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Unlocking the right agentic AI use cases

The business imperative for agentic AI

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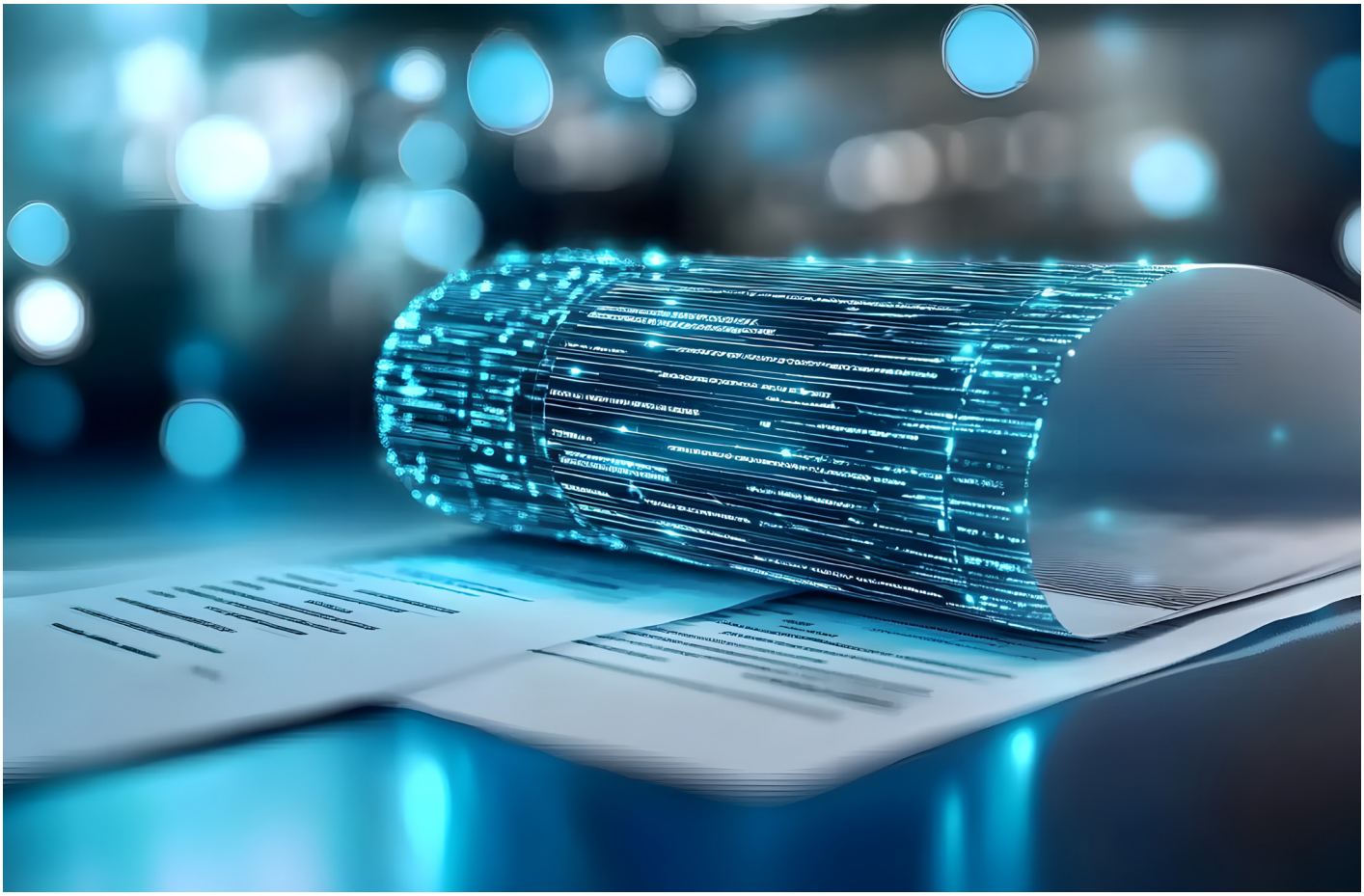


Introduction

As agentic AI systems become a crucial element of enterprise operations, organisations must determine which business processes are most suitable for agentic transformation and how to assess their value effectively. This question is critical because agentic AI significantly departs from traditional automation. Different criteria and considerations are needed to evaluate the implementations and identify the proper use cases to ensure their success.

