

SBF

BLACK
BOX

National Business Survey 2025

Digitalisation

SUPPLEMENT



✦ About this Study

The National Business Survey (NBS) is the flagship survey of the Singapore Business Federation (SBF).

Administered quarterly, the **SBF National Business Survey 2025 – Digitalisation Supplement** provides fresh and pertinent insights into digitalisation trends and needs among businesses.





REPORT CONTENT

02

PREFACE

About the Study

08

SECTION 1

Digitalisation &
Innovation Outlook

25

SECTION 2

Cybersecurity & Artificial
Intelligence (AI) Preparedness



RESPONDENT PROFILE

4

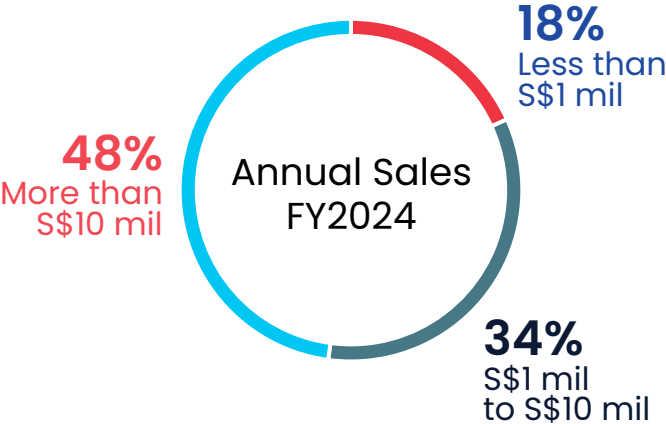
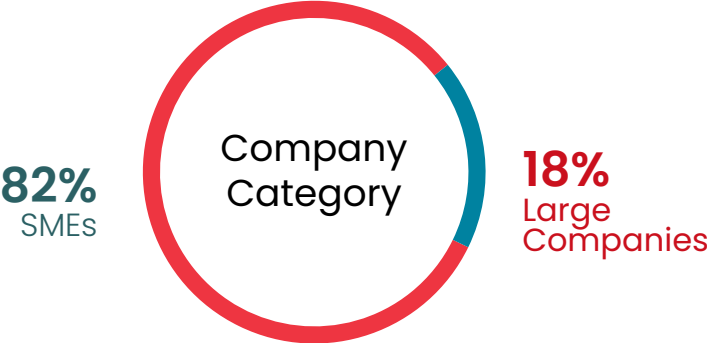
The survey was carried out from **29 September to 17 October 2025** and drew responses from **553 businesses** across all key industries .

The sample included both SMEs (82%) and large companies (18%) and largely mirrors SBF's membership base.

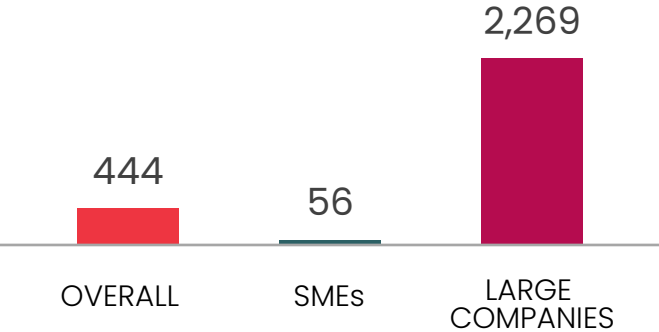
	SBF Database	Q3 2025
Wholesale Trade	20%	23%
Other Financial and Insurance Activities (e.g. Holding/Investment companies)	14%	10%
Manufacturing (e.g. Food, Textiles, Paper products, Chemicals, Metals etc.)	11%	14%
Professional Services	11%	10%
IT & Related Services	8%	4%
Construction and Civil Engineering	8%	11%
Banking & Insurance	7%	3%
Logistics & Transportation	5%	7%
Administrative and Support Service Activities	4%	4%
Retail Trade	3%	4%
Hotels, Restaurants & Accommodations	3%	2%
Real Estate Activities	2%	2%
Others*	1%	2%
Health and Social Services	1%	1%
Education	1%	2%
Other Service Activities	1%	3%
TOTAL	100%	100%

*Others (e.g. Agriculture and Fishing/Mining and Quarrying/Water Supply, Sewerage, Waste management/Public Administration and Defence/Arts, Entertainment and Recreation/ Electricity, Gas and Air-Conditioning Supply)

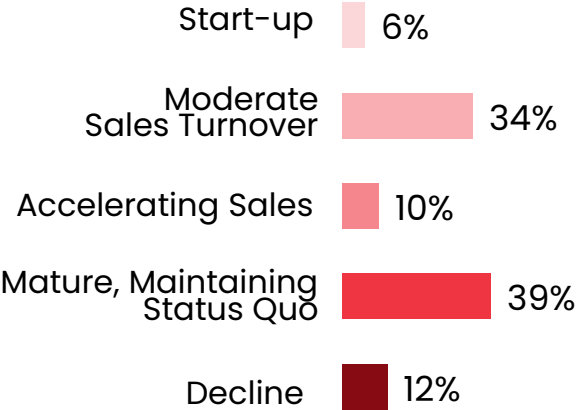
COMPANY PROFILE



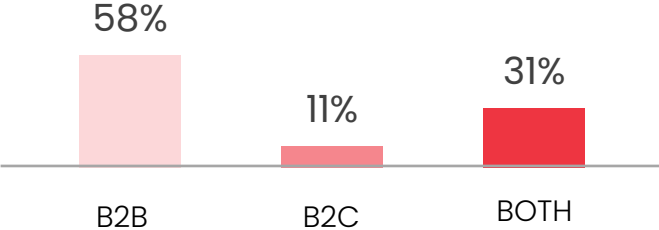
Avg. Employee Size



Stage of Development



Main Mode of Business



EXECUTIVE SUMMARY 1/2

Digitalisation & Innovation Outlook

- Artificial Intelligence (AI), Automation and Cybersecurity are the top 3 developments that businesses are most concerned about in the next 12 months. However, the proportion of businesses that view digital transformation as important has declined from 71% in 2024 to 58% in 2025. The drop is more significant among large companies (from 85% to 60%) than among SMEs (from 68% to 57%). 20% of businesses indicated that they have not engaged in digital transformation.
- Enhancing customer experience (58%) and Information Technology (IT) system (58%) remain the key priorities for digital transformation, with payoffs expected in optimised operations, improved customer experience and enhanced data analysis. Among the businesses that engaged in digital transformation, 71% have taken steps to measure the return on investments (ROI), with time savings by employees and cost savings due to improved efficiency as the most common metrics.
- While cost remains a top challenge in technology adoption, human factors, such as need for upskilling, existing staff not inclined to the use of technologies and lack of management expertise, emerge as key barriers to technology adoption. Hence, businesses prioritise financial support for digital advisory and project implementation and having a central reference to get up-to-date information over self-assessment toolkits on digital readiness in terms of utility to businesses.
- More than half of businesses have implemented e-payment, cloud and cybersecurity capabilities. In the next 12 months, the digital technologies that more businesses have plans to adopt are Artificial Intelligence (AI) (50%), Data Analytics (45%) and Internet-of-Things (IoT) (39%).

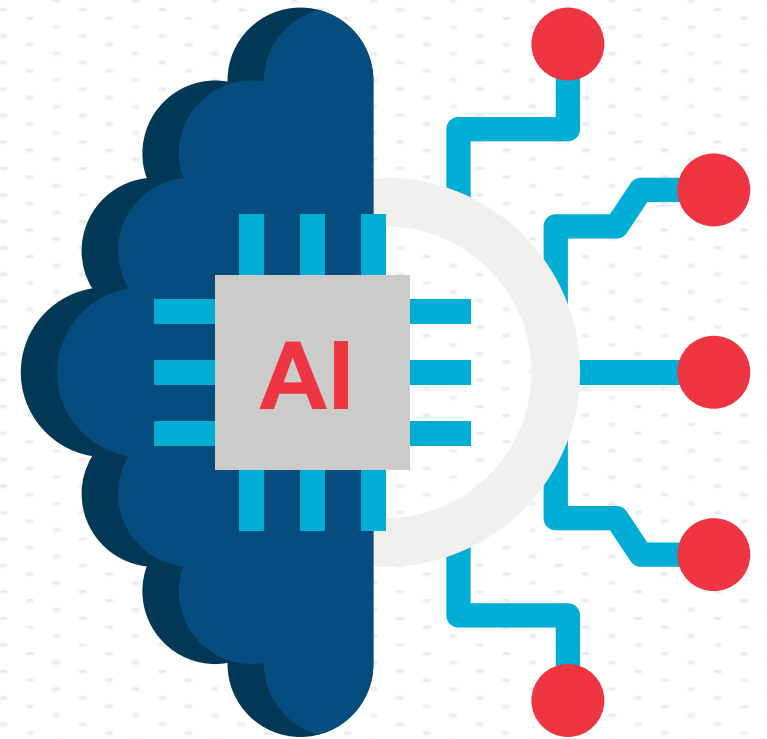
EXECUTIVE SUMMARY 2/2

Cybersecurity & Artificial Intelligence Preparedness

- Businesses are leveraging AI for efficiency gains, content generation and data analysis, but less so in customer support, recruitment and autonomous robotics. Access barriers to AI have declined compared to 2024, with businesses citing high cost of implementation declining from 66% to 49% and lack of knowledge declining from 61% to 45%. However, concerns on data privacy and security as well as quality and accuracy remain comparably high at 43% and 32% respectively.
- 3 in 4 businesses are confident that their cybersecurity measures will protect them from cyber threats, although the confidence of large companies has declined from 94% in 2024 to 84% in 2025. High implementation and maintenance costs, employees' lack of awareness and risks from third-party service providers continue to weigh on businesses.

