

Beyond the hype:

Harnessing the power of Enterprise GenAl, including use cases

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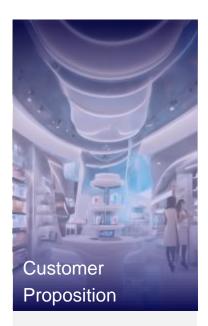


Shift to Al Native

Re-wiring the enterprise for pervasive Al

Al is going to change the services we provide, how we work and how we compete. We have moved past the proof-of-concept stage, with organizations beginning to address longer-term, enterprise-scale implications:

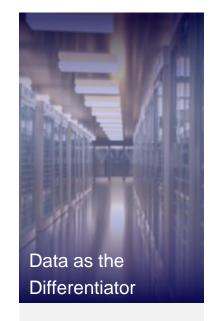
- How should I re-shape people, process and technology to be effective in this environment?
- What knowledge assets create differentiation and how can they be digitized for AI consumption?
- How can I harness productivity gains to outpace competitors and sustain innovation?
- How has the competitive landscape changed?



New services, value propositions and channels as digital gets truly personal



Different relationships and working models between technology and humans



New operating model and enterprise architecture built on knowledge exploitation



Three waves of change in focus for Al adoption

Wave 1: experimenting & preparing 2023–2026



Low-risk experimentation



Gradual adoption

Caution and uncertainty

13%

Business adoption ("high" scenario)

Wave 2: confident adoption 2026–2030



Regulatory clarity



Lower barriers to entry



Reshaped business and operating models

31%

Business adoption ("high" scenario)

Wave 3: embedded collaboration 2030–2032



Widespread use cases



Proven reliability



Meaningful role in decision making and strategic insights

46%

Business adoption ("high" scenario)



Use Cases in BFS&I Industry

Banks & Financial Institutions

Document classification and categorization for legal contracts

Self directed invested by optimized cash management

Analysis & recommendations in financial securities investment

Comparing & identifying cyber security threats

Augmenting call center representatives with enhanced summarization and answers

Deeper analysis of customer spending and behavior patterns

Insurance

Drafting letters and marketing content for new products

Automated processing of broker submissions

Analysis of liability and coverage issues for legal complaints

Underwriting policies by performing comprehensive risk analysis

Efficient & cost-effective claims management

Implemented / Piloted Use Cases

Investment insights & analysis for client advisory in wealth management – Morgan Stanley

Analysis of customer spending patterns and product personalization – Mastercard, American Express

Al driven knowledge assistant for claims management – The Travelers Companies

Semantic search and summarization for financial audits – KPMG, EY





Key Risks in Generative Al

Key Risks	Risk Type	Risk Details	Risk mitigation
Data privacy	Security & Confidentiality Risk	Huge amount of data used for training the model can be exposed if not handled carefully	 Implementation of anonymization technique Establish/adhere to strict data privacy guidelines Hosting of LLMs
Unclear sourcing	Legal Risk, IP/Copywrite	Al employs ML to infer information, which highlights the possibility of data accuracy and IP issues	 Implementing mechanism to verify authenticity and credibility of training data Ensure transparency in sourcing & collection of data
Deliberate misuse	Operational Risk	Deep fakes, identity theft, fraud, and propaganda, which could pose risks to society	 Security measures to prevent unauthorized access Monitoring and tracking of system activities, including using Gen AI
Bias	Reputational Risk	Sophisticated systems are likely to absorb underlying social biases from their training data	 Evaluation & audit of AI models for potential biases Use diverse/representative dataset to minimize bias Monitor bias using Gen AI
Harmful Instructions	Reputational Risk	Generative AI can create harmful instruction is not trained properly	 Reinforcement learning to guide model to ethical & safe outputs Update model from human and Gen AI reviews to improve ethical decision making
Hallucinations	Libel Risk	Generative AI produces out put that are not real, do not match to data on which algorithm is trained on	 Continuously improve and refine AI models through iterative training Incorporation of human and Gen AI validation & feedback loops



