

CUSTOM GENERATIVE AI FOR ENTERPRISES

INSURANCE

Harnessing Gen AI's power to unlock new opportunities

Agenda

1. Where are our customers?
2. Where are we?
3. Where are we with our customers?
4. Some work done....
5. Exploring Gen AI with Capgemini



Where are our clients?



Our clients are eager to learn about Gen AI, top 15 insurers are already experimenting in pockets and wanting to play around with it and see how it can make their software engineering faster and their businesses better!





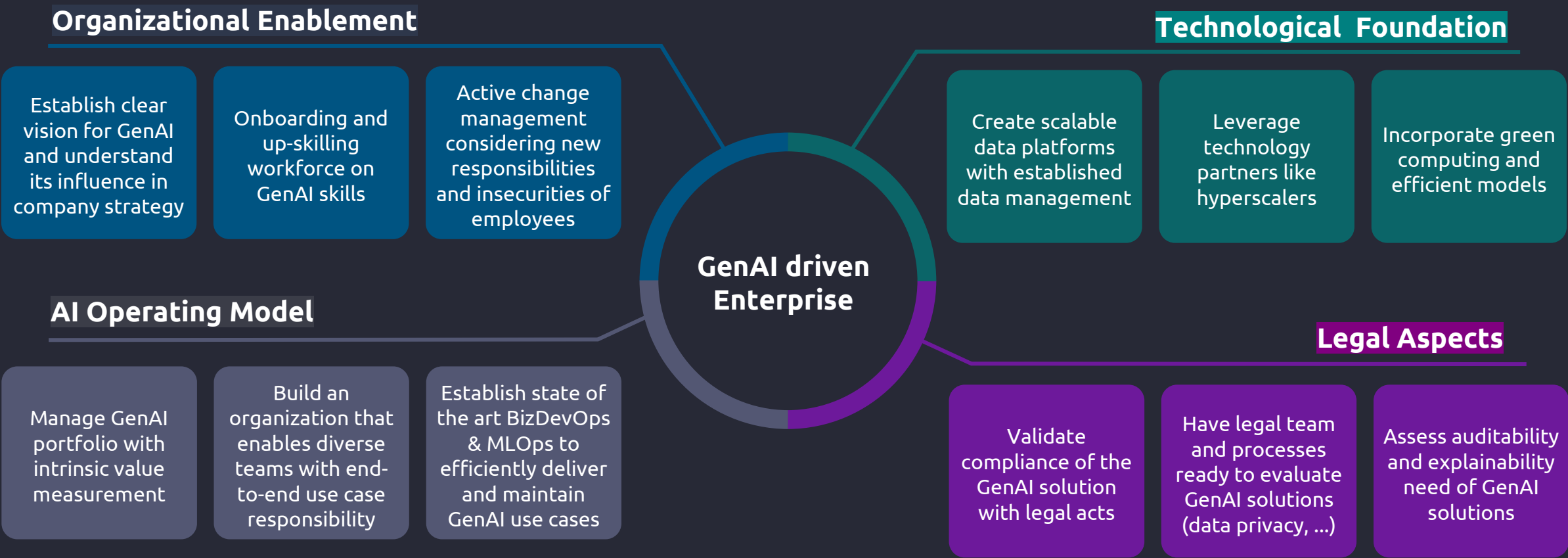
WHERE ARE WE ?

Externally, we're partnering with **clients** and tech giants (**Google, Microsoft, Amazon**). Internally, we're collaborating with **legal, ethics, delivery, security, infrastructure**, and **risk experts**. This involves rapid **exploration, experimentation**, and **scalable efforts**-- all being executed with **responsibility** and **transparency**.

CAPGEMINI GEN AI STRATEGY



Capgemini will invest invest €2 billion to strengthen its leadership in Artificial Intelligence over the next 3 years doubling data & AI teams to 60,000 along with upskilling our workforce on GenAI



GEN AI Strategy | Gen AI for CX | Gen AI for Software Engineering | Custom GenAI for Enterprise

WHAT MAKES US UNIQUE



A PROVEN DATA & AI PORTFOLIO WITH GEN AI EXPERTISE

- Multiple years of experience in deploying scaled GenAI solutions in production
- Intellectual Property and accelerators built in-house or in collaboration with key partners
- Research-based Technical Thought Leadership incl. Prompt Hydration and Privacy Preserving AI techniques
- Ability to guide through ethical and legal compliance complexity such as AI Act with Capgemini Invent.

