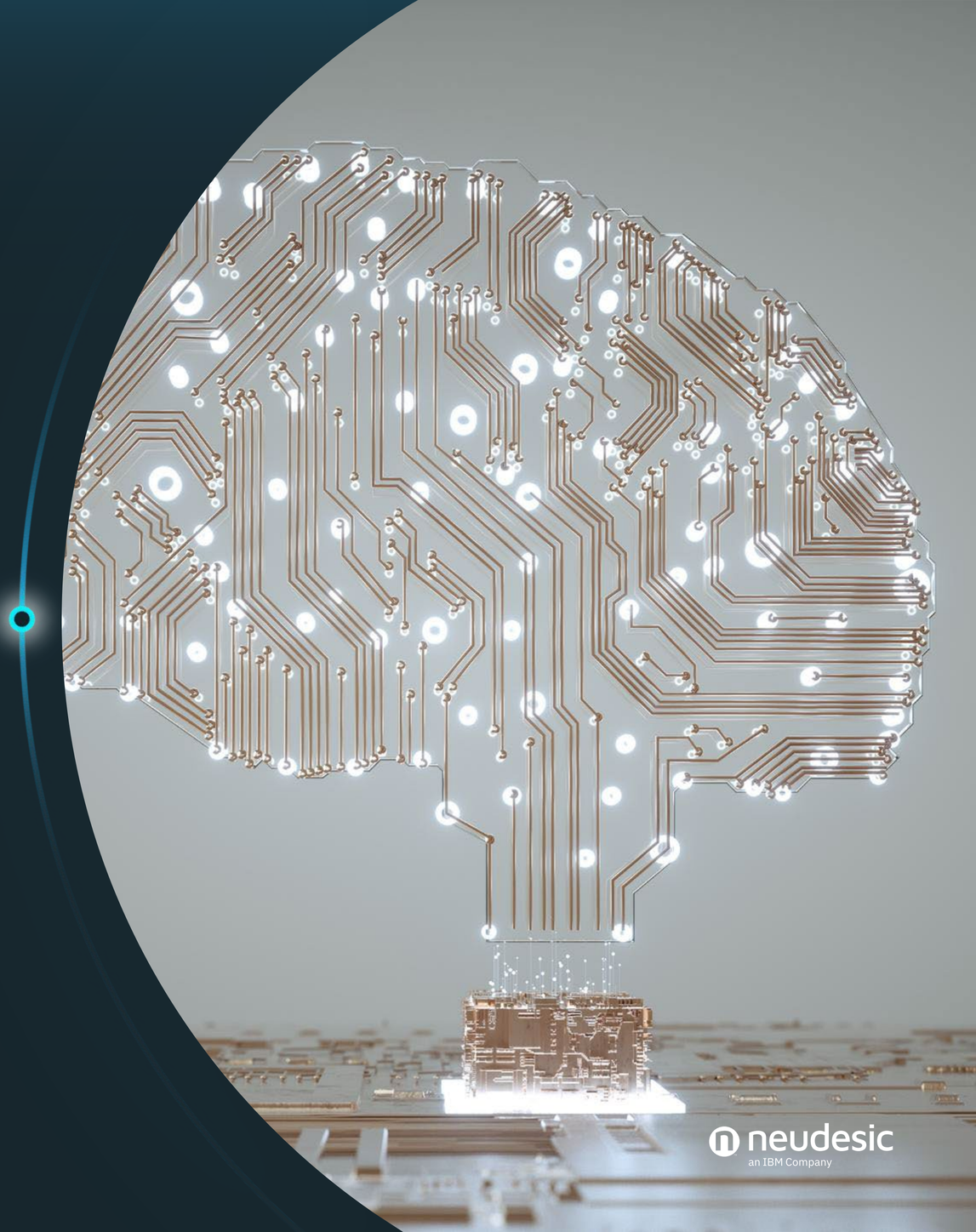
# Agentic AI Point of View:  Strategies for Success and Paths to Failure





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# Introductions

**Dr David Goad GAICD**

(Scan to connect with me on Linkedin)

- David has over 20 years of practical experience in information technology, business and digital strategy.
- Has held several senior technology leadership roles for large well-known global companies such as KPMG, Microsoft, Hitachi and IBM.
- 3 years as IBM Australia CTO .
- David has a PhD in AI, an MBA in Finance and an undergrad in Engineering.
- Architect certifications in Cloud and AI from all the major AI vendors.
- David is also a Microsoft Regional Director. A select group of 150 individuals globally
- Deep experience in Microsoft, Amazon, and WatsonX
- Practical experience in Agentic
- Industry experience in Manufacturing, Utilities, Financial Services and Public Sector

