IDC Directions

SaaS applications and platforms in an agentic era

Reimagining value in the age of automation

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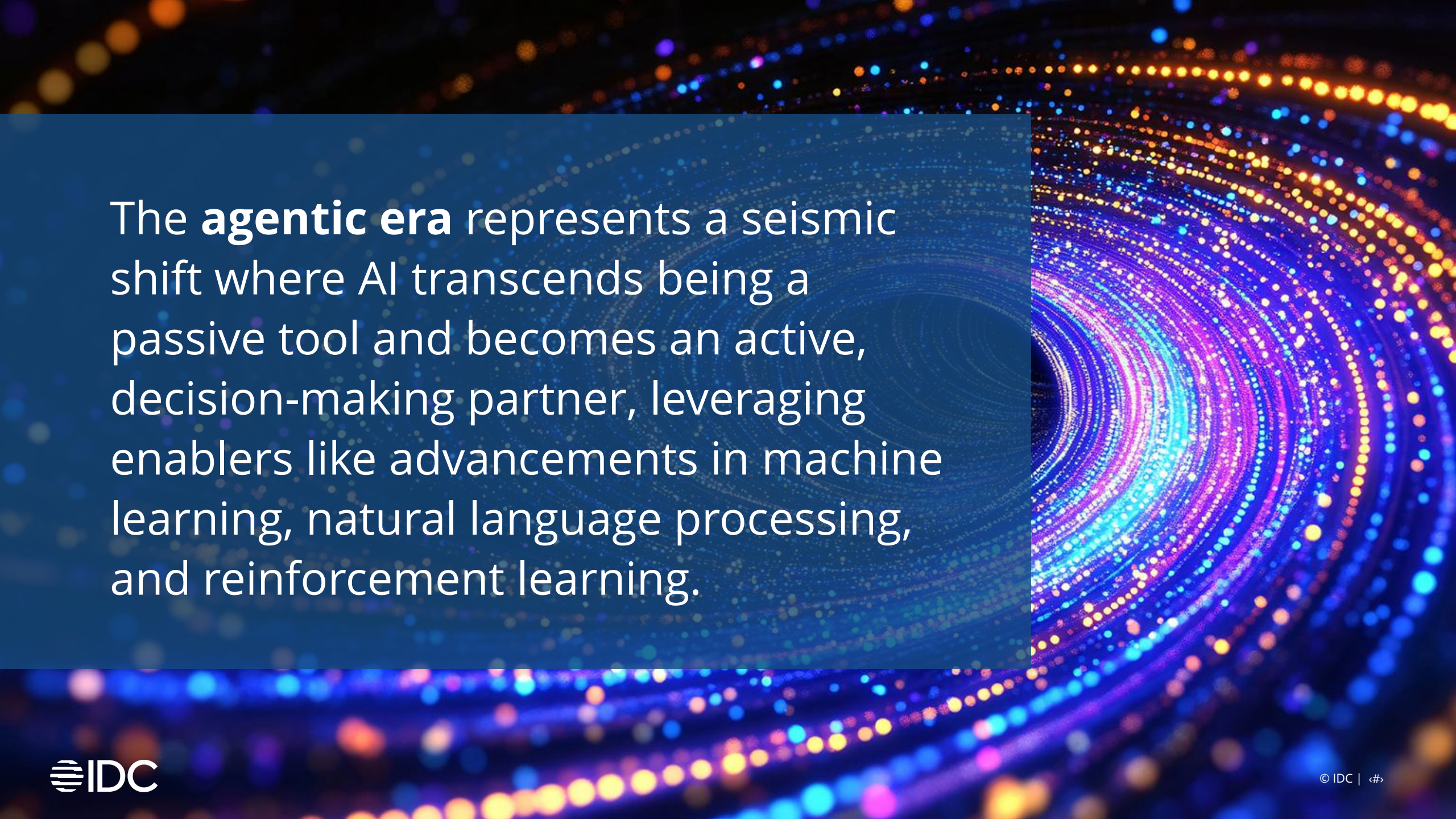

The **agentic era** represents a seismic shift where AI transcends being a passive tool and becomes an active, decision-making partner, leveraging enablers like advancements in machine learning, natural language processing, and reinforcement learning.