20+

GenAI Use Cases implemented

5+

Generative AI-based solutions in place

8+

Partners to deliver Generative AI solutions

Capgemini

Dedicated AI Futures Lab

20 000+

Experts across domains & industry sectors

60 000+

Data & AI Consultants

OUR CROSS-INDUSTRY FOOTPRINT



Automotive



Aerospace & Defense



Banking



High Tech



Life Sciences



Telecommunications



Energy & Utilities



Insurance



Public Services



Consumer Products & Retail

OUR GEN AI PARTNERSHIPS ACROSS THE PIPELINE





Generative AI has the potential to unlock immediate value across the entire Insurance value-chain

Internal business-facing

Customer-facing



Fraud

The FBI reports that insurance fraud costs more than \$40B a year. AI tools can identify oddities in claims data and pinpoint inaccurate information and flag situations for specialists.



Underwriting

Underwriting is a complex process, but AI can accelerate and improve many associated tasks. AI can develop more competitive and personalized prices by automating the gathering of customer data.



Claims

AI has the potential to shorten claims processing times from multiple days to just hours or minutes, which means greater cost savings from companies and for customers speedier payout and resolution.



Service

Advancements in this area have the potential to make the user experience more seamless, personalized, and accessible while easing the burden on insurers to respond to individual inquiries manually.



Sales

AI can open up new digital sales channels and strategies. It can further help target personalized marketing campaigns that include tailored-to policies and plans to the most ideal customers.



We have identified a set of seven use-cases on underwriting that we believe will add immediate value to Insurance business...

Where might we use Generative AI for underwriting use-cases?

Risk Assessment

Generative AI can improve the risk assessment process by being trained on demographic data to better predict risk and provide underwriters with recommendations.

Intelligent Underwriting

Generative AI can be used to identify critical documents, extract critical data in the submission process and then feed just that critical information to the underwriter to help make quicker decisions.

Eligibility & Product Match

Generative AI could be used to determine eligibility based on classifications and eligibility guidelines then suggest the best product match for the customer.

Social Media Sourcing

Generative AI can be used to source social media to gather data around and confirm customers' business operations, social interactions and customer reviews.

Rating Errors

Generative AI can generate notifications for underwriters when rating errors have been made, the impact, and the correction needed.

Policy Manuscripting Generation

Generative AI can generate basic policy manuscripts based on class codes, operations description's or even personalize a manuscript based on exposure information.

Broker Messaging

Generative AI can generate routine human-like communications in real time from Underwriters to Brokers when additional information is needed in assessing a risk.

While we believe that this represents a wide range of generative AI use-cases for, it is still a non-exhaustive list given the speed at which generative AI is advancing...



We have identified a set of eight use-cases on billing that we believe will add immediate value to Insurance business...

Where might we use Generative AI for billing use-cases?

<p>Default Prediction</p> <p>Generative AI can craft personalized, proactive messages for policyholders at risk of default, encouraging prompt payments.</p>	<p>Cash Allocation</p> <p>Generative AI can generate clarifying queries to policyholders when payments received do not match with outstanding bills, ensuring accurate cash allocation.</p>	<p>Payment Plans</p> <p>Generative AI can generate individualized payment plan proposals, written in a way that best resonates with the policyholder's communication preferences.</p>	<p>Collection Strategy</p> <p>Generative AI can create personalized letters, emails, or text messages for each debtor, written to encourage engagement and payment.</p>
<p>Creditworthiness</p> <p>Generative AI could generate personalized financial guidance for policyholders based on their creditworthiness, fostering trust and potentially improving payment behaviors.</p>	<p>Fraud Detection</p> <p>Generative AI can be used to generate automated responses to potential fraudulent behavior, alerting policyholders and asking for their confirmation.</p>	<p>Billing Errors</p> <p>Generative AI can generate notifications for policyholders about the error, the impact, and the rectification plan, maintaining transparency.</p>	<p>Customer Support</p> <p>Generative AI can generate human-like, contextually appropriate responses in real-time, enhancing the customer experience.</p>

While we believe that this represents a wide range of generative AI use-cases, it is still a non-exhaustive list given the speed at which generative AI is advancing...



We have identified a set of eight use-cases on claims that we believe will add immediate value to Insurance business...

Where might we use Generative AI for claims use-cases?

