The State of Responsible AI in India 2023

nasscom

Survey Report - December 2023



About the report

In a remarkably short span, Responsible AI (RAI) has evolved from being a mere buzzword to a compelling business imperative. Today it stands as a guiding principle shaping the very fabric of AI development and use. Businesses that once viewed ethical considerations as peripheral are now recognising their centrality in establishing brand integrity and fostering long-term relationships with stakeholders.

Even as RAI is an evolving expectation whose implementation is plagued by various technical, commercial, and regulatory challenges, the importance of transparency and trust in commercial development and use of AI technologies cannot be overstated. The growing demand for RAI amongst AI users and stakeholders is pushing industry leaders to invest in sophisticated RAI tools and strategies and demonstrate transparency in their AI practices.

This survey report by nasscom highlights the beliefs and perceptions of the Indian tech industry about its key strengths and critical areas for improvement when it comes to RAI compliance. The report is based on our analyses of the data collected via a dipstick survey of 535 senior executives from across large, small and medium-sized enterprises (SMEs) and startups engaged in the commercial development and/or use of AI in India.

Insights from this report are expected to stimulate the development of more robust industrial policies and strategies for ensuring RAI compliance and to guide positive regulation that strikes the right balance between fostering innovation and safeguarding ethical principles.



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Survey Methodology

nasscom conducted a dipstick survey to draw early insights on the preparedness of the Indian tech industry to meet the benchmarks for RAI compliance.

We collected and analysed responses from 535 senior executives from across large enterprises (with annual revenue > INR 250 crores), SMEs (with annual revenue => INR 100 crores and <= INR 250 crores) and startups (with annual revenue < INR 100 crores) engaged in the commercial development and use of discriminative and generative Al technologies. The questionnaire was administered both online through a public call for participation and in person at industry events and conferences held by nasscom between October and November 2023.

The respondents were asked to report the RAI maturity of their businesses by choosing one of the following options:

- (a) matured RAI practices and policies ("Matured"),
- (b) formal steps towards RAI adoption initiated ("Advancing"),
- (c) basic awareness of RAI imperatives without a formal strategy or framework ("Exploring"), and
- (d) RAI practices not in place ("Lagging").

The respondents were then asked 9 self-assessment questions based on certain key benchmarks for RAI compliance, as laid down in the nasscom <u>Responsible AI Resource Kit</u> and nasscom <u>Responsible AI Guidelines for Generative AI</u>.



Key Findings

- **OI** Indian businesses are gearing up steadily for RAI adoption.
 - **~30 percent** of respondents reported having matured RAI practices and policies, while **~30 percent** reported having initiated formal steps towards RAI adoption. **~30 percent** reported having basic awareness of RAI imperatives without a formal strategy or framework, and **~10 percent** reported having no RAI practices in place.
- **Businesses reporting higher AI maturity also tend to report higher RAI maturity.**More than **60 percent** of respondents reporting the highest level of AI maturity also reported having matured RAI practices and policies.
- O3 Large enterprises are 2.3x more likely than startups and 1.5x more likely than SMEs to report matured RAI practices and policies.

As expected, the majority of businesses that reported having matured RAI practices and policies were large enterprises (~43 percent); ~28 percent were SMEs, and ~19 percent were startups.

O4 Developers are almost two times more likely than users to report higher levels of RAI maturity. ~34 percent of AI developers reported having matured RAI practices and policies compared to only ~18 percent of users.

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Key Findings

- O5 Businesses across key industries are progressing to achieve satisfactory levels of RAI maturity.

 ~30 percent of businesses in Technology, Media and Telecommunications (TMT), ~38 percent of businesses in Banking, Financial Services and Insurance (BFSI) and ~21 percent of businesses in healthcare reported having matured RAI practices and policies. Moreover, about one-third of businesses across each of these industries reported having initiated formal steps towards RAI adoption.
- Workforce development remains central for businesses to ensure robust RAI implementation.

 ~89 percent of businesses that reported having matured RAI practices and policies also reported commitments to continue investments in workforce sensitisation and training to ensure the development and implementation of robust RAI compliance strategies. More than 60 percent of businesses that reported lower levels of RAI maturity also reported commitments to improve compliance through investments in workforce sensitisation and training.
- O7 Business leaders tend to feel most confident about meeting obligations around data protection and least confident about meeting regulatory compliances.
 - ~49 percent of respondents reported being most confident about meeting obligations around data protection and ~59 percent reported being least confident about meeting regulatory compliances, relative to other metrics for RAI compliance, like transparency and explainability.



Key Findings

- **8** Businesses lean towards top down accountability for RAI compliance.
 - ~ **69 percent** of respondents suggested that the major share of accountability for RAI compliance should lie with the C-suite or the board of directors. ~20 percent suggested that it should lie with senior executives, including heads of relevant departments and functions.
- OP AI ethics boards and committees are gradually gaining ground.
 - ~55 percent of businesses that reported having matured RAI practices and policies also reported having constituted an internal AI ethics board or committee.
- Lack of access to high-quality data and shortage of skilled technical and management personnel remain the biggest barriers to RAI implementation.
 - ~33 percent of businesses reported lack of access to high-quality data as the biggest barrier to RAI implementation. 26 percent reported shortage of skilled technical and management personnel and ~23 percent reported regulatory uncertainty as the biggest barrier to RAI implementation.