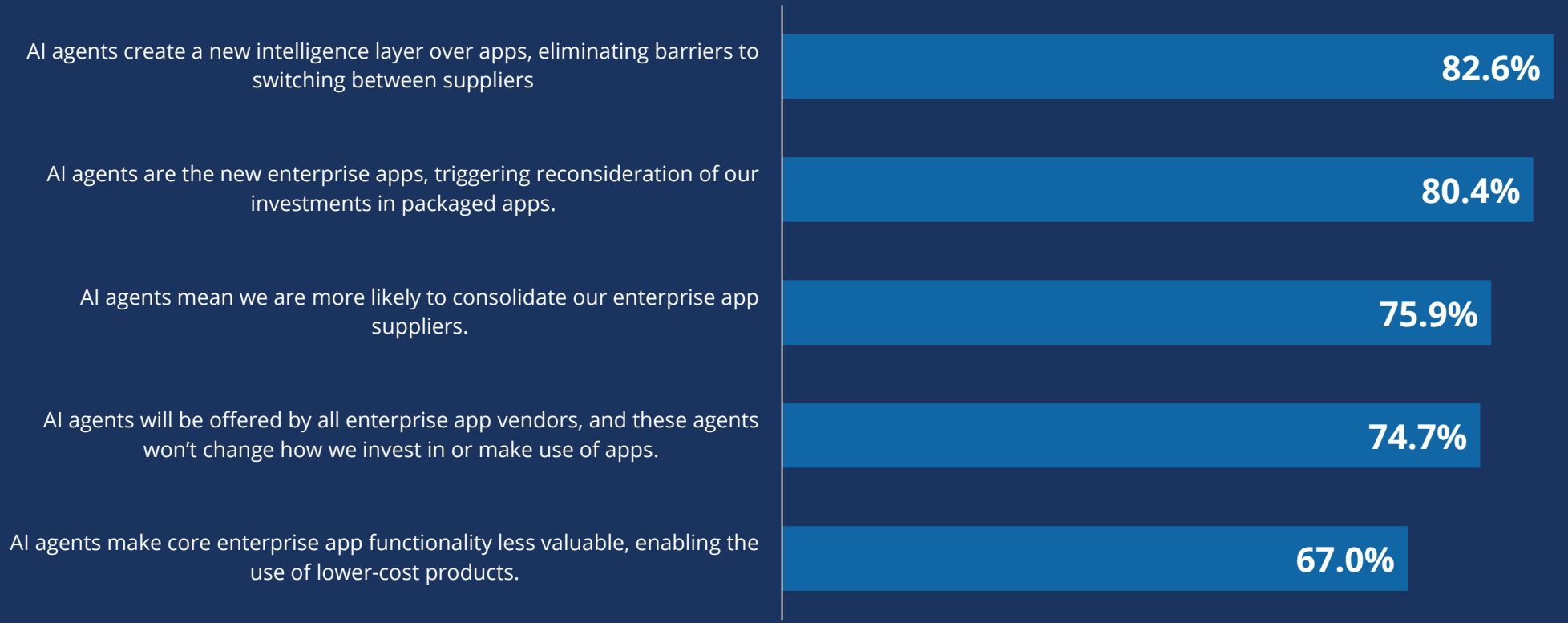
Assistants, Advisors, Agents, oh my!

AI Role	Description	Ideal Value	Use Case Examples: Cash Management
 **Assistant**	**Creates:** Enables language and visual automation collaborating with employees.	Productivity gains	**Dunning letter:** Produces a better correspondence, not just boilerplate but in the context of recent interactions.
 **Advisor**	**Connects:** Synthesizes disparate data; suggests connections and correlations for employee decisions and insight.	Insights exposed and inspired	**Running cash scenarios:** Ability to interact with the data to ask questions like "*What are my best short term investment options balancing risk, liquidity, and return?*"
 **Agent**	**Acts:** Independently drives outcomes by creating and connecting workflows with employees in the loop.	Integrated and/or autonomous work	**Hands-off customer action:** The agent discovers that a customer's bank has filed a forbearance, triggering a series of mitigating actions (near autonomously).

*Source: Generative AI Use Case Taxonomy: The Marketing Function, March 2024

Impact of AI agents on enterprise app investments

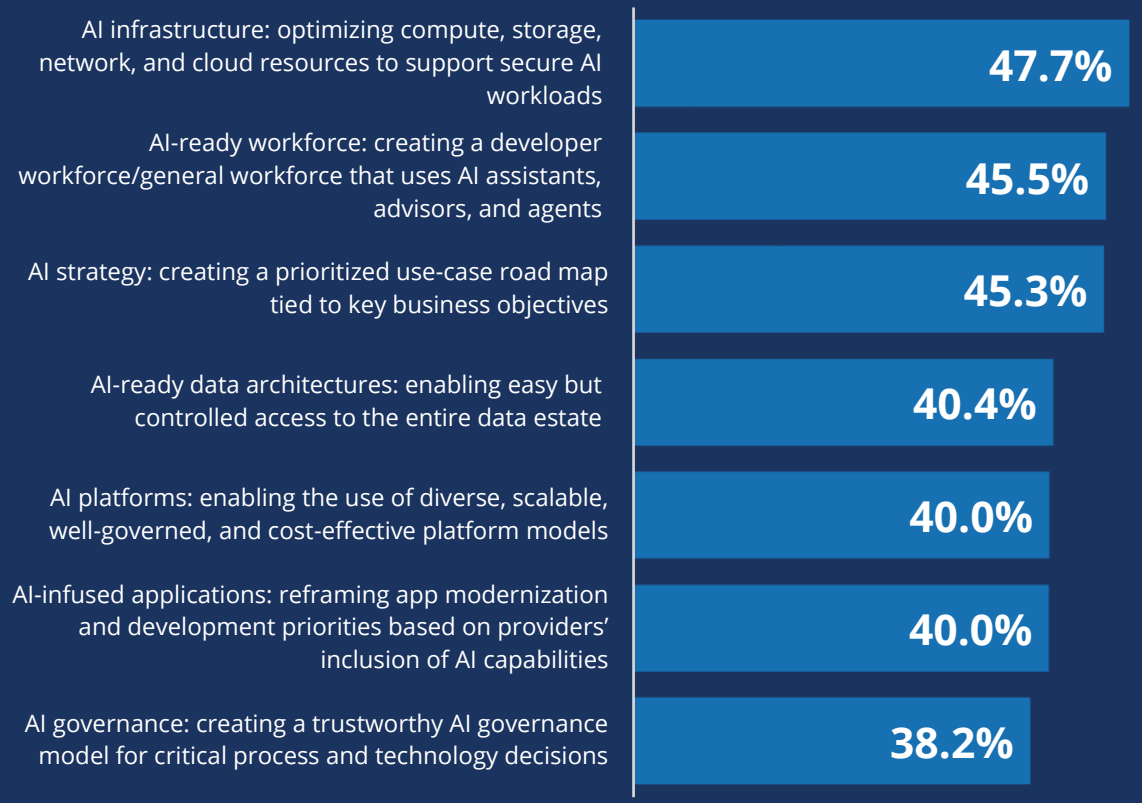
Indicate your level of agreement with each of the following statements regarding how the introduction of AI agents within enterprise applications will impact your organization's evaluation, investment in, and use of such applications.