Claims Triage

Generative AI can be used to predict claim severity of incoming claims and throughout the claim life cycle based on incoming documentation and data from relevant claim s.

Litigation Management

Gen AI can predict litigation weeks in advance, starting at First Notice of Loss and throughout the claims life cycle. Litigation trends, patterns along with potential nuclear verdicts can be identified before they have an adverse impact

Reserve Accuracy

Generative AI can help a claim operations pro-actively manage claim reserves against the predicted severity

Medical Outcomes

Generative AI can score medical providers on actual outcomes and compare them to relevant closed claims. This allows the claims professional to engage the right doctor for better outcomes.

Attorney Utilization

Generative AI can score defense counsel on actual outcomes and expenses. The scoring process will includes comparing the performance of the counsel to outcomes from relevant closed claims.

Fraud Detection

Generative AI can be used to identify potential fraud and trigger appropriate next steps for the claims team.

Automating Workflow

Generative AI can automate workflow within the claims lifecycle based on new information as it becomes available. Workflow triggers can be used to engage services , expertise & escalations.

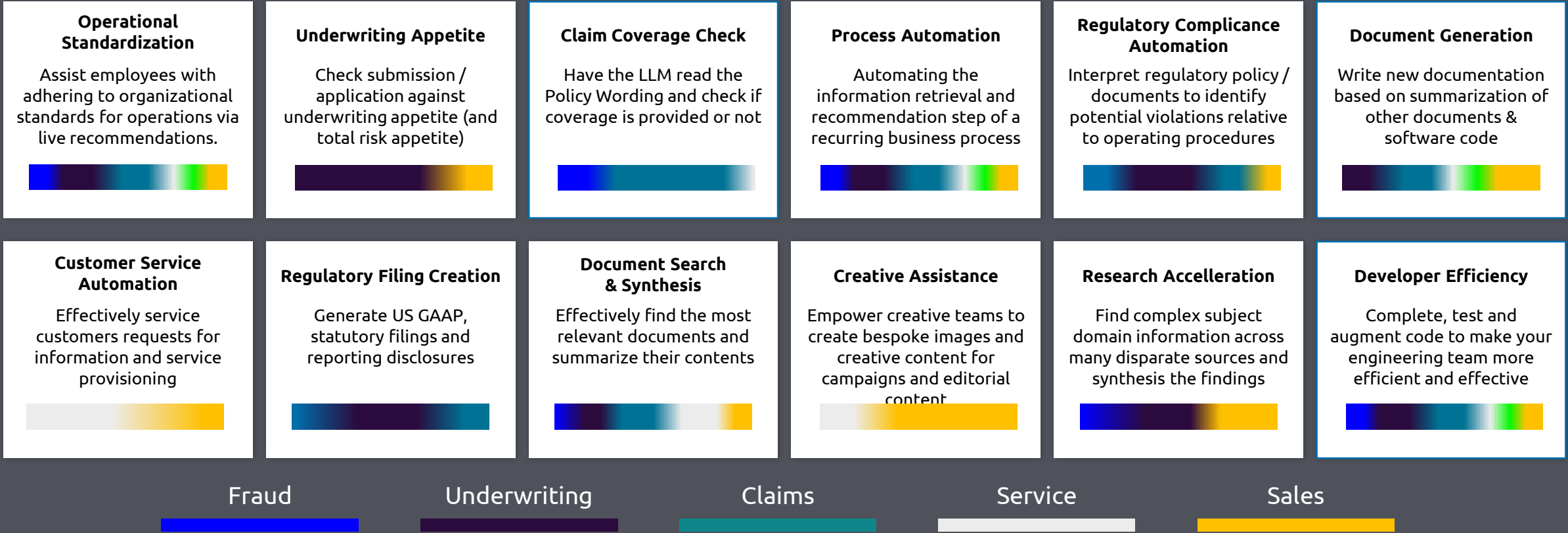
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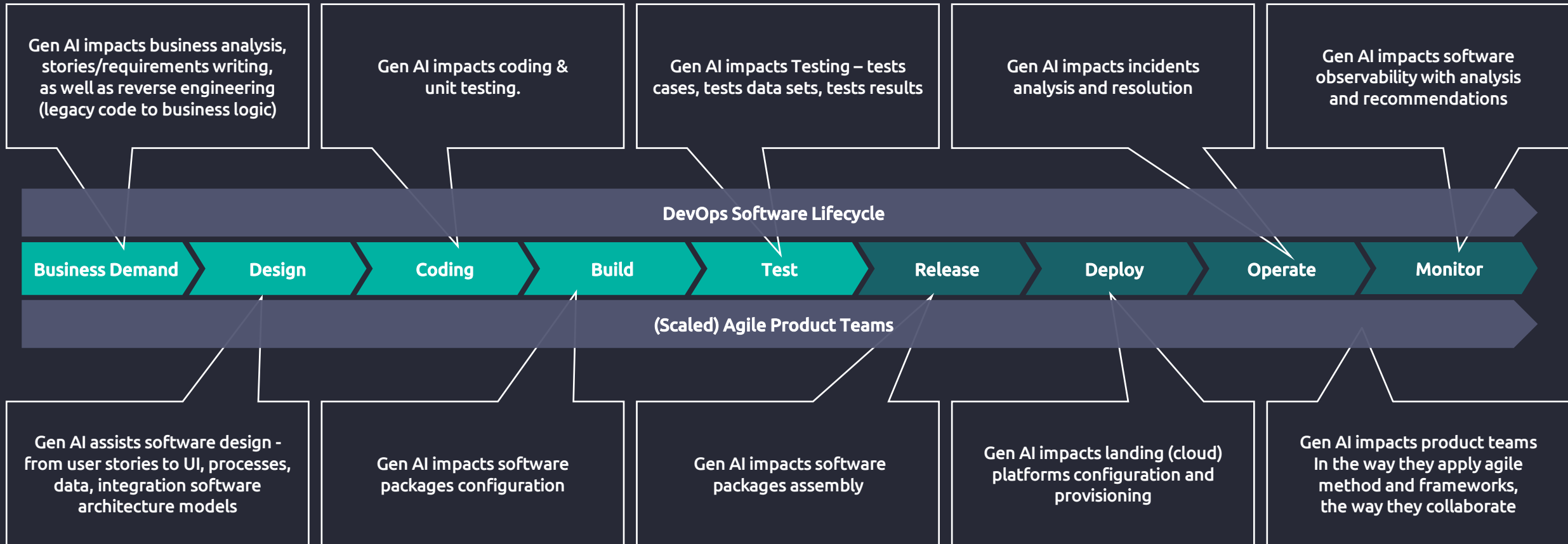
While we believe that this represents a wide range of generative AI claims use-cases for many of our clients is still a non-exhaustive list given the speed at which generative AI is advancing...