# Agenda

1. Introduction
2. What is Agentic AI
3. Benefits of Agentic AI Systems
4. Recent Agentic AI Failures
5. A proposed roadmap for successful Agentic AI adoption
6. The Agentic Innovation Life Cycle and Common Mistakes
7. The Typical Agentic Deployment and Failure Points
8. The challenge for context engineering
9. The need for business process re-engineering throughout the AI journey
10. Strategies and Tactics for Agentic AI Success
11. Generative AI Governance



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# Introductions

Agentic AI is transformational and a source of competitive advantage but requires specialized methods and skills.

Success requires new deployment approaches informed by prior lessons.

**GOVERNANCE + RE-ENGINEERING = AI SUCCESS**

*“AI represents the "most significant transformation of work in history“,*
*Marc Benioff, CEO Salesforce*

*“2025 is the year of AI Agents“,*
*Jensen Huang, CEO NVIDIA*

*“SaaS is Dead“,*
*Satya Nadella, CEO Microsoft*

*“Agentic AI Platforms are the next great business revolution“,*
*World Economic Forum*



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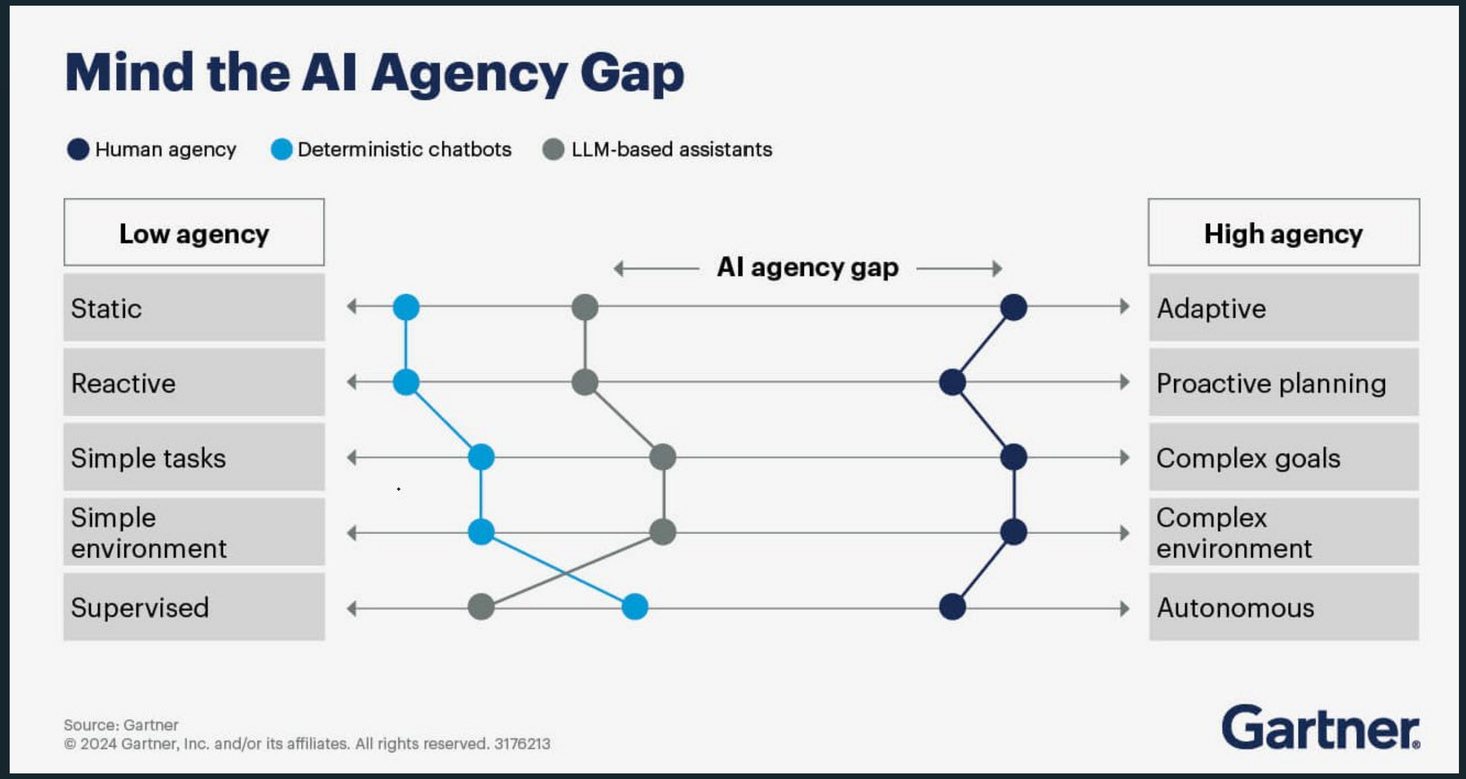
# What is Agentic AI