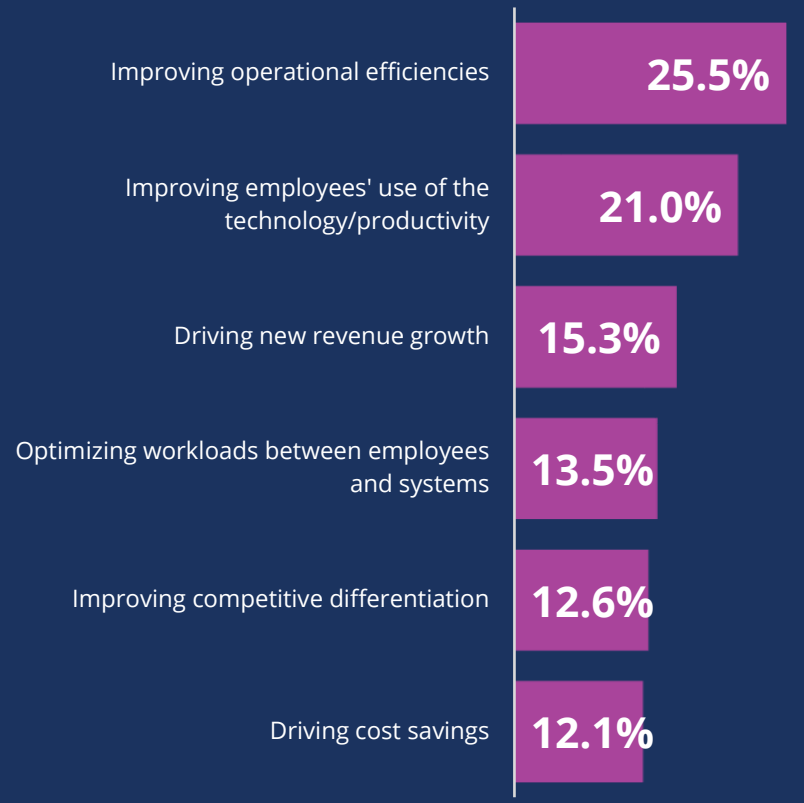
Source: Future Enterprise Resiliency & Spending Survey Wave 1, IDC, February 2025, N = 885

Business value drives AI priorities

What are your organization's top 3 priorities in 2025 to move from experimenting with GenAI to enabling broader adoption of AI across your entire business and IT stack?



Which of the following is the most important goal driving your organization's AI-infused application efforts?



