The human side of AI

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The future we want?


Created with DALL·E

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Some challenges today

- Too little representative data for transgender and non-binary people, and for non-gendered language

- Gender (mis)classification: voice & image

- Binary way of representing data

- Too few LGBTQ+ people working in AI / tech

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Because Responsible AI is a socio-technological challenge, it needs to be approached holistically
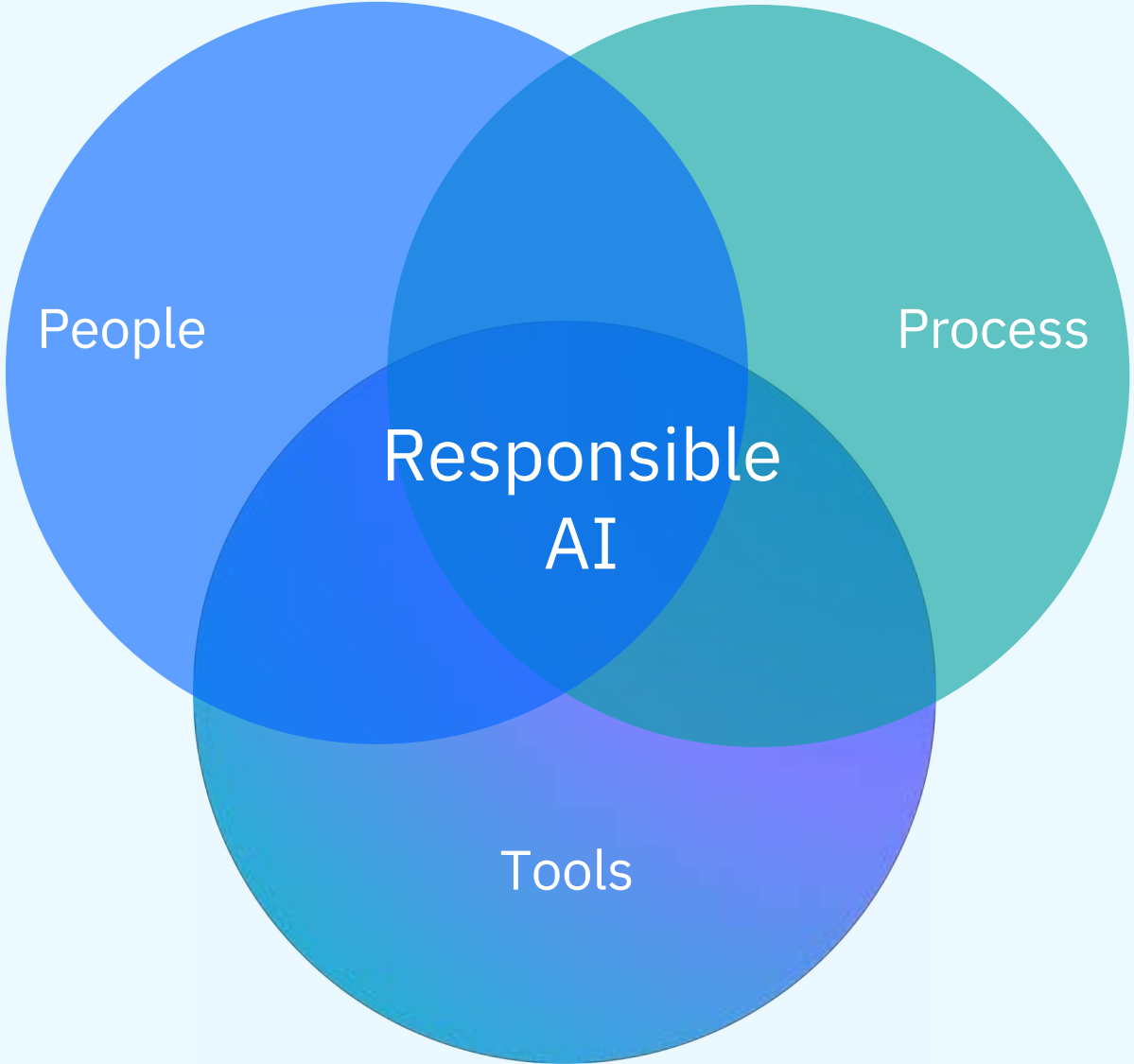
Trust in people & culture
Ensure you have the right capabilities, practices, and operating model to design and build for trust.

Trust in processes
Ensure compliance, repeatability and organizational governance for AI at scale.

Trust in data & technology
Increase reliability, robustness and security leveraging solid engineering & technology across the AI lifecycle.

