RESPONSIBLE AI

accenture

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AI – A Practical Definition

ARTIFICIAL INTELLIGENCE

A system that can sense, reason, act and adapt

MACHINE LEARNING

A subset of AI focused on prediction, that relies on advanced analytics and statistical models to improve system performance with experience

DEEP LEARNING

A subset of machine learning in which multi-layered networks are employed to learn from vast amounts of data, permitting the system to perform tasks like speech and image recognition

2

The Case for Responsible AI

**OPPORTUNITY TO
UNLOCK TRAPPED VALUE**

AI affords a tremendous opportunity not only to increase efficiencies and reduce costs, but also to rethink businesses and solve critical problems.
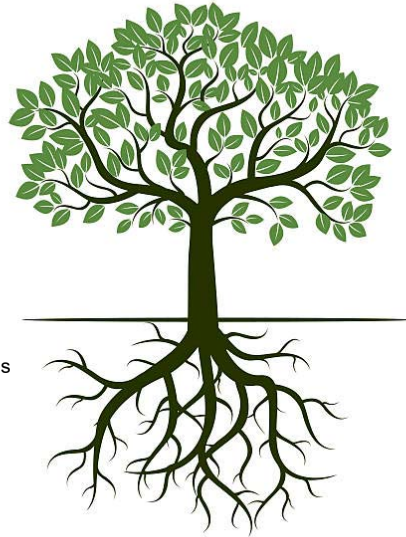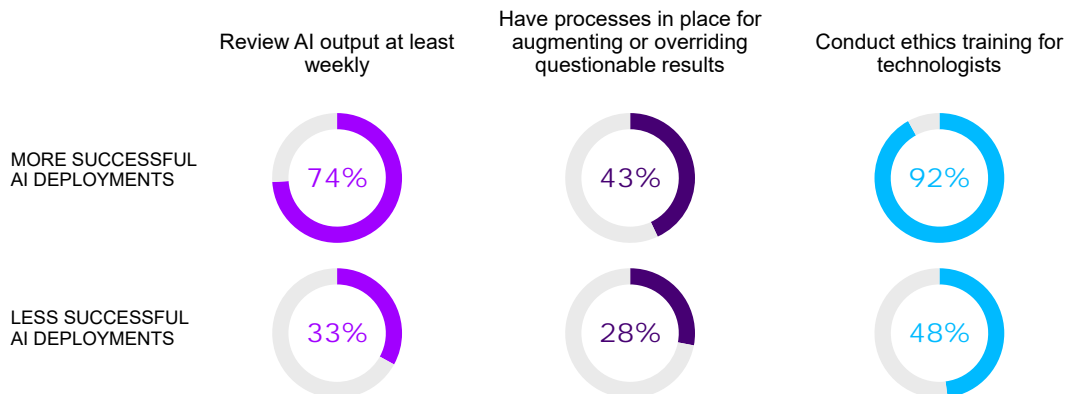
**UNINTENDED
CONSEQUENCES**

Unexpected but harmful outcomes have led to consumer backlash and legal problems. Further, launching AI without an understanding of its social and human agency impact can be problematic.

**COMPLIANCE
CHALLENGE**

Deploying AI without anchoring to robust compliance processes may expose a business to significant risks including employment/HR, data privacy, health and safety issues.

3

Responsible AI in the Field

A recent survey of 300 global executives found that leaders in AI adoption are also taking the lead on Responsible AI efforts.

While 45% of respondents characterized the status of their organization's AI deployment as fully deployed for one or more use cases, the other 55% continue to experiment with protypes, proofs of concept and pilots.

|	Review AI output at least weekly	Have processes in place for augmenting or overriding questionable results	Conduct ethics training for technologists
MORE SUCCESSFUL AI DEPLOYMENTS	74%	43%	92%
LESS SUCCESSFUL AI DEPLOYMENTS	33%	28%	48%

4

What Canadians Say

TD recently surveyed 1200 Canadian adults to understand their attitudes and expectations about AI.
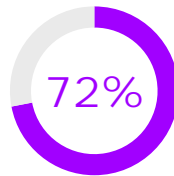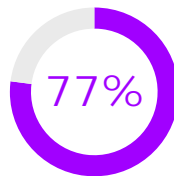
72%
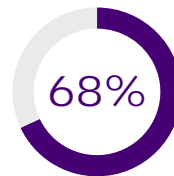are comfortable with AI if it means they will receive personalized services
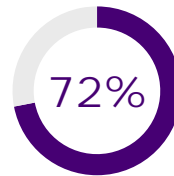
72%
say they have come to expect personalized experiences from the companies they transact with
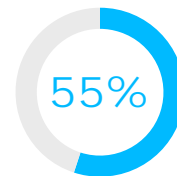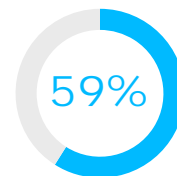
55%
say companies should be transparent about how they are using AI

77%
are concerned that AI is advancing too quickly to really understand the potential risks

68%
are concerned they don't understand the technology well enough to know the risks

59%
believe the lack of diversity among people working in AI could lead to biases in how the technology is being developed

5

Pillars of a Responsible AI Program

Fairness	Transparency	Accountability	Ethics
The absence of bias so that decisions do not disadvantage an individual or a group.	The ability to explain the outputs of AI solutions and the data used to arrive at the outputs, particularly when the output affects human lives.	The assignment of decision making accountability to a human, regardless of whether AI supports that decision.	The alignment of AI approaches to the organization's code of business ethics, and the adoption of human + machine principles including education & empowerment.
Bias should be assessed in the training data, in the algorithms and in the AI developers.	Explainability can be difficult in complex algorithms where millions of computations may be done to arrive at a conclusion.	Organizations make important decisions every day; these must continue to be made with humans in the loop	Ethical considerations include a wide range of topics like community, consent, confidentiality and care

Design

Operate

Govern

6