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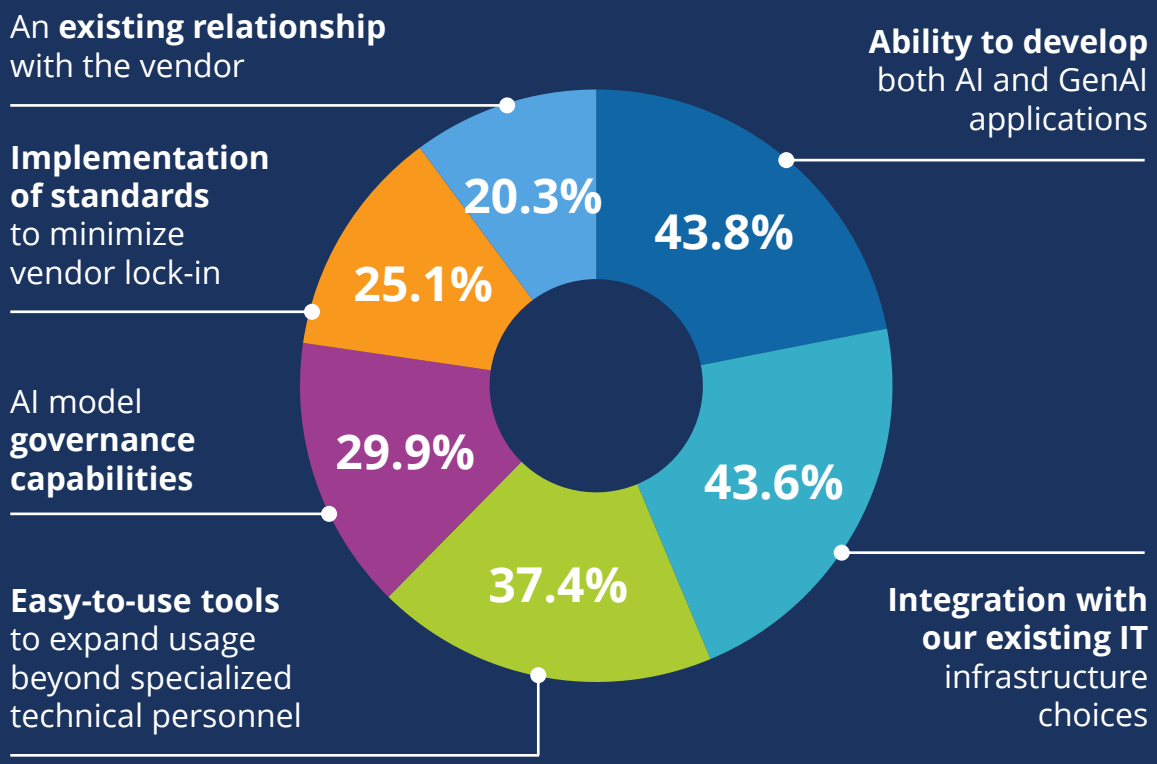
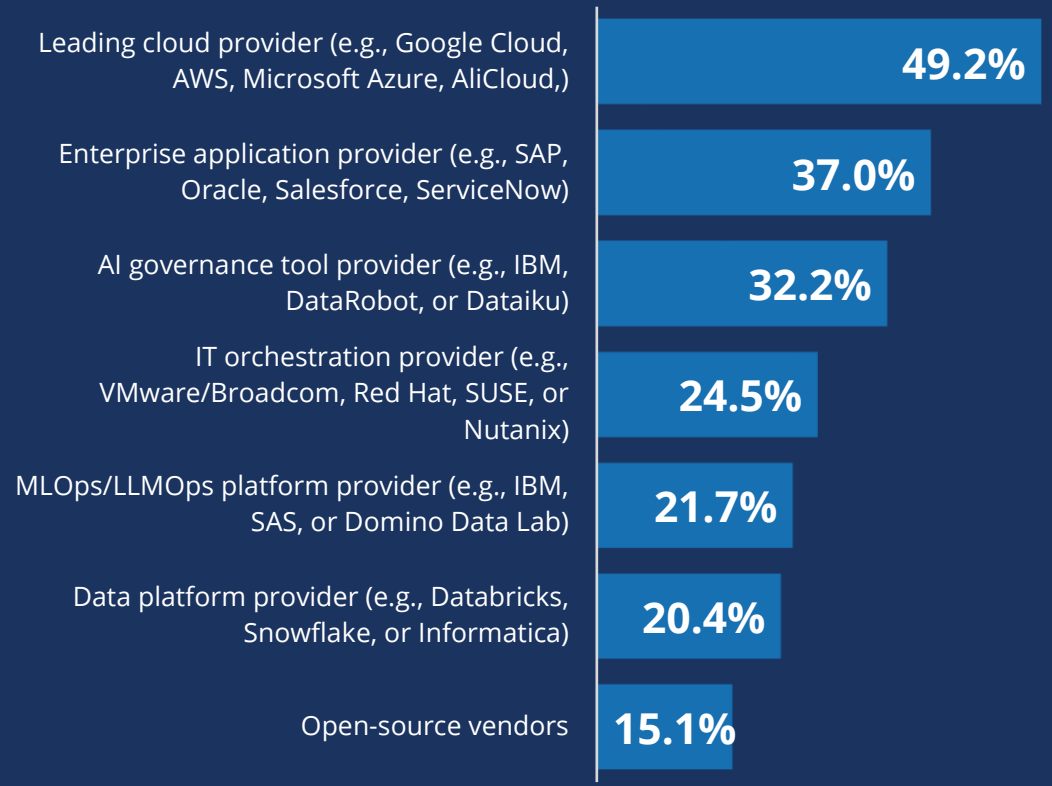
AI platform priorities

Overall important factors



Which type of vendor will be most important in helping you meet your AI platform goals?



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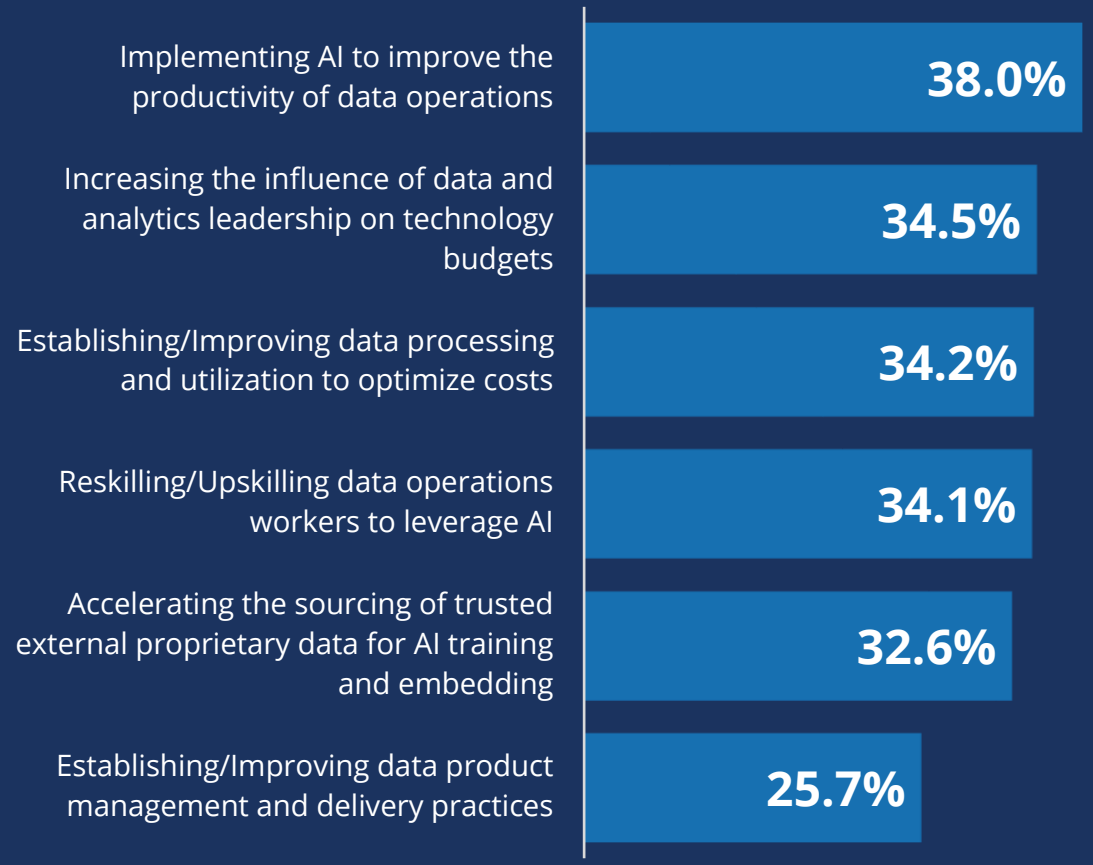
Goals to accelerate AI adoption

