

The GenAI Revolution: Generative AI in Software Development & Application Management



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Gen AI: Early, but Next Wave of Growth

Gen AI will add nearly \$10T to global GDP over next 10 years

-IDC

CXO Interest in Gen AI*

97%

said Gen AI will be transformative to their company and industry

95%

plan to spend a sizable part of their tech budget on Gen AI over the next two years

40%

of all working hours can be impacted by LLMs¹

*Accenture CXO Pulse Survey; October 2023

¹ Source: Accenture Research, 2023

Accenture's journey so far

20+ years leading in AI

\$3B Data & AI investment

1450+ AI patents

250+ AI patents in Software Development and Application Management

AI Navigator for Enterprise

GenAI powered platforms for our services

300 Gen AI client projects

Accenture is leading the GenAI revolution and creating value for all stakeholders



Gen AI for **our clients**

9000+ Clients | 20 Industries | 5 Functions



Gen AI in **how we deliver our services**

Strategy & Consulting | Technology |
Operations | IndustryX | Song

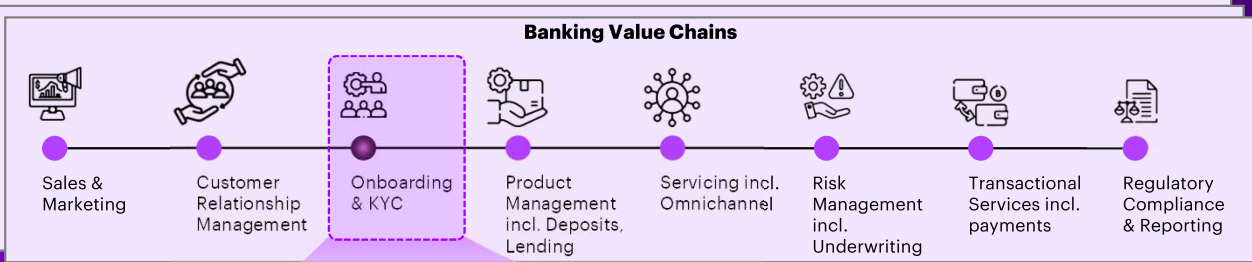


Gen AI in **how we operate**

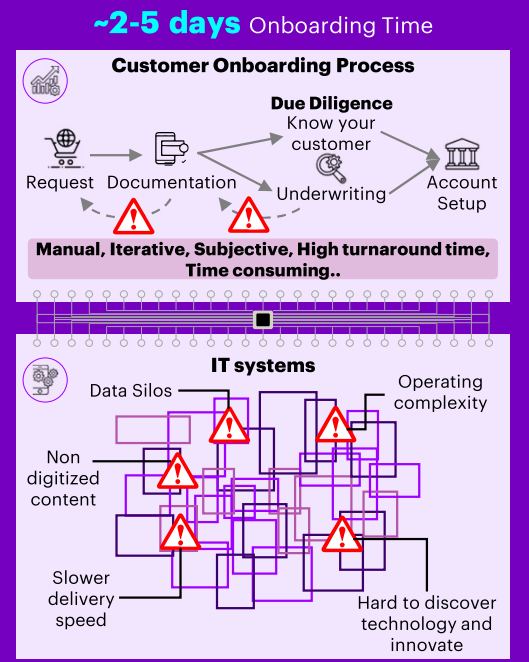
733K Accenture Employees Worldwide

← **Responsible AI** →

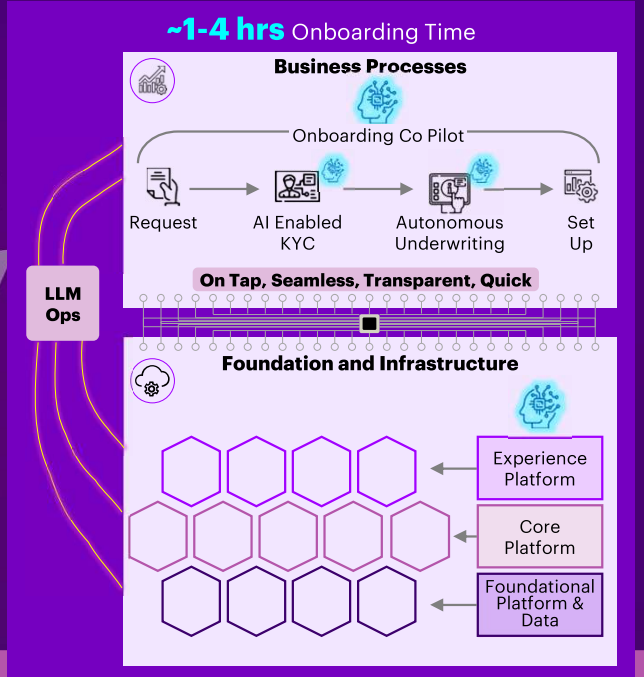
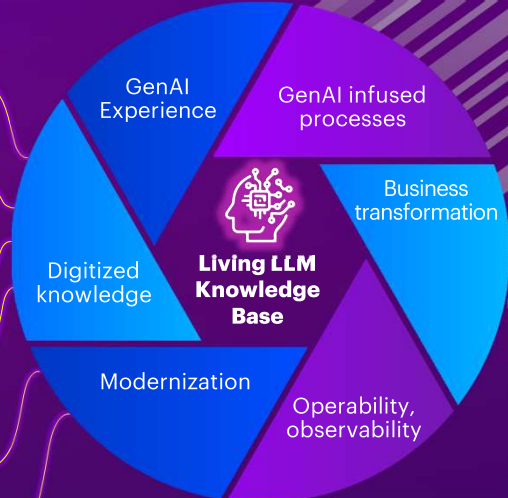
Driving Reinvention across the Value Chain – Illustrative Example



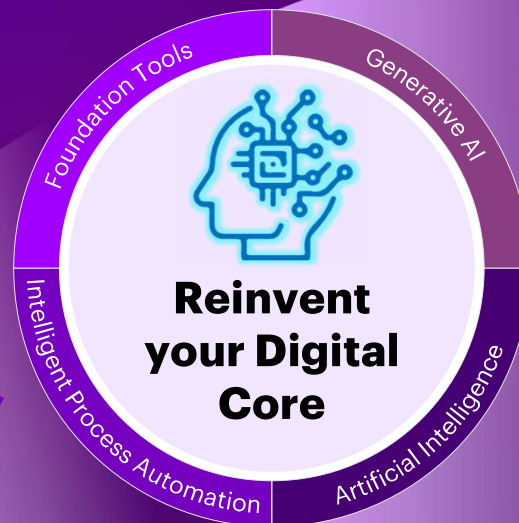
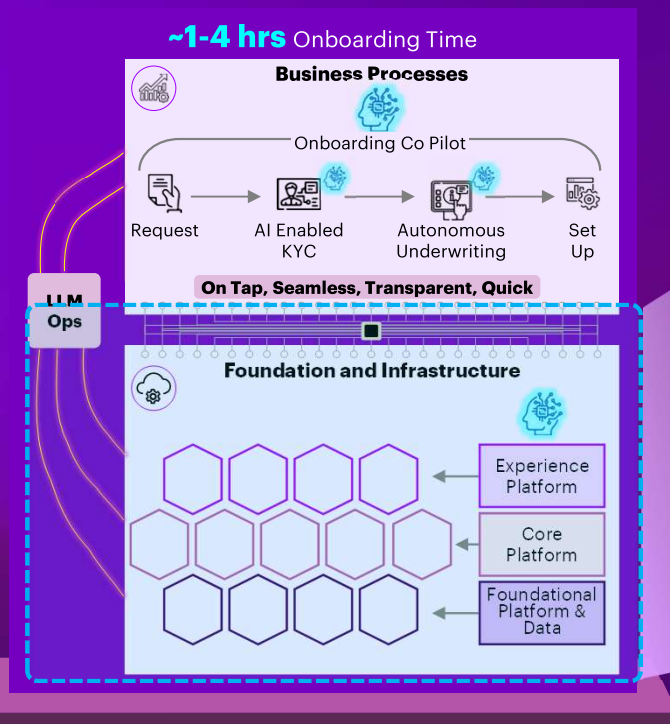
Identify the value chain to transform
from Client Imperatives + Accenture Research



Continuous Reinvention across value chains



Reinventing the Digital Core with GenAI in Software Engineering & Application Management



