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GenAI Amplifier for Apps Platform explanation for sales execs

July 2024

GenAI Amplifier for Apps Platform Introduction

Problem statements

Leverage GenAI Capabilities
Organizations struggle to effectively leverage GenAI capabilities due to constraints of scalability on the technical stack, ability to onboard use cases and support collaboration of various teams.

Governance
With 3+ GenAI use cases, governance and solutions becomes a challenge requiring patterns, security & privacy, consumption guardrails.

Value Realization
GenAI capabilities are exposed through Apps, Agents & Copilots and reveal value within their usage.

Impacts without platform

Organization Adoption
Roadblock to widespread adoption of GenAI through several teams within the organization.

Security & Privacy Risks
Risks on security and privacy using public GenAI services without proper foundation, accessing restricted datasets, lack of guardrails leading to drifting answers.

Cloud Consumption
Overconsumption of cloud resources, Lack of abstraction on LLMs/FMs limiting GenAI App infusion.

Vision & solutions

GenAI Applied Strategy
Adopt a bimodal "GenAI applied strategy" (use case driven, capability driven).

GenAI Apps Platform
Build & Operate a "GenAI Apps platform" providing an assembly of services and beyond with proven processes.

App Portfolio Assessment
Assess App Portfolio with GenAI infusion criteria
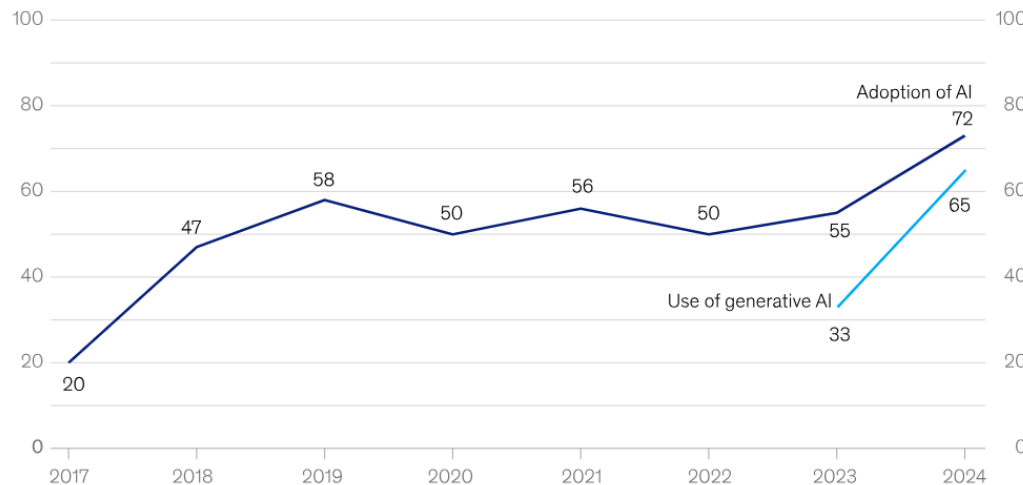
GenAI Apps Jumpstarts
Use "GenAI Apps jumpstarts" to infuse GenAI into Apps

Market insights

By 2028, we'll be spending 30 to 60 minutes a day using our preferred generative AI applications.

AI adoption worldwide has increased dramatically in the past year, after years of little meaningful change.

Organizations that have adopted AI in at least 1 business function,[1] % of respondents

Adoption of AI: 20 (2017), 47 (2018), 58 (2019), 50 (2020), 56 (2021), 50 (2022), 55 (2023), 72 (2024)

Use of generative AI: 33 (2023), 65 (2024)

[1]In 2017, the definition for AI adoption was using AI in a core part of the organization's business or at scale. In 2018 and 2019, the definition was embedding at least 1 AI capability in business processes or products. Since 2020, the definition has been that the organization has adopted AI in at least 1 function.
Source: McKinsey Global Survey on AI, 1,363 participants at all levels of the organization, Feb 22–Mar 5, 2024

McKinsey & Company

Forrester's research indicates that 71% of enterprises are already experimenting with real use cases for generative AI, marking one of the fastest adoption rates of a new technology in the enterprise sector.

AI comes to life in apps.
Data comes to life in apps.
Apps do not exist without developers!

Microsoft

The first productivity-centric wave of generative AI impact on companies is coming into focus. By improving task productivity by roughly 30% to 300%, over the next few years, GenAI-powered applications will reshape every knowledge-fueled task and job, reconstructing knowledge practices and resources in every company in every industry.

Forrester

Generative AI is the next wave of innovation, and apps will be the on-ramp for businesses and consumers to experience its transformative power.