Overall importance



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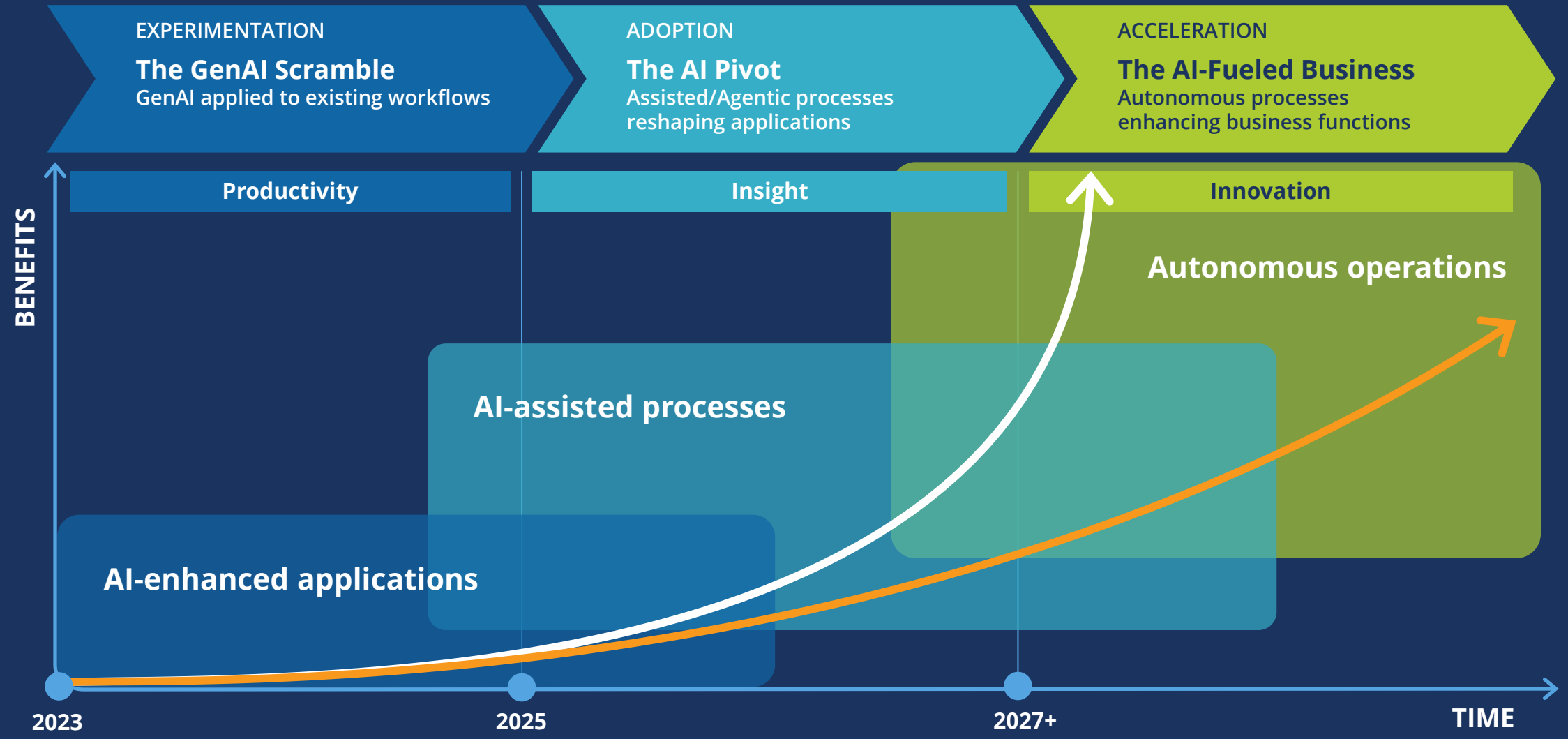
The AI-enabled world: Evolution of applications and platforms



Source: IDC Research 2024

Macro assumptions: The next wave of hyper-functional SaaS

This is an **evolution** unfolding over time.