Euro Al Act - Key Requirements

Category	Keyword	Requirement	Technique	
Data	Data source	Data sources used in foundation model	Multimodal knowledge graph for data governance	
	Data governance	Data governance to train foundation models	GNG, PCHA for data minimization MPT/Falcon for PII anonymization	
	Copyright Data	Summarize copyright data used in foundation models.	Multimodal knowledge graph for data governance	
Compute	Compute	Disclose compute used to train foundation models	Model card	
	Energy	Measure energy consumption to train models and reduce the energy footprint	Convert / migrate to more efficient technology.	
Model	Capabilities	Capabilities and limitations of foundation model	Al Quality control using error analysis and active learning.	
	Risks	Foreseeable risks, mitigations and non mitigable risks.		
	Evaluation	Benchmark the model on public / industry benchmarks		
	Testing	Report test internal / external test outcomes		
	Performance Levels	Design & develop models addressing performance, predictability, interoperability etal.		
Deployment	Machine Generated Content	Disclosure of the content generated by foundation model	Disclaimer in Gen Al output	
	Member States	Disclose EU member state where the model is available.	Compliance by risk teams.	
	Downstream Documentation	Technical compliance with EU AI Act	Compliance by risk teams following NIST playbook.	



Generative AI use cases Cognizant is piloting with clients today

General Productivity

Code Analysis

Technical question & answer along with code troubleshooting

Workflow Management
Unified customer service agent desktop

Semantic Search Digital audit coach

Summarization Summarize product specs into natural chat or speech

Business Specific

Call Center Automation

FSR call automation

Credit Decisioning

Loan approval with fraud detection capability

Claims Management

Identify missing information in a claim file

Billing Reconciliation

Reconcile remittance transactions

Medical data summarization

Medial records extraction for health insurance

Product Prototyping

Empowering product teams with Gen AI

Domain Specific

Marketing & Sales

Auto generation of sales pitch deck

Risk & Legal

Matching & validating legal documents

Finance

Financial statement planning analytics

Procurement

Smart procure system

R&D

Repository of research articles



Demo – Auto Policy Underwriting Preprocessing

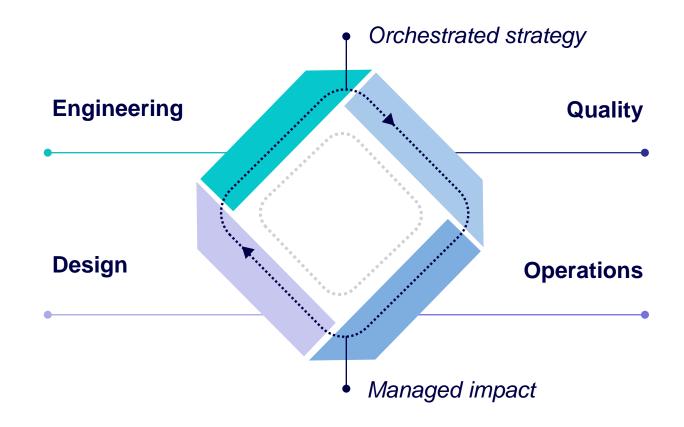




Accelerating business agility is a great place to start in Generative AI adoption

Augmenting the delivery of technology-enabled change should be a high priority:

- Tools are available today that can make a meaningful impact
- Faster, more effective change will accelerate other
 Generative Al initiatives
- Enhancements **drive business agility**, which can save cost, but also drive innovation, effectiveness and growth
- This is a high opportunity area for Generative Al and further acceleration will be possible in the future





Generative AI use cases span the solution development lifecycle

WHAT to change

Consolidate improvement opportunities

- · Market and customer insight
- · Strategy and innovation
- Operating model analytics
- Codebase analytics
- Package and CMDB analytics

HOW to change

Apply requirements to architecture

- Requirements management
- · Enterprise architecture
- UX, design and prototyping
- Codebase analytics
- Code re-factoring and quality