01 Establishing a Living Knowledge Base

02 Hyper-automate tickets and development

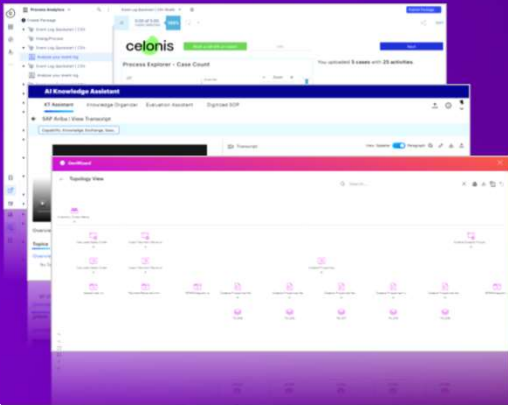
03 Technical debt to Technical dividend

04 Accelerate business reinvention

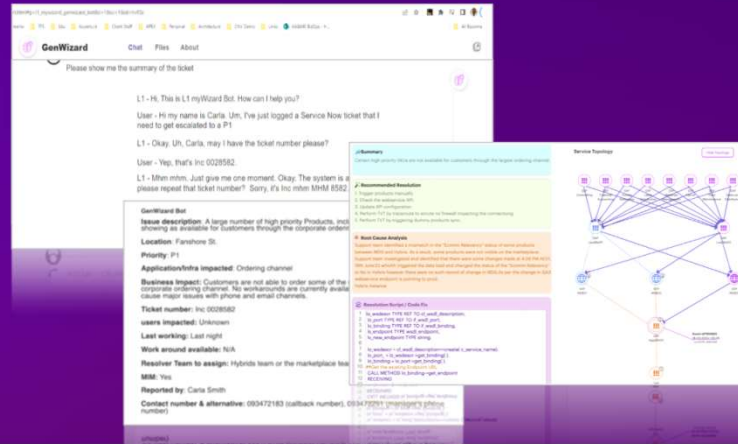
05 Build future ready systems

Bringing it to life...