The term Agent is often confused with “Agency”.  “Agency” is defined as the ability to act independently, make your own choices, and exert control over your own environment.

Most current AI systems can support decision-making but lack true agency. Gartner places AI on a spectrum, from limited, rule-bound tasks to future Agentic AI that learns, decides, and acts autonomously.

As AI gains more agency, it shifts from simple to complex tasks and drives greater productivity.

Watch out for Agent Washing!




**TODAY:** Most AI supports decisions but does not have full agency.

**FUTURE:** As AI agency increases, systems will take on more complex tasks and significantly boost productivity.



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# The Benefits of Agentic AI Systems and the Resultant Growth in Agentic AI Investment

A Microsoft–IDC study* of 2,000 global business leaders reveals how AI is driving economic impact and organizational transformation.

Key findings from this study were:

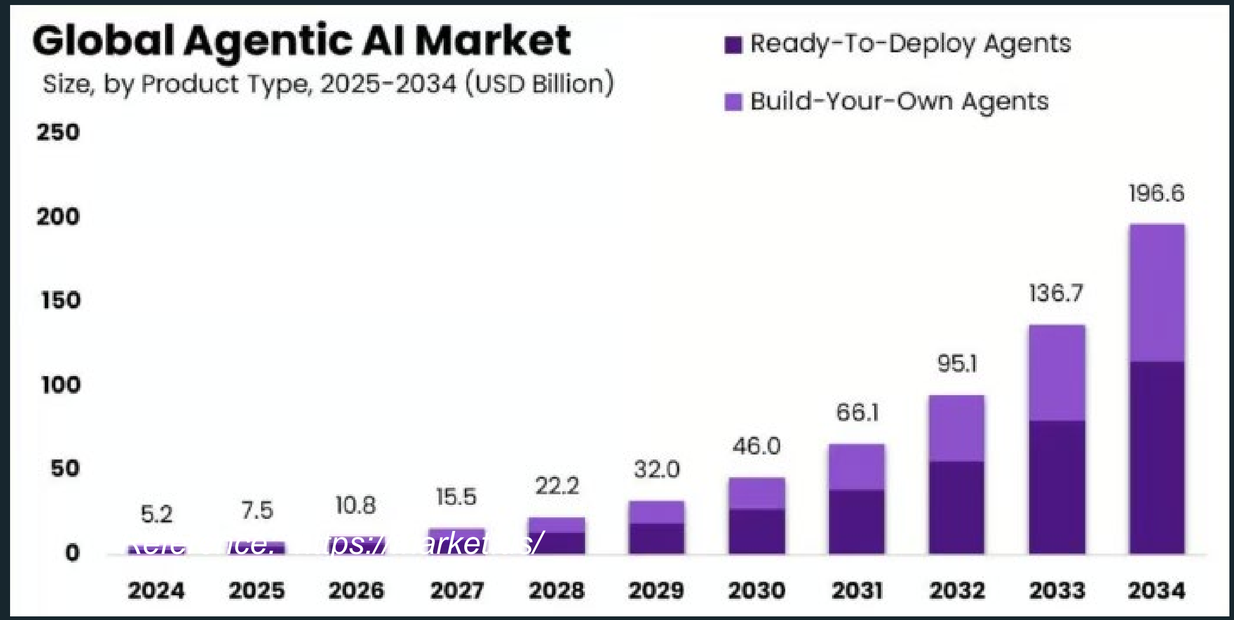
**71%**
of respondents say their companies are already using AI