**Satya Nadella
CEO, Microsoft**

Generative AI will fundamentally change how applications are built, making them more intuitive and user-friendly. This technology will help developers create more robust and efficient applications by automating routine tasks and generating code.

**Satya Nadella
CEO, Microsoft**

"GenAI will reveal its potential in Apps" | Sogeti Global CTO Apps & Cloud

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"GenAI will reveal its potential in Apps"

Our Point of view

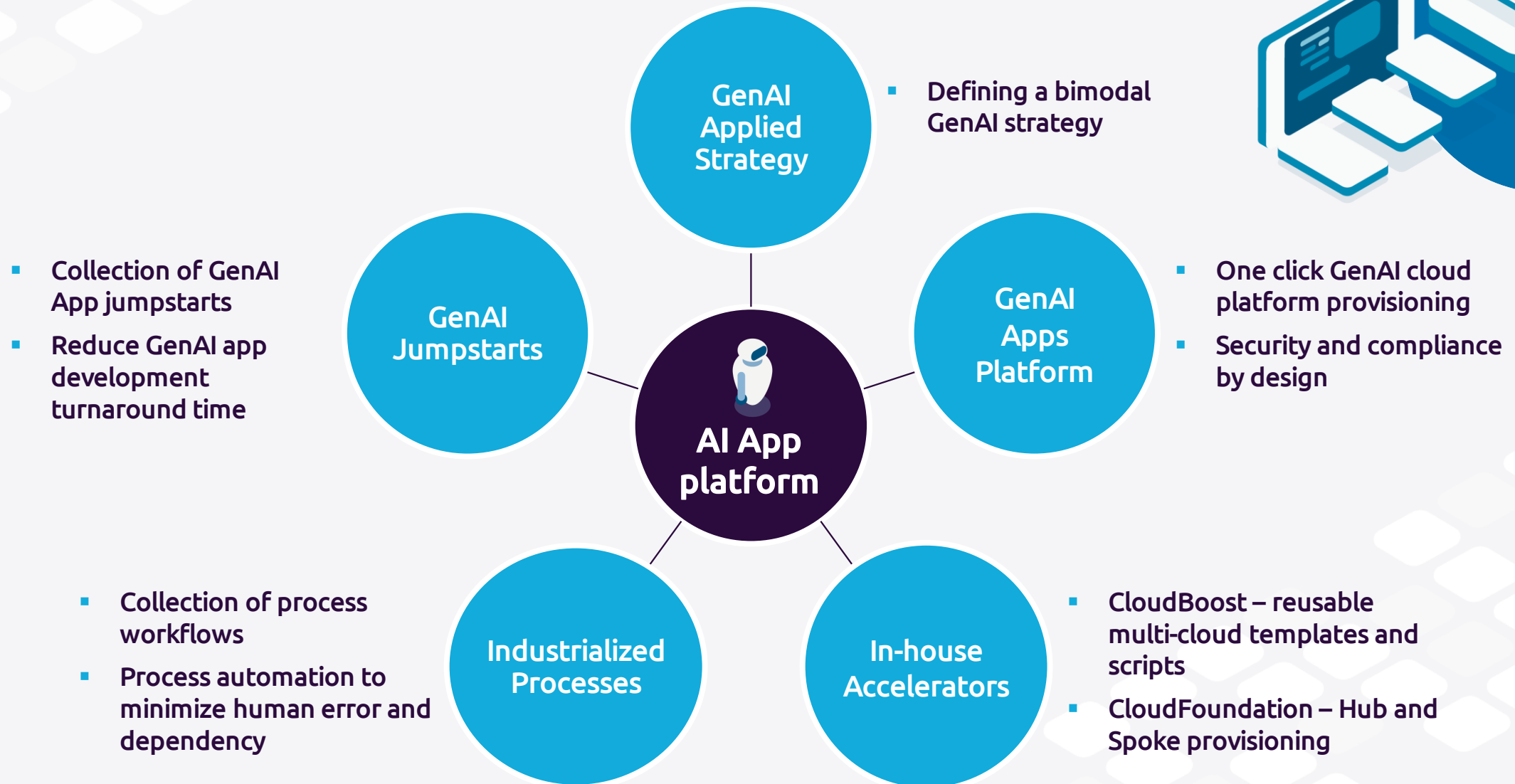| Revolution of interface	Shift of usage	Expansion of intents	Models	App mesh
▪ Interact with Natural Language ▪ Integrate functionnality in chat & collaborative apps ▪ Immersive experience with XR (VR, VR, MR)	▪ From Apps to Copilots and extensions ▪ Agents, Multi-agents and Autonomous agents ▪ Query the whitespace	▪ Conversations & Agents that drive actions ▪ Workflows to chain intents across apps, agents and data referential	▪ Multi-models consumptions ▪ Specialized & Micro models ▪ Customized models with RAG ▪ Private / hosted models	▪ Tied Data & App Integration ▪ "App mesh" required for instant interactions

