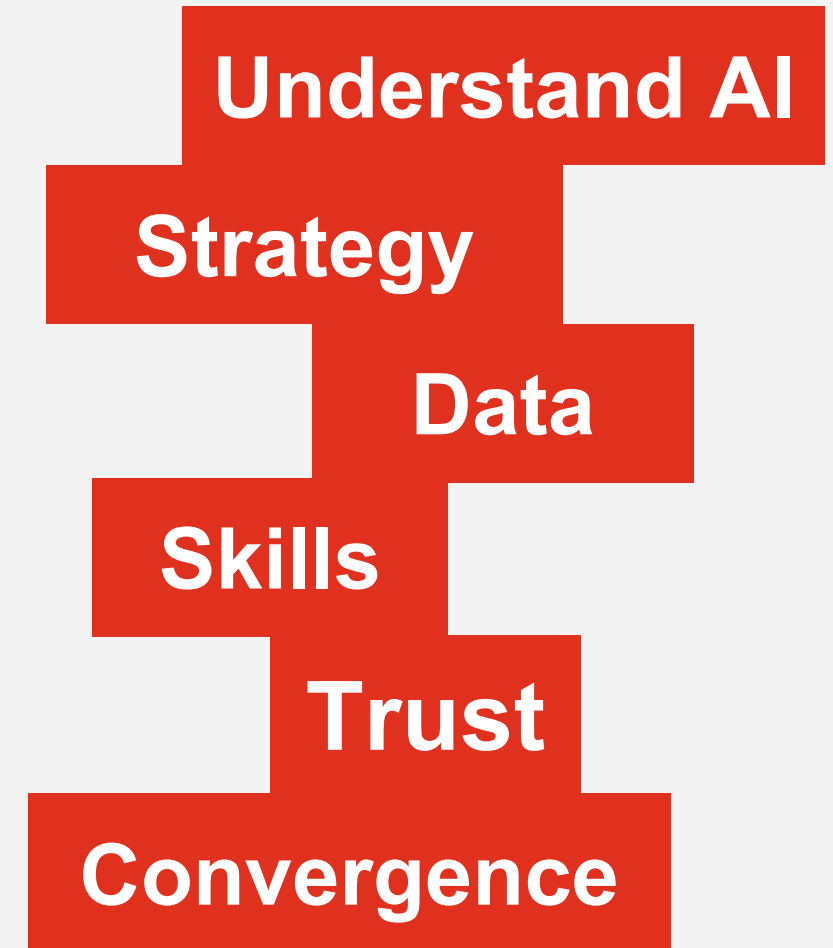
United States



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In 2019, AI will need:

- better understanding of applications and capabilities
- its own organizational strategy
- the right data in the right format
- a workforce with the correct skills
- trustworthy algorithms and the right data to train them
- integration with existing and emerging technologies