Identifying suitable processes and establishing robust evaluation criteria is essential to ensure that organisations derive meaningful value while maintaining operational resilience and enterprise relevance.

This chapter presents two structured approaches for evaluating and selecting business processes for agentic transformation, each tailored to different organisational needs and maturity levels.

1. **Qualifying existing use cases:** Assessing whether a specific business problem is a good candidate for agentic AI.
2. **Prioritising use cases:** Sequencing agentic adoption based on impact, ease of implementation and differentiability.

These approaches offer a comprehensive framework for identifying high-value use cases for agentic AI.

Approaches to assessing suitability for agentic AI implementation

Every organisation's AI journey is shaped by its unique business priorities, technological maturity and the outcomes it seeks to achieve. As enterprises explore agentic AI, they typically approach implementation through one of two distinct pathways:

1. Qualifying existing use cases

Organisations begin with specific business problems and seek to determine whether agentic AI is the right solution. The focus is on determining whether the use case requires autonomy, contextual awareness, and adaptive decision-making. This approach answers the question: Can this use case be agenticised?

2. Robust prioritisation framework to govern the use cases pipeline

When organisations already have a portfolio of use cases considered for automation or AI implementation, the enterprise's challenge shifts to deciding how to prioritise these use cases and chart a roadmap for agentic AI implementation. Therefore, a prioritisation framework is required that helps enterprises assess each use case based on its impact, ease of implementation or complexity level. The framework considers a critical parameter, the "Differentiability index," which enables enterprises to measure how essential GenAI/agentic AI is to a particular use case.

Additionally, within this prioritisation framework, assessing use-case ease of implementation or complexity is crucial for enterprises. The complexity of use-cases is evaluated based on multiple factors such as multi-domain orchestration, the degree of autonomy, the level of dynamic decision-making involved and the extent of integration with diverse systems.

Overall, the prioritisation framework addresses which use case should be agenticised first, and why.

Approach 1: Qualifying the suitability of existing use cases for agentic AI implementation

Organisations can begin their agentic AI journey by evaluating whether specific business problems or existing AI use cases suit agentic transformation. This approach is diagnostic in nature, helping determine whether a use case possesses the characteristics that make it a good candidate for agentic AI, which is capable of goal-oriented planning, dynamic reasoning, executing actions and continuous learning.

Organisations should rigorously evaluate use cases against well-defined criteria to assess suitability. These criteria help identify processes that benefit from agentic capabilities and ensure the implementation delivers tangible business value without introducing unnecessary complexity or risk. Below are the criteria against which these use cases can be evaluated.

