

REGIONAL FOCUS: ASIA/PACIFIC

# The Enterprise Automation Breakthrough to Power Digital Business



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## Executive Summary

Enterprise automation is a critical underlying technology for organisations as they transit into the era of digital business.

This InfoBrief illustrates how an enterprise automation platform that is workflow-centric and citizen-developer friendly can help address common automation challenges by integrating disparate systems, applications, and data to enable end-to-end workflow automation across business and IT processes, as well as provide robust governance and oversight.

Finally, this InfoBrief details the role that an automation platform partner plays in this journey, and provides guidance on designing and executing an automation-powered digital transformation journey.

IDC DEFINITION  
**ENTERPRISE  
AUTOMATION**

A unified approach to closed-loop automation, where AI continuously supports decision-making and automated actions that proactively optimise and enrich outcomes to maximise the business value across the entire organisation.

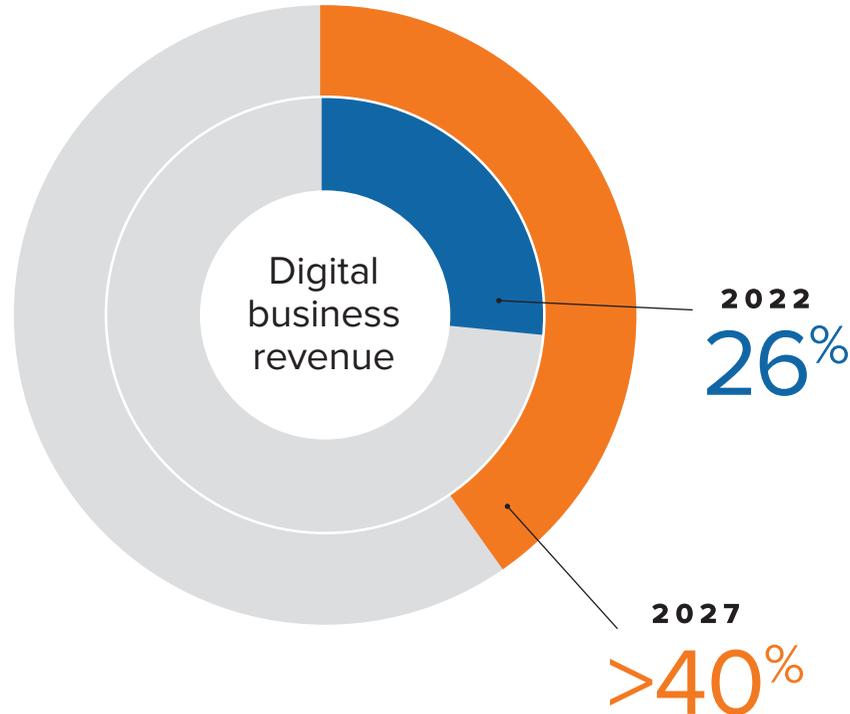


\* Source: Enterprise Automation 2.0: The Connective Tissue of Digital Business (IDC #DR2023\_GS4\_RJ), March 2023

# The future of business is digital

Digital technologies are fast becoming the foundation for future innovation and competitive differentiation through enhanced customer and employee experiences, and improved operational efficiency to drive business outcomes.

**FIGURE 1**  
Revenue generated from digital business is expected to grow



## KEY OBSERVATION

To thrive in the age of digital business, enterprises need to transform their operating model to derive an increasing share of their revenues from digital technology powered offerings.

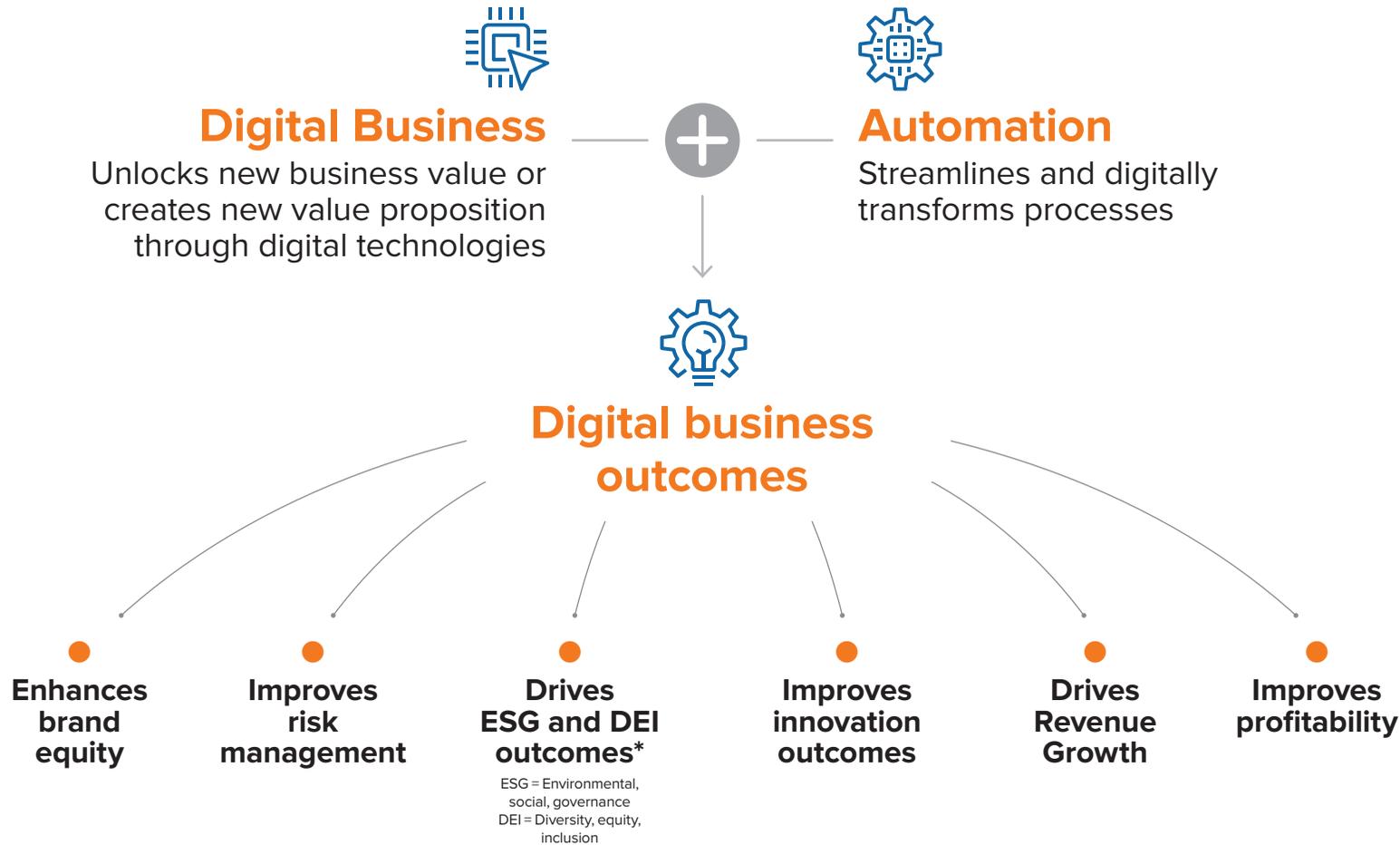


By 2026, **40%** of total revenue for A2000\* organisations will be generated by digital products, services, and experiences.

\*Asia-based top 2,000 organisations

Sources: IDC Digital Business 2022; IDC WW CEO Sentiment Survey (APJ N = 123); IDC FutureScape: Worldwide Digital Business Strategies 2023 Predictions — Asia/Pacific (Excluding Japan) Implications

# Automation: A foundational capability for running a digital business at scale



## KEY OBSERVATION

By changing their business model through digital technologies and transforming their business operations through enterprise automation, organisations can realise both tactical objectives and strategic business goals.



Source: IDC Perspective: Digital Dream Team Archetypes in Asia/Pacific: The Technology Vendor's Guide for Selling to Digital-First C-Suites (#AP50343223), April 2023

# Low/no code capabilities are critical to enterprise digital aspirations

## DEVELOPERS

# 4 million

The anticipated worldwide shortage of full-time developers by 2025 makes it challenging for organisations to differentiate through software-led innovation.