Indian businesses are gearing up steadily for RAI adoption



~3 in 10

businesses reported having matured RAI practices and policies



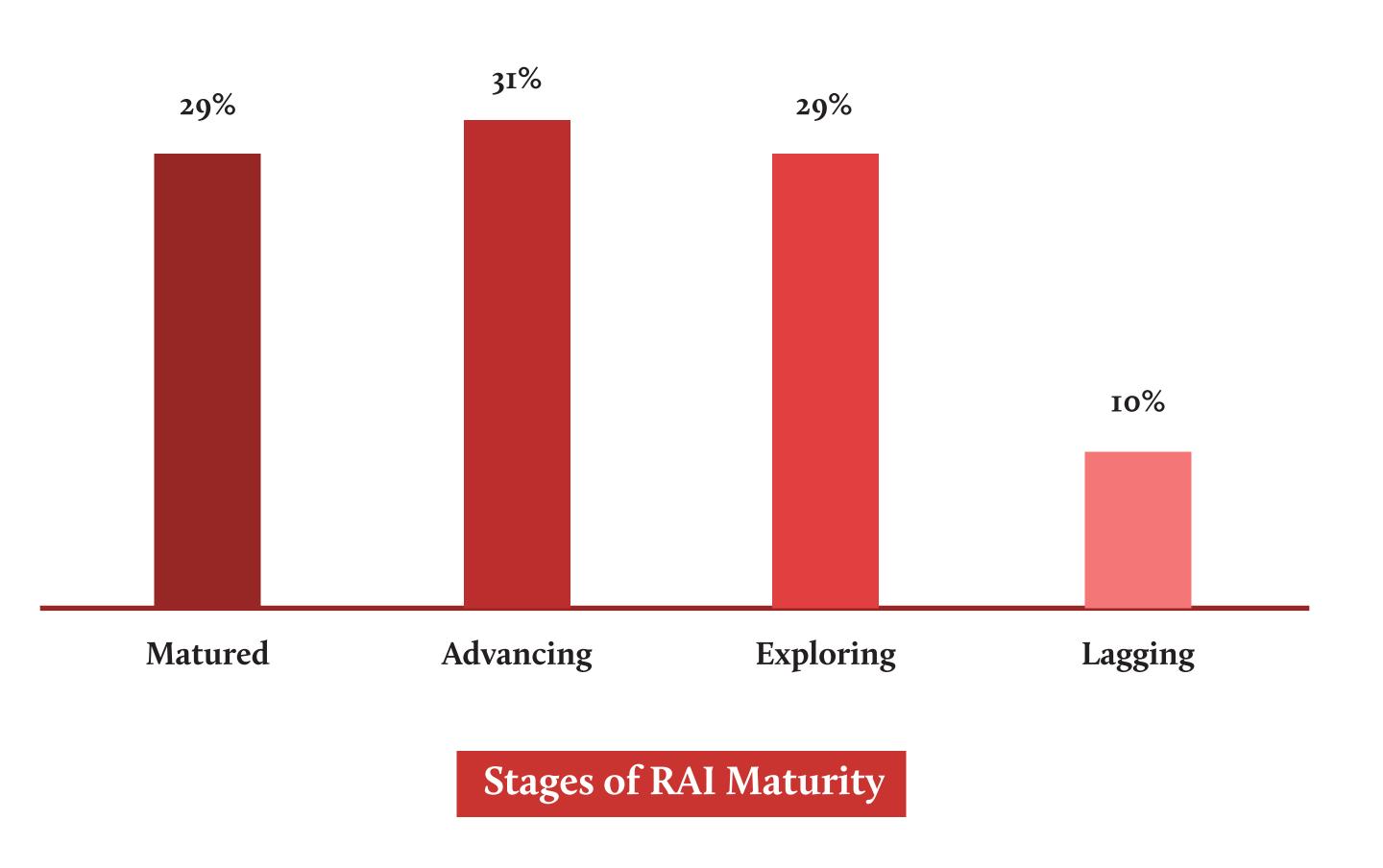
~3 in 10

businesses reported having initiated formal steps towards RAI adoption



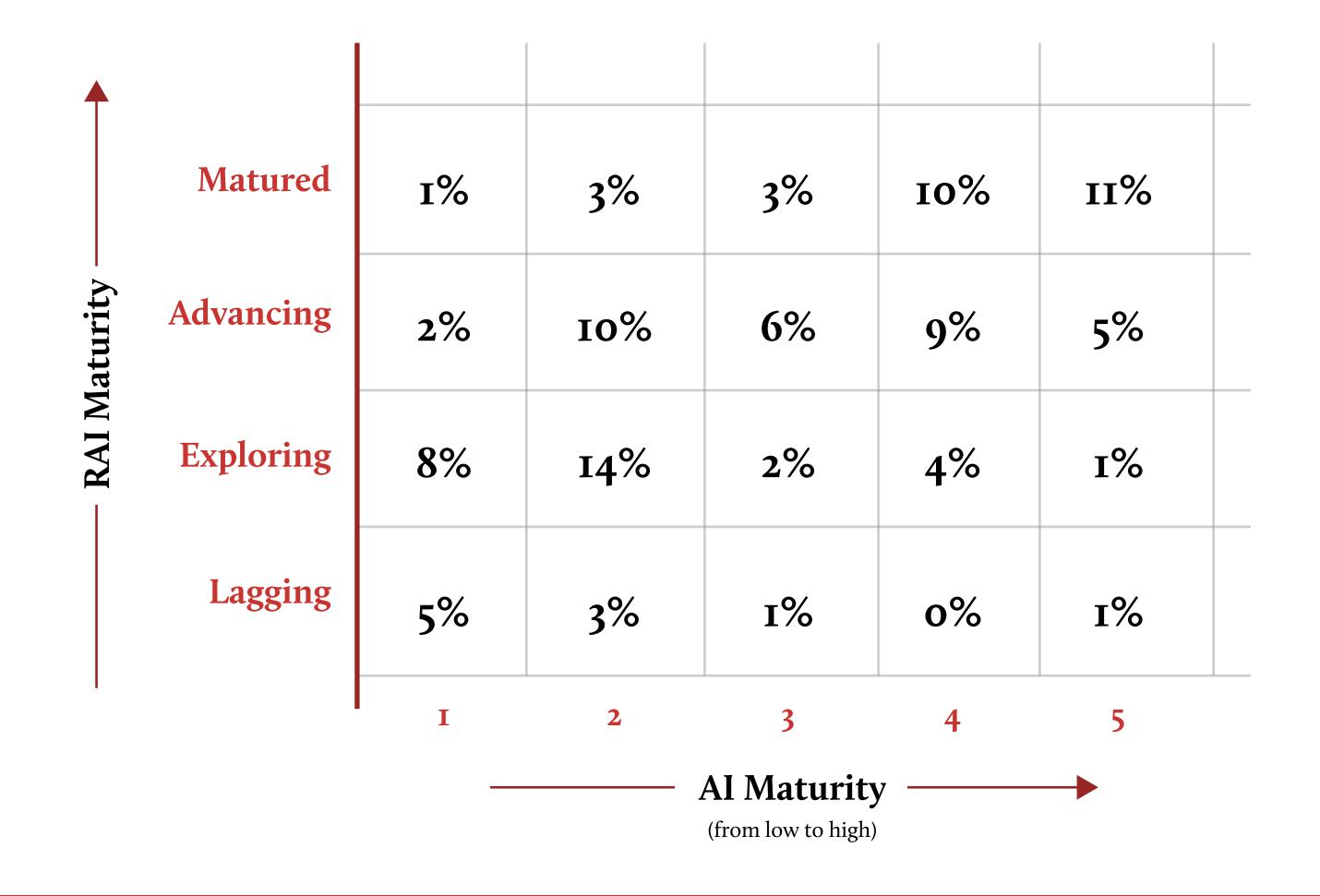
~3 in 10

businesses reported having basic awareness of RAI imperatives without a formal strategy or framework