Across each category there are a wide range of immediately actionable use cases fitting into industries DNA



Capgemini is also supporting multiple insurers on leveraging GenAI for improving software engineering productivity



Industrialized Software Engineering Platform


(Scaled) Agile Process Management - Developer Workplace (IDE) - DevOps automation toolchain - Tests Automation - Open Source | Vendor solutions



Gen AI Experimentation

Live Case Study – Software Engineering



Emerging Technology & Innovation in partnership with **Capgemini** 



Purpose of the Experiment

“ This Experiment is meant to identify areas across SDLC where we have **high benefit** of using Generative AI and those where we have to Explore Further to Augment ”





What Benefit

Productivity Gains. Time. Effort.





Our Journey

Sprint 4

Present
Eventual Study

Sprint 3

We'll Prompt
Engineer
To Try to Achieve Higher
Levels of Efficiency

Sprint 2

We'll Conduct
the Experiment

Sprint 1

We'll Deconstruct the
Use-Cases & Standup
Models





Expected outcomes...

"While the experiment is meant to identify efficiencies across SDLC it is equally important for us to trust the quality of output produced by GenAI"

Model Evaluation	Productivity Gains
<ul style="list-style-type: none">▪ Evaluating multiple open source and close sourced models as each model lends itself better for certain tasks (e.g., code generation, Q&A, testing etc.)▪ Each models have several criteria that are being evaluated (e.g., token size, security, privacy, latency & performance customization/adaptability, hallucination/toxicity prevention, ethical considerations, licensing, cost, bias mitigation, natural language input, documentation, support etc.)	<ul style="list-style-type: none">▪ For the use cases under experimentation, our developers have provided the current time and effort required for completing those tasks without GenAI▪ At the end of the experimentation, we will also capture the time and effort required for producing similar output with GenAI

We will also also understand experimentation output more broadly...