Criteria to evaluate if a use case is agentic

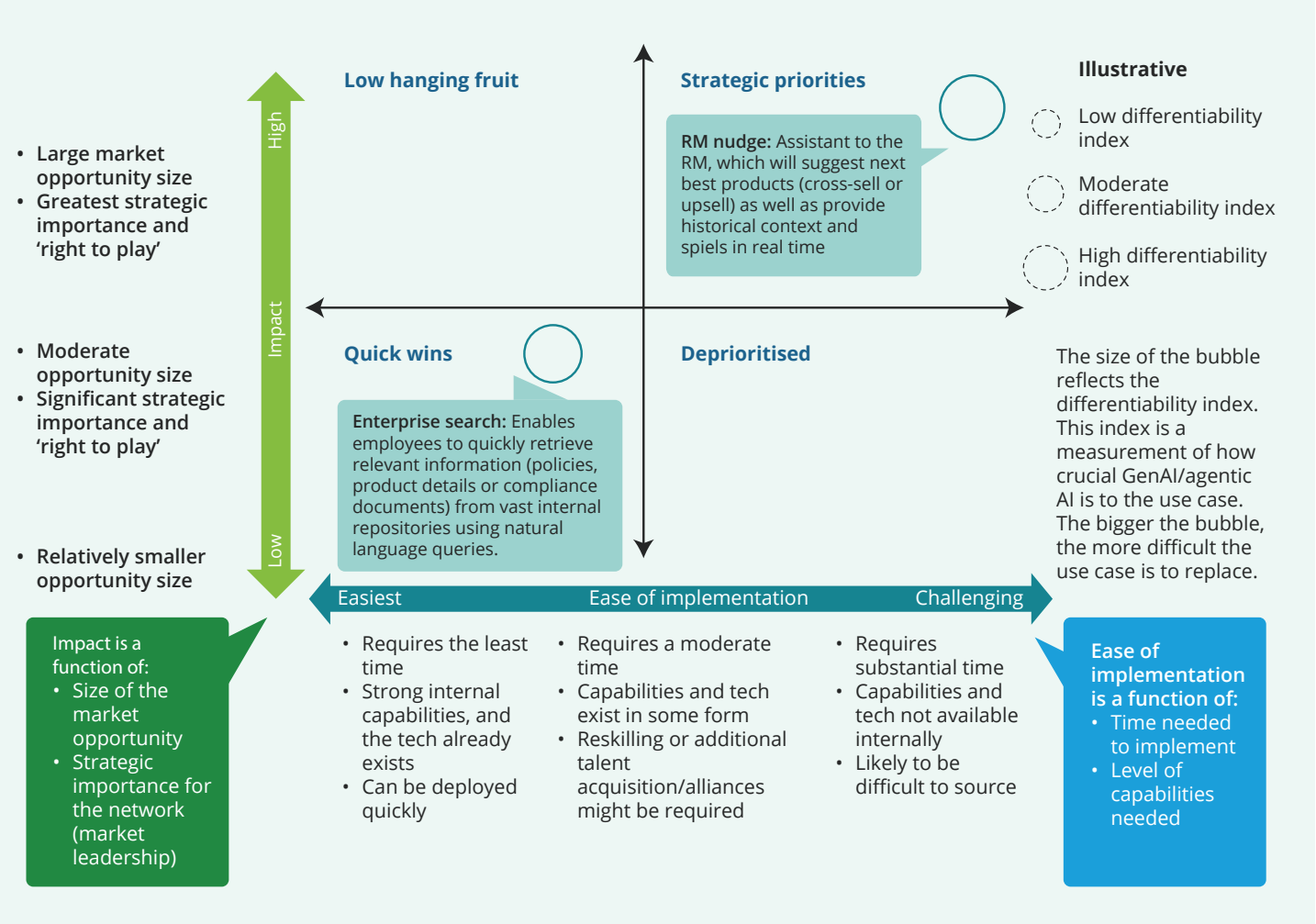
Criteria	Description	Ideal vs. non-ideal examples of agentic processes	
Reasoning, complexity and context dependence	Processes that require logical reasoning, decision-making and adaptation to changing inputs are ideal	**Ideal** • Customer service handling, parsing and sentiment • Supply chain optimisation • Financial forecasting planning	**Non-ideal** • Forecast model building • Customer segmentation
Need for autonomy and escalation	Tasks that involve following instructions require underlying agents to operate independently, demonstrate autonomy in reasoning and escalate when needed	**Ideal** • IT incident management • Compliance monitoring • SDLC process automation	**Non-ideal** • Code generation as a step only
Process with a logical end	Workflows that have clearly defined end goals and do not end at an intermediate step. A use case might be a part of a bigger process and should independently have an end goal	**Ideal** • Expense verification	**Non-ideal** • Digital twins of finance processes
Action and goal-oriented workflows	Tasks that focus on achieving outcomes rather than simply execution. The use case under consideration may involve reasoning and planning actions, but may not necessarily perform specific business actions	**Ideal** • Resolving a customer issue • Completing a procurement cycle	**Non-ideal** • Sending trigger-based pre-drafted communications • CRM entry creation from call centre leads
Multistep and interconnected tasks	Workflows involving multiple steps, tools, or systems. All steps to execute a process may (or may not) involve AI; sub-agents can include automation agents, GenAI based respondent agents, deep learning-based matching agents, etc.	**Ideal** • Customer onboarding • Claims processing • Project coordination	**Non-ideal** • Document comparison as a point solution
Cyclic and repetitive process	Workflows that have a definitive cycle period and repeat frequently	**Ideal** • CV qualification	**Non-ideal** • Attrition causality and actions
Non-explanatory workflows	A problem that does not require causality and explanations. For instance, Agentic AI cannot answer questions like "Why is revenue stagnant?"	**Ideal** • Change request management	**Non-ideal** • Summarisation on a dashboard
Continuous learning and optimisation potential	Processes that improve over time with feedback	**Ideal** • Marketing campaign management • Fraud detection	**Non-ideal** • Email list segmentation based on fixed rules