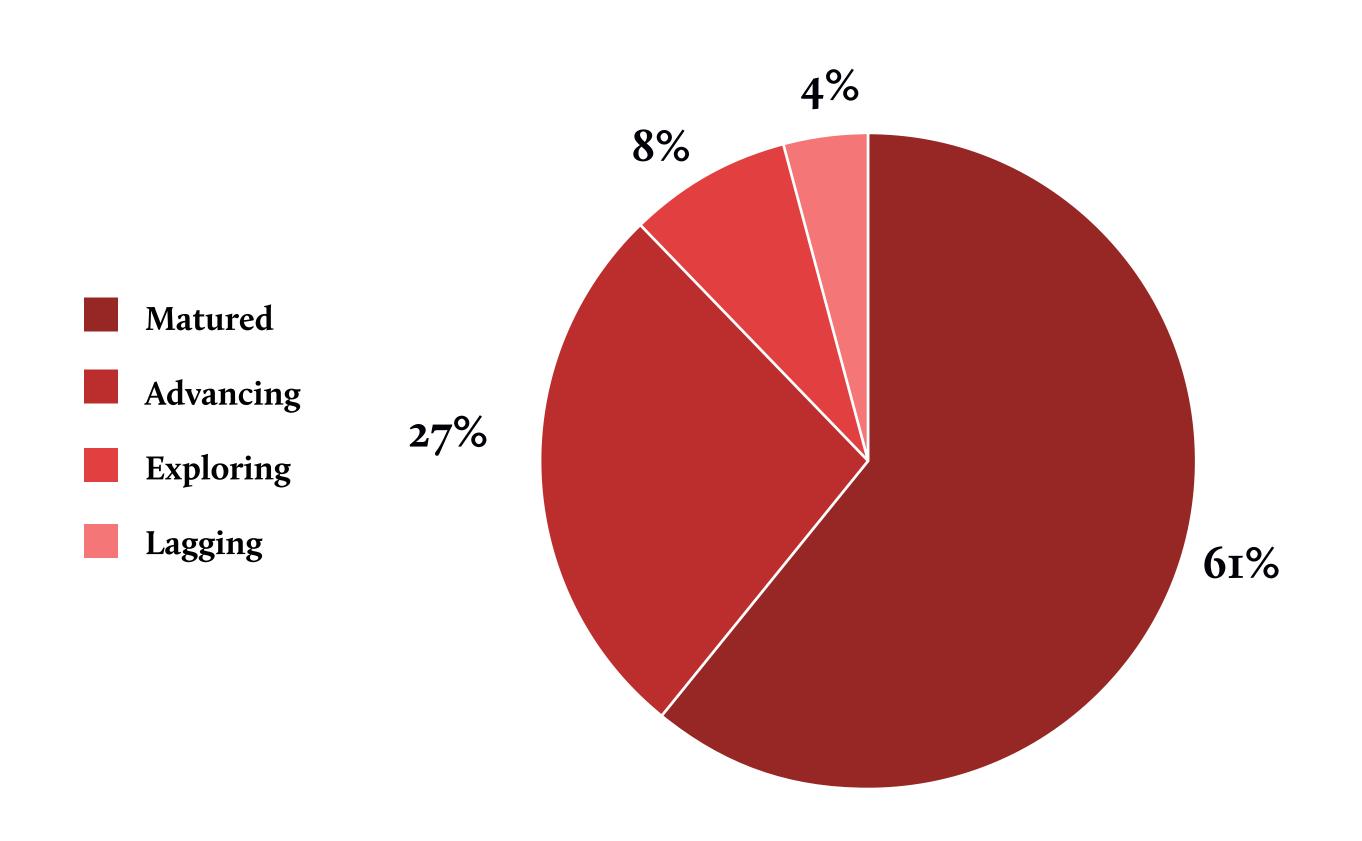
Businesses reporting higher AI maturity also tend to report higher RAI maturity





> 6 in 10

businesses reporting integration of AI across critical functions also reported having matured RAI practices and policies



This is a positive trend line as higher levels of Al adoption should be accompanied by higher levels of responsibility and improved measures for RAI compliance amongst businesses to sustain user trust



Large enterprises reporting higher RAI maturity than SMEs and startups







reported having matured RAI practices and policies



reported having either no RAI practices in place or having only basic awareness of RAI imperatives without a formal strategy or framework

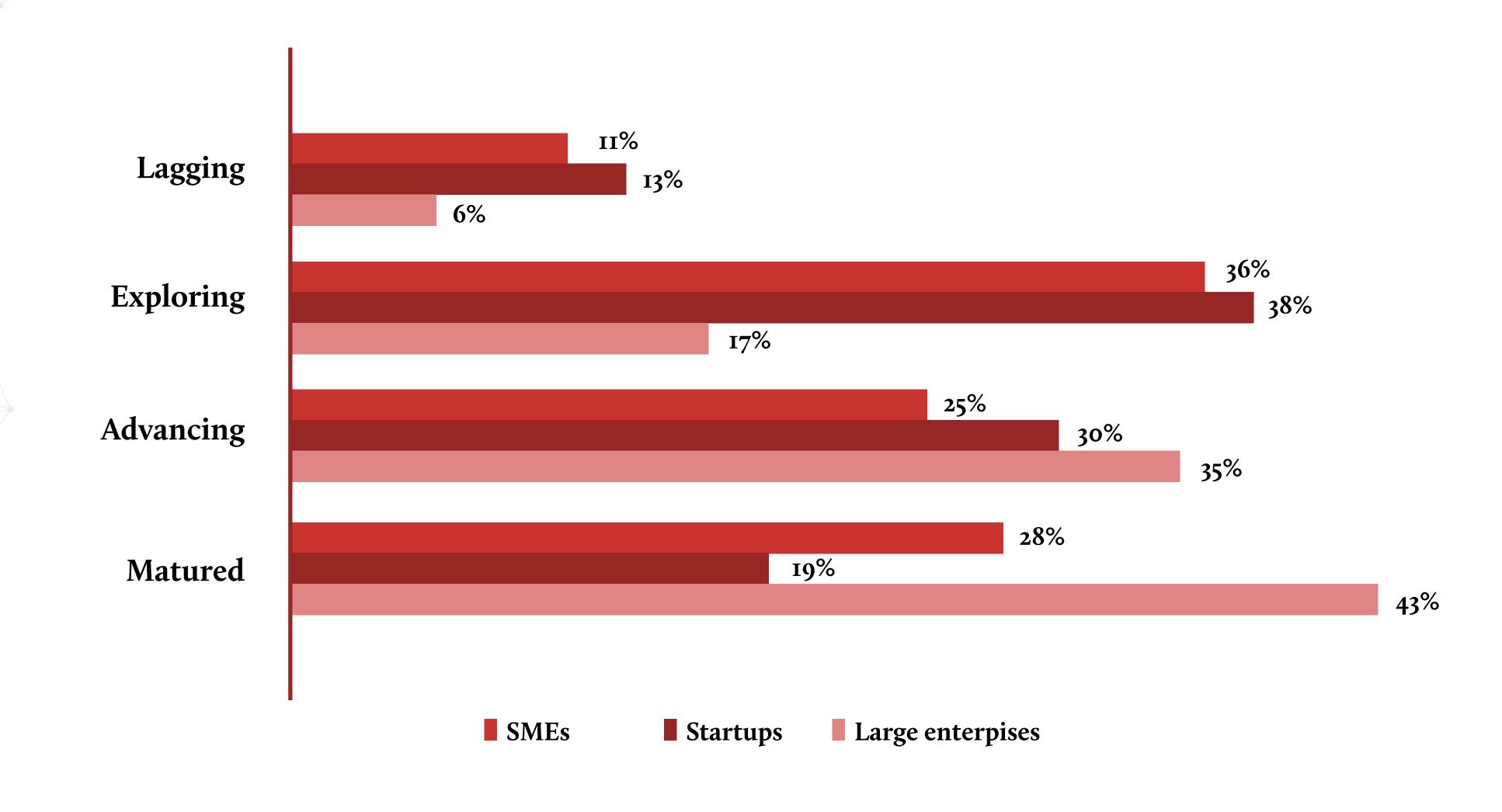




The finding reaffirms that large enterprises are typically much better equipped than SMEs and startups to devise robust RAI implementation strategies