✓ SECTION 1

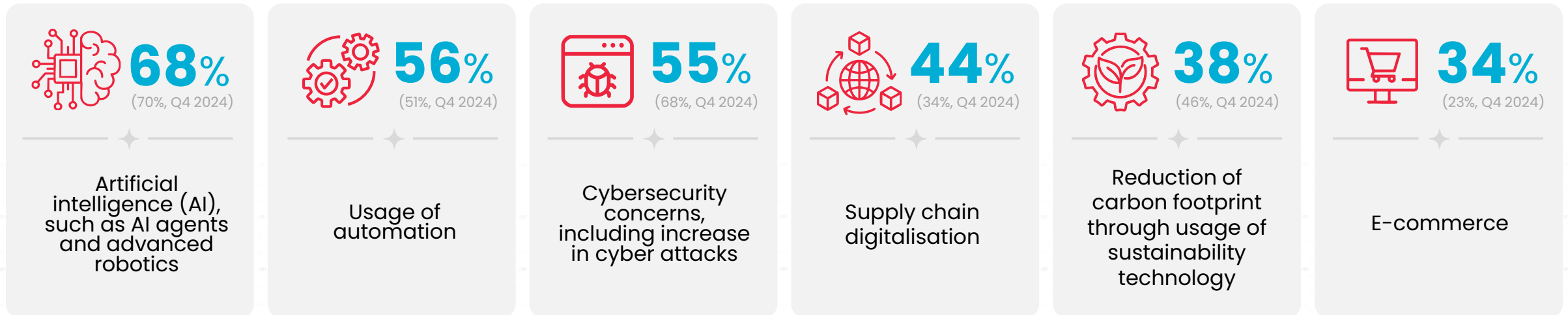
Digitalisation & Innovation Outlook



✦ **The top three trends are Artificial Intelligence (AI), automation, and cybersecurity. Supply chain digitalisation and e-commerce have also seen an increase in the proportion of businesses reporting an impact.**

Supply chain digitalisation and e-commerce are gaining importance as businesses seek to strengthen resilience and protect growth in an uncertain environment.

New Trends And Developments Likely to Impact Businesses In the Next 12 Months



Both SMEs and large companies share comparable views on how technology trends are impacting their businesses.



SMEs

Base: 456

Artificial intelligence (AI), such as AI agents and advanced robotics

69%

(70% 2024)

Usage of automation

55%

(50% 2024)

Cybersecurity concerns, including increase in cyber attacks

55%

(68% 2024)

Supply chain digitalisation

43%

(34% 2024)

Reduction of carbon footprint through usage of sustainability technology

38%

(43% 2024)

E-commerce

36%

(26% 2024)



LARGE COMPANIES

Base: 97

Artificial intelligence (AI), such as AI agents and advanced robotics

67%

(69% 2024)

Usage of automation

60%

(54% 2024)

Cybersecurity concerns, including increase in cyber attacks

55%

(73% 2024)

Supply chain digitalisation

47%

(33% 2024)

Reduction of carbon footprint through usage of sustainability technology

42%

(60% 2024)

E-commerce

24%

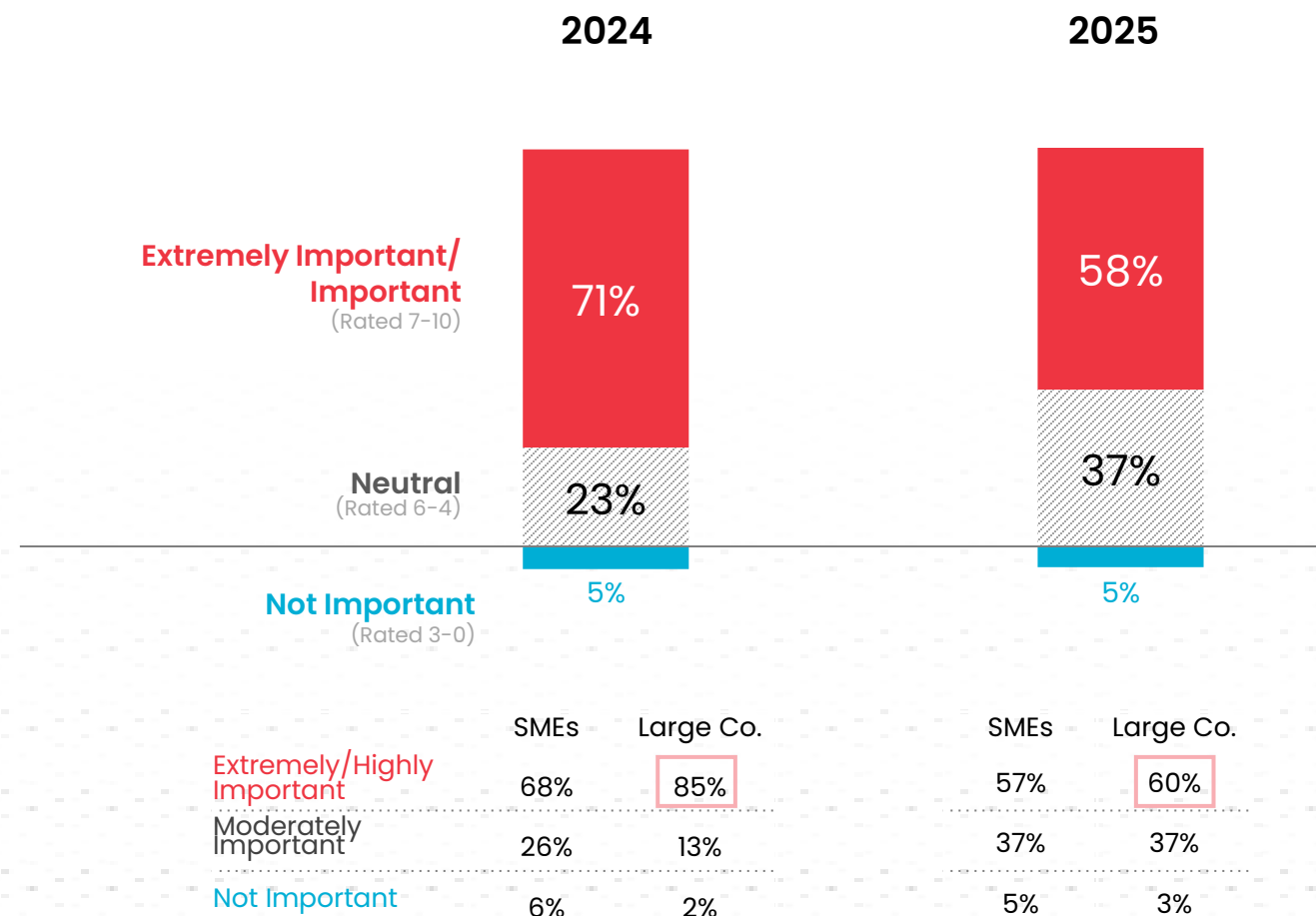
(11% 2024)

✦ Amid the current economic climate, the proportion of businesses that view digital transformation as important has decreased.

Close to three-fifths (58%) of businesses believe digital transformation is highly important, down from 71% in 2024.

The decline in perception is seen more strongly among Large Companies, where the proportion of those who see digital transformation as highly important has fallen to 60%, from 85% in 2024.