Source: Deloitte Insights

Approach 2: Robust prioritisation framework to govern the use cases pipeline

For enterprises to realise long-term value from their agentic AI programmes, they require a robust, systematic prioritisation framework to identify, sequence and invest in the right initiatives. The prioritisation framework adds a unique differentiability index parameter to the classical impact versus ease of implementation matrix. This enables enterprises to allocate resources effectively, accelerate time-to-value and position agentic AI as a core driver of business transformation.

Agentic AI prioritisation framework to govern the use cases pipeline



Source: Deloitte Insights

Why prioritisation matters

Deploying agentic AI is not a matter of experimenting with isolated pilots. It involves aligning the existing tech ecosystem with strategic priorities, differentiability and organisational readiness. A robust prioritisation framework helps enterprises avoid fragmented investments and ensures that effort is focused where impact is highest.

The framework categorises use cases in four quadrants:

- **Strategic priorities:** High-value, complex use cases where agentic AI can deliver transformative outcomes.
- **Quick wins:** Lower-complexity initiatives that offer immediate returns
- **Low-hanging fruit:** Easy to implement and scalable, with potential to significantly improve performance over time
- **Deprioritised:** Low-impact or difficult-to-execute initiatives that are unlikely to deliver meaningful results in the short term

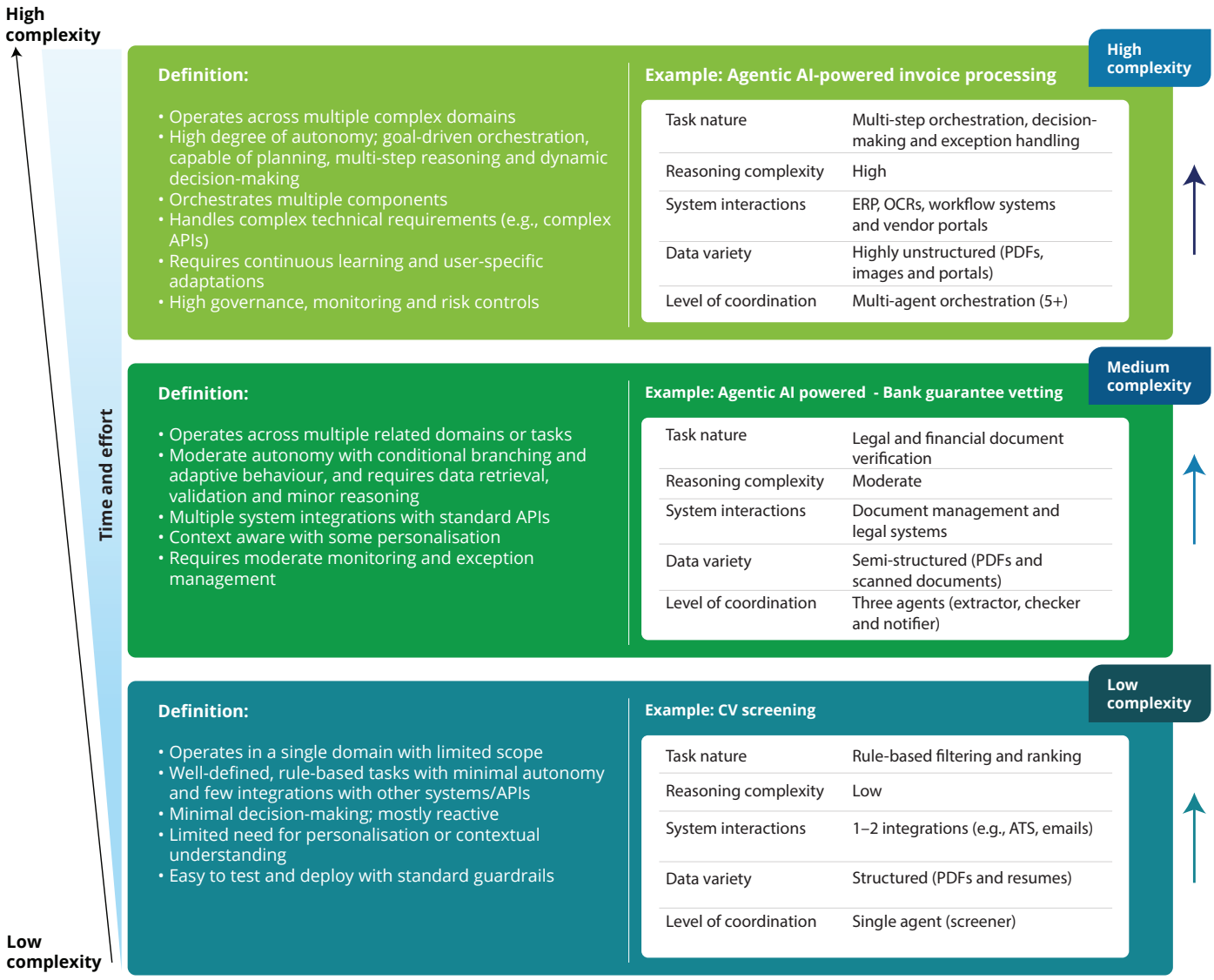
"Differentiability Index" acts as a unique guiding principle in the framework

Enterprises should know that cases vary in strategic value. They should prioritise initiatives that offer high differentiability, where GenAI/agentic AI can deliver a meaningful competitive edge rather than incremental gains. In the prioritisation framework, the bigger the bubble size, the more difficult the use case is to replace, but it will offer greater long-term impact.

Differentiating use-cases based on complexity for prioritisation

Adopting agentic AI could also require a systematic approach for the enterprises, depending on the complexity levels. The use-case model framework below is a practical guide for enterprises to navigate the spectrum of agentic AI deployments by aligning complexity with business priorities, technological capabilities and risk appetite.

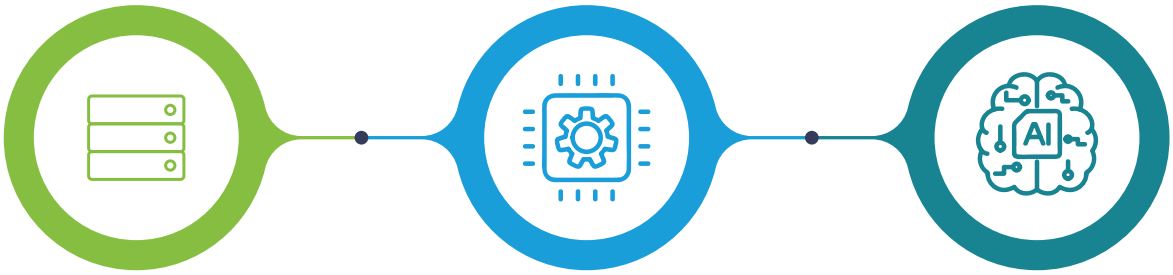
Use case model | Framework to define use case complexity



Source: Deloitte Insights

It categorises the use cases into three tiers of complexity, which are high, medium and low, allowing leaders to gain clarity on deployment scenarios, investment priorities and governance requirements. This enables enterprises to make deliberate choices, maximising RoI and operational agility.