% of businesses across the four stages of RAI maturity





Developers vs. Users

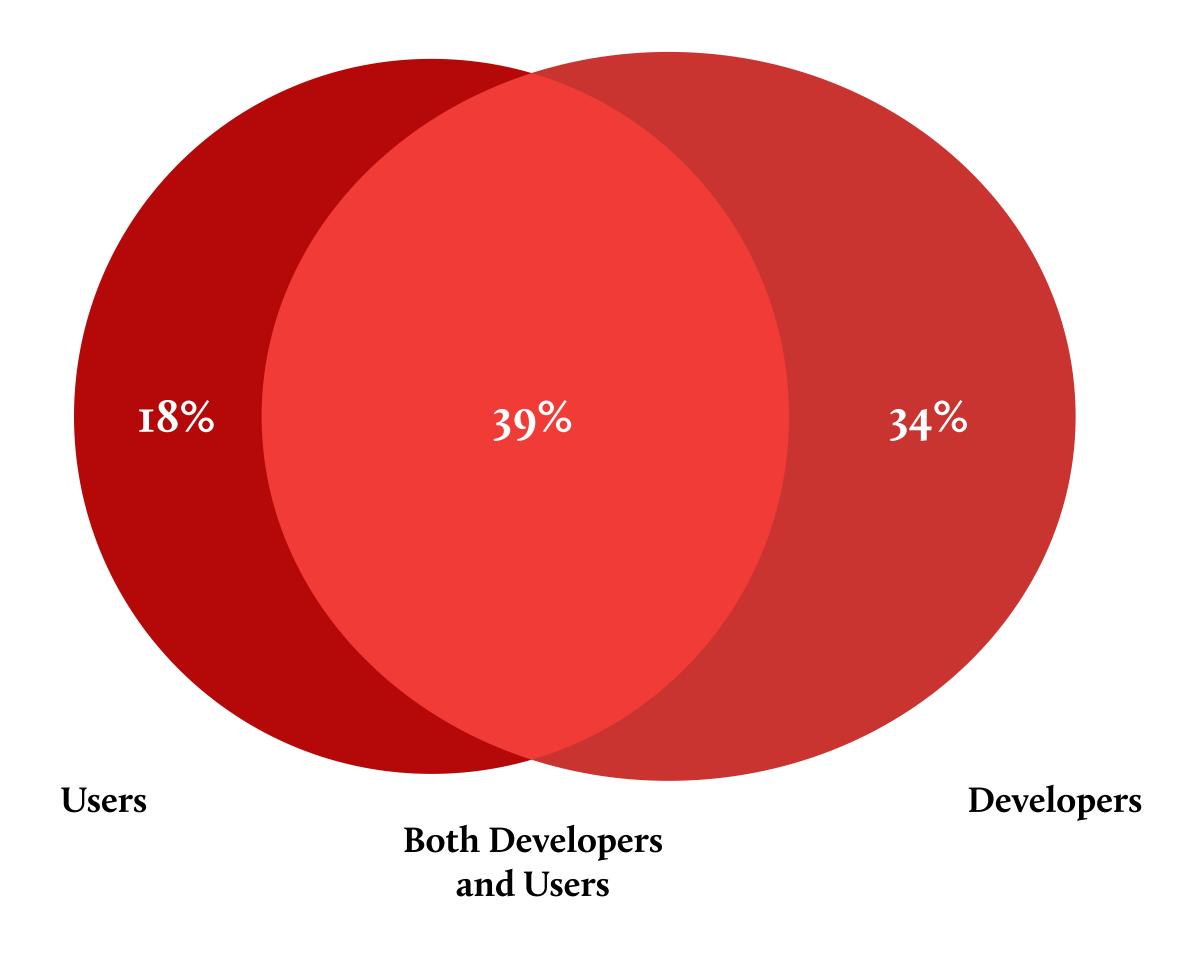
Developers are almost two times more likely than users to report higher levels of RAI maturity





reported having matured RAI practices and policies

This finding aligns with the notion that developers generally exercise greater control over model design and its potential uses, and therefore, should bear a greater responsibility in shaping Al systems for compliant and ethical use