VS

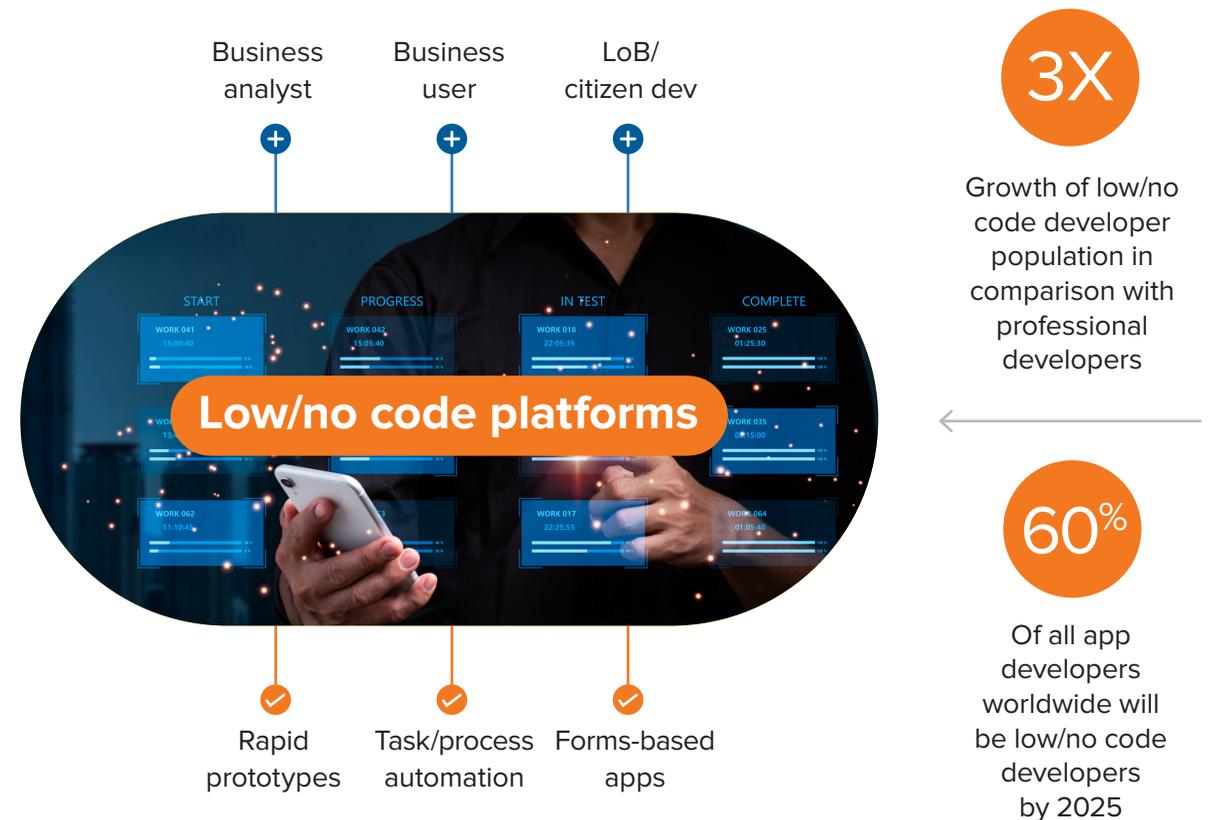
## APPLICATIONS

# 750 million

The predicted number of cloud-native applications globally by 2025 as enterprises build applications that open new revenue streams, deliver differentiated customer experiences, and improve operational efficiency.

**Low/No code technologies will be key to radically expanding the developer pool and accelerating development velocity.**

**FIGURE 2**  
Path to Digital Business



Source: Pivot Table: *Worldwide Low-Code Developer Forecast, 2022-2027* (IDC #US48951722), March 2022, and Pivot Table: *Worldwide No-Code Developer Forecast, 2022-2027* (IDC #US48951922), March 2022

# While enterprises are prioritising digital business, they face operational headwinds

FIGURE 3

## Key Enterprise Priorities

for Continued Investment on the Path to DX



By 2027, **40%** of A1000\* will incorporate employee experience initiatives into their core CX strategies to compete in **CX, talent acquisition, and retention** but will struggle to measure EX+CX.

\*Asia-based top 1,000 organisations

### KEY OBSERVATION

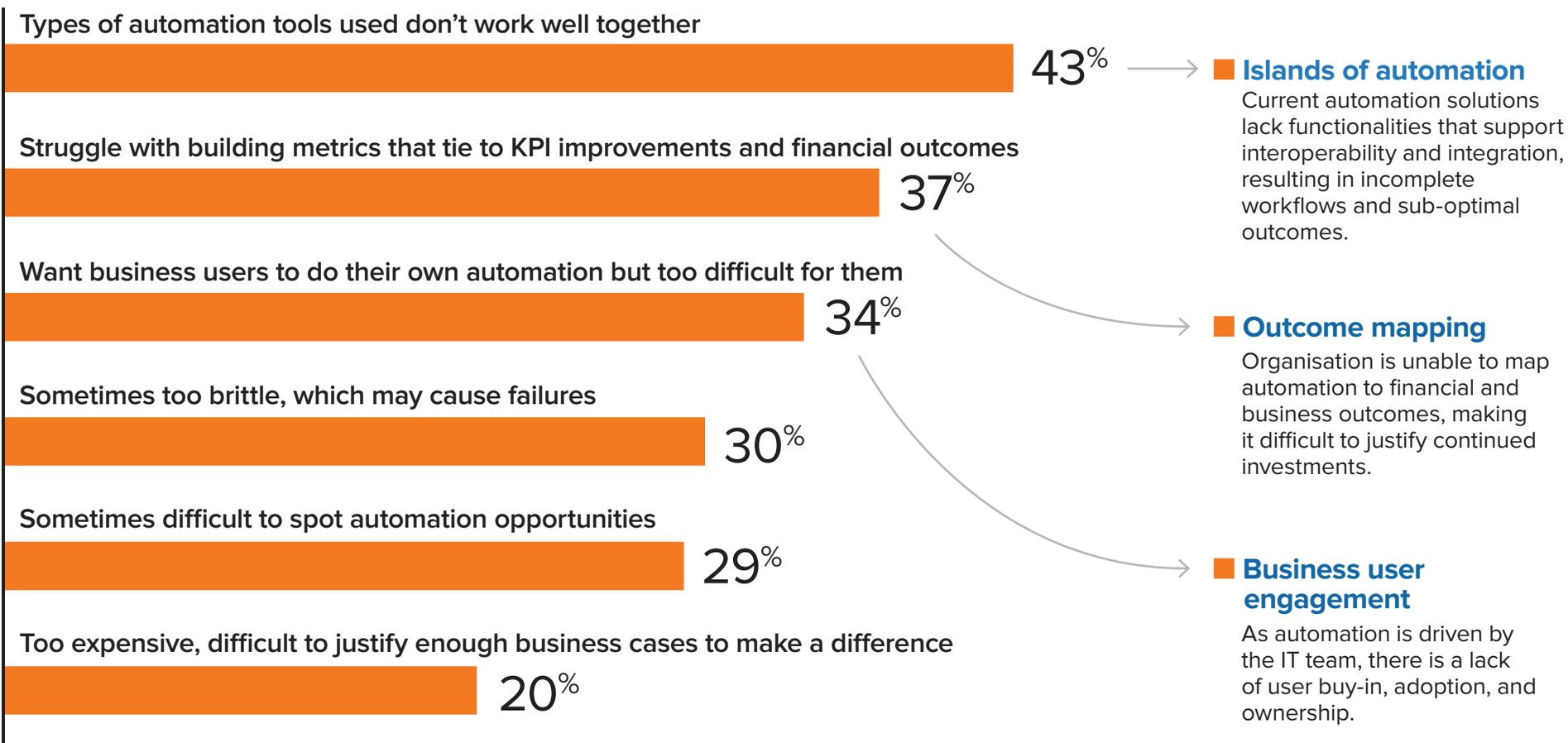
Even as enterprises chart their digital evolution, they will have an uphill task supporting key business priorities if they lack the right underlying digital foundations.

Source: IDC Future Enterprise Resiliency & Spending 2023 Survey Wave 2, March 2023 (WW n = 952)

# Decoding the challenges of current automation implementations

FIGURE 4

## Top Asia/Pacific enterprise challenges with automation implementation



- Islands of automation**  
 Current automation solutions lack functionalities that support interoperability and integration, resulting in incomplete workflows and sub-optimal outcomes.
- Outcome mapping**  
 Organisation is unable to map automation to financial and business outcomes, making it difficult to justify continued investments.
- Business user engagement**  
 As automation is driven by the IT team, there is a lack of user buy-in, adoption, and ownership.

### RESULT

Many enterprises are struggling to effectively deploy automation

No. 1  
ITOps  
Challenge

Insufficient automation within/ between various ITOps tools for effective pre-emption, auto-remediation, etc.<sup>1</sup>

36%

of Asia/Pacific enterprises have automated **less than 10%** of repetitive tasks in their software development/ engineering processes.<sup>2</sup>

Only  
13.7%

of Asia/Pacific enterprises report that they are highly satisfied with their use of automation technologies.<sup>3</sup>

Source: IDC Future Enterprise Resiliency & Spending 2022 Survey Wave 8, Sep 2022 n = AP: 370

Sources: <sup>1</sup> IDC A/P Services Sourcing Survey 2022  
<sup>2</sup> IDC A/P Software Survey 2022  
<sup>3</sup> IDC FERS Survey Wave 8, 2022

# How to overcome automation implementation challenges

Enterprises need to take a business-driven view of automation that has the following characteristics:

This approach allows enterprises to:

- + A **platform** approach that integrates disparate systems, applications, and data across the enterprise
- + Takes a **workflow-centric** view for end-to-end automation of complex workflows
- + Enables automation across **business processes, IT operations, and software development**
- + Provides complex **pre-built capabilities** and is easily **extensible** (even for non-traditional developer personas)
- + Provides a mechanism for programmatic **governance** and business value mapping



Take an integrated, enterprise-wide approach that supports automation of cross-enterprise processes and services;



Deliver exemplary experiences through automated workflows; and



Engage and co-opt employees through self-service and citizen development mechanisms.