Our GenAI Apps Platform Solution and Key Features

GenAI Applied Strategy

- Defining a bimodal GenAI strategy

GenAI Apps Platform

- One click GenAI cloud platform provisioning
- Security and compliance by design

GenAI Jumpstarts

- Collection of GenAI App jumpstarts
- Reduce GenAI app development turnaround time

AI App platform

Industrialized Processes

- Collection of process workflows
- Process automation to minimize human error and dependency

In-house Accelerators

- CloudBoost – reusable multi-cloud templates and scripts
- CloudFoundation – Hub and Spoke provisioning

Some key questions we address through our GenAI Apps Platform Methodology

01 — How are your GenAI capabilities exposed & used ? → Through Apps (APIs, Chatbot, Custom code, Low code)

02 — With 1 use case, how are you focusing on Proof-of-Value? → Avoiding / limiting any technical constraints

03 — With 3 use cases, how are you reusing the software stack? → Templates, but limited to one shot deployment

04 — With 10+ use cases, how do you govern teams, software stack onboarding, security and consumption guardrails? → Platform engineering enables technology access, process instantiation, collaboration and governance
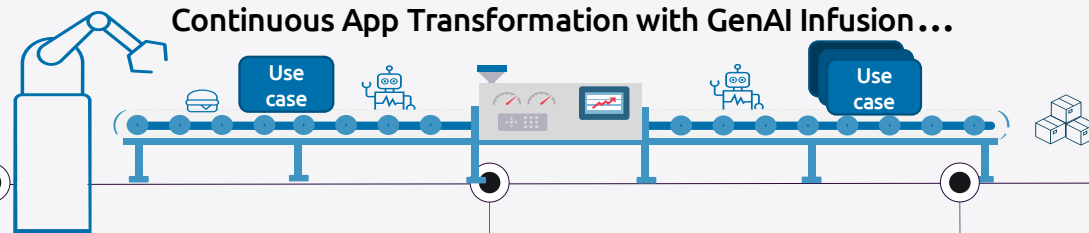
05 — Are your apps directly integrated with LLMs/FMs? → Not recommended. Platform abstraction allows governance on LLMs/FMs for control, cache, quota, versioning, leveraging/swapping several LLMs/FMs

Our GenAI Apps Platform Methodology

Achieve optimum business benefits through GenAI Strategy and Portfolio Management powered by GenAI App Platform and AI App Jumpstarts

Continuous App Transformation with GenAI Infusion…

Use case

Use case

| Ideation | POC ➡ Pilot ➡ Production | Scale |

Current State

GenAI Applied Strategy ①

GenAI App Platform ② Platform

GenAI App Rapidstart ③ GenAI Infusion

Infinite Change & Expansion

- Journey started with **some use cases identified** and tested
- **Opportunistic approach**
- Several solutions

- Define a bimodal "**GenAI applied strategic**"
- Drivers:
  - **use cases**
    - **AI-Industry**
    - **AI-Context based**
    - **AI-Custom Software**
  - **capability**