DO the change

Create code and digital assets

- Image generation
- Text generation
- Code generation
- Code re-factoring and quality
- Data modelling

ASSURE the change

Test and monitor for effectiveness

- Test case generation
- · Generative AI testing
- Generative AI observability
- A-B Testing
- Al Operations

Delivery management and Integration

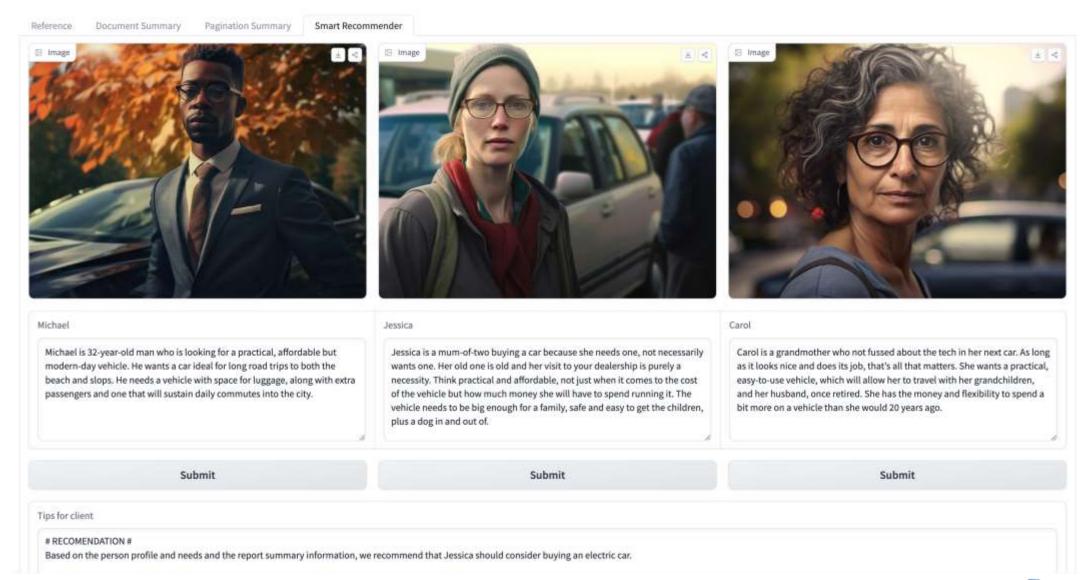
· Process integration

Work assignment

 Delivery progress & performance Documentation & communication



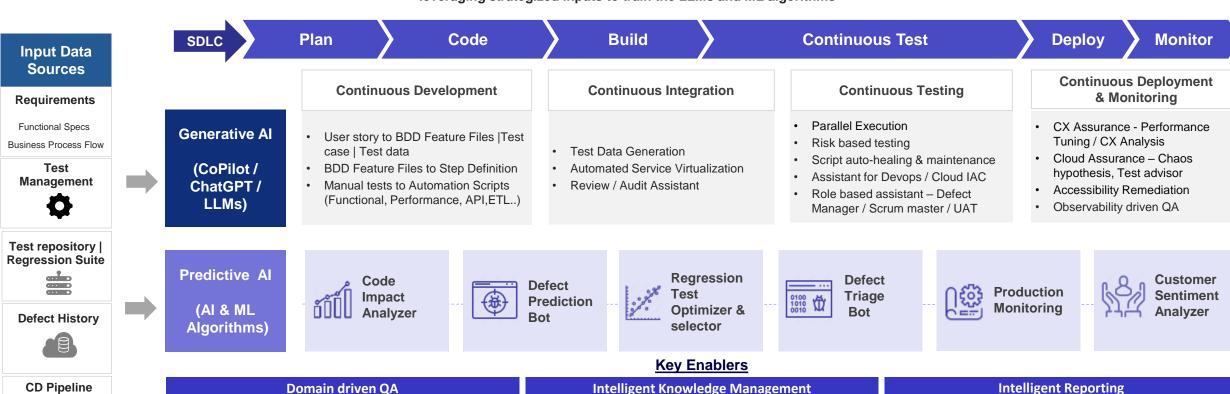
Demo - User research and human centred design



Al adoption in quality engineering by blending predictive and Gen Al

Platform driven Quality Engineering across Lifecycle powered by Generative and Predictive AI models

leveraging strategized inputs to train the LLMs and ML algorithms



Leveraging AI for critical business process assurance (Verification & Validation | Platform Assurance : T24, SFDC,...)