Complexity tiers in agentic AI deployment



1.High complexity use cases:

- These represent the most technically demanding and transformative business applications of agentic AI.
- Enterprise fit: Suitable for enterprises with mature data infrastructure, strong governance processes and enterprise-wide transformation mandates. These use cases deliver large-scale impact but require significant integration, monitoring and talent investment.

2.Medium-complexity use cases:

- These use cases offer a balanced pathway for organisations seeking more than incremental efficiency but without the full scope of enterprise-wide orchestration.
- Enterprise fit: Mostly suited for mid-sized enterprises or teams upgrading legacy automation. They provide significant gains in scalability and efficiency without requiring the same degree of organisational change as high-complexity deployments.

3. Low-complexity use cases:

- These are narrowly scoped, rule-based use cases that act as productivity enablers rather than transformative orchestrators.
- Enterprise fit: Ideal for small enterprises beginning their AI journey. They provide quick wins, validation of AI capabilities and confidence-building steps before scaling into more complex deployments.

Evaluating impact

For impact assessment, enterprises need to consider:

- **Market opportunity**: Identify significant, unmet needs where agentic AI can meaningfully shift outcomes, such as in customer-centric operations.
- **Strategic importance**: Focus on areas/processes where agentic AI strengthens competitive advantage or reinforces core product offerings.
- **Right to play**: Determine whether the enterprise has the data, capabilities or collaborations to succeed
- **Economics of agentic solution:** Evaluate the expected efficiency gains and value creation relative to the cost of implementing and maintaining the solution.

Assessing ease of implementation:

- **Time to value**: Enterprises can classify initiatives into short, medium and long-term delivery windows.
- **Internal capabilities**: Assess the current readiness in technology, talent availability and organisational willingness to implement agentic AI.
- **Alliances and ecosystem**: Identify where re-skilling, external expertise or collaborations are required for success.

Conclusion

As organisations embrace agentic AI, selecting use cases must be intentional, strategic and aligned with long-term goals. agentic AI is most effective when applied to the correct problems, such as those that demand autonomy, contextual reasoning and adaptability.

To ensure successful implementation, organisations should focus on high-impact opportunities, avoid over-indexing on technology alone for decisions and adopt a scalable, enterprise-wide approach.

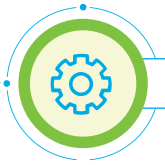
Key considerations to keep in mind for successful agentic AI use case identification:

1. Prioritise based on impact, effort and differentiability:

Use a structured framework to assess each use case's potential value, implementation complexity and alignment with agentic AI capabilities. Some questions to ask here are:

- **Business impact:** What value will this use case deliver if agenticised?
- **Implementation effort:** How complex and resource-intensive is the deployment?
- **Suitability for agentic AI:** Does the use case require autonomy, contextual understanding and dynamic decision-making? impact

This tri-dimensional lens helps focus resources on high-impact, feasible and strategically aligned initiatives.



2. Avoid overemphasizing technology for decisions

While technology is an essential enabler, agentic AI should not be implemented simply because it is new or trending. Instead, organisations must:

- Define the problem statement and expected outcomes.
- Justify why agentic AI is the best fit over traditional automation or rule-based systems.
- Ensure that the use case uses the unique strengths of agentic systems, such as reasoning, adaptability and learning. This prevents wasted effort on low-value or misaligned initiatives and keeps the focus on solving real business problems.

3. Focus on strategic, high-impact use cases:

Agentic AI should be deployed where it can make a measurable difference. Identify use cases that:

- Align with strategic business priorities.
- Have the potential to scale across functions or geographies.
- Drive immediate impact while setting the stage for sustained change. This approach ensures that early implementations build momentum and credibility for broader adoption.

4. Adopt a long-term, enterprise-wide approach:

Agentic AI is not a point solution. It should be adopted as a solution that benefits across the organisation. To do this effectively:

- Avoid siloed or one-off deployments.
- Develop a centralised roadmap that aligns with enterprise architecture and digital strategy.
- Invest in governance, change management and capability building to support sustainable adoption. This ensures that agentic AI becomes a core enabler of enterprise agility and innovation, rather than a fragmented experiment.

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