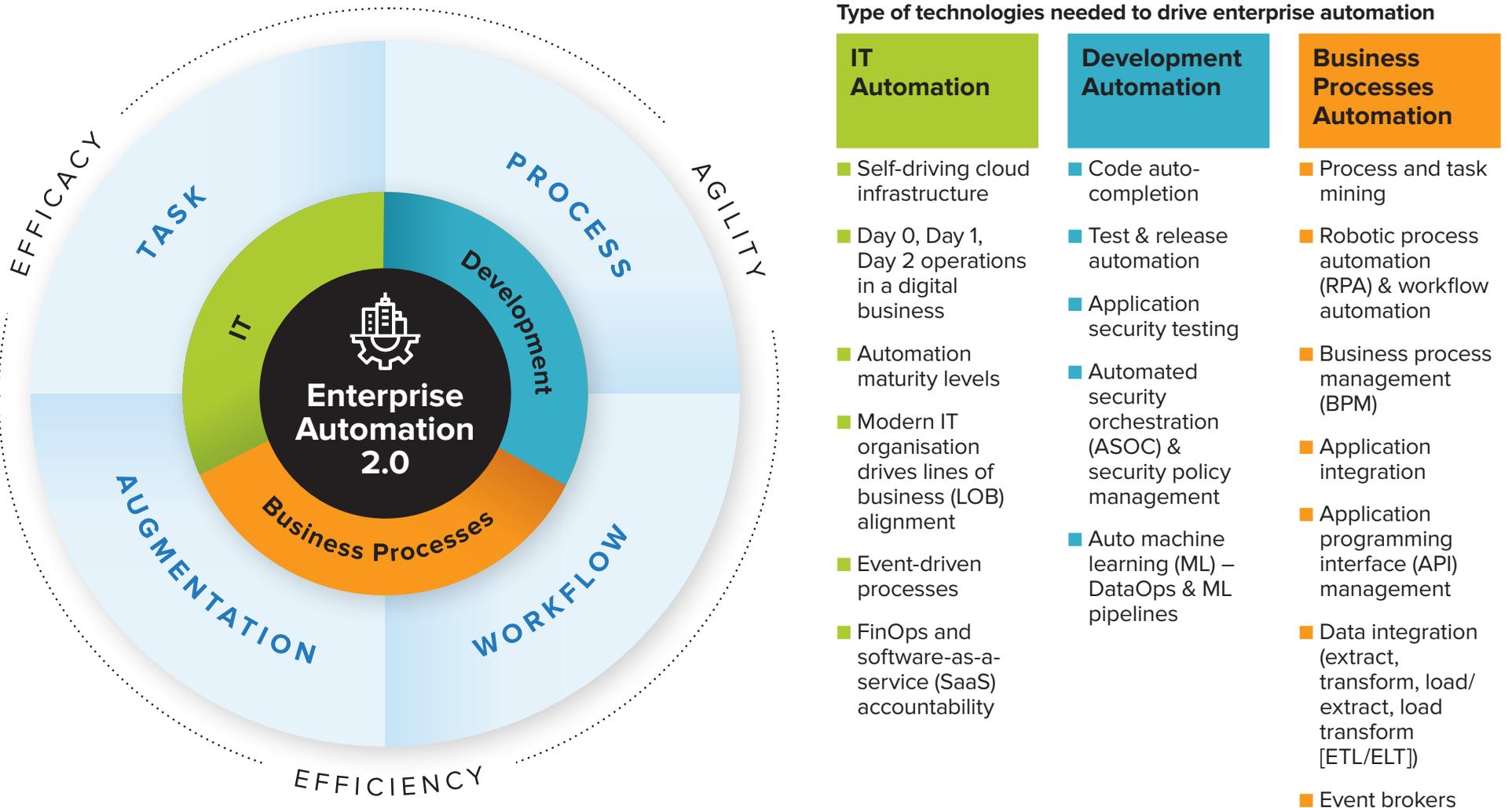


Source: IDC Enterprise Automation Framework 2023

# IDC Enterprise Automation Framework supports automation at scale

IDC’s enterprise automation framework spans business processes, apps and software development, and infrastructure and IT systems.

**FIGURE 5**  
**IDC Enterprise Automation Framework**

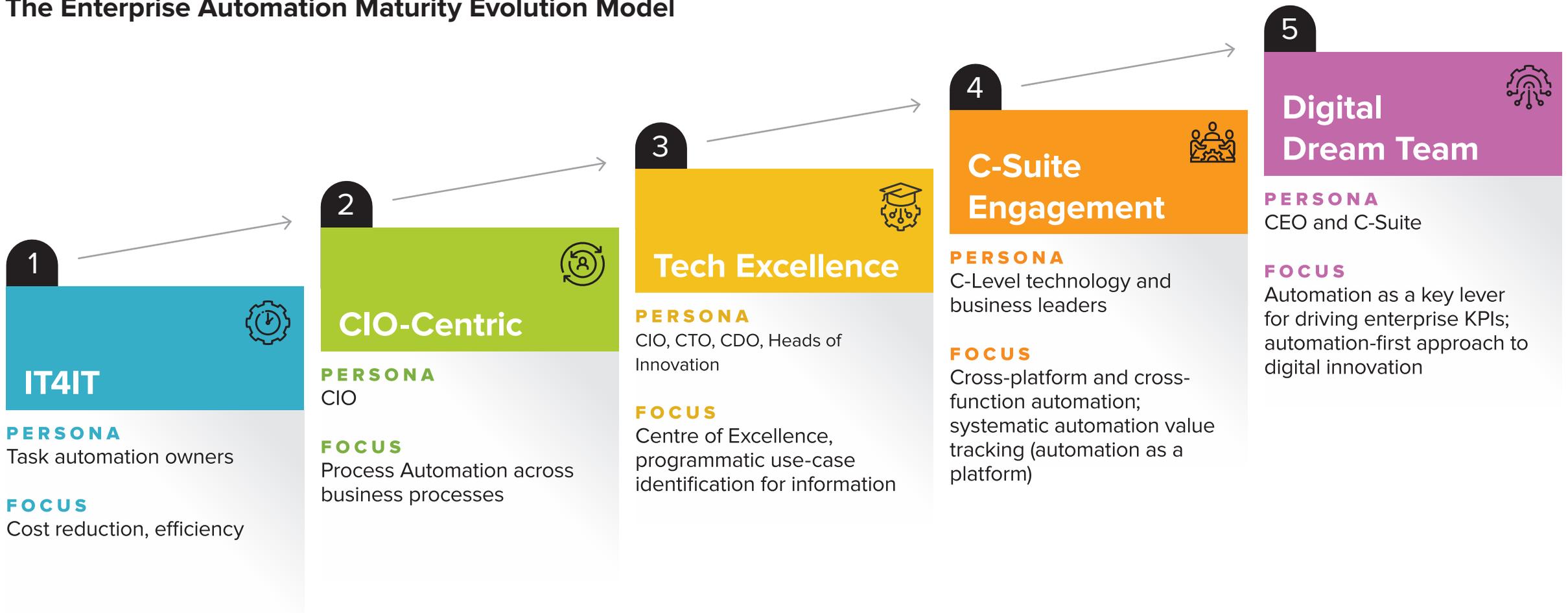


Source: IDC Enterprise Automation Framework 2023

# The enterprise automation journey in five steps

Organisations implementing an automation strategy typically go through a phased maturity journey, beginning with task automation driven by IT. At the aspirational end stage, a cross-functional digital dream team drives automation strategy and implementation.

## The Enterprise Automation Maturity Evolution Model

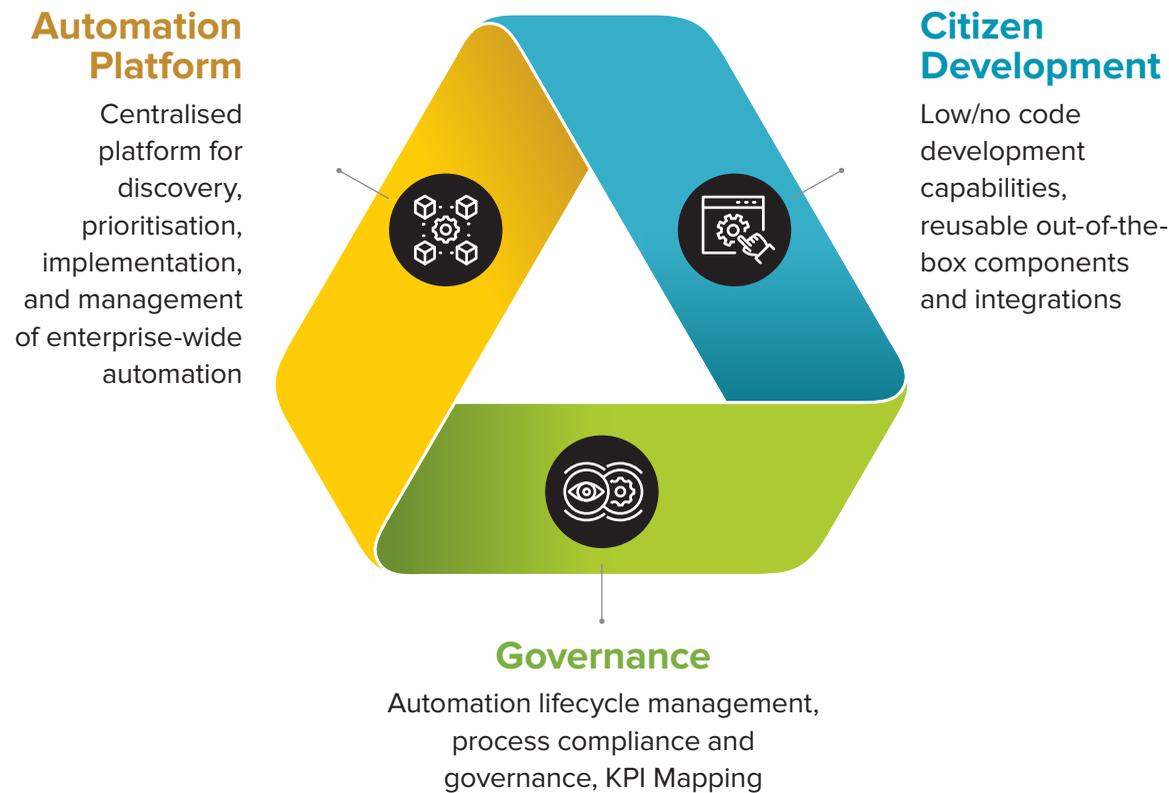


Source: IDC C-Suite Tech Agenda Research

# The benefits of working with an automation platform partner

Many organisations do not possess the broad set of critical skills needed to execute an enterprise-wide, intelligent automation-driven transformation strategy. They may consider working with an enterprise automation partner to augment the needed capabilities.