Intelligent Knowledge Management

Al powered Knowledge Management for accurate Search and Retrieval of information

Intelligent Reporting

Single view of metrics to monitor test efficacy, coverage and utilization metrics | intelligent reporting in CI/CD for DevOps

Outcome

Archives

Faster Test Design and Execution



99 9% Test Effectiveness



Significantly improved execution stability



Automating the incident management lifecycle using AI driven IT operations

Eliminate/deflect incidents Accurate and accelerated triaging **Process excellence** Triaging / defect classification Performance insights Proactive identification of potential failure Auto response / RTT Email+Chat Visualization & dashboarding Agent assist Feedback & sentiment analysis Sentiment analysis <a>® Policy Update & calibration # Standard operating procedures **Assignment** Categorization Resolution Logging **Escalation Initial diagnosis** & triaging & feedback Gen Al Insights **AIOps** Rapid diagnosis **De-Escalation** Case / document understanding Chat / email summarization Search & smart knowledge repository Automated triaging <a>## Chat / call summarization, Next best action contextualization, and NBA Lead time on **Accelerated** Customer Cost of **Employee Proactive**

satisfaction

mindset

operations



service recovery

resolution

retention



Thank you

Opportunities are everywhere, but focus will be different across the organization

Major areas of Generative-Al implementation opportunity Corporate strategy & market insight Deeper insight into market & Effective cascade & Proactive response to threats competition course correction Research & development Sales, marketing & customer operations Novel product & Speed to market & quality Go-to-market acceleration & Enhanced digital selfservice ideas assurance service experiences impact Core product / service Augmented Service automation & Breakthrough features & Dynamic adaptation knowledge work cycle time to context **Corporate functions** Staff development & Domain knowledge as a Real-time quality & risk Skillset & pyramid enablement corporate function management optimization Change capability Engineering speed & Machine assisted concept Pivot from outputs to Multi-source ideation & design productivity outcomes

Work smarter

- · Better contextual awareness
- Expand creative horizons
- Execute with pace and quality

Attack / Protect

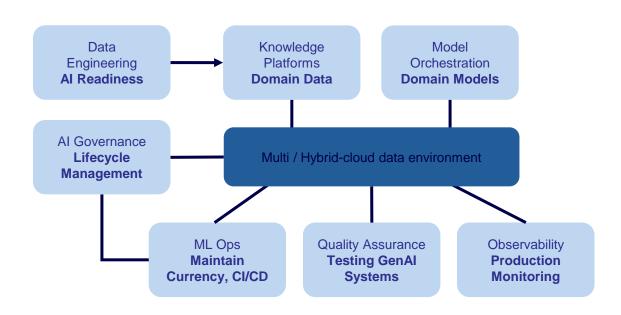
- Wow moments
- Hyper hyper personalized
- Radical price / service ratios

Streamline

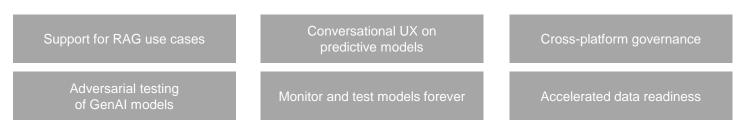
- Reduce cycle times
- Increase productivity and effectiveness
- · De-risk and assure



Al/Gen Al Adoption using a robust technology ecosystem



Key Features



Neuro AI enables scaling of Enterprise-grade AI. Clients can **build domain-specific, special-purpose models** that make use of Generative AI, Deep Learning and Enterprise knowledge assets.