**92%**
of AI deployments are taking 12 months or less

**Within 14 months**
Organizations are realizing a return on their AI investments

**An average return of $3.5X**
Is being realized for every $1 a company invests in AI

**52%**
report that a lack of skilled workers is their biggest barrier to implement and scale AI



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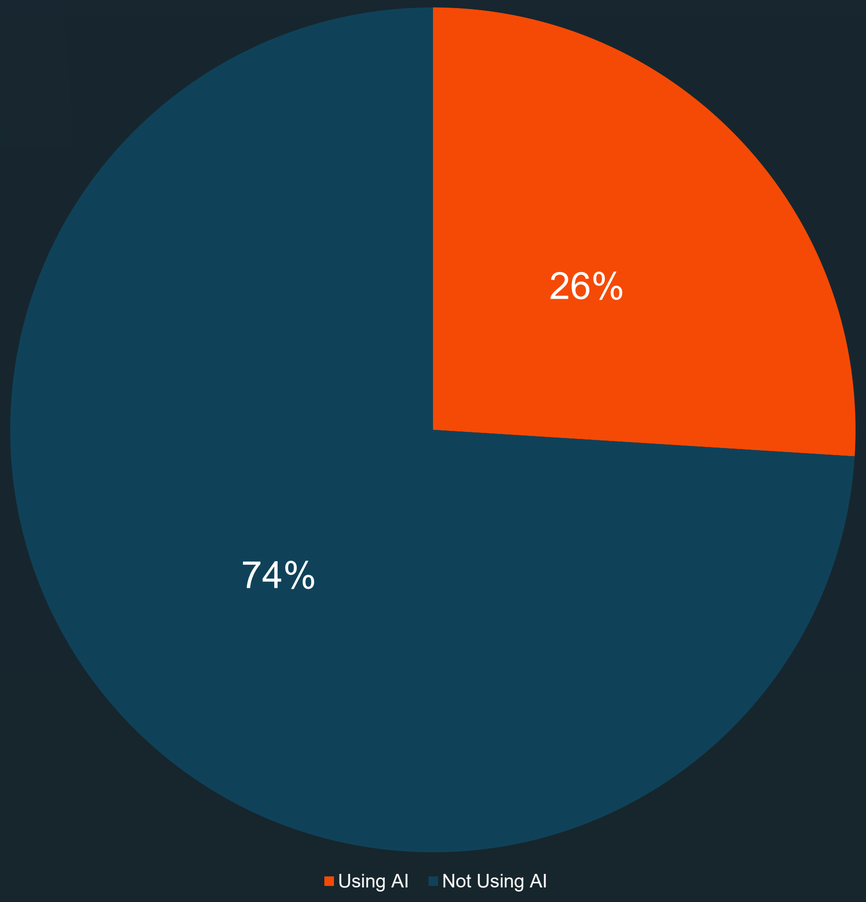
# The AI Transformation Imperative

## AI is a transformation program, not a series of projects




**1.5x**
higher revenue growth

**1.6x**
greater shareholder returns

**1.4x**
higher return on invested capital

AI leaders (only 26% of companies) are significantly outperforming their peers across all key business metrics.  But only 26% of organizations are doing AI effectively.



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# Recent Agentic AI Failures

The high Agentic Project Failure Rate is primarily due to flawed implementation methodologies

**FAMOUS AI DISASTERS**

Zillow **$304M**

Zillow's algorithmic home-buying errors resulted in a $304 million inventory write-down.

iTutorGroup **$365K**

iTutor Group faced a $365,000 EEOC settlement for AI recruiting discrimination.

amazon **$62M**

Amazon scrapped a $62 million recruitment AI project due to gender bias.

AIR CANADA

In February 2024, Air Canada was ordered to pay damages to a passenger after its virtual assistant gave him incorrect information at a particularly difficult time.

*Source: https://www.cio.com/article/190888/5-famous-analytics-and-ai-disasters.html*

> The 95% failure rate for enterprise AI solutions represents the clearest manifestation of the GenAI Divide," the report states. The core issue? Not the quality of the AI models, but the "learning gap" for both tools and organizations. While executives often blame regulation or model performance, MIT's research points to flawed enterprise integration.