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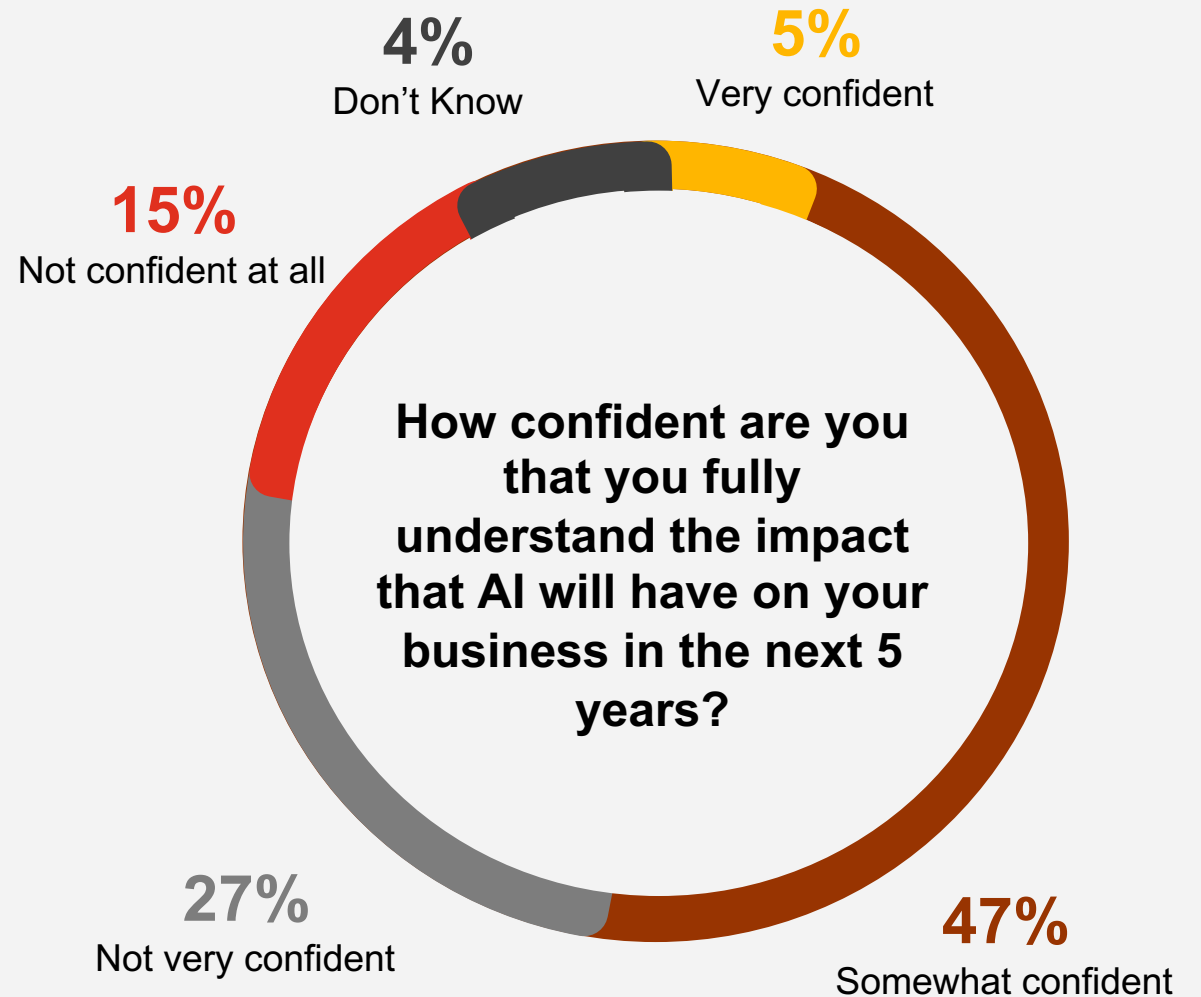
Understand AI: Better understanding of applications and capabilities

Assisted intelligence: Helping people make decisions faster and better.

Augmented intelligence: Working with people to find new solutions.

Autonomous intelligence: Automating decision making processes without human intervention.

Automated intelligence: Doing the tasks that people used to do.



27% of Irish organisations feel making business case for AI is their biggest challenge vs. 7% in US