Importance of Digital Transformation



Base: All Respondents, n=529 (2024) n=553 (Q3, 2025)

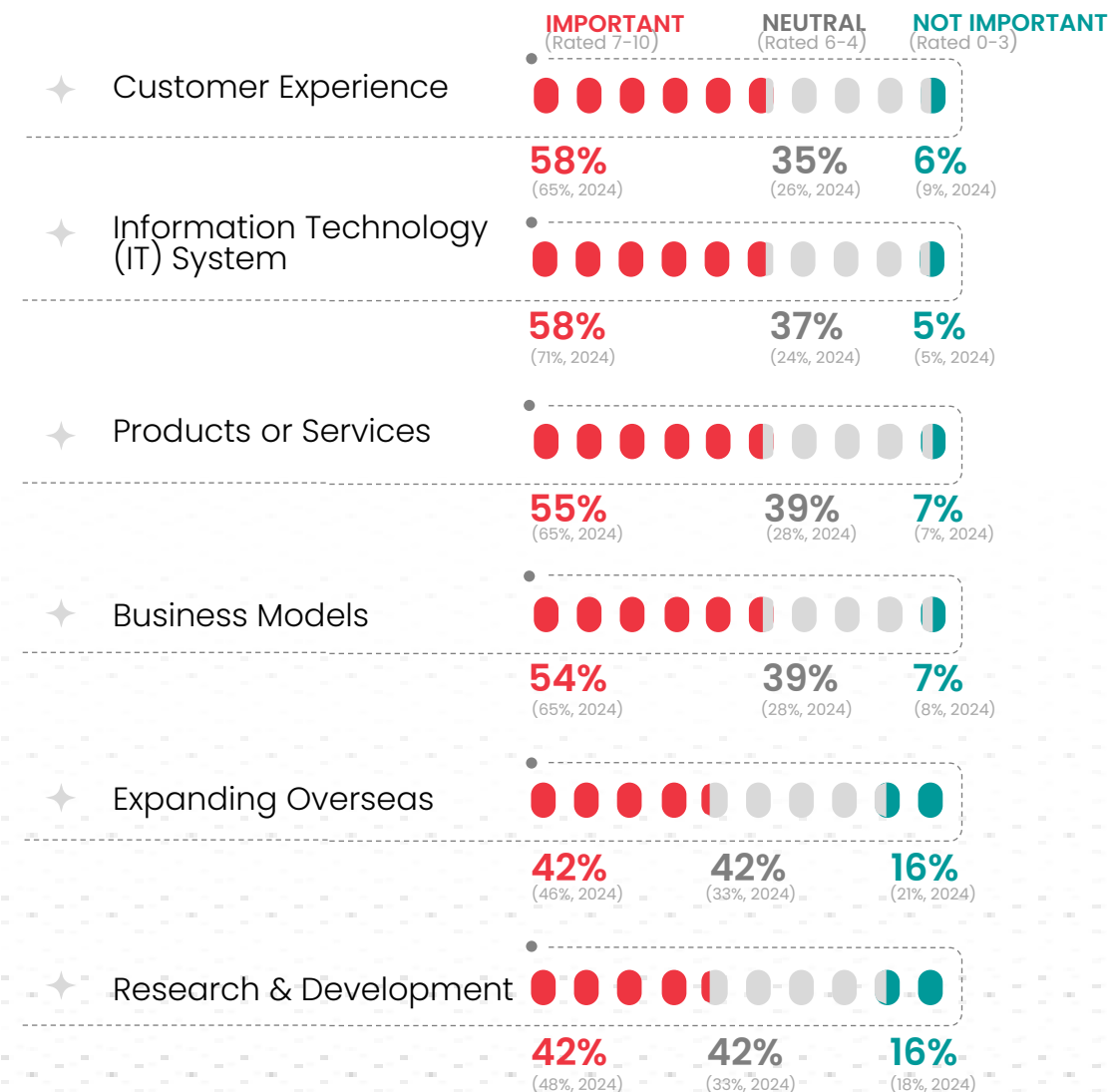
Q23a On a scale of 0 to 10, how important are the digital transformation and innovation efforts implemented in relation to the following aspects of your business?

Enhancing customer experience and technological infrastructure are key priorities for digital transformation.

Enhancing customer experience (58%) and IT infrastructure (58%) remain the key priorities for digital transformation.

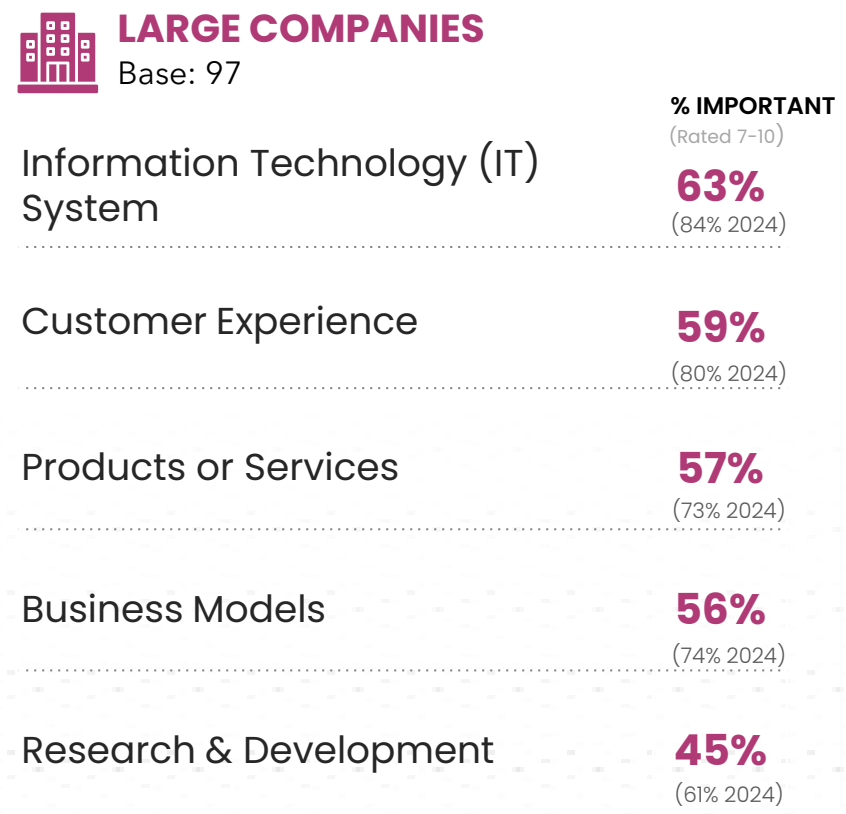
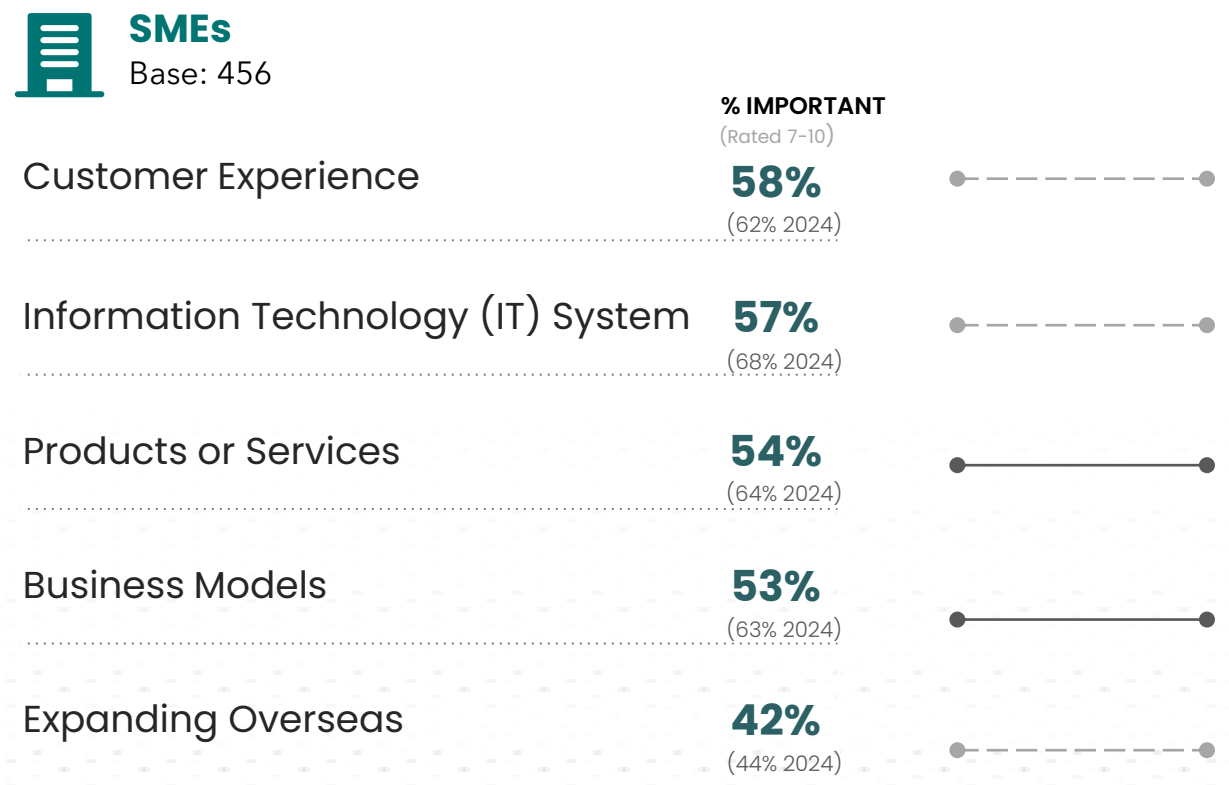
Using digitalisation to support overseas expansion and R&D are somewhat viewed as secondary priorities.