- **AI App Platform Sandbox**
- **AI App Platform @ scale**
- **GenAI industrialized processes**
- Build pilot use cases and promote to production
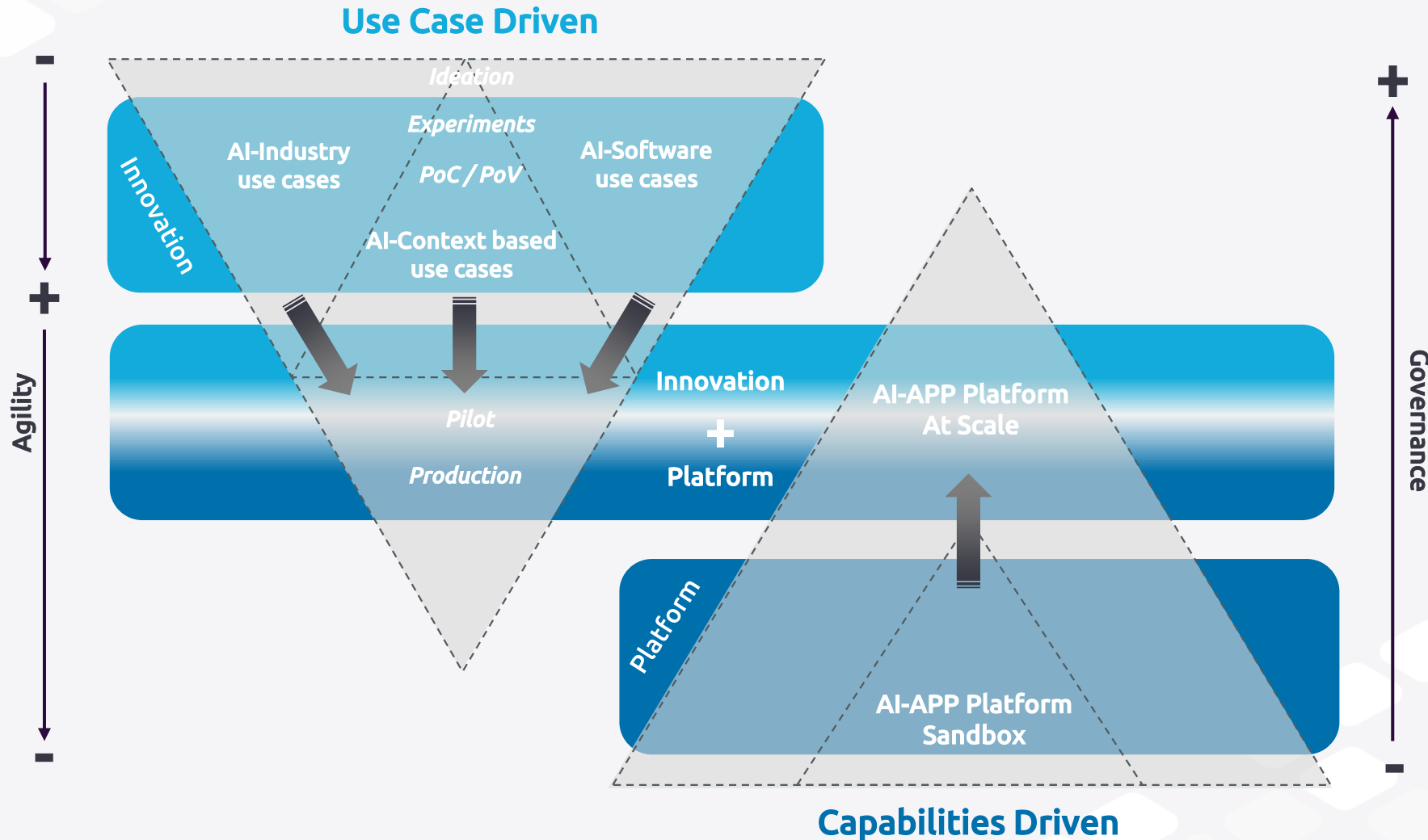- CloudBoost
- CloudFoundation

- **Application portfolio assessment**
- Build GenAI apps with **"GenAI Jumpstarts"** on platform
- Execute rapid POCs to pilot and production

Insights	Data Analysis
Personalization	Automation
Marketing	

- Refine and ideate new business function backlog
- Scale **GenAI infusion across organization** on GenAI App Platform