**FIGURE 6**  
**Critical capabilities for enterprise automation**



## What can a partner do?

- ✓ **Provide** an integrated, cross-silo platform (as compared to having numerous purpose-specific tools)
- ✓ **Enable** effective business-user participation through citizen development
- ✓ **Facilitate** robust governance to ensure that the objectives of initiatives are met

## Positive outcomes

- ✓ **Enterprise automation platform**
  - Higher operational efficiency
  - Improved digital experiences
- ✓ **Citizen development**
  - Engaged workforce and smooth adoption
  - Accelerated development of business apps
- ✓ **Automation governance**
  - Measurable business value from automation
  - Sustainable and scalable enterprise automation

# Essential Guidance

IDC has the following recommendations for organisations that are looking to embark on such an automation-powered journey.



## DEFINE

- Identify desired business outcomes
- Finalise automation scope
- Conduct detailed workflow review
- Stakeholders: C-Suite/ Board; Business leaders/ SMEs

- Automation to business outcome mapping
- Robust business case development



## DESIGN

- Select the right automation platform and tools
- Create detailed implementation plan
- Design a robust governance structure
- Stakeholders: CTO/CIO, CISO, CDO

- Improved project-business goal alignment
- Project risk mitigation

## KEY ACTIONS



## DEPLOY

- Select the right transformation partner
- Execute the implementation plan flawlessly
- Configure a rich low/no code development environment
- Stakeholders: CIO, LOB Heads

## BENEFITS

- Business results: revenue, efficiency, productivity, etc.
- Smooth technology transition
- Increased adoption readiness



## EMBRACE

- Automation adoption training
- Change management
- Low/No code development skilling
- Address preliminary implementation issues
- Stakeholders: CHRO, LOB Heads, end-users

- Increased business-user ownership and buy-in
- Increased efficiency/productivity through citizen development



## OPTIMISE

- Continuous analytics for performance improvement
- Ongoing process optimisation
- New automation opportunities
- Stakeholders: CIO, COE, end-users

- Outcomes optimisation
- Identification of new automation opportunities

# Enterprise Automation in Asia/Pacific

## An Industry and Market Perspective



SITUATION	COMPLICATION	POSITION	ACTION	BENEFIT	INDUSTRY PERSPECTIVE
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# How different sectors fare in automation adoption

■ These are the **most mature** sectors for automation adoption, and should focus on optimisation and citizen development.

■ A significant proportion of these two sectors has limited automation and **needs support** to scale automation through strong governance.

■ The least mature sector and **needs guidance** on use-case led, pre-built automation.

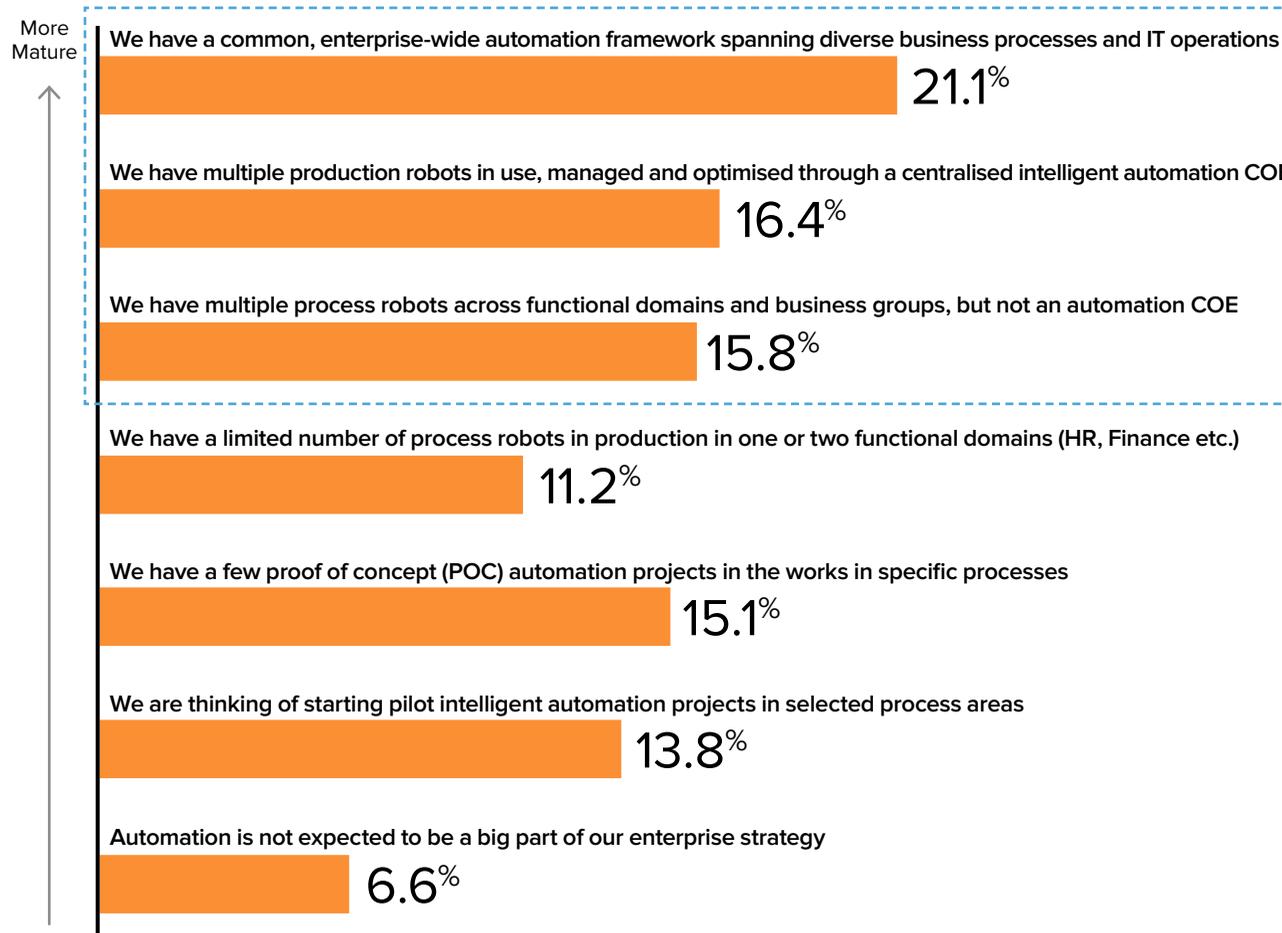
	BFSI	MANUFACTURING	RETAIL	HEALTHCARE	GOVERNMENT
Common enterprise-wide automation framework spanning diverse business processes and IT operations	21.3%	18.4%	17.3%	14.0%	17.6%
Multiple production robots in use, managed and optimised through a centralised intelligent automation COE	18.3%	16.0%	12.5%	19.3%	5.9%
Multiple process robots across functional domains and business groups, but not an automation COE	21.3%	15.2%	13.5%	8.8%	14.7%
Limited number of process robots in production in one or two functional domains (HR, Finance etc.)	12.2%	16.8%	21.2%	22.8%	11.8%
Few proof of concept (POC) automation projects in the works in specific processes	10.7%	11.2%	14.4%	8.8%	23.5%
Starting pilot Intelligent Automation projects in selected process areas	11.7%	16.8%	15.4%	15.8%	26.5%
Automation is not expected to be a big part of enterprise strategy	4.6%	5.6%	5.8%	10.5%	0.0%

Source: IDC Asia/Pacific Enterprise Services Sourcing Survey, 2022 (Asia/Pacific N=929)

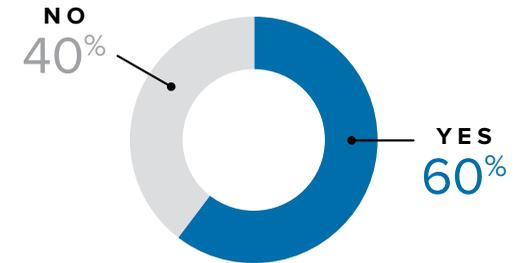
# ANZ: A mature automation market with room for improvement

With almost 53% of respondents stating that their organisations have adopted automation at scale, Australia and New Zealand is one of the most mature automation markets in Asia/Pacific. A relatively high percentage – 60% – of ANZ enterprises have an enterprise automation strategy, but a sizable 30% indicate dissatisfaction with automation usage, suggesting there is room for improvement.