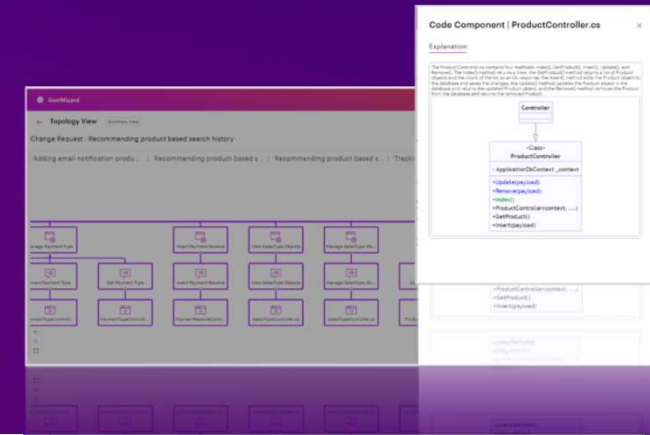
Establishing a Living Knowledge Base



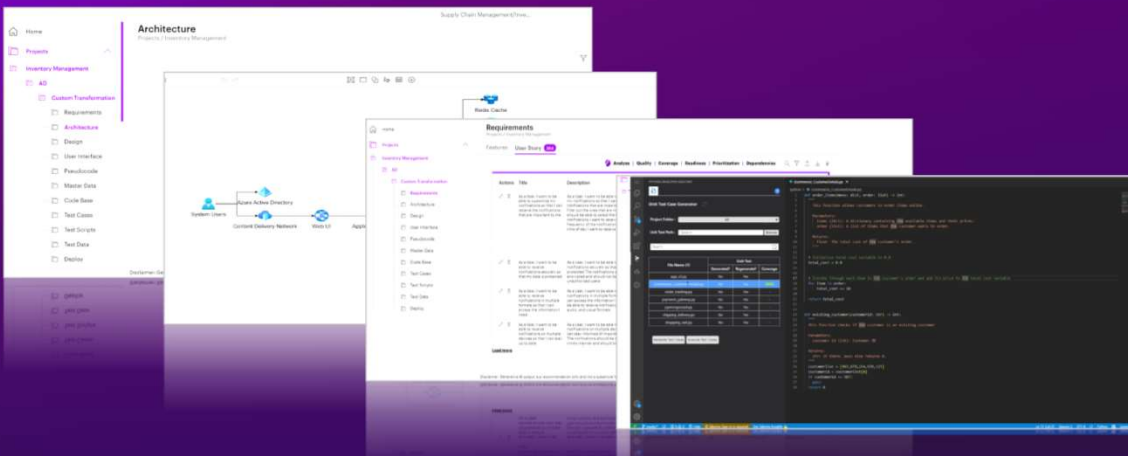
Hyper-automate tickets and development



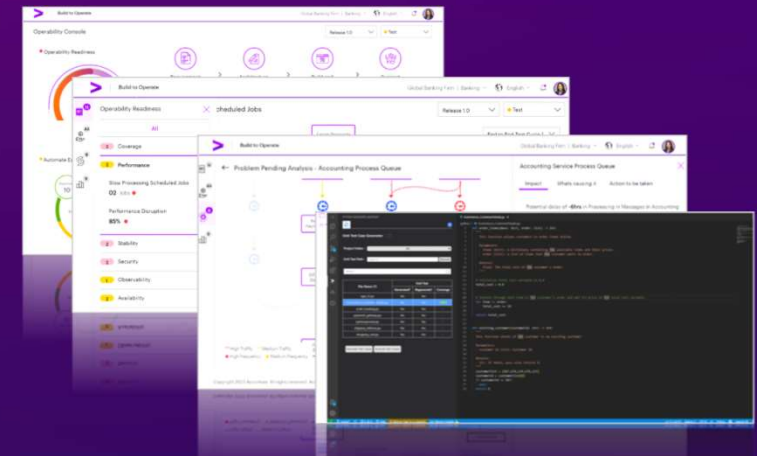
Drive down technical debt



Accelerate business reinvention



Build future ready systems





01 **Establishing a Living Knowledge Base**

02 Hyper-automate tickets and development

03 Technical debt to Technical dividend

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Digitize call transcripts and generate documentation

AI Knowledge Assistant

Welcome to KLEWER

AI Knowledge assistant helps automate the process of KT planning. It is a learning assistant that auto generates transcripts of the uploaded videos and prepares System Understanding Documents. It organizes the Knowledge base by classifying the documents and videos. It then helps Knowledge Recipients to take AI-generated assessments and provides personalized learning recommendations based on evaluation results.