GenAI Applied Strategy

GenAI App enterprise platform to operate a bimodal approach "Innovation on Platform" driving agility and governance at scale
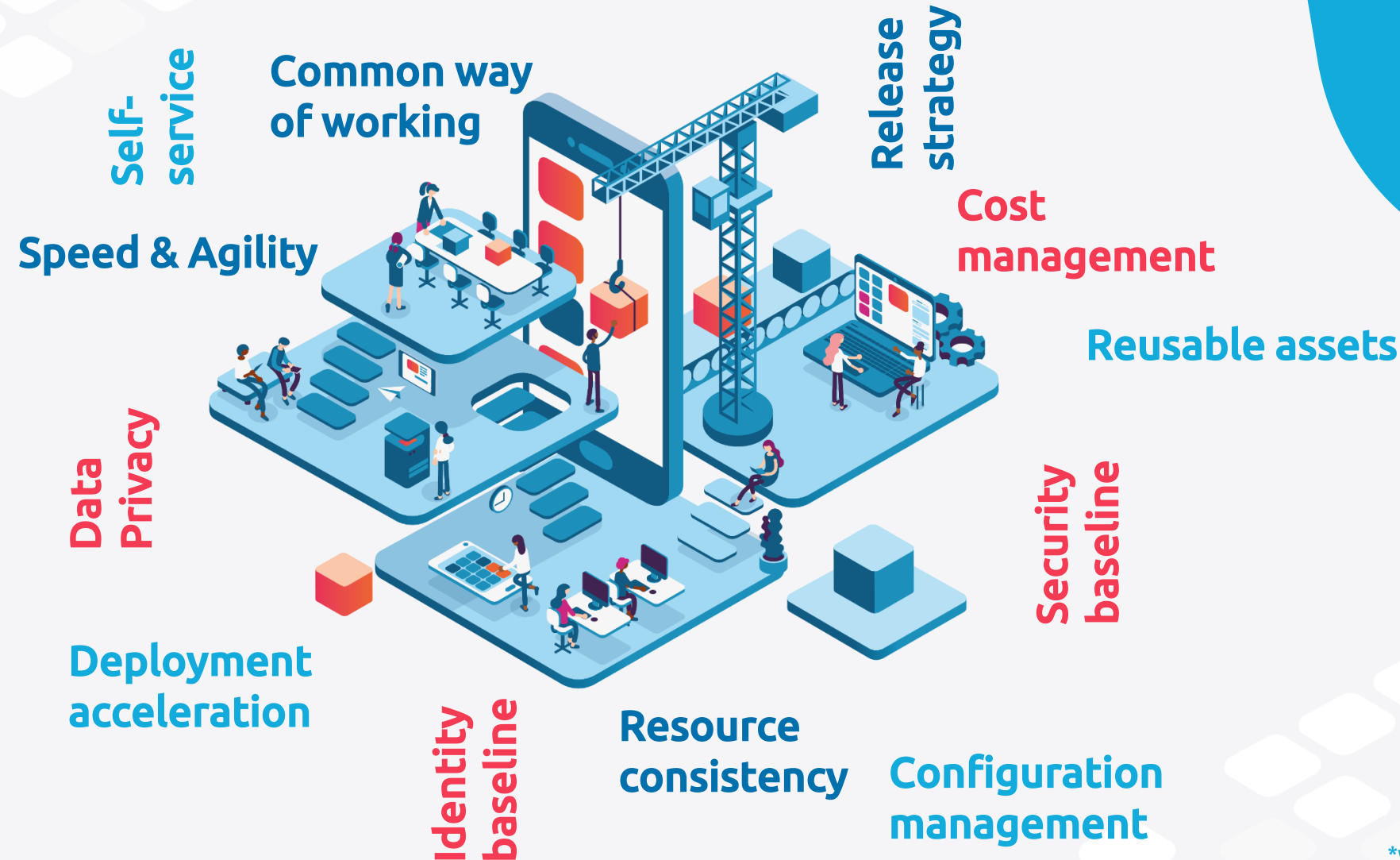
Use Case Driven

Ideation

Experiments

AI-Industry use cases

PoC / PoV

AI-Software use cases

Innovation

AI-Context based use cases

Innovation

+

Platform

Pilot

Production

AI-APP Platform At Scale

Platform

AI-APP Platform Sandbox

Agility

Governance

Capabilities Driven

GenAI App Infusion Assessment drivers for GenAI capability

- Content creation
- Personalization
- Customer Engagement
- Data Analysis and Insights
- Automation and Efficiency
- Marketing and Sales
- Development and Testing
- Security and Compliance
- Users Experience
- Integration and Deployment
- Monitoring and Evaluation
- Cost and ROI
- Change Management

Enable speed to transformation – in control

85% of AI projects doesn't go to production due to lack of platform

Self-service

Common way of working

Release strategy

Speed & Agility

Cost management

Reusable assets

Data Privacy

Security baseline

Deployment acceleration

Identity baseline

Resource consistency

Configuration management

AI-APP enterprise platform meets the 7C's of effective platform engineering

Cohesion

Closure

Completeness

Consistency

Commensurate Value

Connectedness

Captivity

*when running multiple initiative in the same platform

GenAI Apps Platform Enablers

Empowering innovation with our cutting-edge accelerators and tools to establish the GenAI App Platform