Strategy: Organise for return on investment

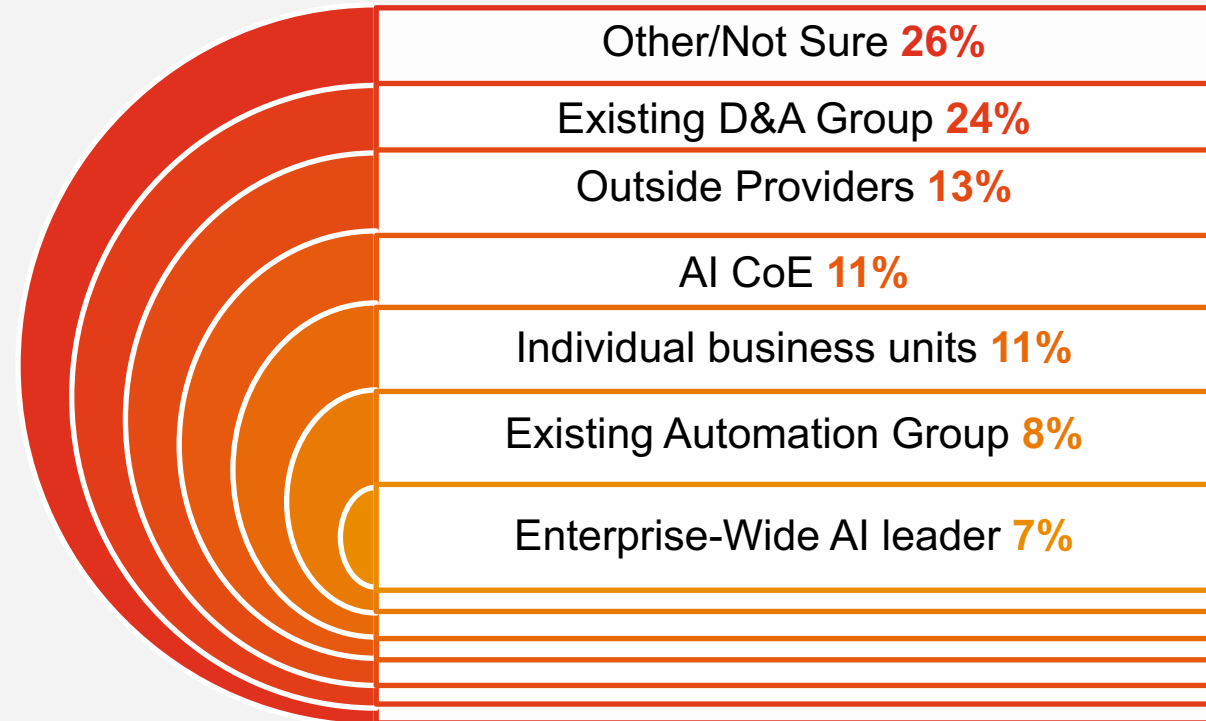
AI strategy belongs to everyone

Bring together AI, IT and core business leaders in a structured way to manage priorities, data strategy, resources and use cases.

Create the blocks to build success

Instead of applying AI to a complete process, focus on specific tasks that are common across the business and develop reusable AI solutions.

How will you implement and govern AI in 2019?



Only 3% of US firms Not Sure who owns AI

Data: Locate and label to teach machines

Label and standardise

Identify the data sets you need to train AI to solve specific business problems, then prioritize capturing and labeling that data in line with enterprise-wide standards.

Use new AI data tools

Lean and augmented data learning, transfer learning and other AI approaches can help do more with less much more easily.

Pay attention to policy

Align teams that are helping shape policies in different jurisdictions and address compliance by applying best practices globally.

Ireland

45%

of executives say labelling, standardizing, and integrating data is one of their top priorities for 2019.

29%

United States

Ireland

31%

say identifying and aggregating data from across the organisation is their top priority in 2019.

13%

United States

4

Skills: Build an AI-ready workforce with an agile mindset

Adapt your workforce strategy

Systematically identify how AI is changing job roles and skills; evolve upskilling, performance and compensation frameworks and develop new collaborative processes.

Cultivate a culture of continuous innovation

To attract and retain talent, use AI responsibly.

Train, coach, collaborate

Business specialists need training in basic data science concepts. Data scientists need coaching and collaborative structures to enable them to partner effectively with business staff.

Ireland 16% of executives say AI will create more jobs in their company in 2019.

United States 38% of executives say AI will create more jobs in their company in 2019.

Ireland 11% will develop a plan to identify new roles and skills as a result of AI.