They can also **establish the foundations for responsible Al** across platforms, with the tooling to govern Al and intelligent applications lifecycles.

Client scenarios

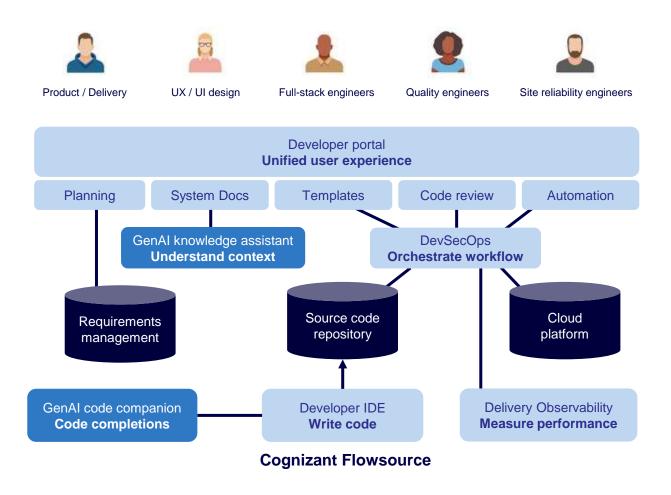
- Build specialized AI models that combine domain knowledge, conversational UX and predictive recommendations
- Gain control over many parallel AI initiatives

Illustrative outcomes

- >90% accuracy of AI recommendations
- Unique GenAl / Deep Learning models
- Transparency of AI activity and operational observability
- Release gating, CI/CD, etc.



Al adoption in Software Engineering with Cognizant Flowsource



Flowsource enhances the value of Generative Al coding companions such as GitHub Co-Pilot and AWS CodeWhisperer by fully integrating them with developer experience and DevOps automation solutions.

Flowsource accelerates engineering productivity by up to 40% in a safe way that prevents Al-generated code from adding complexity to large code-bases.

Client scenarios

- Struggling to effectively scale coding companions
- Slow and unpredictable change delivery
- Aspirations for self-funding GenAl adoption

Illustrative outcomes

- 25-40% increase in developer productivity
- 40% increase in produced code quality
- Ability to rapidly deploy emerging AI tools and models
- Mobilize continuous modernization efforts



A leading US bank adopts a product mindset to drive digital transformation

When our client wanted a product-centric model, we embarked upon a journey of digital transformation to drive customer obsession and improve metrics across the digital ecosystem.



Context

Cognizant worked with our client's team to increase focus towards delivering delightful experiences for the users across touchpoints. We defined Product Strategy through co-creation workshops, deployed a hybrid pod model to build in a scaled, agile way, and drove speed to value with optimized cost.



Our Approach

Established product studio to scale engineering led capabilities and tailored operating models to meet the growing needs of the client. Ensured there is a seamless collaboration across multiple teams.



Why Cognizant

Cognizant helped our client to transform by consulting and evolving product teams in multiple ways. Our Hybrid Pods model enabled cross pollination of learning across teams. With customer obsession as our north star, we started on small project, proved value, and scaled fast.

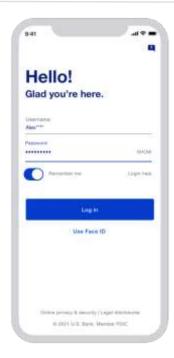
End-to-end Digital Capabilities:

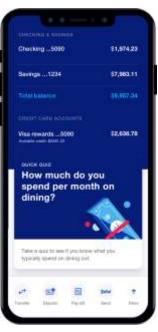
- Organized under CIO and CDO towers
- Delivering one brand experience across multiple customer facing banking products
- Platform teams spread across Interfaces, Data & Communication, Sales & Onboarding, and Authentication
- Involved across different phases of product lifecycle – User Research, Design, Core Development, User Testing, and Product Adoption

#1 Ranking consumer mobile banking app

5.5M Total users

36% App rating improvement







Leading UK Insurance Company

Unlocking Enterprise Agility with GenAl for a

(*exclusive of tool subscription cost)