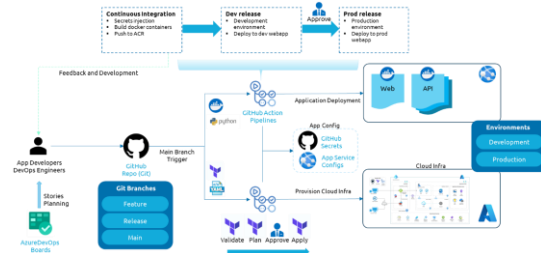**AI-App enterprise composable platform logical architecture**
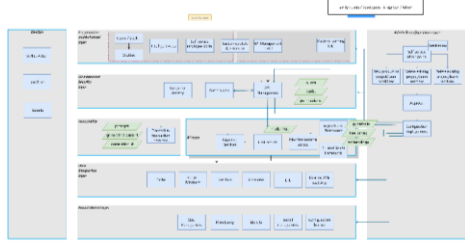
Foundation Self-service Portal
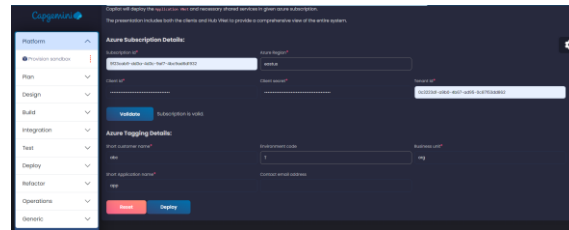
Reference Architectures
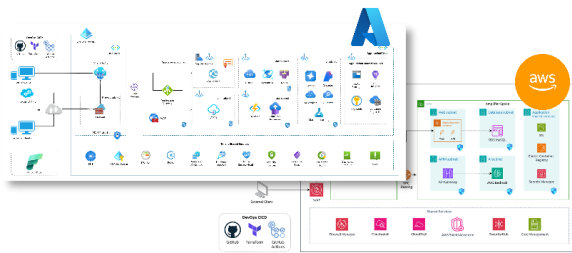
CICD Automation Pipelines

GUARDRAILS API
1. Validation Check
2. Sanitization Check
3. Profanity Check
4. Length Check
5. Encoding Check
6. Character Set Check
7. Duplicate Check
8. Contextual Check

SCORING API
1. Jailbreaks
2. Prompt Injections
3. Coherence Score
4. Readability Score
5. Toxicity Score
6. Sentiment Score
7. Bias Check Score

TOOLS
1. Langchain
2. OpenAI
3. Bedrock

Business Outcomes

- Focus on Business Value
- Focus on Usability & Adoption
- +70% cost reduction*
- Security by Design
- Improvised KPIs and SLAs
- Faster turn around time
- Resource optimization
- Efficiency gain by over 30%
- Savings from current cost unlocked through efficiencies

GenAI Apps Platform as Industrialized Processes

Processes

Onboard new use case
Business

Optimize costs of a use case
Cost
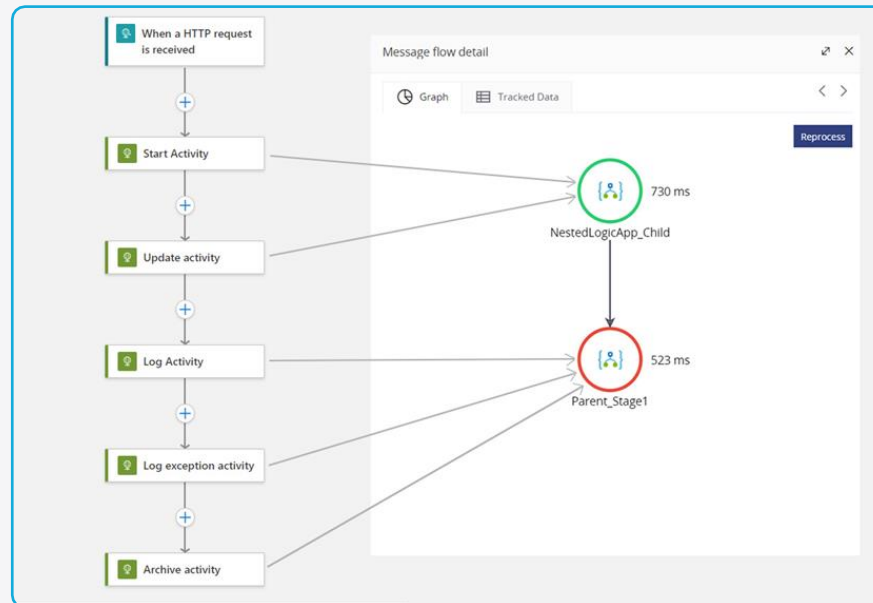
Optimize tokens (guardrails)
Sustainability

Establish a GenAI system health check routine
Operability

Manage access to LLMS/FMS with policies Maintainability

Value realization

Streamline operations leads to faster completion of tasks and projects

Significant cost savings over time by automating repetitive tasks

Maintain compliance and avoid costly fines and legal issues

Increasing overall productivity

Improved service delivery, enhancing customer satisfaction

Visual workflow

Collection of Logic App workflow

Easy to maintain

Easy to adapt

100+ business / IT processes to go at scale

AI-Apps Jumpstarts

Rapidstart with App building blocks

- Custom Single use case GenAI Website (Amplifier Lite)
- Improve business process with Low code for performance
- Create custom O365 Copilot for employees' interactions
- Conversational agents for clients experience
- Empower your workforce with Copilot
- Integrate application in Teams for employees experience
- Workflow, business logic & agent application
- Contextualization for personnalized experience
- Enterprise Search Knowledge management & Search to Decision & Action
- Empower your workforce with custom plugins