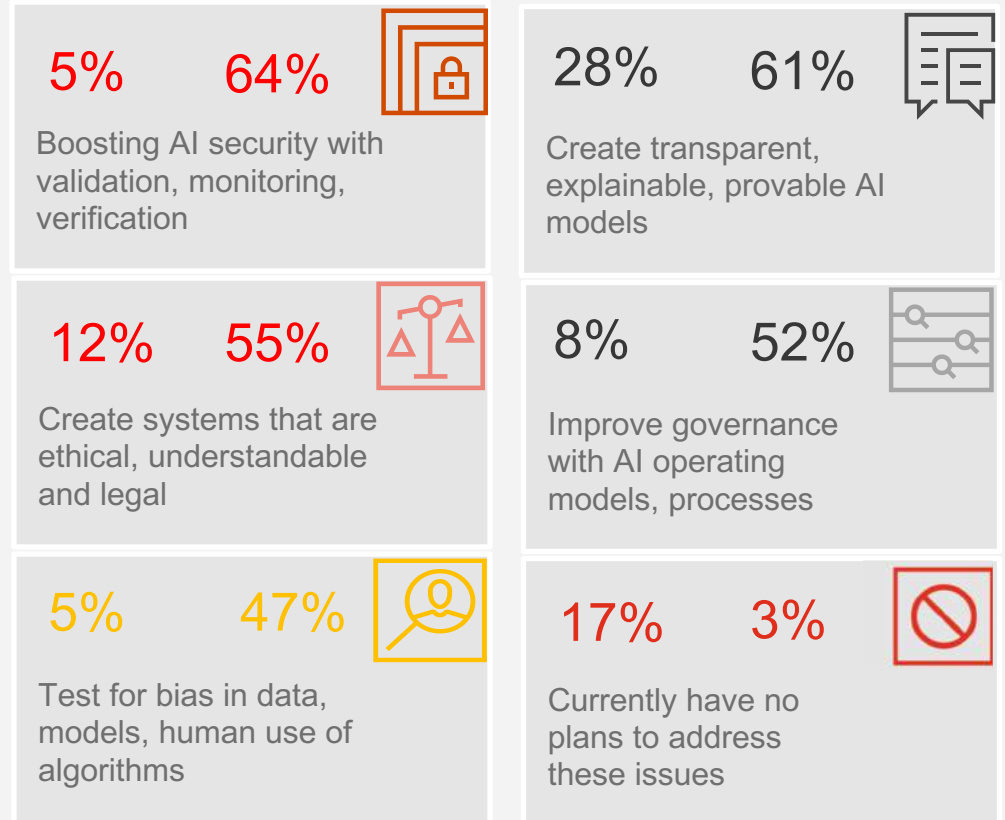
United States 56% will develop a plan to identify new roles and skills as a result of AI.

Trust: Make AI responsible

Create roles, accountability, and metrics in the five areas of responsible AI:

1. fairness
2. interpretability
3. robustness and security
4. governance
5. system ethics

Taking steps towards Responsible AI



6

Convergence: Combine AI with analytics, the IoT and more

Start with analytics and the IoT

Many technologies can benefit from AI, but advanced analytics and the IoT will bring sizable benefits.

Bring it all together

Combining AI with other technologies requires bringing together different teams. Emphasising continual feedback and iteration can speed processes and improve productivity.

Keep your AI systems fed with new data

Enterprise systems and IoT networks create data continuously. To prevent a decline in performance, continually train AI algorithms with the new data.

Ireland

5%

of executives say that managing convergence of AI with other technologies was one of their greatest challenges is the top data priority for 2019.

United States

12%

of executives say that managing convergence of AI with other technologies was one of their greatest challenges is the top data priority for 2019.

2%

say integrating IoT data so it can be used by AI systems is the top data priority for 2019.

10%

say integrating IoT data so it can be used by AI systems is the top data priority for 2019.

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Now is the time to develop your AI strategy. Your company will need to:

- ensure AI has its own organisational structure and workforce plans
- generate trustworthy algorithms with the right data to train those algorithms
- create a plan to reinvent the business to grow revenue and profits with AI
- converge AI with other existing and emerging technologies to create the most value.



Move quickly...
AI is.