OUTCOMES

Overall QA Cost Savings

Reduction in the time spent

Reduction in efforts for code migration [~400 tests in just 3

Increased in code coverage

Reduction in data framework development time [from 2-3] weeks to just 2 days

from initial 2.3%

through efficiencies

writing test cases manually

days compared to estimated 3+ months manually]

The approach – Key factors which contributed to efficiency gains

To address these challenges, customer identified generative AI solutions with Azure **OpenAl and GitHub Copilot** to:

Customer was dealing with challenges across the software delivery lifecycle

including ineffective unit testing coverage in development, prolonged test data

preparation in QA, knowledge silos across teams working in different programming languages and difficulties managing heterogeneous dev and test environments.

- Generate comprehensive unit test cases, review, refine and execute them, analyze failures and update code to address gaps
- Create framework which rapidly generate high quality, standardized test data on demand
- Analyze and document legacy Java code and migrate core systems to C# by converting code and APIs, minimizing business disruption



Implementation Success

Deploying GenAl solutions across delivery lifecycle increased efficiency, velocity and agility by automating manual bottlenecks while integrating seamlessly to boost productivity



The Challenge

Al driven Quality Engineering for a Canada based Global Insurance Leader

Problem Statement

Need for Optimization, test efficiency and lower defect throughput due to Large Volume of Manual Test Scripts – 40K, Automated Test Case > 41K, Performance Scripts > 80 which led to longer test cycle | Transform team to produce higher value work

The approach – Key factors which contributed to efficiency gains

 Successful (POCs) in Predictive and Azure LLM based solution for QEA with focus areas including:

Generative

- ✓ Automated generation of BDD feature files in Gherkins based on User Story
- ✓ Assistive chatbot for automated test script design and maintenance

Predictive

- ✓ Test Optimization- ML based Regression Test Optimization
- ✓ Test Prioritization Al driven application hot-spot analysis for test prioritization and early defect detection.
- ✓ Failure Analysis ML based Automated root cause analysis of QA build failures in the CI/CT pipeline
- All engineers trained and orchestrated models and tooling to integrate new solutions across key chokepoints in the QEA process

OUTCOMES

40% Effort Savings

70%Faster turnaround in build failure analysis

35%
Optimized regression test



32%
Overall QA Cost Savings through efficiencies

-/

Implementation Success

GenAl in Software Testing Life Cycle lead to efficient and effective testing processes with the potential to automate, improve test coverage and enhance the overall quality



Transforming customer experience and operational efficiency with Conversational AI for a global European bank

The bank wanted to improve customer experience and reduce human agents' efforts in handling customer calls/requests substantially.



Context

The bank was facing issues due to language barriers considering its multi region operations. There was no system to provide a personalized or omnichannel customer experience. Its vision is to create one personalized digital assistant experience connecting people with businesses, buyers with sellers.



Our Approach

Cognizant implemented a Conversation AI Solution by leveraging its strategic partnership with Google. The solution is named as Intelligent Digital Assistant (IDA).



Why Cognizant

At Cognizant, we've helped many of the world's largest brands to transform, through consulting, modern engineering and in deploying platform based Gen Al at scale, and through evolving product teams and methodologies.

The key features of our solution are listed below -

- Language specific NLU model and Language detection at real time to connect to region specific knowledge base & CRM system.
- Active Learning process feature constituting continuous monitoring of conversation log, measuring KPIs & relabeling for new intents detected to automate the model retraining process ad improve accuracy & coverage.
- Our solution enabled the client to improve customer experience, expedite rollout speed and increase scalability. Jointly we drove the transition by strategically mapping it to architecture of new version.
- IDA helps customers on almost all Retail Banking queries

35%

cost reduction due to lesser number of live agents

10%

increase in customer conversation

5%

improvement in model accuracy per quarter through automated customized active learning

Real time analytical dashboards

Monitor Real-Time
Deflection & other KPIs
improvement through a
single pane of glass