Importance of Engaging In Digital Transformation in..



Base: All Respondents, n=529 (2024); n=553 (Q3, 2025)
Q23b On a scale of 0 to 10, how important are the digital transformation and innovation efforts implemented in relation to the following aspects of your business?

✦ Digital transformation priorities are broadly consistent across firm sizes, but more SMEs prioritise it to enhance customer experience, while Large Companies prioritise it to drive their IT systems.



Businesses see the strongest payoffs from digital transformation in optimising operations, improving customer experience and enhancing data analysis.

Beyond efficiency gains, additional benefits such as stronger decision-making (40%), better employee collaborations (36%), and enhanced data protection (36%), highlight broader organisational benefits of digital transformation.

Key Benefits of Digital Transformation

45%



Optimised operations



(68%, 2024)

44%



Improved customer experience



(49%, 2024)

40%



Enhanced data analysis and decision-making



(38%, 2024)

36%



Enhanced employee collaboration and remote work channels



(50%, 2024)

36%



Enhanced security and data protection



(42%, 2024)

34%



Improved product / service quality



(339%, 2024)

✦ **Operational efficiency remains the top digital transformation outcome for SMEs, whereas Large Companies see the greatest impact in enhanced decision-making.**



SMEs

Base: 456

Optimised operations

45%

(66%, 2024)

Improved customer experience

43%

(47%, 2024)

Enhanced data analysis and decision-making

37%

(34%, 2024)

Improved product / service quality

35%

(36%, 2024)

Enhanced employee collaboration and remote work channels

35%

(46%, 2024)



LARGE COMPANIES

Base: 97

Enhanced data analysis and decision-making

56%

(60%, 2024)

Improved customer experience

49%

(58%, 2024)

Optimised operations

47%

(80%, 2024)

Enhanced employee collaboration and remote work channels

43%

(70%, 2024)

Enhanced security and data protection

43%

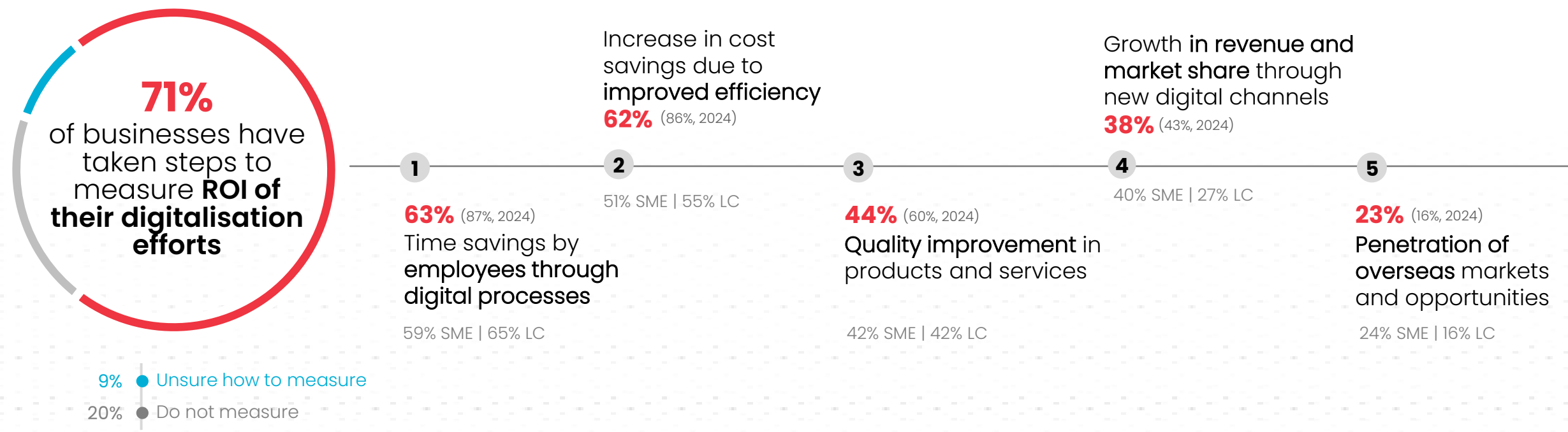
(61%, 2024)

★ Among businesses that engaged in digital transformation, 71% track ROI of their digitalisation efforts, using time and cost savings as the most direct measures of impact.

Beyond cost and efficiency savings, businesses also measure ROI of digitalisation through quality improvements (44%) and growth in revenue and market share via digital channels (38%).

Key Indicators Used to Measure ROI of Digitalisation Efforts

80% of businesses have engaged in digital transformation, among whom...



✦ High cost of technology adoption remains the key challenge faced by businesses, though the proportion of businesses citing it as a challenge has decreased.

Human factors represent the next major hurdle to technology adoption after cost, with businesses highlighting difficulty upskilling employees (34%), lack of interest (27%), and limited management expertise in driving change (27%).

Key Challenges to Technology Adoption



58% High cost of the technology adoption

(73% 2024)



34% Upskilling of staff to keep up with the new technologies

(47% 2024)



27% Existing staff not attuned or inclined to the use of the technologies

(28% 2024)



27% Lack of management expertise to drive the technological change

(33% 2024)



25% Expensive licensing payments for commercial use of intellectual property

(47% in 2024)



24% Awareness of suitable technologies

(45% 2024)



21% Lack of clear strategy to drive technological adoption

(26% 2024)



18% Unable to keep up with the pace of technology development

(26% 2024)

High cost of technology adoption and upskilling of staff are the key challenges faced by both SMEs and Large Companies.

SMEs also highlight lack of management expertise among their top 5 challenges, while Large Companies point to staying informed of suitable technologies among their key challenges.



SMEs

Base: 456

High cost of the technology adoption **57%**
(73% 2024)

Upskilling of staff to keep up with the new technologies **32%**
(44% 2024)

Lack of management expertise to drive the technological change **27%**
(34% 2024)

Existing staff not attuned or inclined to the use of the technologies **27%**
(27% 2024)

Expensive licensing payments for commercial use of intellectual property **25%**
(47% 2024)



LARGE COMPANIES

Base: 97

High cost of the technology adoption **61%**
(74% 2024)

Upskilling of staff to keep up with the new technologies **42%**
(57% 2024)

Existing staff not attuned or inclined to the use of the technologies **31%**
(34% 2024)

Awareness of suitable technologies **30%**
(48% 2024)

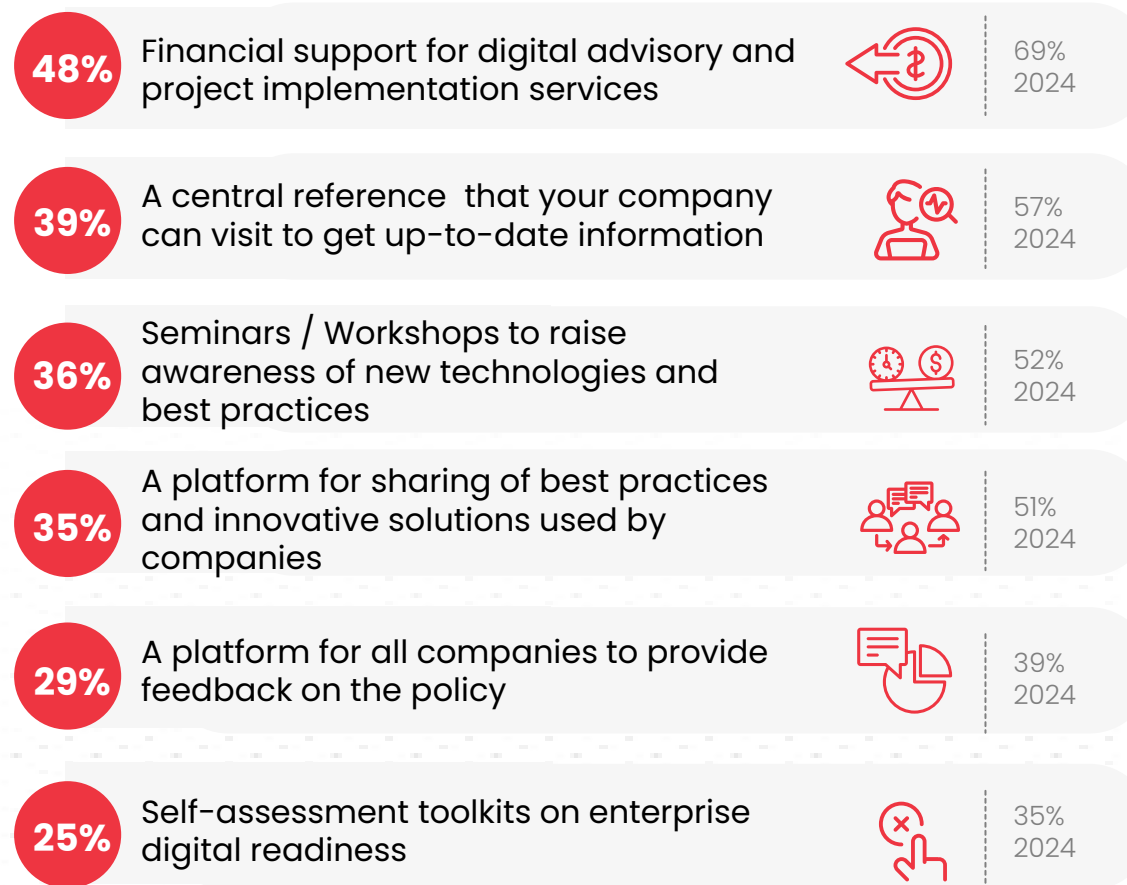
Expensive licensing payments for commercial use of intellectual property **26%**
(45% 2024)

✦ **Financial support for digital advisory and implementation remains the most impactful support, enabling businesses to manage cost barriers to digital transformation.**

48% of businesses find financial support useful in driving digitalisation.