*Source: https://fortune.com/2025/08/18/mit-report-95-percent-generative-ai-pilots-at-companies-failing-cfo*



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# A Roadmap to Successful Agentic AI Adoption

Agentic AI success starts with strong data and integration, followed by learning through experimentation




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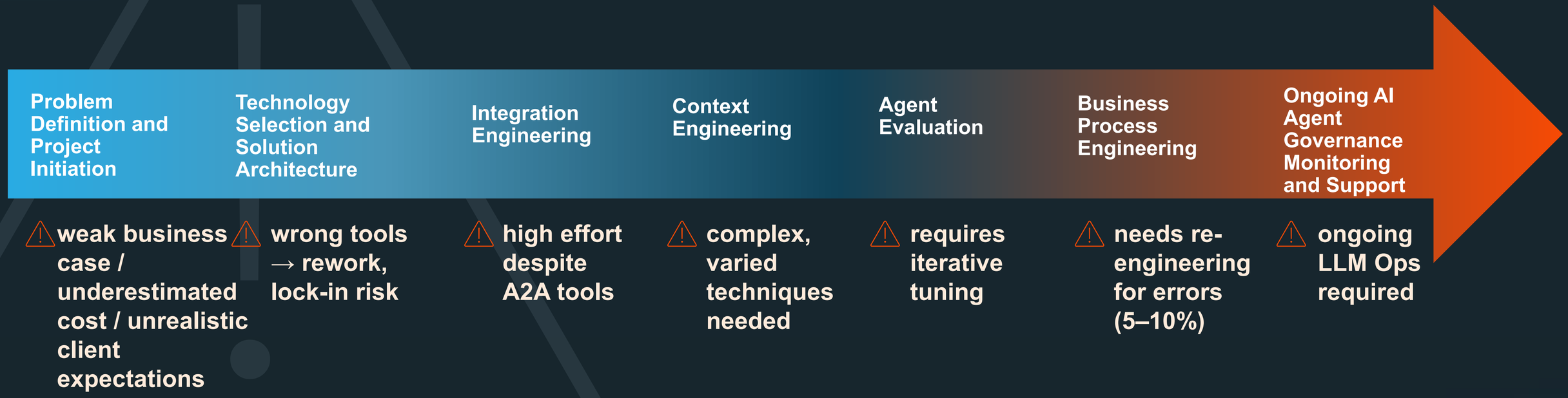
# The Typical Agentic Deployment Cycle and Common Failure Points



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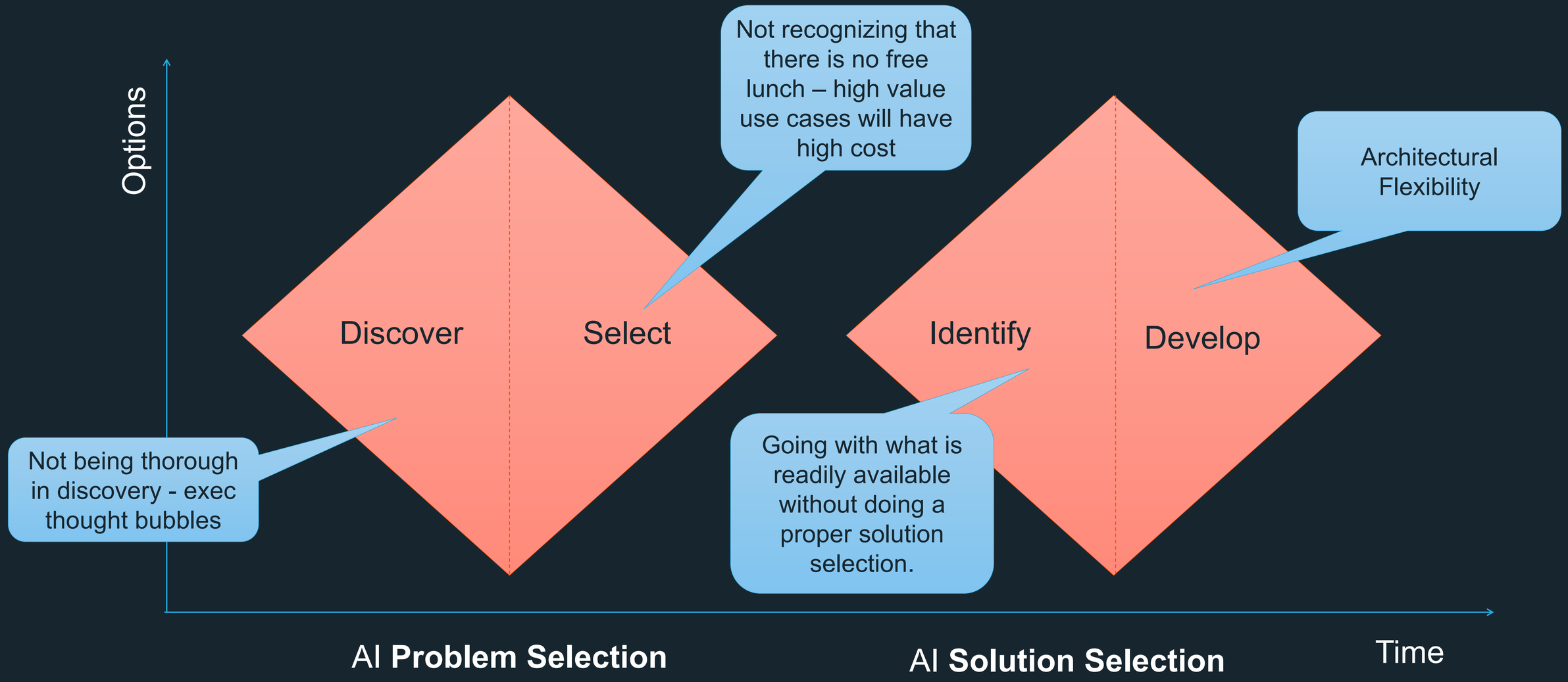
# Agentic Innovation Life Cycle and Common Mistakes