Principles for Trust and Transparency

1 The purpose of AI is to augment — not replace — human intelligence

2 Data and insights belong to their creator

3 New technology, including AI systems, must be transparent and explainable

Pillars of Trust
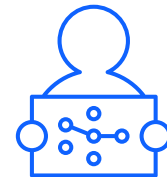
Explainability
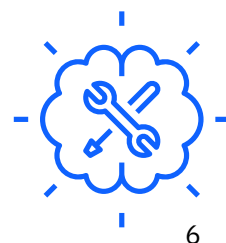Easy to understand outcomes/decisions
Why did the AI arrive at an outcome? When would it have been different?

Fairness
Impartial and addressing bias
Are privileged groups at a systematic advantage compared to other groups?

Robustness
Handle exceptional conditions effectively
Can we evaluate and defend against a variety of threats?

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Transparency
Open to inspecting facts and details
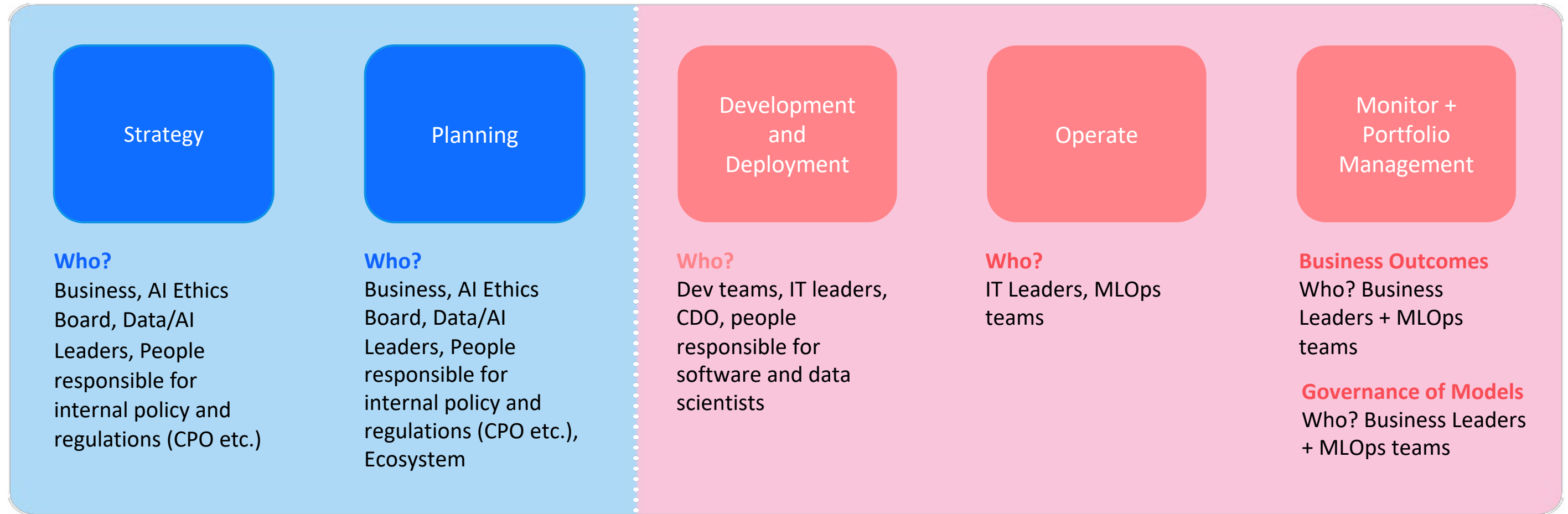*Can we increase understanding of why and how AI was created?*

Privacy
High integrity data & business compliance
How do we ensure owners retain control of data and insights?

AI Governance

Strategy	Planning	Development and Deployment	Operate	Monitor + Portfolio Management
Who? Business, AI Ethics Board, Data/AI Leaders, People responsible for internal policy and regulations (CPO etc.)	**Who?** Business, AI Ethics Board, Data/AI Leaders, People responsible for internal policy and regulations (CPO etc.), Ecosystem	**Who?** Dev teams, IT leaders, CDO, people responsible for software and data scientists	**Who?** IT Leaders, MLOps teams	**Business Outcomes** Who? Business Leaders + MLOps teams **Governance of Models** Who? Business Leaders + MLOps teams

ORGANIZATIONAL AI Governance

Decide and drive the AI strategy for the organization. Establish AI policies for the organization. (This may include AI principles, regulations, laws, etc.) => AI Ethics Board

Encode the policies into business rules, guidelines and transparent reporting mechanism. Determine appropriate guardrails and parameters

AI *MODEL* GOVERNANCE in the LIFE CYCLE

Instrument the processes with technology to implement the guardrails

Enable data collection and transparent reporting to make needed information available to *all stakeholders*.