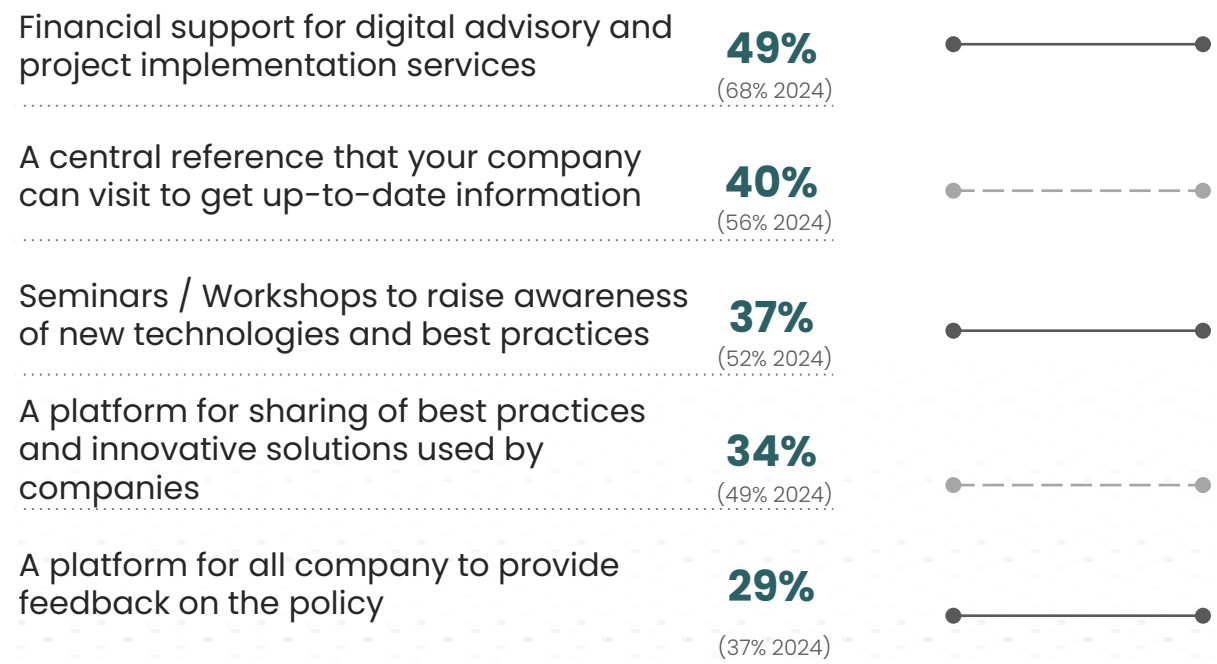
Beyond financial assistance, businesses also value initiatives that help them stay informed on emerging technologies (39%) and best practices (36%) to enable more informed digital adoption.

Usefulness of Digitalisation & Innovation Support Initiatives

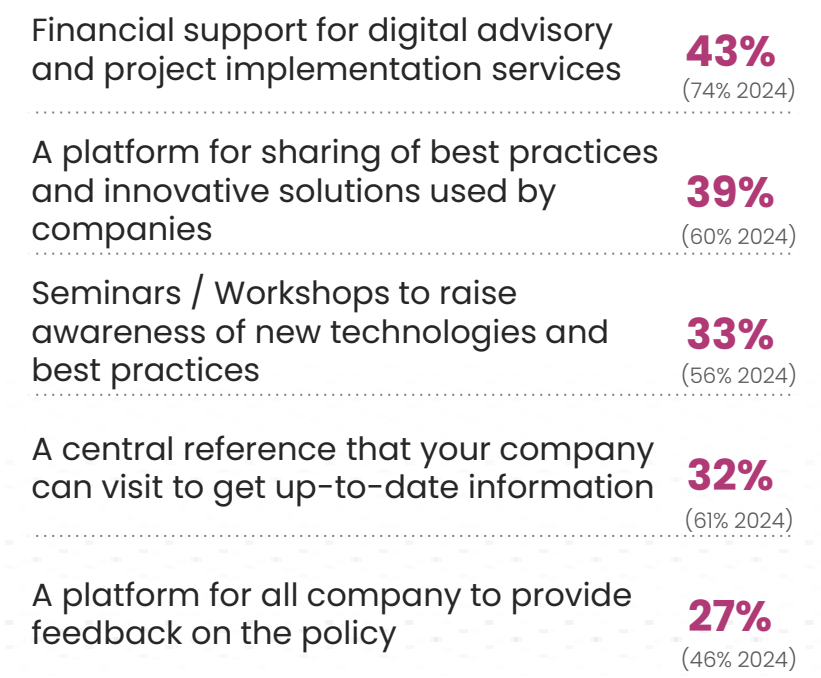


Usefulness of digital support initiatives is broadly aligned across SMEs and Large Companies.

SMEs Base: 456



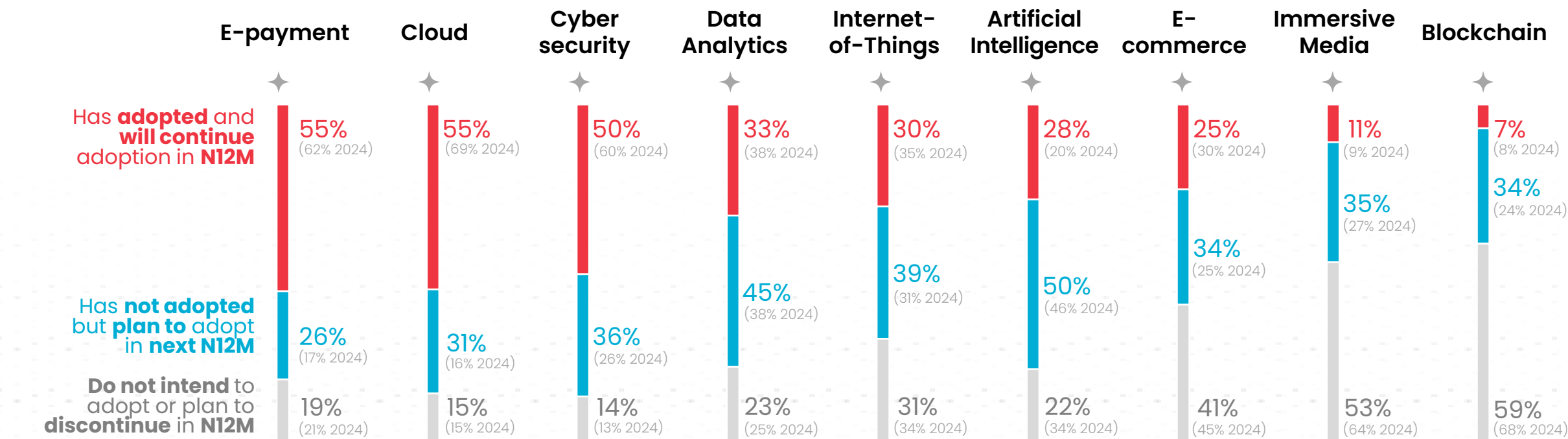
LARGE COMPANIES Base: 97



More than half of businesses have implemented e-payment, cloud, and cybersecurity capabilities, signaling a building up of baseline digital readiness.

The focus is now shifting toward more advanced capabilities, with AI (50%), data analytics (45%), and IoT (39%) shaping the next stage of digital transformation.