SaaS is **an enduring and viable business model**. Organizations will continue to need core systems-of-record (data and business processes).

SaaS app revenue continues to experience **double-digit growth** as it matures as a delivery model.

Venture capital, high double-digit growth rates, and a pioneering spirit **shift to AI-native** applications, agents, and tools.

SaaS businesses become premier suppliers of **app-centric agentic workflows (adopt),** e.g., Workday delivering recruiting agents, but AI native specialists will receive significant agent investments **(build),** similar to RPA.

SaaS applications will have **two key roles** vis-à-vis AI agents:

- As providers of the app-centric assistants/advisors/agents
- As providers of data (as systems-of-record) for 3rd party agents

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Evolving cognitive systems architecture: Supporting adaptive workflows

Innovation

- Self-learning, adaptive based on context and real-time input
- Scenario-based outcomes that are dynamic and not fixed for a workflow based on data
- Inputs shift from data to insights to autonomous actions
- APIs, containerized microservices integration based on outcome-driven, event-triggered workflows
- Emergence of advanced cognitive autonomous systems: Specialized agents collaborating to create a chain of analysis, actions, and decisions
- Application composability: easier to engineer/reengineer

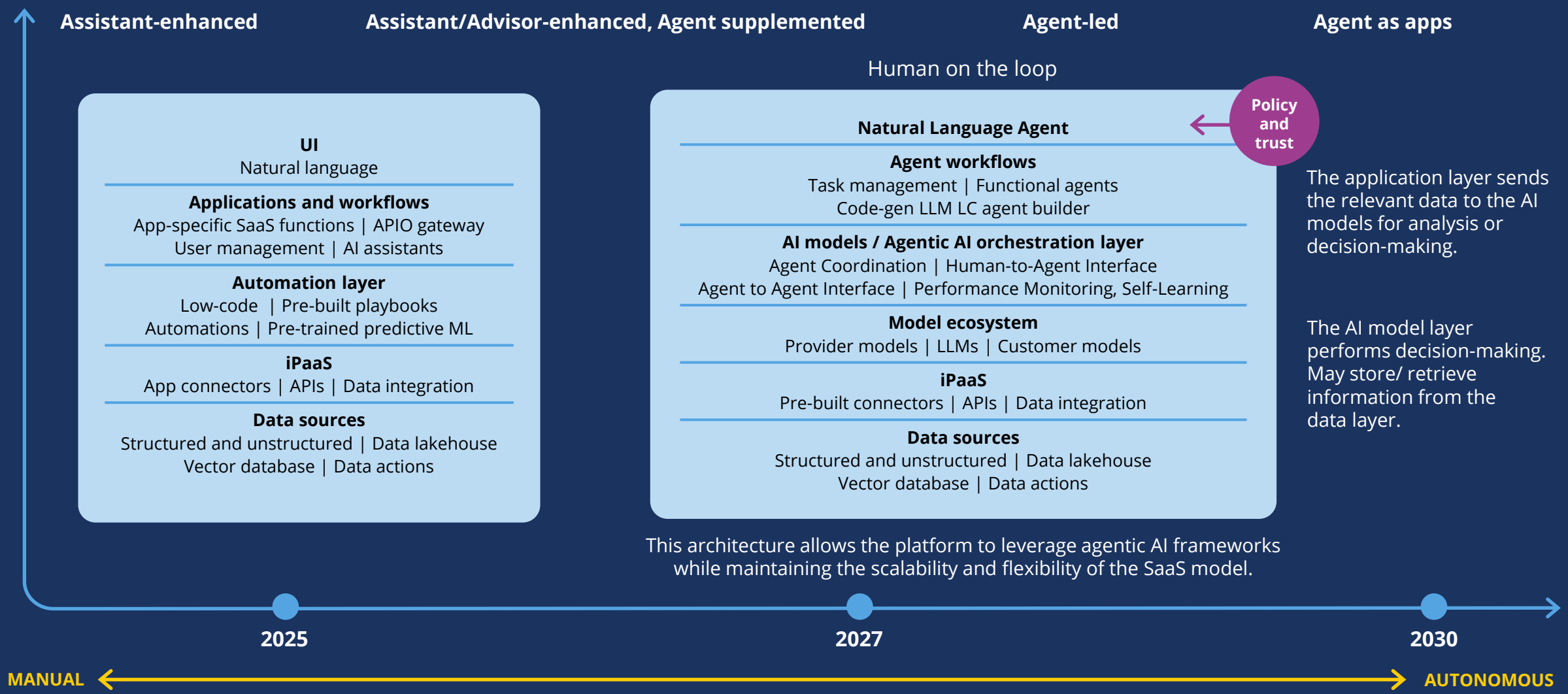
The agentic evolution of SaaS applications