RAI compliance in key industries viz. TMT, BFSI, and Healthcare

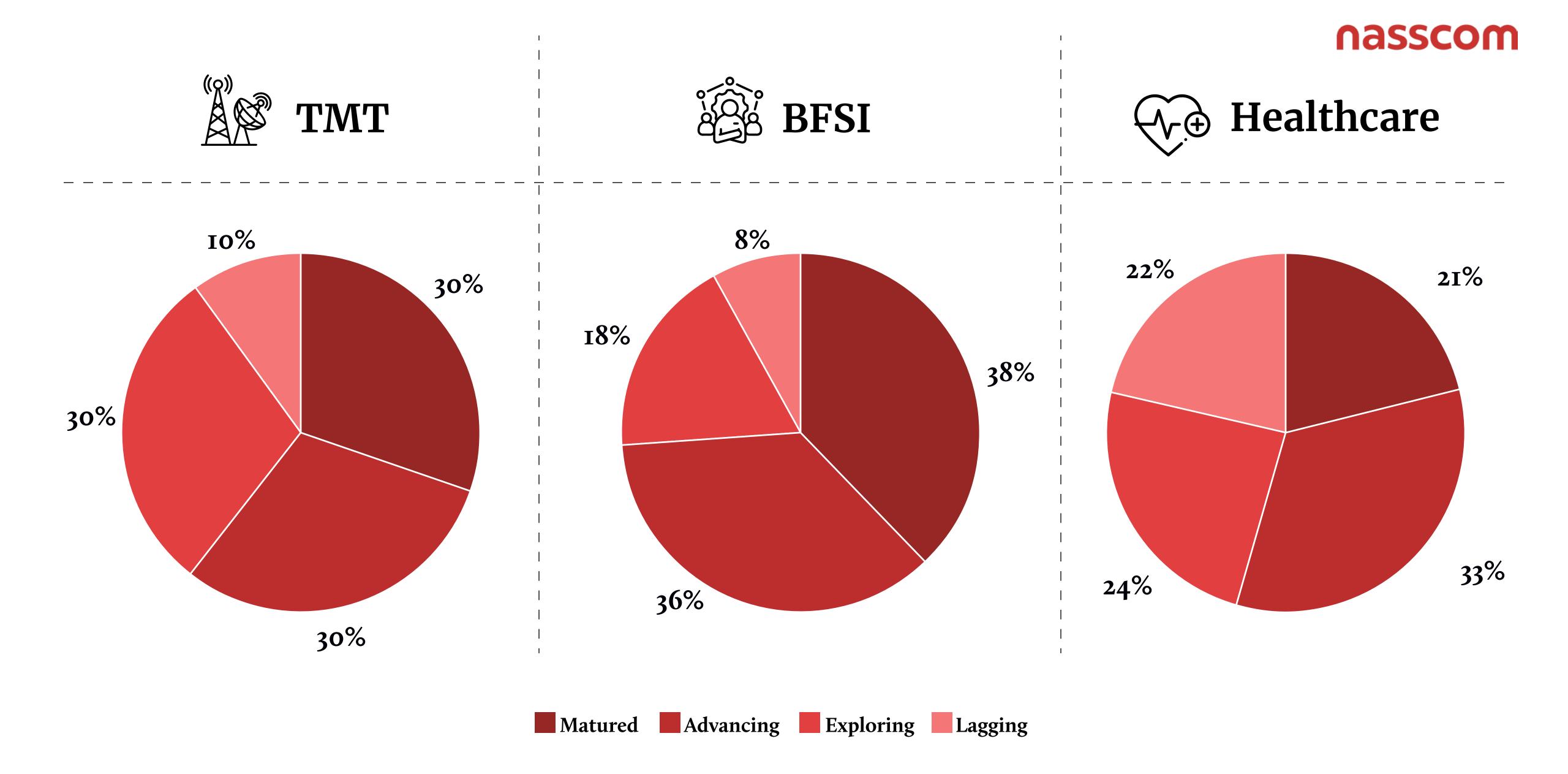






reported having matured RAI practices and policies

Moreover, about one-third of businesses across each of these industries reported having initiated formal steps towards RAI adoption





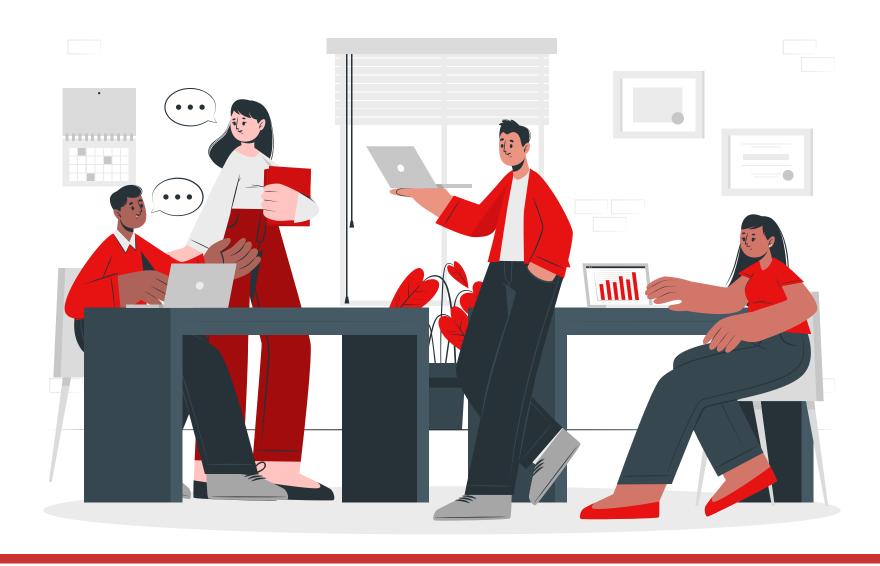
Workforce development remains at the core of robust RAI compliance

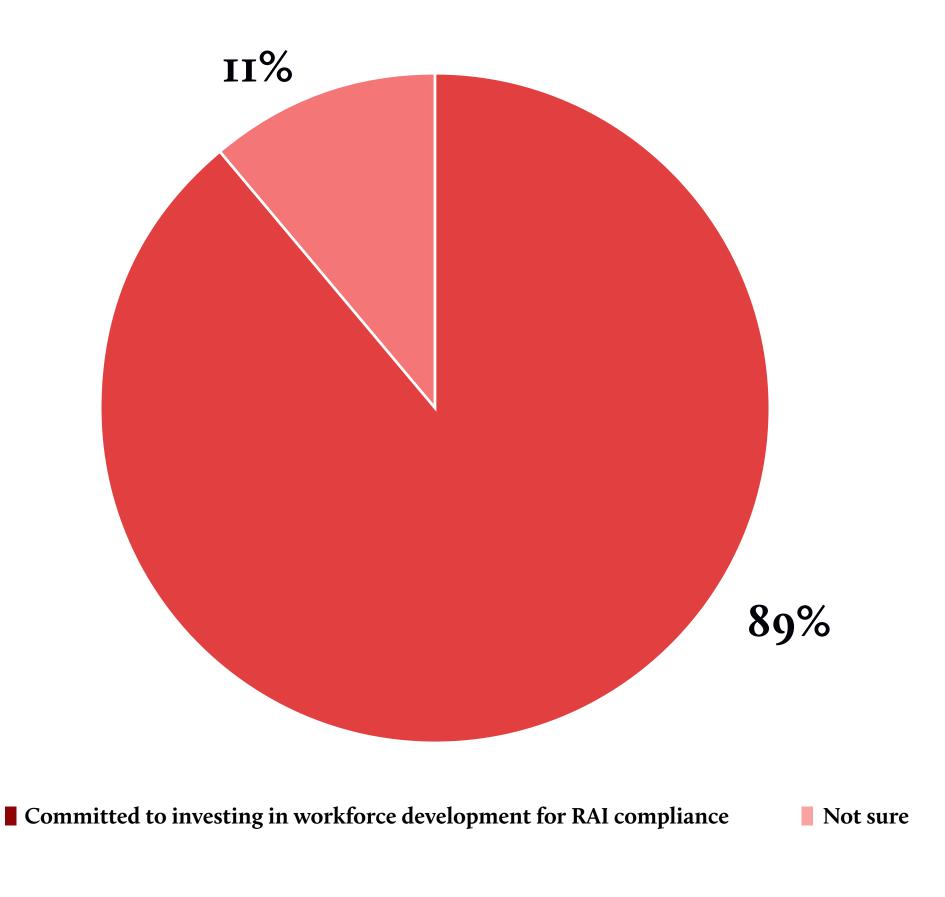
Among businesses that reported having matured RAI practices and policies



~89 percent

also reported commitments to continue investments in workforce sensitisation and training to ensure development of robust RAI compliance strategies