## Current state of intelligent automation adoption



## Enterprises with automation strategy



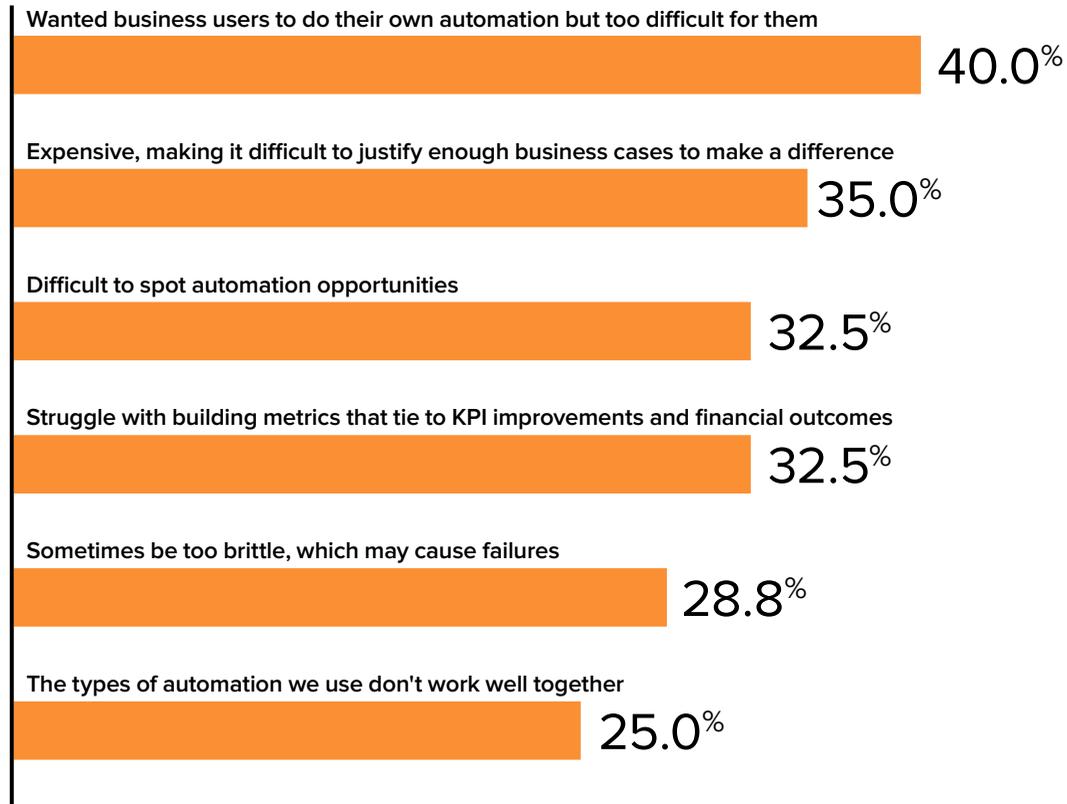
## Satisfaction with use of automation technologies



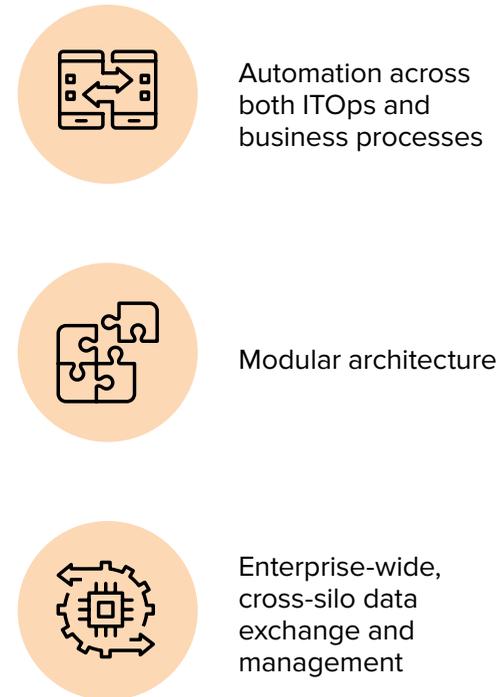
Source: IDC Asia/Pacific Enterprise Services Sourcing Survey, 2022 (ANZ N=152); IDC Future Enterprise Resiliency and Spending Survey 2023, Wave 1 (Jan 2023, ANZ N=30)

# ANZ: The way forward

## Key automation challenges



## Top desired automation capabilities



## Automation opportunities for ANZ Enterprises

To be successful in their automation journey, IDC recommends that ANZ enterprises seek an automation platform with the following features:

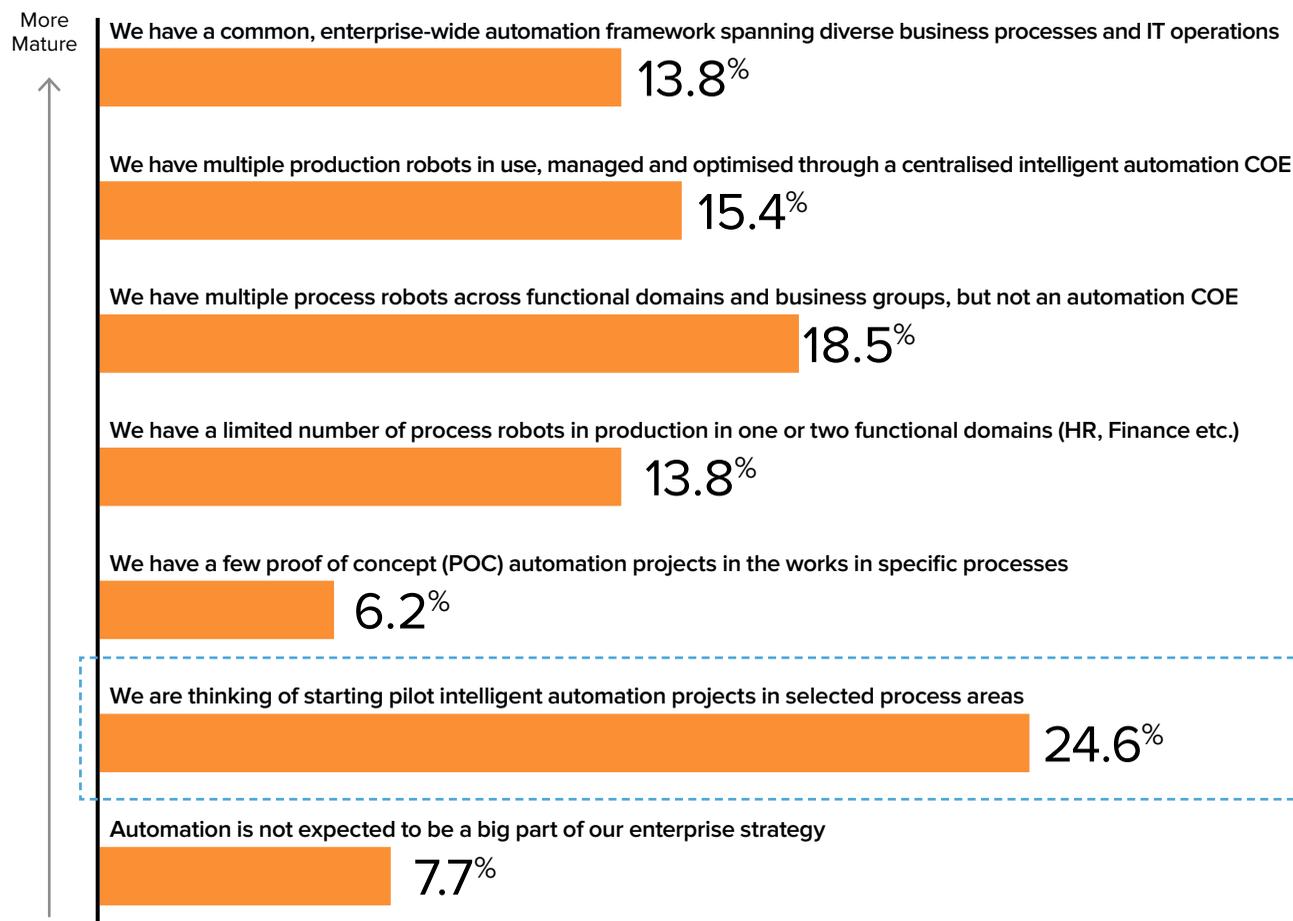
- Provides robust **low/no code development capabilities** to support a diversity of developer personas (including citizen developers). Ensure that the provider has requisite assets for workforce skilling and change management.
- Prioritises strong **governance and value mapping capabilities** that can help tie automation actions to business outcomes. This will help build business justification for additional spend and investment.
- Supports **cross-silo automation** across both IT operations and business process

Source: IDC Future Enterprise Resiliency and Spending Survey 2022, Wave 8 (ANZ N=80); IDC APEJ Enterprise Software Survey, 2022 (ANZ N=150)

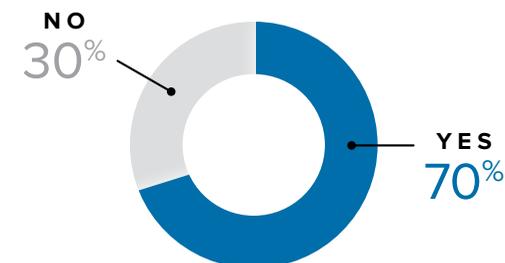
# Japan: A significant portion of enterprises has low automation usage

Almost a quarter of Japan respondents were still considering automation pilots in select areas, indicating a significant population of enterprises with low automation usage and maturity. A high percentage of enterprises - 70% – indicate that they have an enterprise automation strategy, but a major concern is that 36% of respondents indicate dissatisfaction with their automation usage.