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IBV study – AI Ethics in Action

1,200 respondents

22 countries, 16 roles

In partnership with Oxford Economics, the IBM Institute for Business Value surveyed 1,200 executives in 22 countries across North America, Latin America, Europe, Middle East and Africa, and Asia (including China and India) from May through July 2021

The survey scope included 16 business and technology roles—primarily executives but also AI professionals— from more than 22 industries.
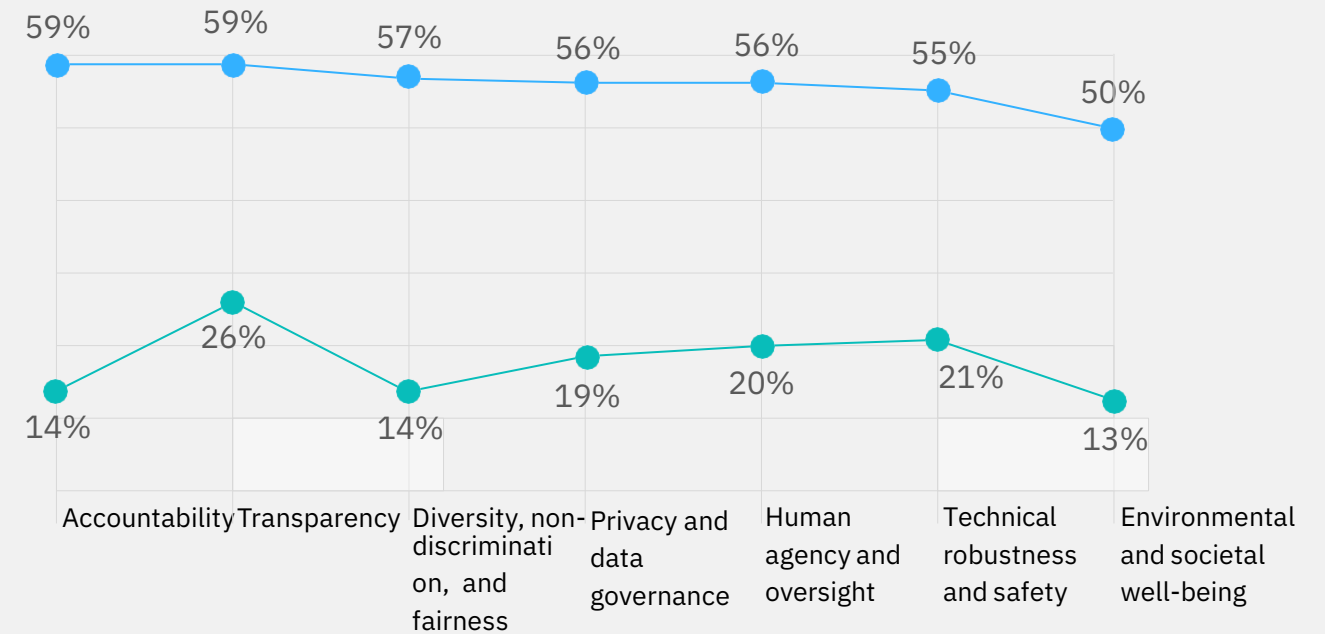
The median revenue/budget for surveyed organizations was just under $3B.

North America

Europe

Greater China

Latin America

Middle East and Africa

Asia Pacific

Organizations' aspirations—
intensified by the urgency
to meet market expectations—
seem to be exceeding
their ability to put intent into
practice quickly enough
to appease stakeholders

The intention-action gap

Organizations are endorsing AI ethics principles— but are still catching up on implementing them

	Accountability	Transparency	Diversity, non-discrimination, and fairness	Privacy and data governance	Human agency and oversight	Technical robustness and safety	Environmental and societal well-being
Endorsed	59%	59%	57%	56%	56%	55%	50%
Operationalized	14%	26%	14%	19%	20%	21%	13%

Endorsed | Operationalized

Note: AI ethics principles as defined by the European Commission High-Level Expert Group on AI in "Ethics guidelines for trustworthy AI." April 2019. https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai

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Closing these operational gaps is critical

For example, for AI to become less biased and more trustworthy, the ethics principle of diversity, non-discrimination, and fairness must be addressed

To address this issue, employees working on AI ethics should represent the broader audience

Diversity dichotomy

Organizations' AI teams are significantly less diverse than their enterprise workforces