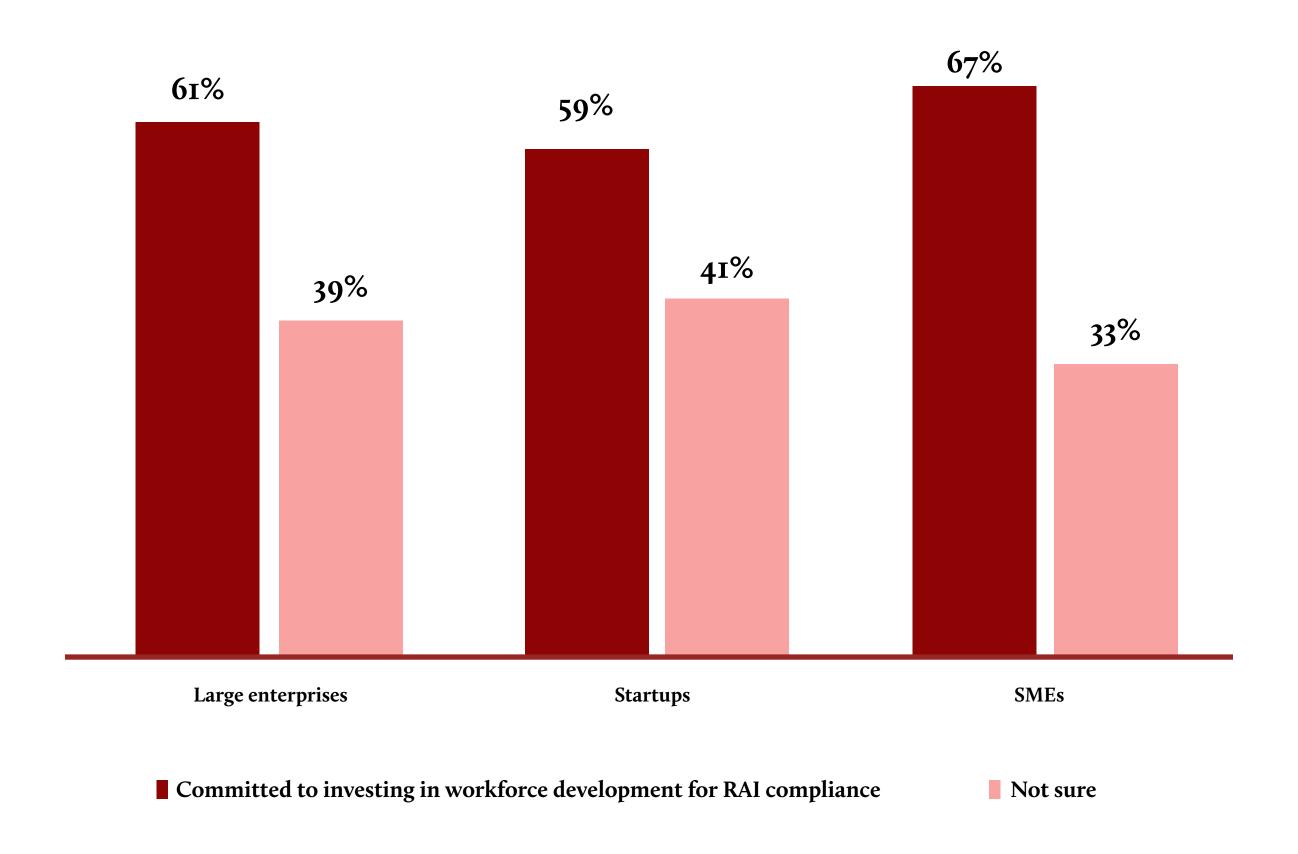




~67 percent

SMEs

that reported lower levels of RAI maturity also reported commitments to improving compliance through investments in workforce sensitisation and training





Industry confidence vis-à-vis metrics for RAI compliance

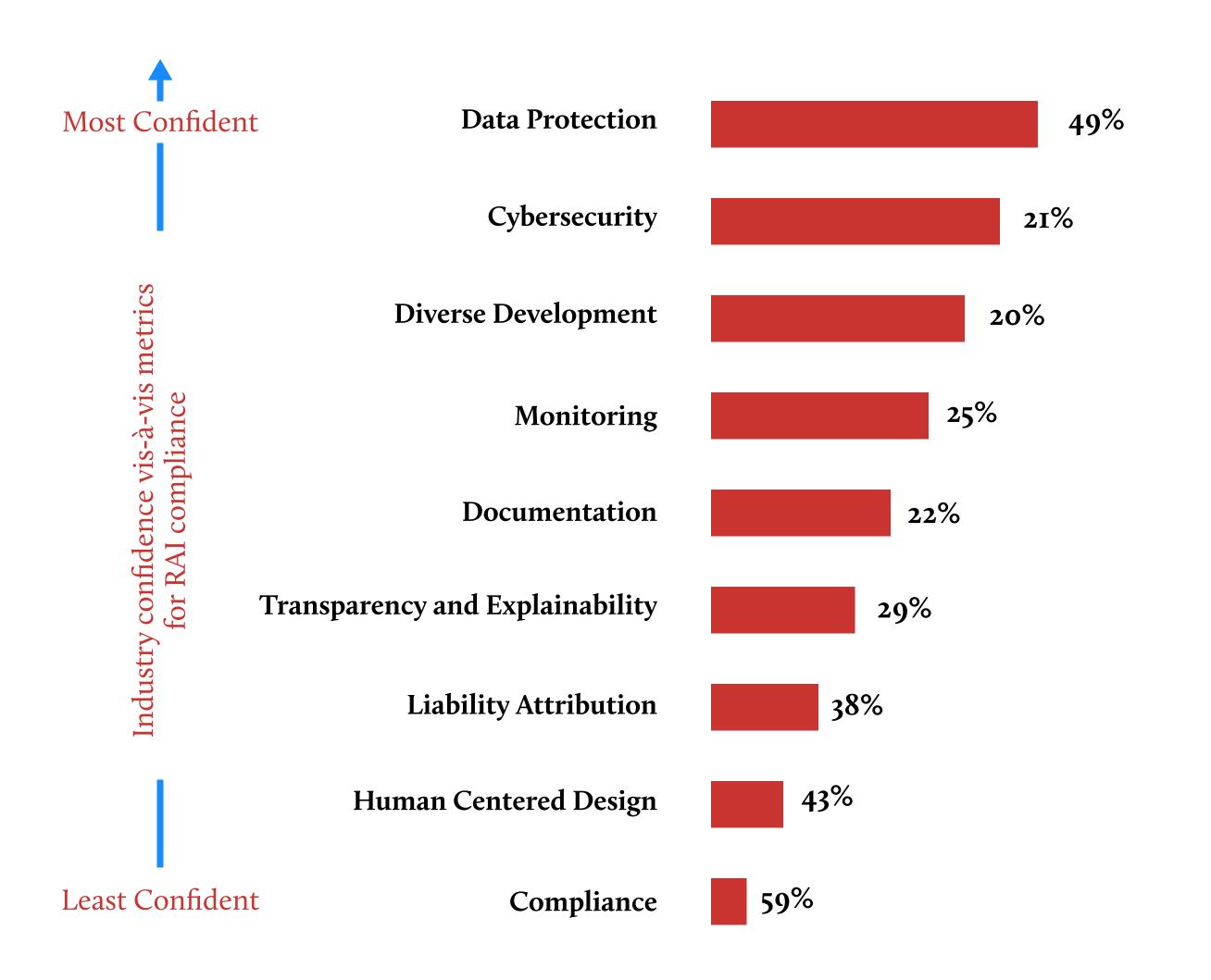


of business leaders suggested being most confident about meeting obligations for data protection



suggested being least confident about meeting regulatory compliances

The finding is logical as regulatory mandates around data protection are more mature and better defined in comparison to those for other metrics for RAI compliance, like transparency and explainability





Leaning towards top down accountability



~69 percent

of respondents suggested that the major share of accountability for RAI compliance should lie with the C-suite or the board of directors