## Current state of intelligent automation adoption



## Enterprises with automation strategy



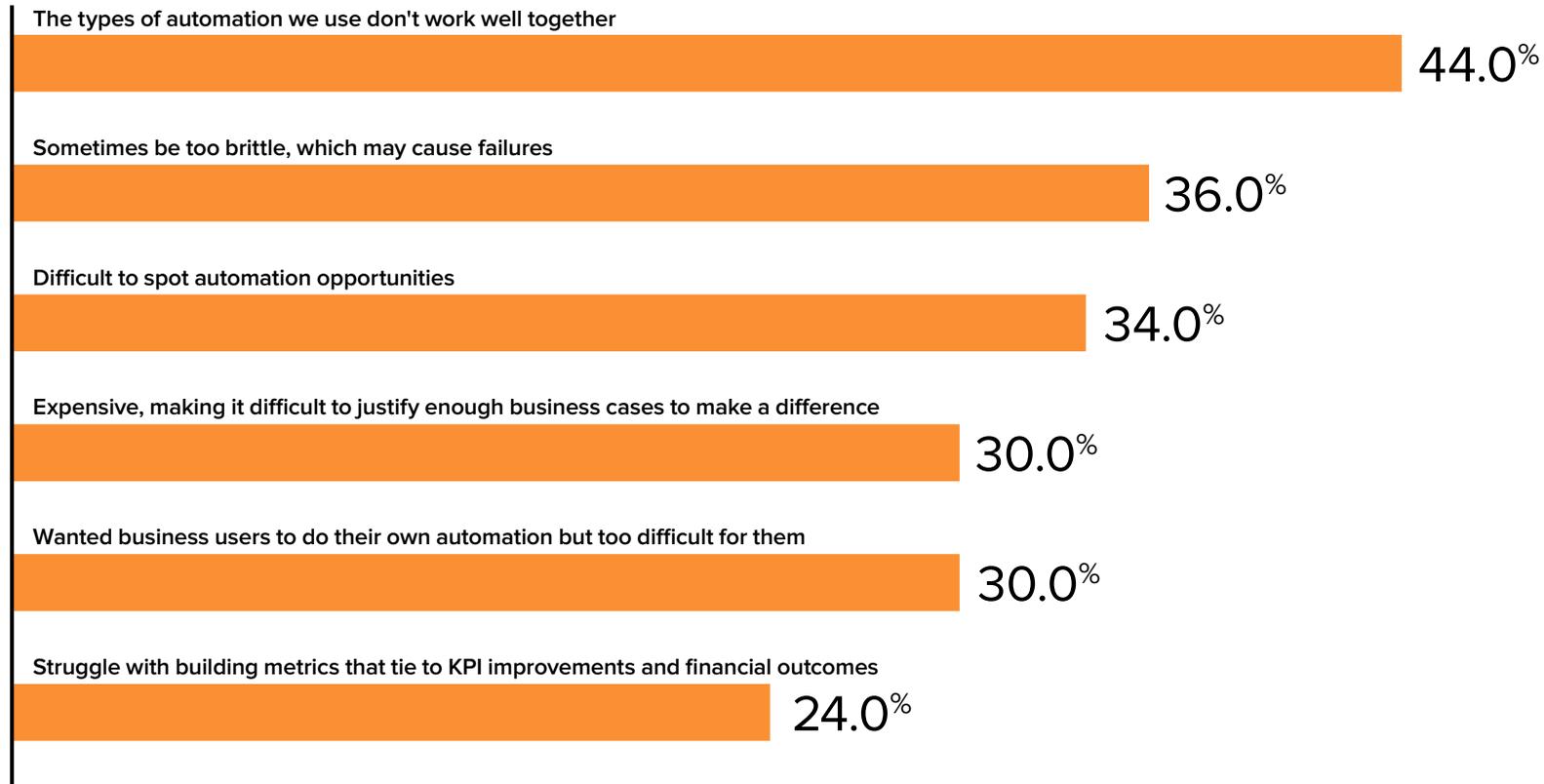
## Satisfaction with use of automation technologies



Source: IDC Asia/Pacific Enterprise Services Sourcing Survey, 2022 (Japan N=65); IDC Future Enterprise Resiliency and Spending Survey 2023, Wave 1, Jan 2023 (Japan N=50)

# Japan: The way forward

## Key automation challenges



## Automation opportunities for Japan enterprises

To be successful in their automation journey, IDC recommends that Japan enterprises seek an automation platform with these features:

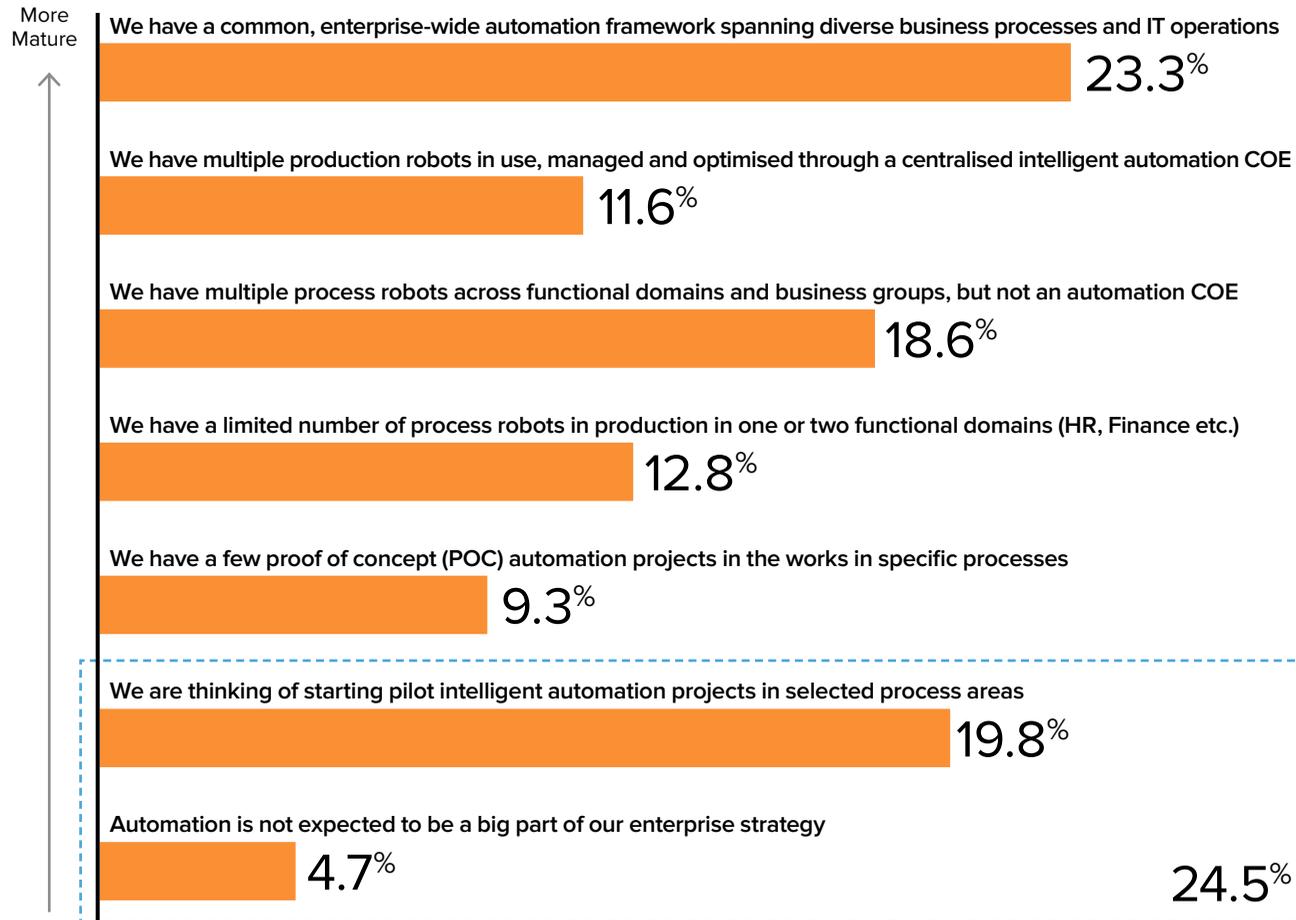
- Brings together disparate enterprise systems, apps, and data to enable seamless end-to-end automation of enterprise workflows to overcome interoperability and “duct-tape automation” challenges.
- Provides curated, pre-built templates for easy, use-case driven automation implementation.
- Has a robust governance mechanism and tools to encourage business users to identify automation opportunities in their regular work.

Source: IDC Future Enterprise Resiliency and Spending Survey 2022, Wave 8 (Japan N=50)

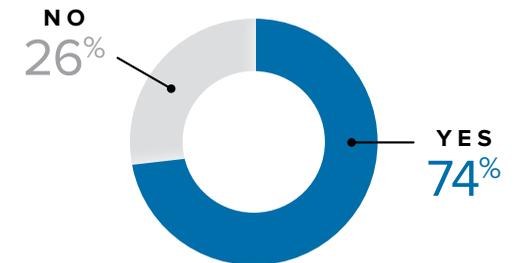
# India: A diverse and uneven automation market

Three quarters (74%) of Indian enterprises surveyed indicated they had an automation strategy, but about 38% indicated dissatisfaction with their automation usage presenting a serious challenge. Indian enterprises appear to be distributed across the entire spectrum of automation maturity, indicating a very heterogenous and uneven market. Approximately 25% of the market is at the beginning of its automation journey.