*To successfully innovate with Agentic AI requires careful discovery, project selection, solution selection and architectural design that allows for a changing environment.*

# The Challenge with Agentic AI Context Engineering

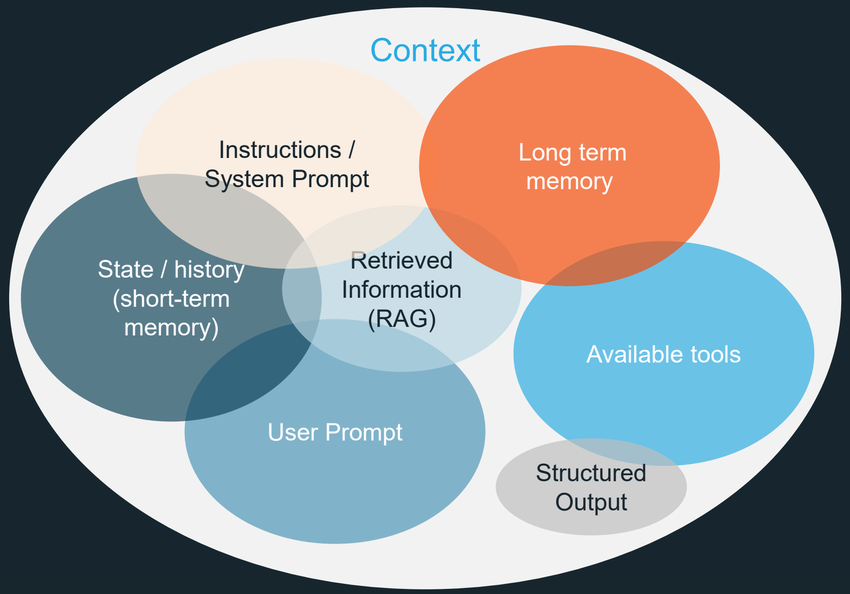
## A critical challenge associated with effectively deploying Agentic AI systems

LLMs suffer from loss of attention — when overloaded with context, they can drop or confuse information even with large input windows.

Providers are working on fixes, but precision is still required. This makes **Context Engineering** essential: carefully selecting and structuring context using tools like RAG, Graph DB, or Pyramid, depending on the data topology. Successful context engineering also relies on robust data engineering to ensure the right datasets are used from the start.

**TOO MUCH CONTEXT = CONFUSION**
**SMART CONTEXT ENGINEERING = ACCURACY**

**Context Engineering**

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"Context engineering is still an emerging science—but for agent systems, it's already essential. Models may be getting stronger, faster, and cheaper, but no amount of raw capability replaces the need for memory, environment, and feedback. How you shape the context ultimately defines how your agent behaves: how fast it runs, how well it recovers, and how far it scales."

*Reference: https://www.philschmid.de/context-engineering*



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# Setting Realistic Goals for AI Projects

## AI is Probabilistic, Not Perfect

Unlike traditional software where 2+2 always equals 4, AI systems are **stochastic**—they work on probabilities and patterns, not certainties. This means they will occasionally make mistakes. This isn't a bug; it's how AI fundamentally works.