	TIMING AND DISTRIBUTION OF ADOPTION BY LEVEL						
	2025	2027	2029	2031	2033	2035	2037
Agents as Apps • Agents replace entire applications (i.e.. Companies will have a CRM Agent/Ag-fleet. a SCM Agent/Ag-fleet, etc.) • Traditional interfaces rarely used	0%	0%	5%	20%	35%	50%	65%
Agent Led • Agents replace entire functional areas within the application (i.e.. Within SCM, an agent for inventory management, an agent for logistics, etc. • Agentic interfaces dominate (both text prompt and voice). Traditional interfaces used infrequently	0%	5%	20%	40%	50%	35%	25%
Ag-Enhanced • Applications are significantly enhanced and augmented by Ag-driven capabilities • Ag-interfaces becoming more dominant, reliance on traditional interfaces fading • Slowing development of As/Ad, as traditional interfaces become less prominent	3%	30%	40%	25%	10%	10%	5%
As/Ad-Enhanced, Ag Supplemented • Most functionality is As/Ad-enhanced, Embedded Ag grows • Mostly traditional interfaces, some replaced with Ag-interface	17%	35%	20%	10%	5%	5%	5%
As/Ad-Enhanced • Growing As/Ad-enhanced functionality • Traditional Interfaces remain	50%	20%	10%	5%	0%	0%	0%
Traditional • Traditional functionality & Interface	30%	10%	5%	0%	0%	0%	0%

Legend: Assistants (**As**), Advisors (**Ad**), Agents (**Ag**)

Source: The Agentic Evolution of Enterprise Applications, February 2025, IDC #US53194625

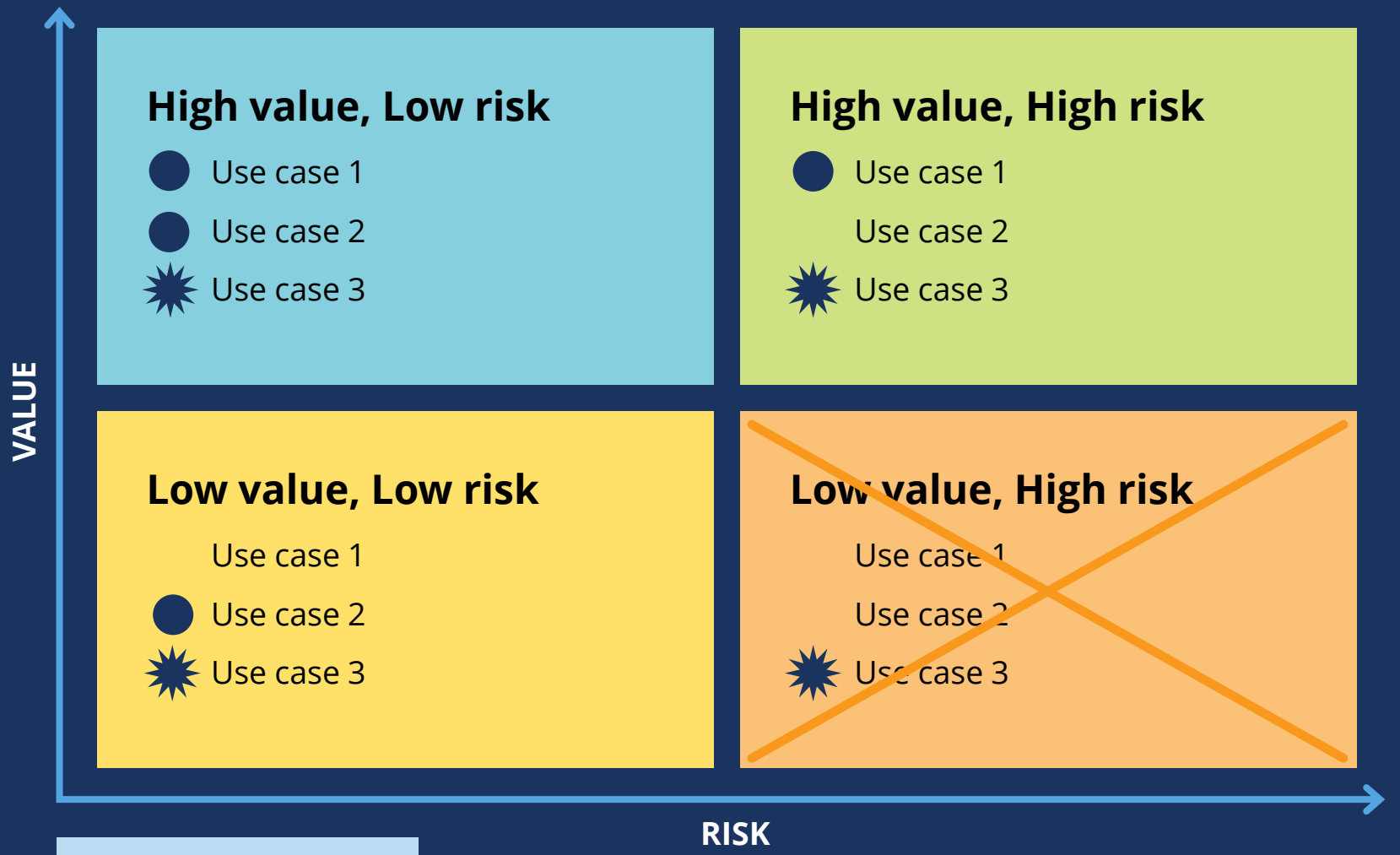
SaaS application platforms: AI-enabled to Agent-centric



Prioritize use cases that drive performance

Assessment of use case ideas

DIMENSION	SPECIFICATION
Value	Economic value
	Strategic alignment
Risk	Security vulnerabilities
	Data quality and privacy
Complexity	Data
	Algorithm
	Workflow
	Skills, experience