## Current state of intelligent automation adoption



## Enterprises with automation strategy



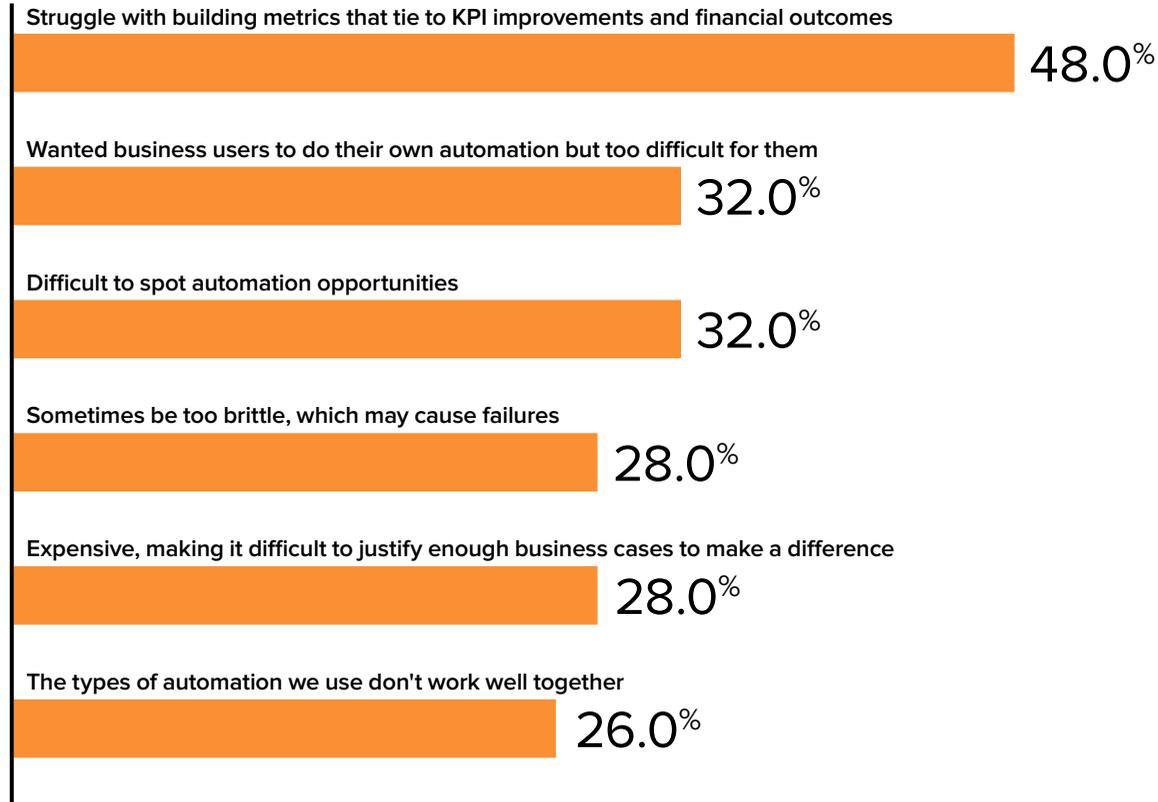
## Satisfaction with use of automation technologies



Source: IDC Asia/Pacific Enterprise Services Sourcing Survey, 2022 (India N=86); IDC Future Enterprise Resiliency and Spending Survey 2023, Wave 1, Jan 2023 (India N=50)

# India: The way forward

## Key automation challenges



## Top desired automation capabilities



## Automation opportunities for India enterprises

To be successful in their automation journey, IDC recommends that India enterprises seek an automation platform with these features:

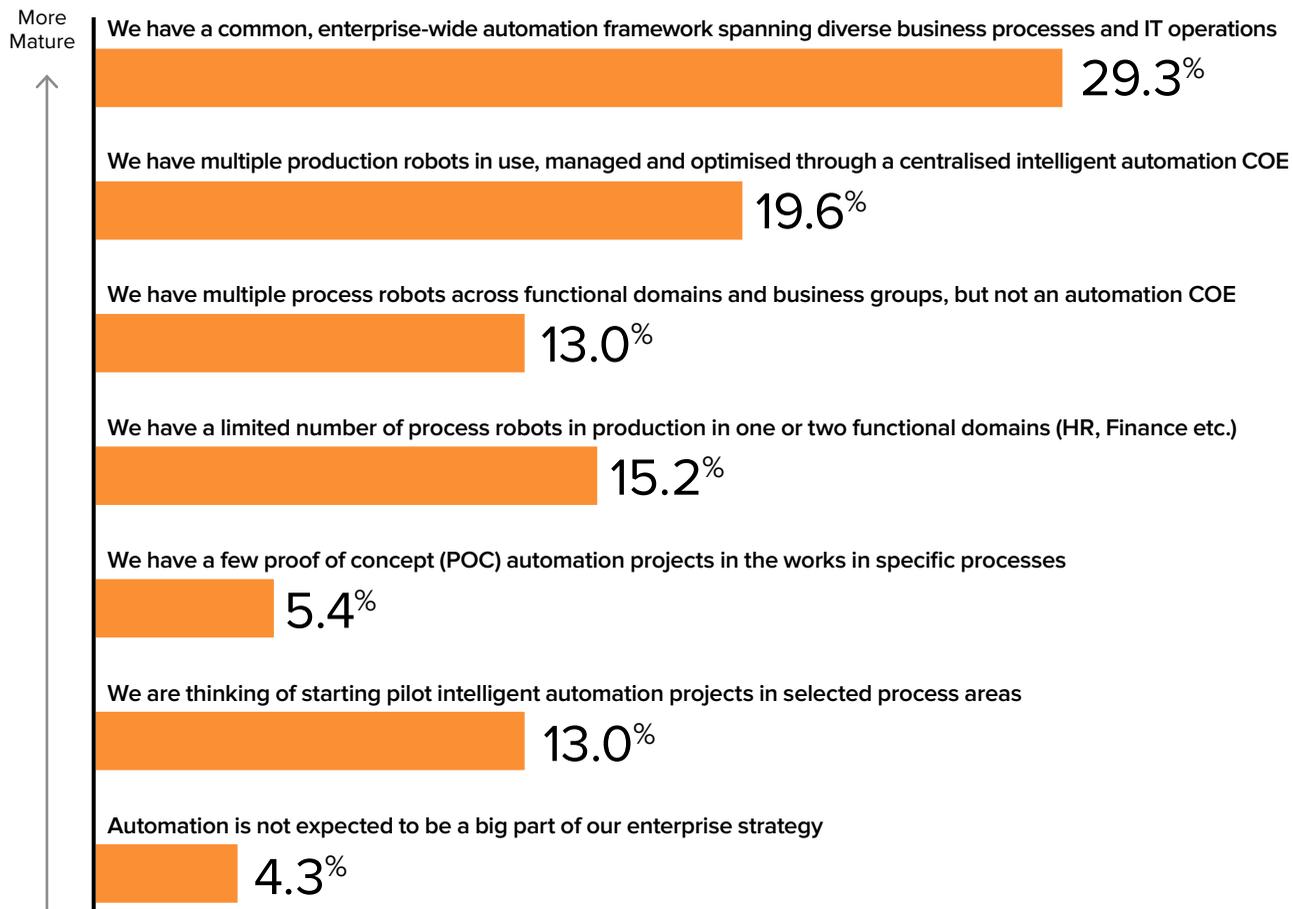
- Provides strong value mapping capabilities (visualisation, dashboarding and analytics) that can help tie automation actions to business outcomes.
- Has robust low/no code development capabilities to support a diversity of developer personas (including citizen developers). Ensure that the platform provider has requisite assets to support workforce skilling and change management initiatives
- Provides comprehensive collection of out-of-the-box, pre-built connectors and integration assets to 3rd party applications for easy and rapid automation implementation

Source: IDC Future Enterprise Resiliency and Spending Survey 2022, Wave 8 (India N=50)

# Singapore: Mature users aspiring to scale automation

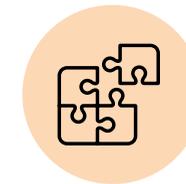
Singapore enterprises are, on average, highly mature automation users looking to scale automation use and build complex automation solutions.

## Current state of intelligent automation adoption



Source: IDC Asia/Pacific Enterprise Services Sourcing Survey 2022 (Singapore N=92)

## Top capabilities enterprises look for in an automation solution



Modular architecture



Automation across both IT Ops and business processes



Robust built-in assurance and environment security

## The Way Forward

### Automation opportunities for Singapore enterprises

To be successful in their automation journey, IDC recommends that Singapore enterprises seek an automation platform with these features:

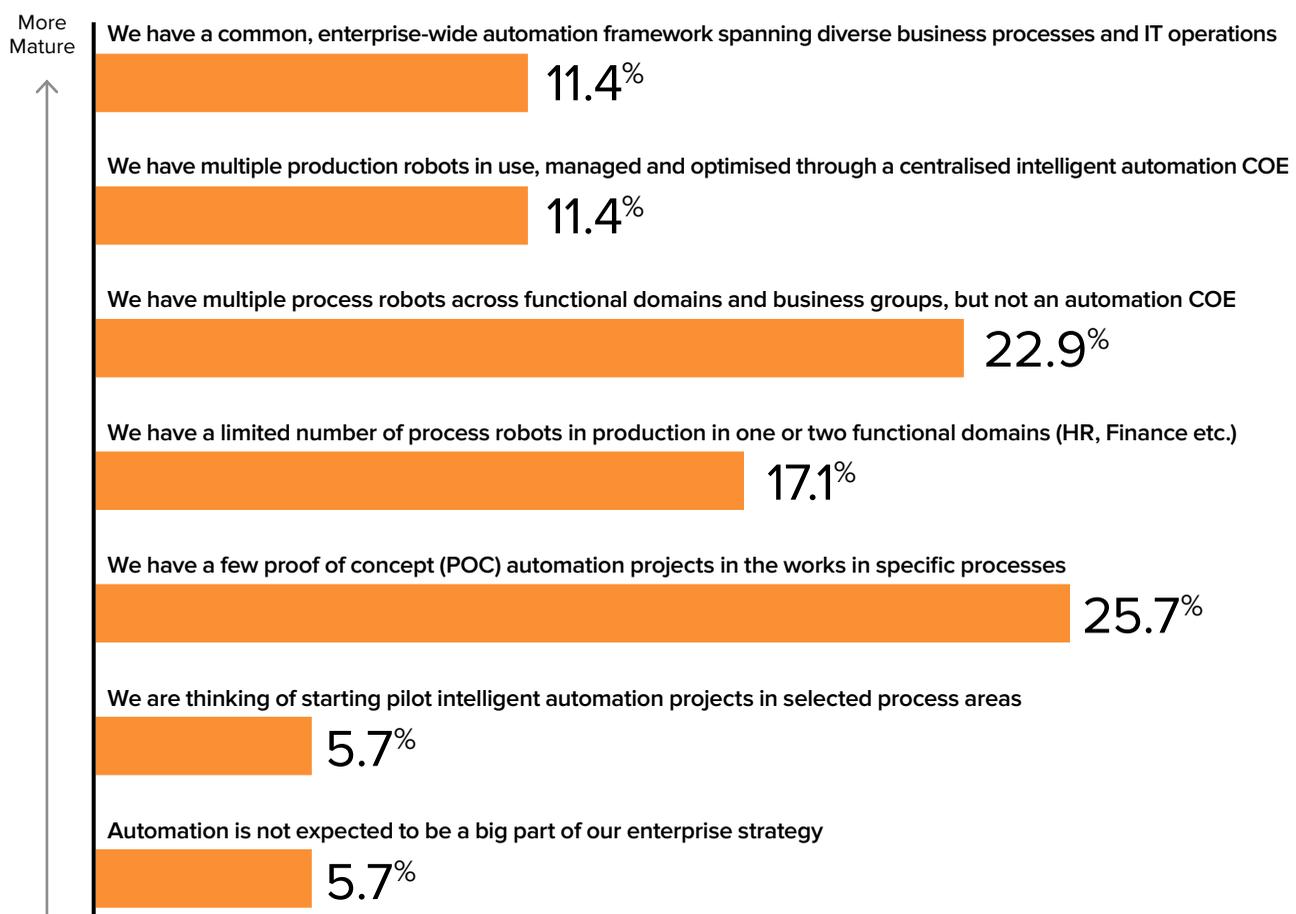
- Ability to provide effective automation management and governance at scale
- Have a modular architecture that allows a mix-and-match approach to building custom-made and complex automation
- Allows automation across both business processes and IT Ops for use-cases that straddle domains

Source: IDC APEJ Enterprise Software Survey 2022 (Singapore N=50)

# Hong Kong: Halfway there

Hong Kong enterprises are mostly in the mid stages of automation maturity and need support to improve automation adoption and build scale.

## Current state of intelligent automation adoption

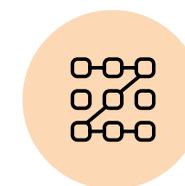


Source: IDC Asia/Pacific Enterprise Services Sourcing Survey 2022 (Hong Kong N=35)

## Top capabilities enterprises look for in an automation solution



Traceability, compliance, and governance



Rich library of reusable components



Low code/ no code development

## The Way Forward

### Automation opportunities for Hong Kong enterprises

To be successful in their automation journey, IDC recommends that Hong Kong enterprises seek an automation platform with these features:

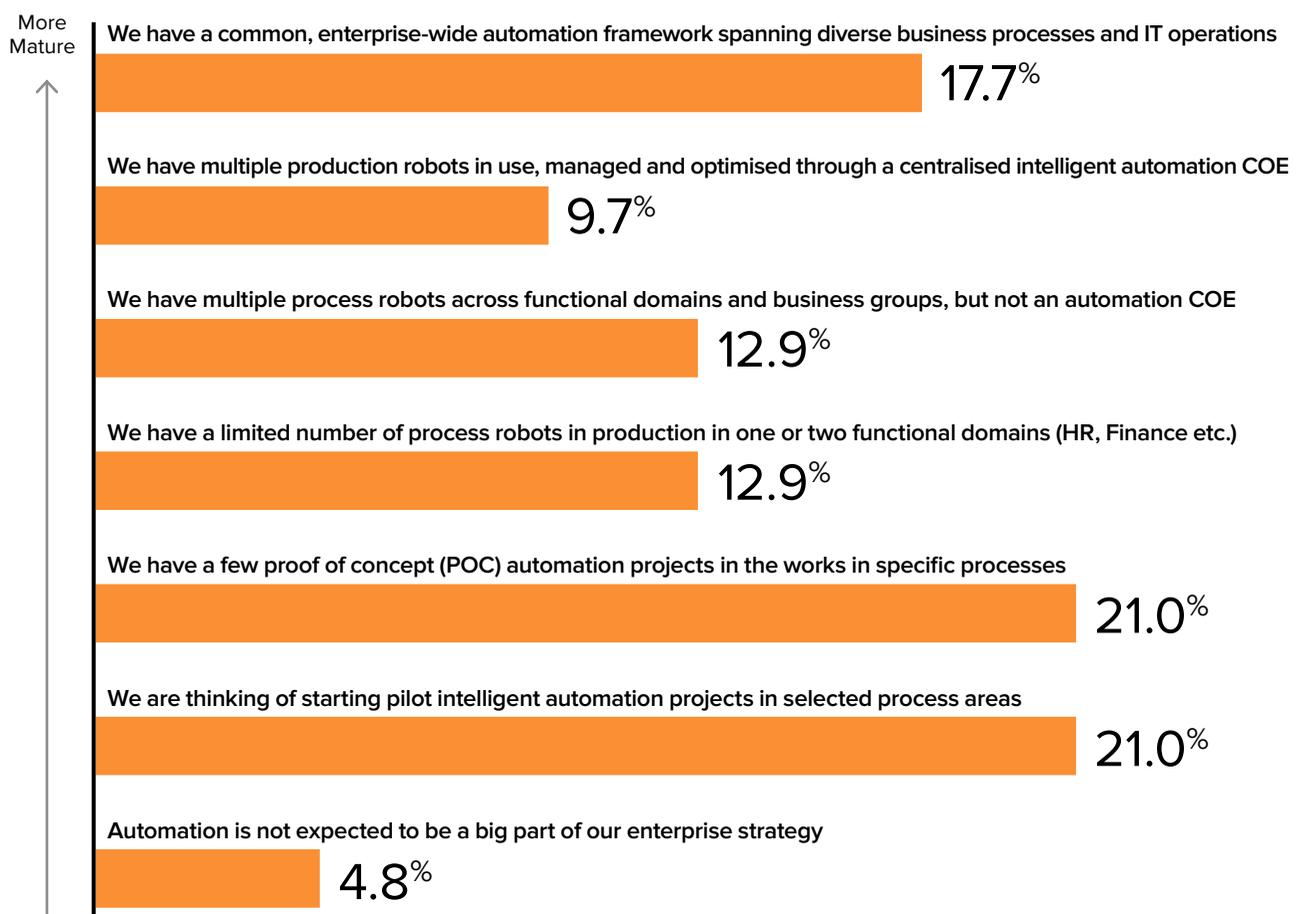
- Traceability, compliance, and governance for a market dominated by a highly regulated BFSI sector
- Reusable components (templates, connectors, pre-built use-cases, etc.) to accelerate automation adoption
- Low/no code capabilities to encourage citizen development and mitigate talent availability issues

Source: IDC APEJ Enterprise Software Survey, 2022 (Hong Kong N=50)

# Thailand: A market with potential

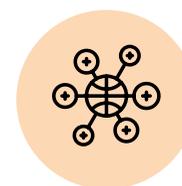
The Thailand market is still in the early stages of automation maturity, and there are vast opportunities for enterprises to accelerate the adoption of automation technology.

## Current state of intelligent automation adoption



Source: IDC Asia/Pacific Enterprise Services Sourcing Survey 2022 (Thailand N=62)

## Top capabilities enterprises look for in an automation solution



Wide range of deployment models/pricing options



Automation across both IT Ops & business processes



Low code/no code development

## The Way Forward

### Automation opportunities for Thailand enterprises

To be successful in their automation journey, IDC recommends that Thai enterprises seek an automation platform with these features:

- Business case development/ROI tools, proof of concept (POC), pre-built use-cases, etc. to help enterprises at the early stages of their automation journey
- Wide range of deployment models/pricing options to make it attractive for enterprises to begin their automation journey on their terms
- Common automation framework across business processes and IT for enterprises taking a holistic approach to automation

Source: IDC APEJ Enterprise Software Survey 2022 (Thailand N=50)

# Malaysia: A heterogeneous automation market

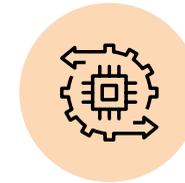
The Malaysia automation market is a mixed one with enterprises across the spectrum of the automation maturity curve.

## Current state of intelligent automation adoption



Source: IDC Asia/Pacific Enterprise Services Sourcing Survey 2022 (Malaysia N=64)

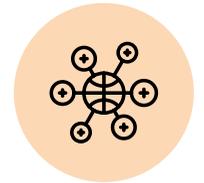
## Top capabilities enterprises look for in an automation solution



Common, cross-silo data management layer



Robust built-in assurance and environment security



Wide range of deployment models/pricing options

## The Way Forward

### Automation opportunities for Malaysia enterprises

To be successful in their automation journey, IDC recommends that Malaysia enterprises seek an automation platform with these features:

- Wide range of deployment models/pricing options to make it attractive for enterprises to begin their automation journey.
- Robust, cross-silo data management capabilities for automating data processing centric back-office processes.
- For mature automation users, the ability to provide effective automation management and governance at scale.

Source: IDC APEJ Enterprise Software Survey, 2022 (Malaysia N=50)

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