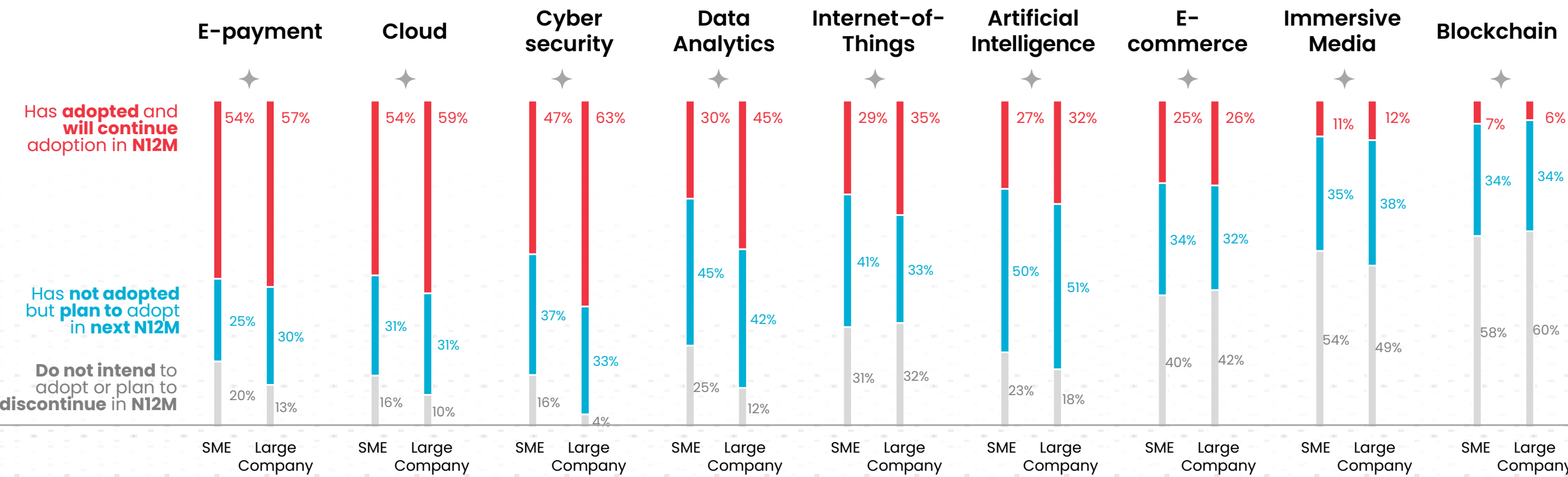
Adoption of Digital Technologies in Next 12 Months



★ **SMEs and Large Companies show similar levels of intent to adopt AI and data analytics in the next 12 months, highlighting shared recognition of the importance of these tools.**

In terms of current adoption, Large Companies show higher adoption rates of cybersecurity solutions and data analytics tools than SMEs.

Adoption of Digital Technologies in Next 12 Months



✦ **Around 1 in 4 businesses have engaged in IP commercialisation activities.**

Businesses mainly commercialise IP by incorporating proprietary IP into products (55%) and using own IP in research or business collaborations (46%).

Engagement in Commercialisation of Intellectual Property (IP)



(55%, 2024)

28% of businesses have **engaged in IP commercialisation activities**
(32%, 2024) 27% SME | 33% LC



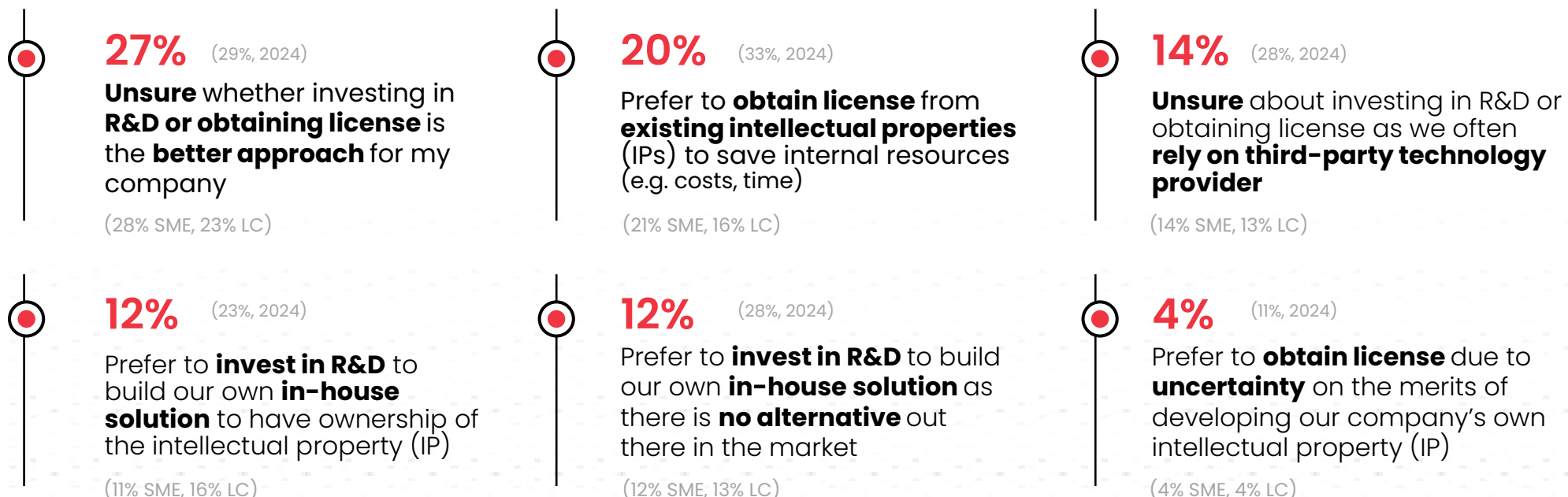
Among those who have engaged in IP commercialization activities:

55% (70%, 2024) Incorporated your own IP into products	46% (49%, 2024) Used your own IP in research and/or business collaboration	20% (28%, 2024) Licensed IP from another party	13% (23%, 2024) Licensed your own IP to another party	10% (15%, 2024) Used IP to raise capital or seek out new investors	4% (4%, 2024) Sold your own IP to another party
54% SME 59% LC	46% SME 44% LC	17% SME 31% LC	14% SME 13% LC	11% SME 6% LC	3% SME 9% LC

✦ **Uncertainty over whether to invest in R&D or obtaining a license is one of the key concerns on technology adoption, suggesting a need for practical guidance on determining the best approaches to innovate and digitalise effectively.**

Licensing is the preferred route for businesses seeking efficiency in cost and resources (20%), while R&D is undertaken selectively to create proprietary solutions due to ownership needs (12%) or lack of alternatives in the market (12%).

Outlook on New Technology Adoption

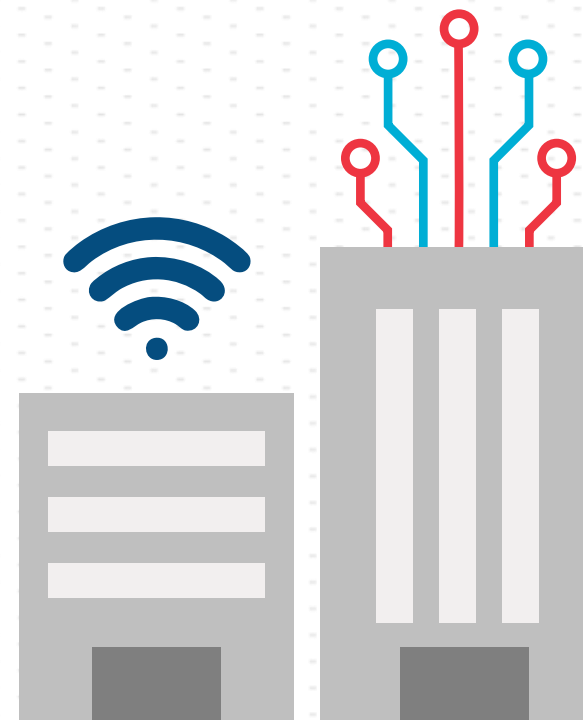


Base: All Respondents, n=555 (Q2, 2025)

Q30 In adopting new technology, does your company prefer to invest in Research & Development (R&D) or in-license existing solutions, and why so? Please select the response that best describes your company's approach.