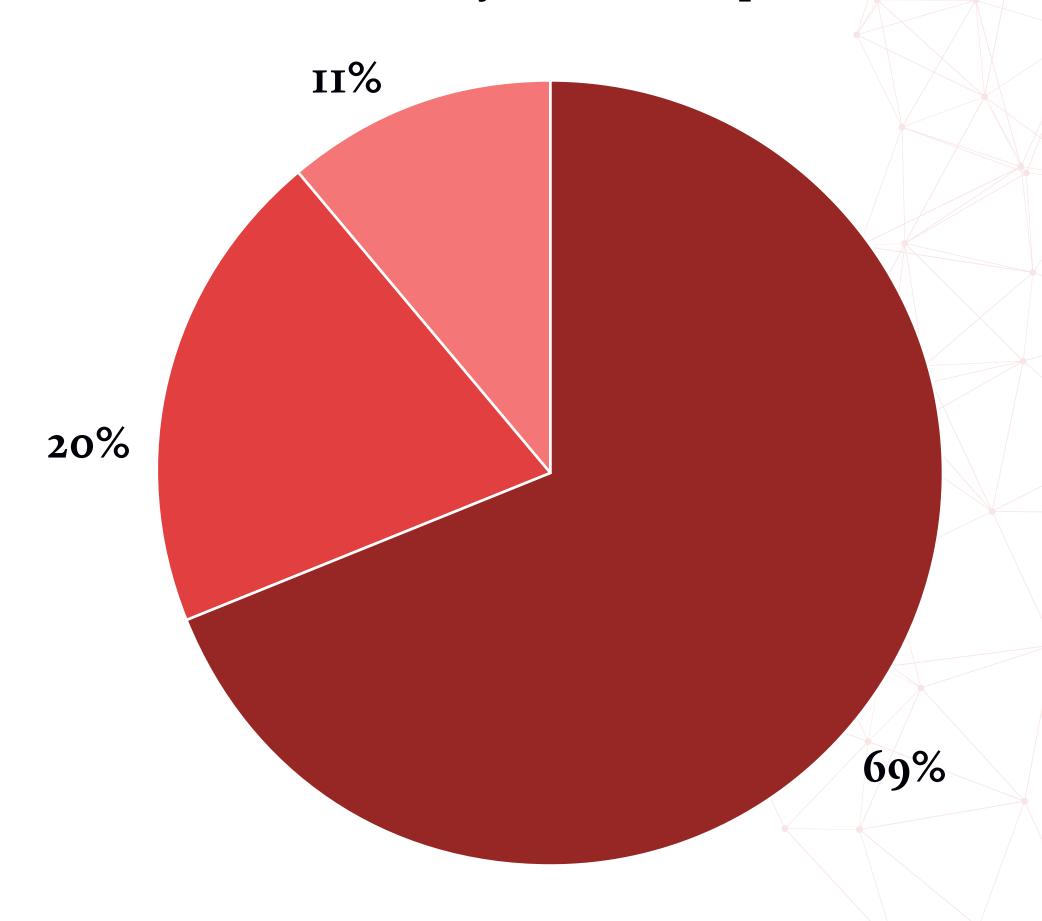


~20 percent

suggested that it should lie with senior executives, including heads of relevant departments and functions

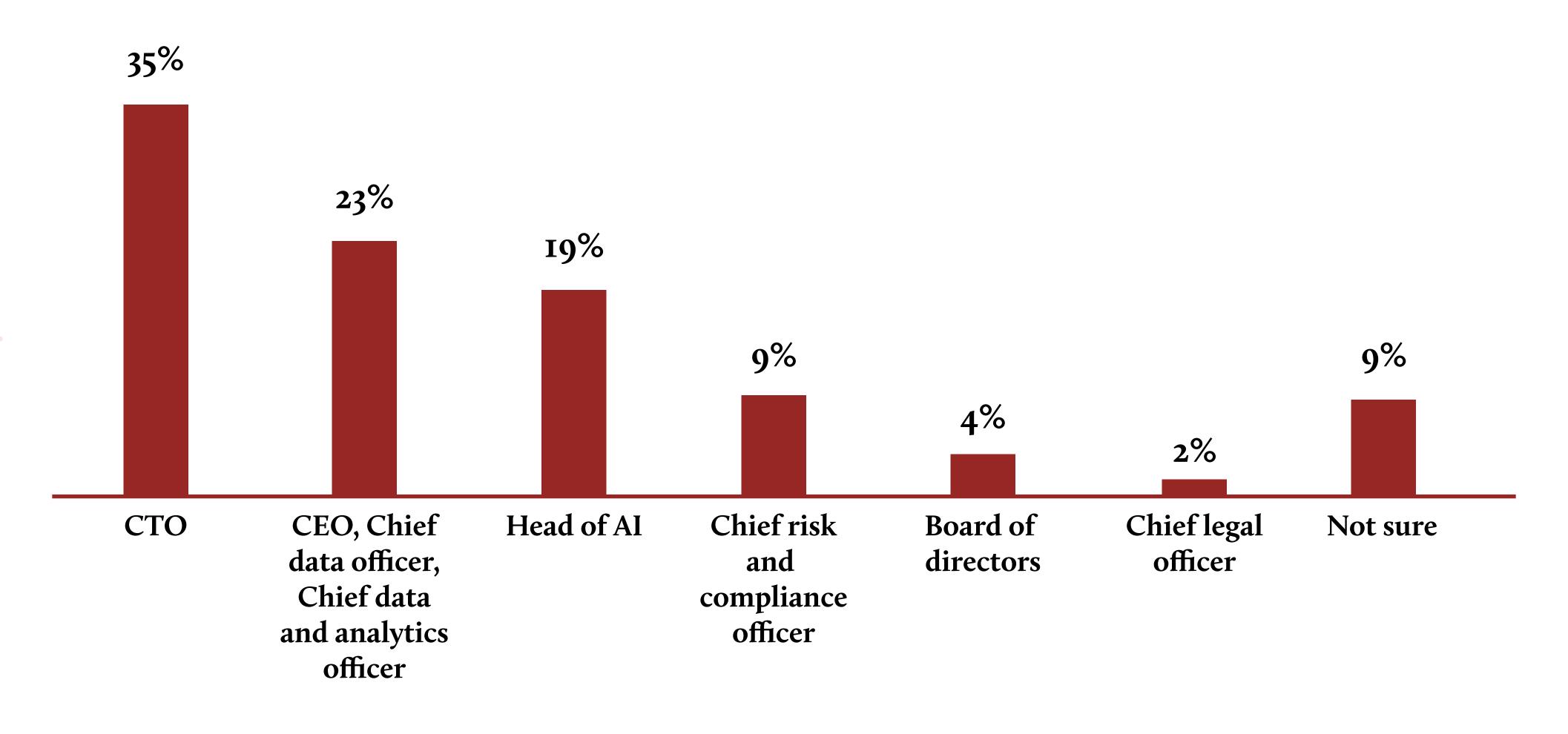
- C-suite or board of directors
- Senior executives, including head of departments and functions
- **Others**

Seniority-wise distribution of accountability for RAI compliance





Who should be mainly responsible for ensuring RAI compliance?