Benefits:

- Time and Cost savings
- Smart apps use machine learning and AI to understand users' behaviour and suggest actions to help them save time
- Personalized responses
- Smart apps can learn from past customer interactions to provide more accurate responses over time
- Better user experience
- Smart apps can gather data from various sources, such as online, sensors, and user interaction, to help provide a better user experience
- Improved efficiency
- Smart apps can integrate with Internet of Things (IoT) devices to allow users to control and monitor connected devices, which can enhance convenience and efficiency

Success story

GenAI enablement for an industrial technology conglomerate

Client challenge:

- Recognizing the transformative potential of artificial intelligence, they sought to leverage GenAI to enhance their operations, improve decision-making processes, and gain a competitive edge
- The client's goal was to deploy over 16 AI use cases across two critical applications, accessible to various business divisions
- They also aimed to establish a secure and scalable GenAI platform to ensure long-term benefits

Proposed solution:

- We started off by integrating over 16 Generative AI based use cases that could cater to multiple aspects of the client's business and a centralized AI platform that seamlessly integrated with the client's existing infrastructure
- We implemented a phased deployment strategy, prioritizing high-impact use cases while ensuring minimal disruption to ongoing operations. This approach allowed the client to deploy this solution to their various business units
- The AI platform could accommodate future use cases and technological advancements, providing a foundation for long-term AI integration
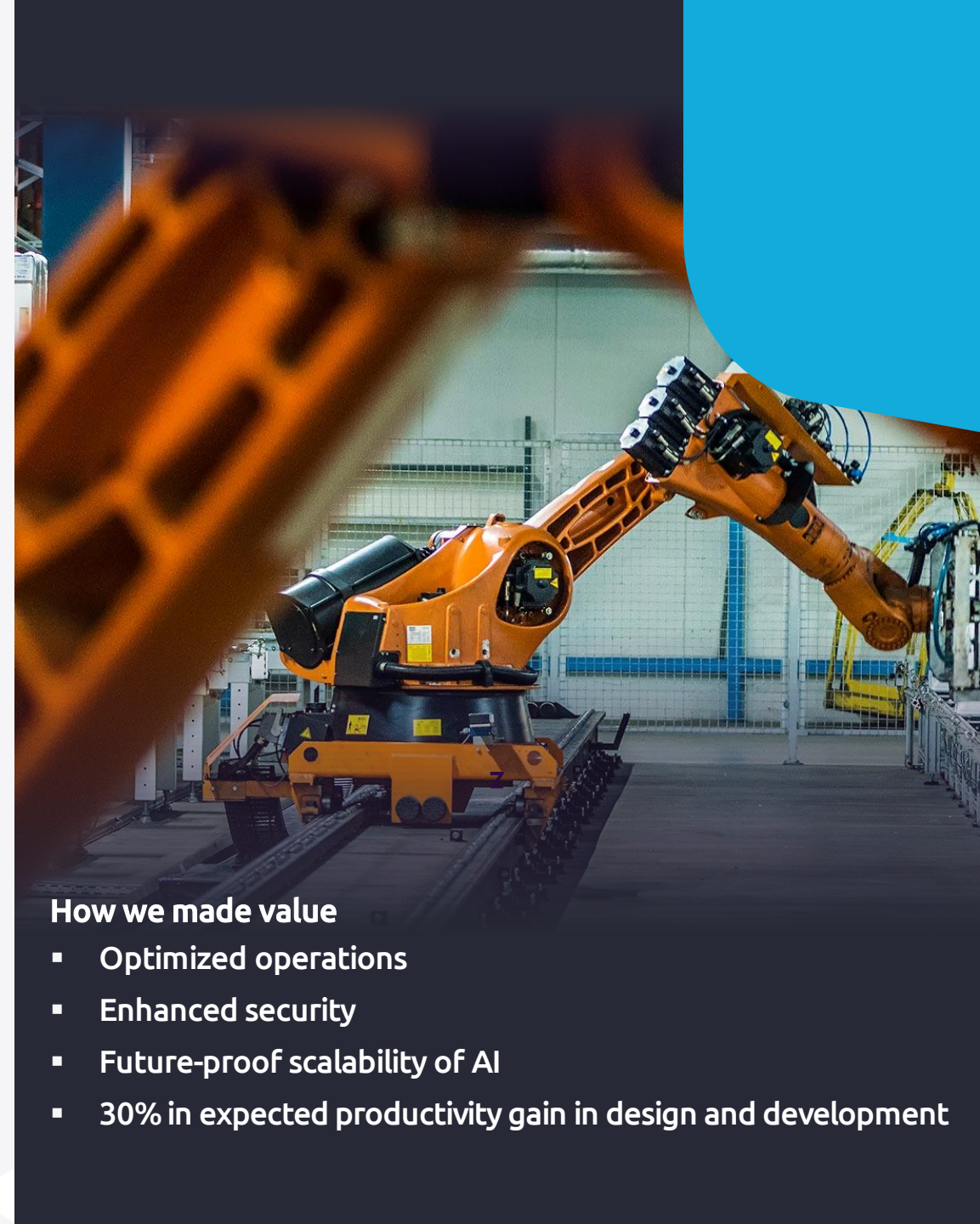
How we made value
- Optimized operations
- Enhanced security
- Future-proof scalability of AI
- 30% in expected productivity gain in design and development