Are we gaining Better Output Quality?

Are we obtaining Better Documentation?

Is this improving Engineering Experience?

Experimentation Details...



Reach

- 34 use cases identified across code generation, code conversion, code review, testing, documentation & miscellaneous
- 12 prioritized for later experimentation
- 22 use cases detailed with developer pain points, dependencies, steps, outputs & effort spent



Focus Areas

Environment/Code languages covered: Java, Python, SQL, Angular, React, Gosu, AWS, Github, Selenium, Cucumber, Guidewire, Junit, VB Script, Java Script, .NET, Jasmine/Karma



Participating Teams

- Data, Claims, Enterprise, Personal Lines, Internal Audit, Ent Risk, Small & Middle Large Commercial

Models under consideration

#	Use-Case	Open Source Models	Closed Source Models
1	Code Generation	StarCoder,WizardCoder,Replit 1.3B,Code T5+,CodeGen, Falcon 7B	Code Whisperer, GitHub Copilot
2	Test Case Generation	LaMiNi-LM 738M , MPT-7B , StableVicuna Models	Github Copilot
3	Code Conversion	LaMiNi-LM 738M	Azure OpenAI
4	Q&A	ChatGPT	Azure OpenAI
5	Code Review	TBD	TBD

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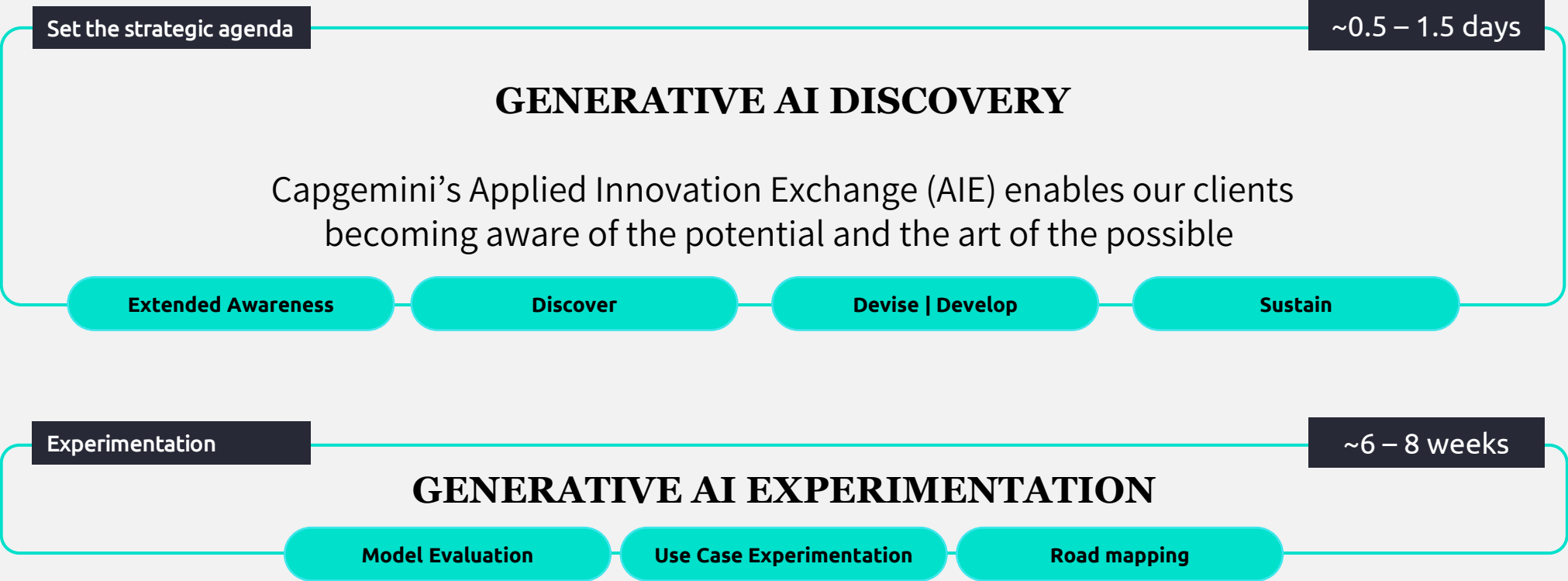
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We are partnering with our clients on discovery and experimentation





About Capgemini

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 every day by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of nearly 350,000 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 2022 global revenues of €22 billion.

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