Women	BIPOC	LGBTQ+

Enterprise | AI   33% | 6%   10% | 6%   4% | 1%
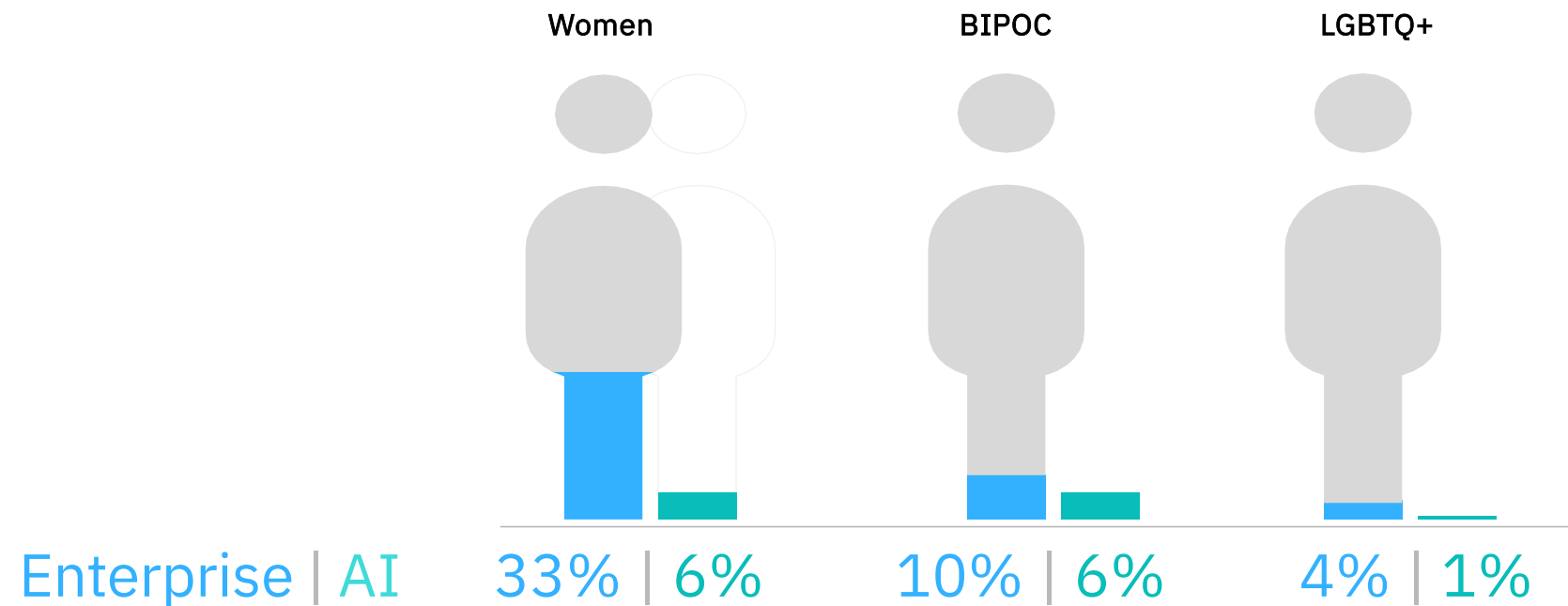
Impetus to action:
Responsible AI can deliver business value

Companies can potentially realize additional benefits. Achieving sustainable practices and guarding information quality— as well as embracing long-term thinking over short-term profits— tangibly increases trust in consumers' minds

75%

of respondents view ethics as a source of competitive differentiation

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Other IBV research reveals that consumers, citizens, and workers view AI as a top technology to help solve the most pressing challenges facing humanity

More than

85%

of respondents indicate that it is important for organizations to address AI ethics while tackling society's problems[6]

6. IBM Institute for Business Value Human Insights Global Survey of 14,526 adults. July 2021. Unpublished analysis.

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Companies that do good can do better, if they do it right

43%
Consumers are ready to pay more than 100% premium to environmentally sustainable brands[2] compared to 8% two years back[3]