Business Value – Scaling AI with a Platform Accelerator

PoC	Pilot	Production	Scale

Without platform accelerator

• Research mode • 6-10 weeks timeline • Focus on proving tech • Disconnected from data	• Restart of development • Siloed solution • New team setup • 8-16 weeks timeline • Focus on getting it to work	• Manual release process • Infra & Release Focus • Lack of MLOps • 20% of POCs reach prod	• Siloed team approach • One by one use case • Research and Innovation mode • 5 to 10 AI use cases

➕ GenAI Applied Strategy	➕ GenAI App Foundation	➕ Industrialized Processes	➕ Rapidstarts

With platform accelerator

• Data is integrated • Focus on business value • Automation in build • Increased speed	• Already built for prod • Automated. • Deployment • Only adding UI/UX • 2-6 weeks timeline • Focus on usability	• Automated deployment • MLOps in place • Monitoring & Retraining • Focus on enhancements • Focus on adoption • 70% of POCs reach prod	• Focus on Change Mgmt • Scale cross departments • Multiple PODs in parallel • Infusing AI everywhere • 20 to +200 AI use cases

Business values

80% cost & time reduction*	60% cost & time reduction*	80% cost & time reduction*	80% cost & time reduction*
Data & AI driven organization	Stock market effects	70-80% Increased business adoption of AI	Sector based business value coming from AI • Reduced energy consumption • Increased sustainability • Reduced demand management
22% profitability compared to laggards	Optimized data driven processes	70% higher revenue per employee	

* Based on Machine Learning use cases. Estimations need to be done for each client.

Seamless Implementation of AI APP Platform

Empowering Your Business with Effortless AI Integration and Cutting-Edge Solutions

Ideation, strategy and assessment	POC ➡ Pilot ➡ Production	Scale

Assess

- **Review the application portfolio** to align with GenAI infusion criteria, ensuring compatibility and readiness for AI integration
- **Evaluate the journey's progress** from its inception, focusing on the use cases tested and the variety of solutions explored
- **Analyze the current opportunistic approach** to identify areas of improvement and potential strategic pivots

Accelerate

- **Provision 'GenAI App Foundation'**
- **Adopt the 'GenAI Apps jumpstarts'** to infuse GenAI into applications, enhancing functionality and driving innovation
- **Leverage and operate the GenAI Apps foundation**, providing a robust assembly of services that support rapid development and deployment
- **Promote pilot use cases** to production, scaling the AI App platform to meet growing demands and opportunities

Customize

- **Implement a bimodal GenAI applied strategy**, tailored to the unique drivers of use cases, industry demands, context, and custom software requirements
- **Refine and expand the business function backlog**, fostering infinite change and ensuring continuous evolution of the GenAI Apps Platform
- **Scale GenAI infusion** across the organization, customizing the platform to seamlessly integrate with existing processes and future innovations

Adapt And Scale

About Sogeti

Part of the Capgemini Group, Sogeti makes business value through technology for organizations that need to implement innovation at speed and want a local partner with global scale. With a hands-on culture and close proximity to its clients, Sogeti implements solutions that will help organizations work faster, better, and smarter. By combining its agility and speed of implementation through a DevOps approach, Sogeti delivers innovative solutions in quality engineering, cloud and application development, all driven by AI, data and automation.

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 340,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering, and platforms. The Group reported in 2023 global revenues of €22.5 billion. Get the Future You Want.

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