Business application and platform architectures shaped by agents

FEATURE	6-12 MONTHS	12 – 24 MONTHS	24 – 36 MONTHS
Autonomy	AI assistants begin to make simple decisions independent of humans. Agents gain greater autonomy in business-critical processes.	Assistants and advisors handle moderately complex decisions with minimal oversight. Agents achieve near-complete autonomy for many business-critical processes.	Assistants and advisors gain high autonomy in specific functional areas. Agentic AI achieves near-complete autonomy for most business-critical processes.
Scope	Assistants used for discrete tasks and user interactions. Advisors synthesizing data and bringing next-best actions to users. Agents are crafted for business-critical processes and expand to more functional processes.	Assistants and advisors influence functional areas with humans-in-the-loop. Agents orchestrate end-to-end workflows within functional areas.	Assistants and advisors will broaden their scope across more business processes and functions. Agentic AI will increase management of business functions across organizations.
Learning	Assistants, advisors, and agents improve contextual information & learning capabilities. Agentic AI develops more sophisticated self-learning algorithms	Agents and assistants starts to evolve into autonomous agents using more sophisticated AI models.	Assistants, advisors, and agents integrate advanced AI models. Agents may leverage quantum computing for exponential learning, while assistants and advisors use federated learning for inter-organization knowledge sharing.
Strategic impact	Assistants and advisors provide data-driven insights & next-best action alternatives for decision support. Agentic AI begins influencing strategic decisions.	Assistants and advisors provide more comprehensive BI and scenario modeling. Agentic AI becomes integral to strategic planning.	Assistants and advisors offer proactive strategic recommendations based on comprehensive data analysis. Agents drive AI-powered strategy formulation.
UI	Assistants and advisors become more conversational and context-aware. Agents enable more intuitive interfaces for oversight.	Assistants and advisors deliver more immersive AR-enhanced user experiences. Agents develop natural language interfaces for strategic oversight.	Assistants and advisors offer hyper-personalized, emotion-aware experiences. Agentic AI may explore thought-based interactions.
Integration	Assistants and advisors create tighter integration with core applications and additional datasets. Agents will augment some workflows within applications, like ERP and HCM.	Assistants and advisors are fully integrated across all application modules. Agents natively built into next-generation SaaS business applications.	Assistants and advisors will have native integration in cloud-based systems of record. Agents seamlessly integrate with other agents. Armies of agents start to evolve.
Decisioning	Assistants and advisors take on moderately complex decisions with humans-in-the-loop. Agents handle increasingly complex scenarios.	Assistants and advisors will handle more complex decisions within defined parameters. Agents make decisions considering complex business contexts.	Assistants and advisors manage intricate, multi-stakeholder decisions within established guidelines. Agentic AI incorporates governance, risk, compliance, and macroeconomic factors.
Data processing	Assistants, advisors, and agents improve unstructured data processing. Agents will take the lead in complex data synthesis.	Assistants and advisors will seamlessly integrate external data sources, with Agents performing advanced predictive analytics on diverse dataset.	Assistants and advisors perform predictive modeling based on historical and real-time data. Agents provide real-time processing of global data streams with advanced pattern recognition in unstructured data.
Tailored functions	Assistants, advisors, and agents provide industry-specific and purpose-built functional solutions and easy to use customization tools.	All will offer modular, AI-driven self-customization capabilities to adapt to unique business requirements.	Assistants and advisors suggest customizations based on user needs. Agents are self-adapting systems that automatically respond to changing business needs.
Implementation	Assistants, advisors, and agents have streamlined implementation and on-boarding processes.	Implementation will be simplified through advanced no-code/low-code platforms for assistants, advisors and agents, reducing the skills gap.	Deployment will be simplified through advanced AI-driven self-configuration of cloud-native containerized applications.

Closer look

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Strategic impact	Assistants and advisors provide data-driven insights & next-best action alternatives for decision support. Agentic AI begins influencing strategic decisions.	Assistants and advisors provide more comprehensive BI and scenario modeling. Agentic AI becomes integral to strategic planning.	Assistants and advisors offer proactive strategic recommendations based on comprehensive data analysis. Agents drive AI-powered strategy formulation.
Decisioning	Assistants and advisors take on moderately complex decisions with humans-in-the-loop. Agents handle increasingly complex scenarios.	Assistants and advisors will handle more complex decisions within defined parameters. Agents make decisions considering complex business contexts.	Assistants and advisors manage intricate, multi-stakeholder decisions within established guidelines. Agentic AI incorporates governance, risk, compliance, and macroeconomic factors.

Business application and platform architectures shaped by agents

FEATURE	6 – 12 MONTHS	12 – 24 MONTHS	24 – 36 MONTHS
Interoperability	Fill out	Assistants and advisors provide moderate cross-platform functionality. Agents offer limited cross-platform functionality.	Assistants and advisors leverage standardized protocols for communication and data exchange across platforms. Agents have universal compatibility across all digital business ecosystems.
Predictive capabilities	Fill out	Assistants and advisors offer basic features. Agents provide advanced predictive and prescriptive capabilities.	Assistants and advisors deployed for operational forecasts with real-time adjustments based on events. Agents used for long-term strategic forecasting with multiple scenario planning.
Cost efficiency	Fill out	Assistants and advisors bring incremental productivity savings. Agents offer high initial investment with significant long-term savings.	Assistants and advisors enable scalable solutions accessible to all businesses. Agents enable the democratization of advanced AI capabilities and significant ROI through optimized operations.


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