70%
Employees are more likely accept a job offer from an organization they consider to be environmentally and socially responsible[4]
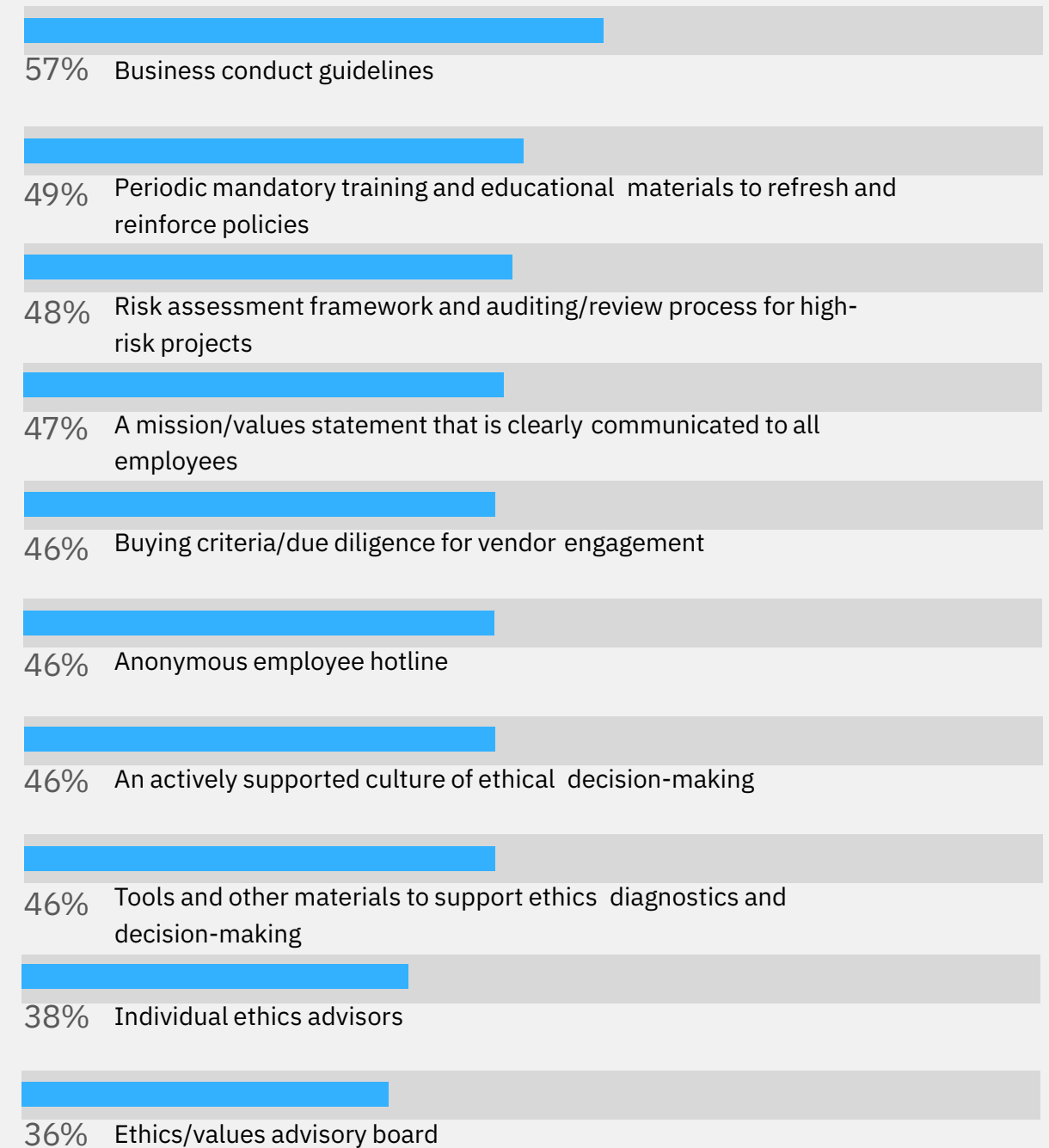
92%
Investors expected to invest, divest, or lobby fund managers to change investment mixes based on environmental factors and/or social responsibility in the next 12 months[5]

2,3,4 ,5 Gupta, Sachin, Sashank Yaragudipati, Jane Cheung, and Chris Wong. "The last call for sustainability: An urgent growth agenda for consumer products and retail." IBM Institute for Business Value. August 2021. https://ibm. co/sustainability-consumer-products-retail

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Companies that view AI as central to their business models have embraced governance approaches specific to AI ethics

First steps

Many organizations are incorporating AI ethics into existing business ethics mechanisms

57% Business conduct guidelines

49% Periodic mandatory training and educational materials to refresh and reinforce policies

48% Risk assessment framework and auditing/review process for high-risk projects

47% A mission/values statement that is clearly communicated to all employees

46% Buying criteria/due diligence for vendor engagement

46% Anonymous employee hotline

46% An actively supported culture of ethical decision-making

46% Tools and other materials to support ethics diagnostics and decision-making

38% Individual ethics advisors

36% Ethics/values advisory board

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Let's create responsible AI together!

Let's connect

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Thank you!