### Why Realistic Goals Matter

- Expecting 100% accuracy sets projects up for failure
- Successful goals acknowledge uncertainty: "95% accuracy" or "60% efficiency gain"
- AI is a tool for improvement, not a magic solution

### Reengineer Business Processes

Because AI will occasionally fail, you must redesign workflows around this reality:

- Review mechanisms: Validate outputs before critical decisions
- Fallback procedures: Handle low-confidence or incorrect results
- Appropriate thresholds: Determine when to trigger human review vs. automation

Example: Loan AI auto-approves low-risk cases, flags high-risk, and sends borderline cases to human underwriters.

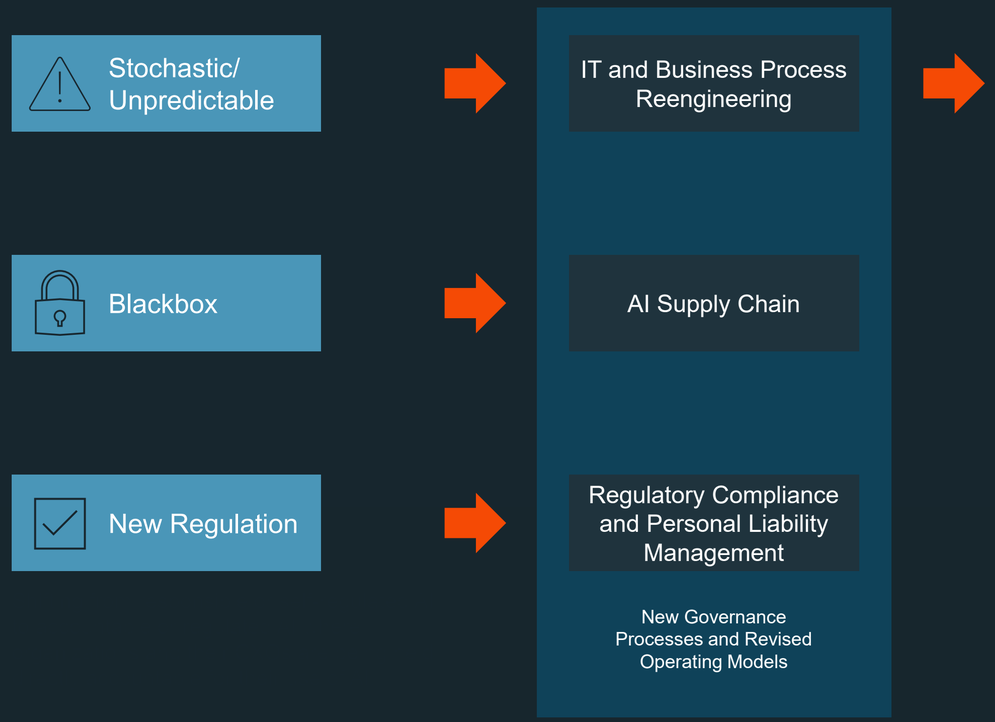
### A Success Framework

- Define acceptable error rates based on business impact up front
- Plan for "what happens when AI is wrong?"
- Budget for process redesign, not just technology
- Include human oversight as a permanent feature
- Measure improvement over current state, not perfection

# The need for AI Governance & Process Re - engineering

## AI success requires both strong governance and re-engineered processes across IT and business

There are several characteristics of AI /GenAI / Agentic Systems that mean difference governance and operating models are required compared to traditional Software Development (SDLC) or Commercial Off the Shelf (COTS) Package implementations…




*Here's how stochastic unpredictability impacts processes and what needs to change*

| Process | Complication | Resolution | Comments |
|---|---|---|---|
| **AI Design** | There are literally hundreds of thousands of models to choose from some proprietary and many open source. | Effective processes and governance to control model choice and use centrally and ensure compliance, safety and security. | |
| **AI Development** | Many factors can impact AI performance in including Data Quality, Integration, Context Engineering, etc. | Iterative development cycles where the AI is built tested, iterated on to improve performance. Requires a good test data set and understanding of what optimal is. | This is different from traditional Agile delivery methods which are focused on features and functions and maximizing user input. |
| **IT Operations** | What is currently working can stop working due a variety of factors including data drift, model updates, etc. | Operational processes to continuously model AI performance and identify which it goes outside of acceptable parameters. | Often referred to as AI Ops, ML Ops or LLM Ops. Speciallized tooling supports this process. |
| **Business Operations** | Even high-performance AI systems can have error rates in the 5 to 15% range when optimized. | This requires exception processes and human oversight to monitor the exceptions. | Often referred to as "human in the loop". Recognizing that if the human has to look at only 1 in 5 or 1 in 10 decisions an AI takes this is a significant efficient improvement. |