✓ SECTION 2

Cybersecurity & Artificial Intelligence (AI) Preparedness

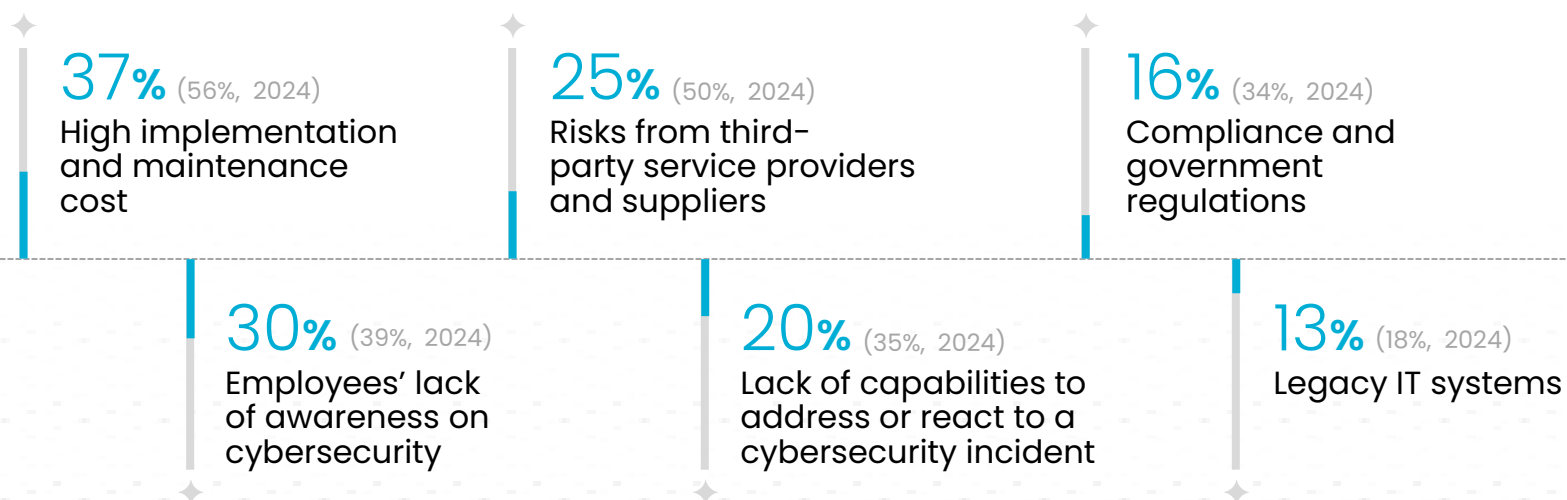


✦ **3 in 4 businesses are confident that their cybersecurity measures will protect them from cyber threats.**

The top cybersecurity challenges identified by businesses are the high cost of implementation (37%), lack of employees' awareness (30%), and risks from third-party service providers (25%), highlighting both financial and human factors in maintaining cybersecurity.

Key Cybersecurity Challenges Faced by Businesses

77% (78%, 2024)
are **confident** that their
cybersecurity ✦
measures will protect
them from cyber
threats



The cybersecurity confidence of Large Companies has declined from 94% in 2024 to 84% in 2025.

Both SMEs and Large Companies face similar set of challenges in maintaining cybersecurity. SMEs are also concerned about fulfilling compliance and government regulations, while Large Companies highlight challenges from legacy IT systems.



SMEs

Base: 456

75% Confident (75% 2024)

TOP 5 CHALLENGES:

- **36%** High cost of implementation and maintenance
(56% 2024)
- **29%** Employees' lack of awareness on cybersecurity
(38% 2024)
- **23%** Risks from third-party service providers and suppliers
(48% 2024)
- **19%** Lack of capabilities to address or react to a cybersecurity incident
(37% 2024)
- **16%** Compliance and government regulations
(33% 2024)



LARGE COMPANIES

Base: 97

84% Confident (94% 2024)

TOP 5 CHALLENGES:

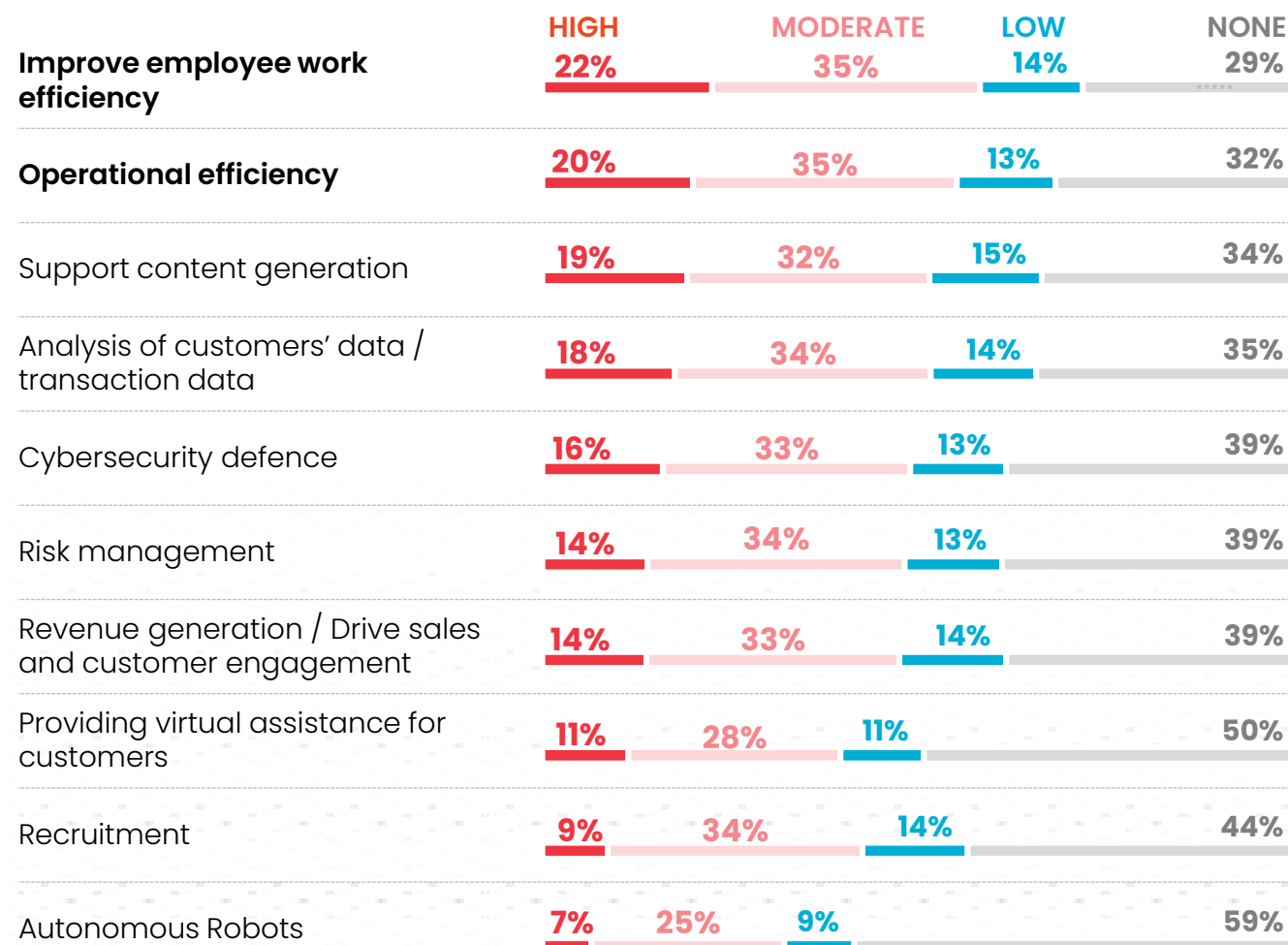
- **38%** High cost of implementation and maintenance
(53% 2024)
- **34%** Employees' lack of awareness on cybersecurity
(43% 2024)
- **34%** Risks from third-party service providers and suppliers
(58% 2024)
- **23%** Lack of capabilities to address or react to a cybersecurity incident
(24% 2024)
- **19%** Legacy IT systems
(25% 2024)

Businesses are leveraging AI for efficiency gains, content generation and data analysis, but less so in customer support, recruitment and autonomous robotics.

Beyond efficiency gains, businesses are also leveraging AI to value-add in the form of **content generation** and **data analysis**.

In contrast, **AI-driven customer support** and **autonomous robotics** remain the least adopted applications, suggesting that these are still at an early stage of integration.