AI ethics boards and committees — gradually gaining ground

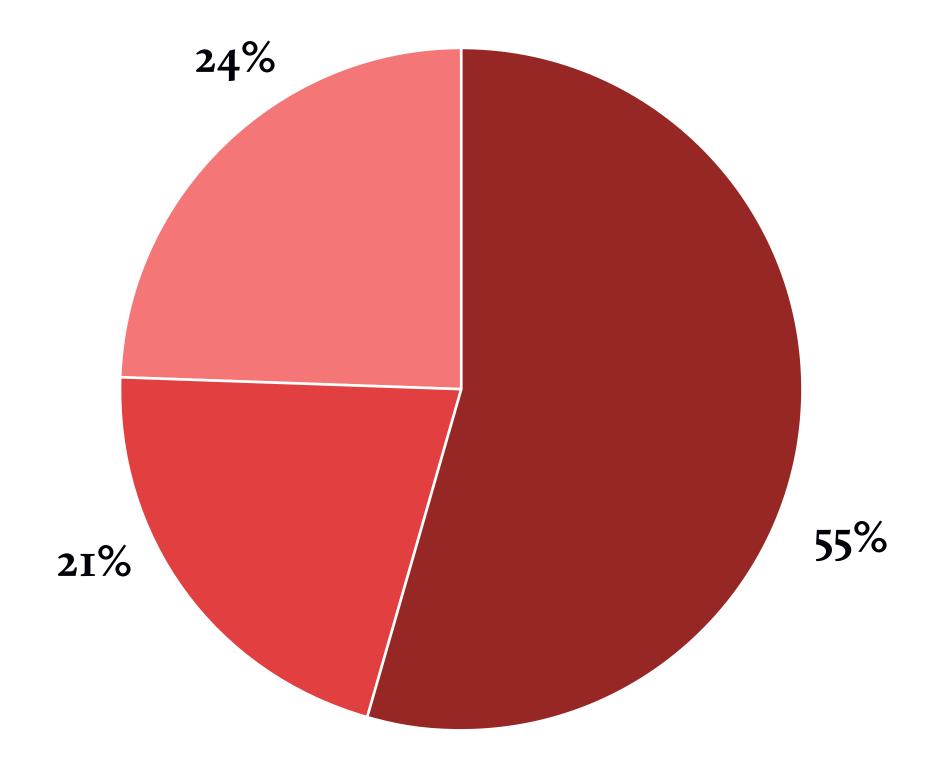
Among businesses that reported having matured RAI practices and policies



~55 percent

also reported having constituted an internal AI ethics board or committee, indicating its steady relevance for businesses to ensure robust development and implementation of RAI strategies

- Have an Al ethics board or committee
- Does not have an Al ethics board or committee
- Unsure about the utility of an Al ethics board or committee



Biggest barriers to RAI implementation



businesses cited lack of access
to high-quality,
fit-for-purpose data



cited shortage of skilled technical and management personnel



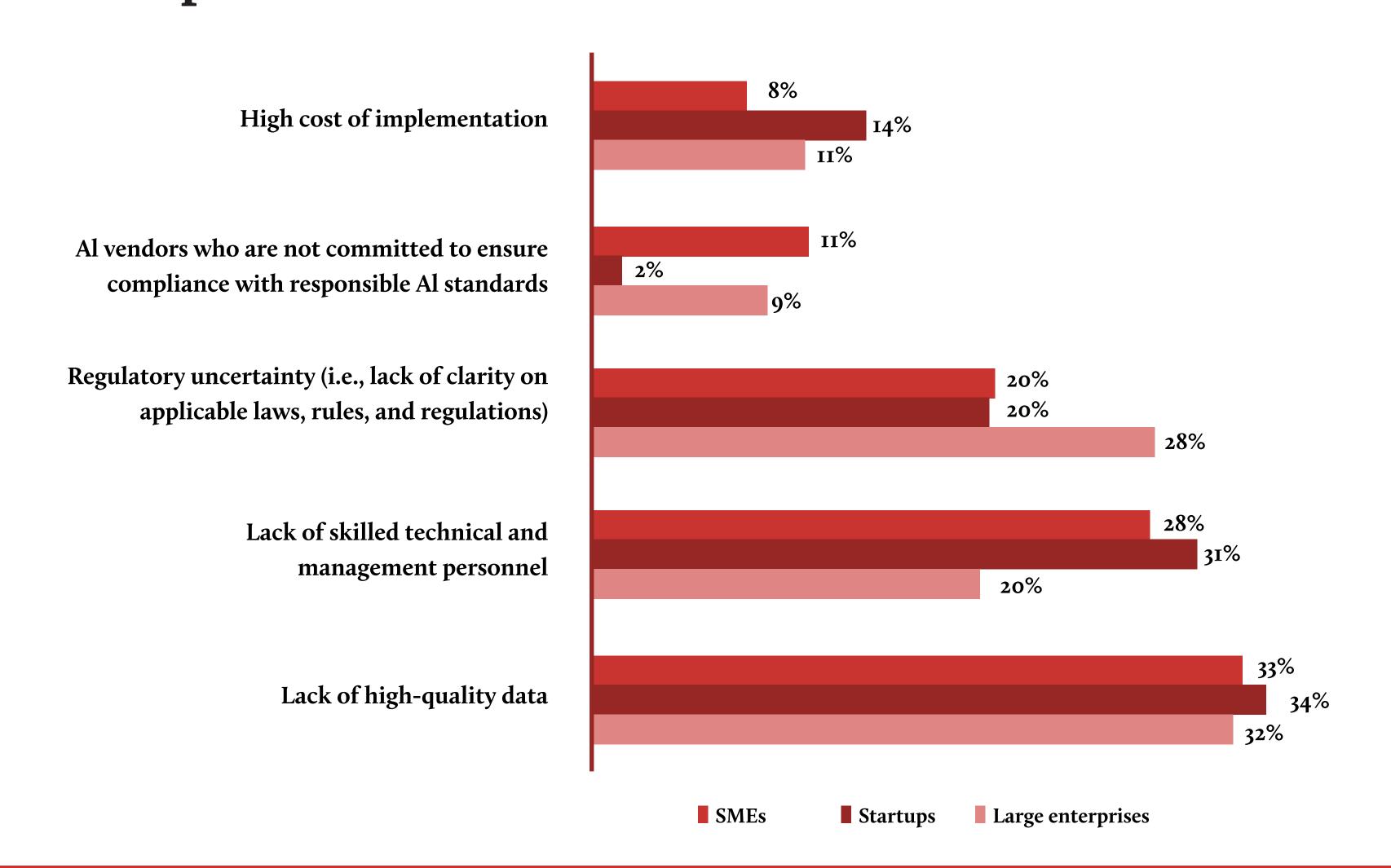
cited regulatory uncertainty

as the biggest barrier to RAI implementation

Other businesses cited **high-cost of implementation** (~12 percent) and **non-compliance by third-party vendors** (~6 percent) as the biggest barrier to RAI implementation

% of businesses with their biggest barriers to RAI implementation





For startups, lack of skilled technical and management personnel remains the biggest barrier to RAI implementation. As for SMEs and large enterprises, it is the lack of access to high-quality data

In a positive trend line, more than **75 percent** of businesses that reported lack of skilled personnel as their biggest barrier to

RAI implementation, also reported commitments to invest in sensitising and training their workforce on RAI compliance