**FUNDAMENTALLY PEOPLE, PROCESS AND TECHNOLOGY HAVE TO BE CONSIDERED FOR ANY TRANSFORMATION PROGRAM**



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# Suggested Solutions to the Agentic AI Challenges

## Success with AI and Agentic AI requires a deliberate, thoughtful well-planned approach:

### Use Case Ideation Workshop(s)

Understanding current business priorities to develop a prioritized list of projects based on business value and technical feasibility. Provide inputs into business case development.

**Inputs:** Business leader's participation

**Output:** Tailored Use Case Prism and Business Case Inputs

### Current Project Review & Evaluation Workshop(s)

Reviewing and evaluating current AI/ Agentic projects to identify risks and mitigating actions

**Input:** Access to current AI project team

**Output:** Current Projects Risk Assessment

### Program Development Workshop(s)

Developing a self funding program of works with timelines and indicative costs/ benefits

**Input:** Business and IT leadership participation

**Output:** Overall Program Plan

### Governance & Operating Model Workshop(s)

Identifying the Governance and Operating Models to support the program

**Output:** IT leadership participation

**Output:** Governance and Operating Model Action Plan

### Architecture & Infrastructure Workshop(s)

Developing a best-in-class Architecture and Infrastructure that avoids creating technical debt

**Input:** Program plan and access to project technical leadership

**Output:** High Level Recommended Technical Architecture and Action Plan

**Value Stream Engineering Framework**



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# Questions?

**Dr David Goad GAICD**

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# Day 1– Nov 17

| | |
|---|---|
| 8:00am – 8:45am | 🥯 **Check In & Breakfast** 🥯 |
| 8:45am – 9:00am | **Kickoff & Welcome** |
| 9:00am – 9:30am | **Generative Pages in Power Apps** |
| 9:30am – 10:00am | **Lights, Camera, Akka! The Actor Model & Agentic AI Orchestra** |
| 10:00am – 10:30am | **How to create Moonshot solutions with AI** |
| 10:30am – 10:45am | 🍵 **Break** 🍵 |
| 10:45am – 11:15am | **Elevating Construction: Real-Time Optimization with Azure Digital Twins and AI** |
| 11:15am – 11:45am | **Transforming Facility, Network and Organization Management with Visio and Power BI** |
| 11:45am – 12:45pm | 🍴 **Lunch** 🍴 |
| 12:45pm – 1:15pm | **Adventures in AI** |
| 1:15pm – 1:45pm | **Building Agents in AI Foundry!** |
| 1:45pm – 2:15pm | **What's new with Azure Load Balancer, NAT Gateway, and Public IP Addresses** |
| 2:15pm – 2:30pm | 🍵 **Break** 🍵 |
| 2:30pm – 3:00pm | **.NET Apps Everywhere!** |
| 3:00pm – 3:30pm | **Accelerating Web Application Development with AI-Powered Tools: From Design to Deployment** |
| 3:30pm – 4:00pm | **Agentic AI: Strategies for Success and Paths to Failure** |
| 4:00pm – 4:30pm | **How (and why) Microsoft's upstream teams engage with multi-stakeholder open source projects** |
| 4:30pm – 5:00pm | 🛜 **Networking / Mingle** 🛜 |



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# Day 2 – Nov 18

| | |
|---|---|
| 8:00am – 9:00am | 🍳 **Check In & Breakfast** 🍳 |
| 9:00am – 9:30am | **Leveling Up Agents: Copilot Studio for Enterprise Solutions** |
| 9:30am – 10:00am | **RAG Hero: Fast-Track Vector Search in .NET** |
| 10:00am – 10:30am | **Building Resilient Systems** |
| 10:30am – 11:00am | **Agentic Orchestration: Building Scalable, Open Source Automation with A2A, MCP and RAG Patterns** |
| 11:00am – 12:00pm | 🍴 **Lunch** 🍴 |
| 12:00pm – 2:00pm | 📺 **Keynote Watch** 📺 |
| 2:00pm – 3:00pm | 🎙️ **MVP Panel** 🎙️ |
| 3:00pm – 5:00pm | 🛜 **Networking / Mingle** 🛜 |



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