Extent of AI Implementation across Business Domains

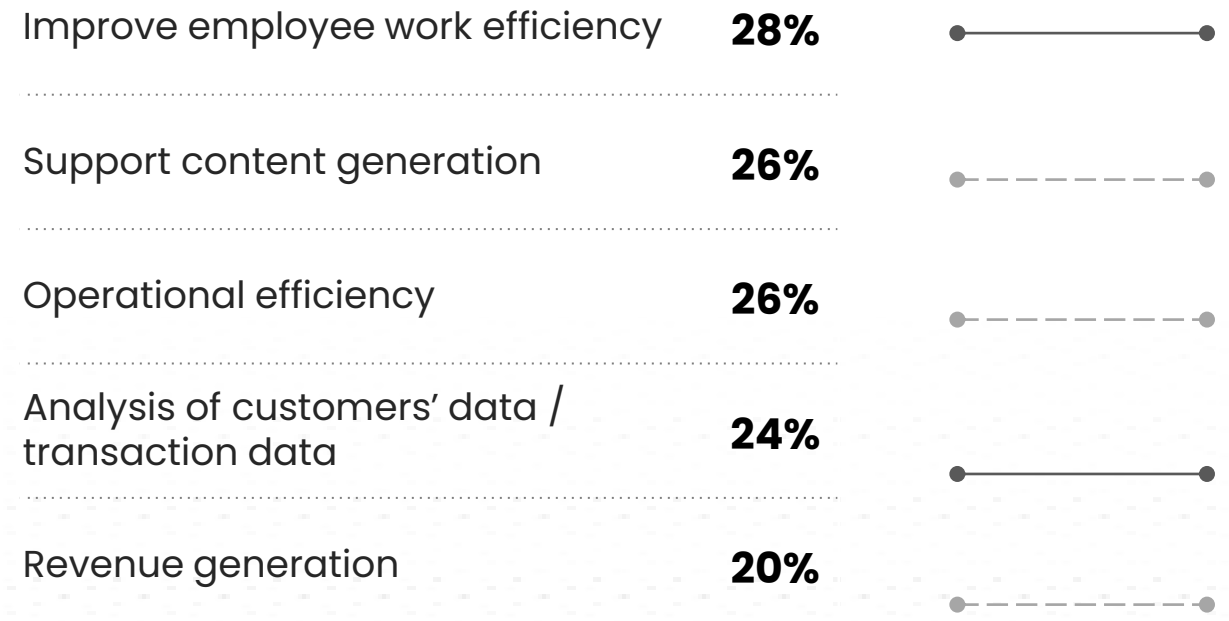


Both SMEs and Large Companies are applying AI tools in similar areas of their operations.



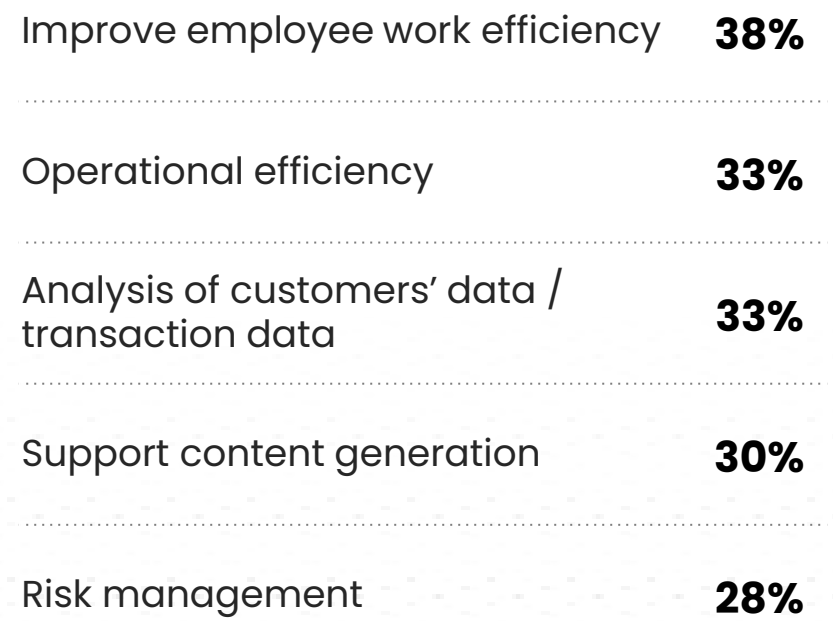
SMEs
Base: 456

% RATING
HIGH/MODERATE:



LARGE COMPANIES
Base: 97

% RATING
HIGH/MODERATE:



✦ **Improved efficiency and enhanced data analysis remain the key positive impacts of AI, although the proportion of businesses citing these benefits has declined from last year.**

The proportion of businesses reporting these gains has declined in 2025, highlighting potential challenges in sustaining consistent returns from AI adoption and tracking measurable outcomes.

Key Impacts of AI on Businesses



★ SMEs and Large Companies observe similar benefits of AI adoption.

SMEs report decrease in reliance on manpower while Large Companies see reduced costs from AI adoption.



SMEs

Base: 456

Improved operational efficiency and time saving

46%
(52% 2024)

Data analysis and identification of insights

33%
(39% 2024)

Job transformation

24%
(20% 2024)

Content creation and marketing

23%
(27% 2024)

Decrease in manpower required

22%
(22% 2024)



LARGE COMPANIES

Base: 97

Improved operational efficiency and time saving

52%
(77% 2024)

Data analysis and identification of insights

43%
(63% 2024)

Reduced costs

28%
(41% 2024)

Job transformation

27%
(34% 2024)

Content creation and marketing

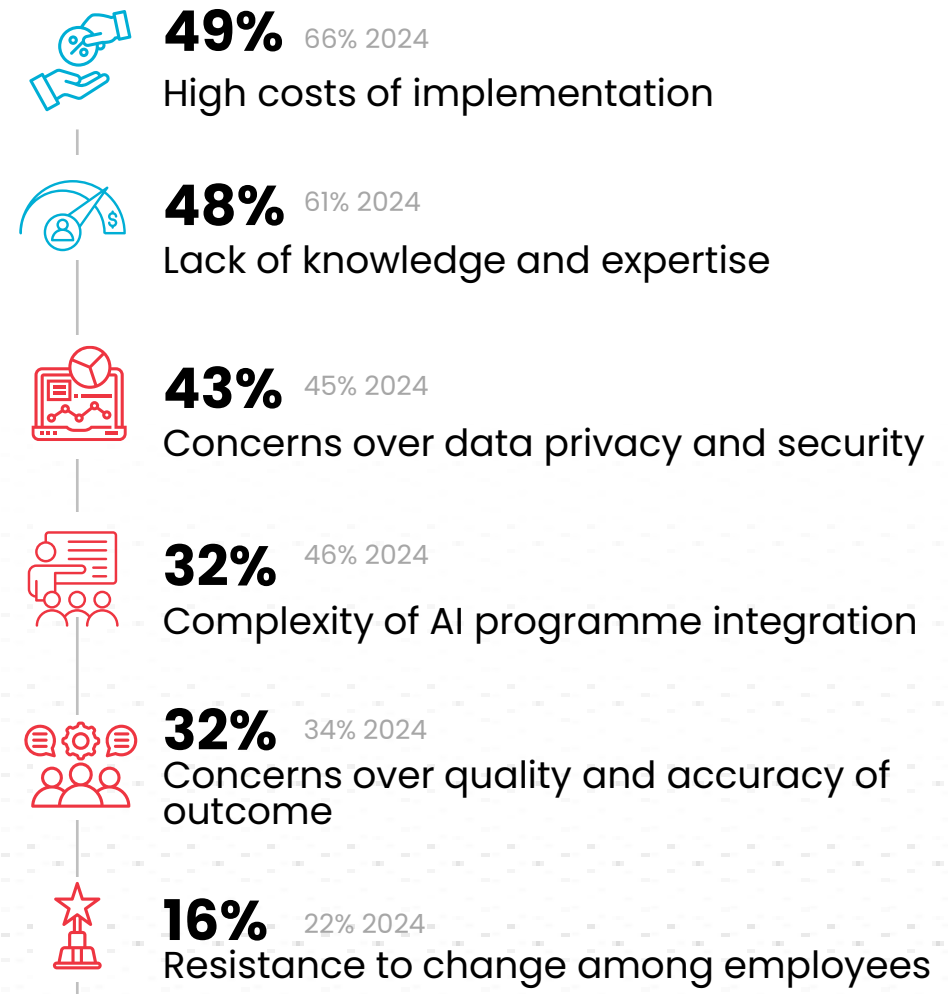
25%
(29% 2024)

✦ The cost and knowledge barriers to AI adoption are softening, though they remain key challenges to AI adoption.

Access barriers are easing among Businesses in 2025, while trust and reliability concerns with AI adoption remain.

Businesses remain concerned about data privacy and security (43%), and the accuracy of AI outcomes (34%), even as cost and technical barriers are easing.

Key Challenges to AI Adoption



Both SME and Large Companies report similar set of challenges in adopting AI.



SMEs

Base: 456

High costs of implementation

49%
(67% 2024)

Lack of knowledge and expertise

48%
(60% 2024)

Concerns over data privacy and security

42%
(41% 2024)

Complexity of AI programme integration

30%
(45% 2024)

Concerns over quality and accuracy of outcome

30%
(32% 2024)



LARGE COMPANIES

Base: 97

High costs of implementation

51%
(60% 2024)

Concerns over data privacy and security

51%
(61% 2024)

Lack of knowledge and expertise

46%
(64% 2024)

Complexity of AI programme integration

41%
(47% 2024)

Concerns over quality and accuracy of outcome

37%
(45% 2024)

Thank you.



Survey conducted by:
Research & Publishing
Advocacy & Policy Division
Singapore Business Federation

If you have any enquiry, kindly contact research@sbf.org.sg.



Supporting Trade Associations and Chambers (TACs)