KNOWLEDGE TRANSITION
AND **L**EARNING ASSISTANT


E-LEARNING ORGANIZER
AND **W**IZARD OF
KNOWLEDGE


EVALUATION ASSISTANT

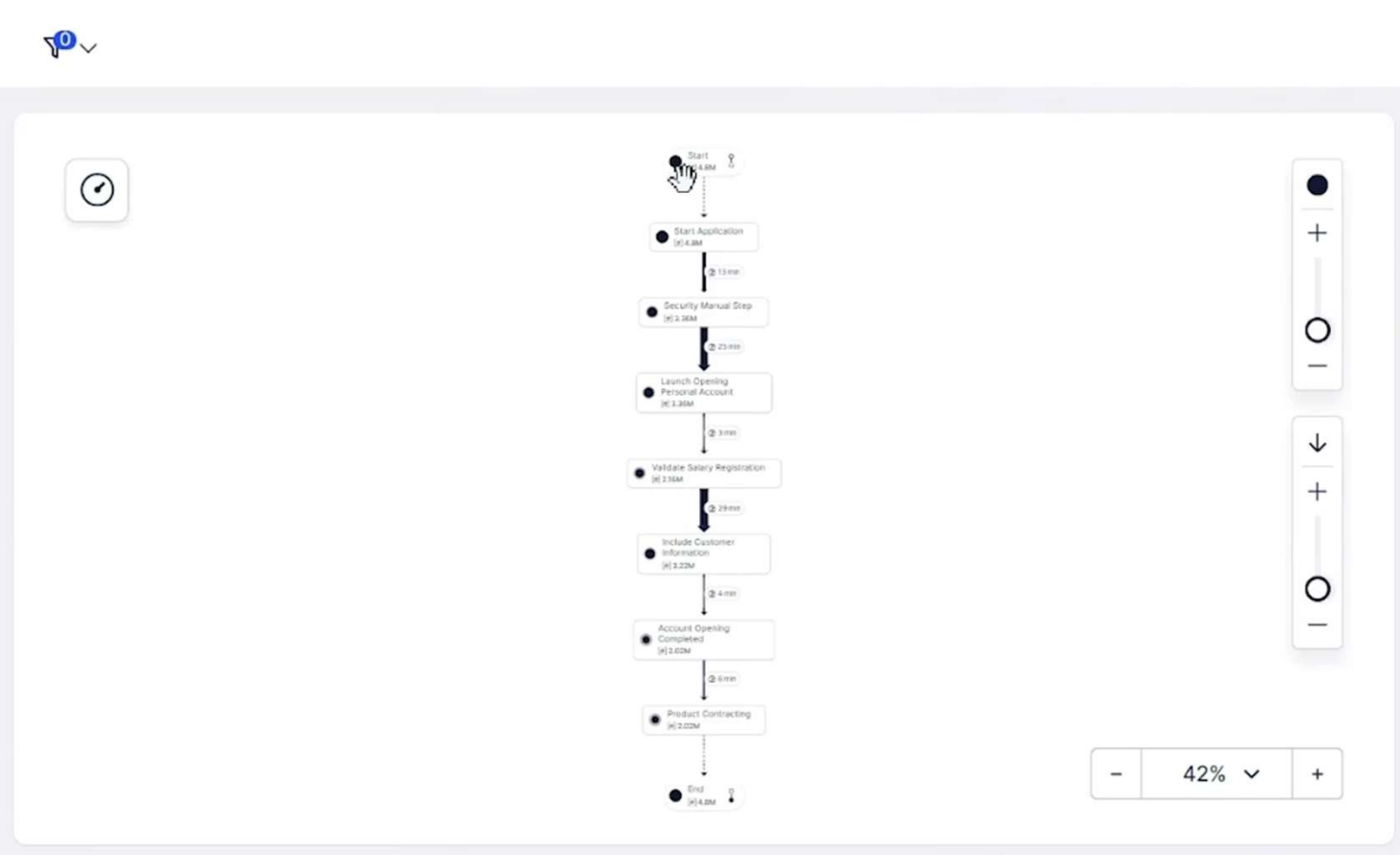

RECOMMENDER


DIGITIZED SOP

Process Mining

- Inbox
- 1 - Customer Onboardi...
- Customer-Onboarding
 - Executive Dashboard
 - Process Explorer**
 - Process Explorer Multi Event
 - Business Objectives
 - Operational View
- > Action Flows

Process Explorer



Reverse Engineer from the Application Code base

- Home
- Projects
 - Payment Processor
 - AD
 - Custom Transformation
 - Requirements
 - Analyze Application
 - Architecture
 - Design
 - User Interface
 - Pseudocode
 - Master Data
 - Code Base
 - Technical Debt

Analyze Application

Projects / Payment Processor

Scan Repository Change Analysis

Action	Application	Size	Scan Status	Topology	Knowledge Graph	Wiki
	payproc-master	188.59 KB	Completed			

Assistant for every engineer on the team using the knowledge base

The screenshot displays the GenWizard application interface. On the left is a navigation tree with folders: Home, Projects, Payment Processor, AD, Custom Transformation, Requirements, Analyze Application (highlighted), Architecture, Design, User Interface, Pseudocode, Master Data, Code Base, Technical Debt, and Test Cases. The main area is titled 'Analyze Application' under 'Projects / Payment Processor', with sub-links for 'Scan Repository' and 'Change Analysis'. A table lists application scan results:

Action	Application	Size	Scan Status	Topology
	payproc-master	188.59 KB	Completed	

On the right, a chat window titled 'GenWizard' is open. It contains two messages: 'What are the payment methods accepted' and a response stating that the system is not configured for this request but can assist with generating user stories, test cases, and architecture. A 'Command' input field with a 'Q&A' button is visible at the bottom of the chat.



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Handle user calls and analyze/self heal tickets

 **GenWizard** — 

 Hey, I'm GenWizard! How may i help you today?

- AMS
 - Monitoring
 - Correlation & Observability
 - Incidents
 - Service Requests
 - Problem Tickets
 - Non Ticketing Activities
 - Knowledge Management
- IMS
- Transition



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Analyze the change impact and use generative AI for code fix or enhancement

The screenshot displays the GenWizard application interface. At the top left, there is a navigation menu with a home icon and a list of folders: Home, Projects, Payment Processor, AD, Custom Transformation, Requirements, Analyze Application, Architecture, Design, User Interface, Pseudocode, Master Data, Code Base, Technical Debt, and Test Cases. The 'Analyze Application' folder is highlighted. The main header area shows 'GenWizard' on the left and user profile icons on the right. The breadcrumb trail indicates the current location: 'Projects / Payment Processor'. The main content area is titled 'Analyze Application' and includes a sub-header 'Projects / Payment Processor'. Below this, there are two tabs: 'Scan Repository' and 'Change Analysis', with the latter being the active tab. A table displays the results of the change analysis, with one entry visible. The table has columns for Action, CR Title, Triggered By, Triggered On, and View Impact.

Action	CR Title	Triggered By	Triggered On	View Impact
	Perform Impact Analysis for feature that allows users to reject a payment if a currency is not supported and to support payments with a QR code and Swiss franc currency in the payment gateway	manoj.venkata.sai	11/1/2023	



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Generate Application Architecture

The screenshot shows the GenWizard application architecture tool interface. At the top left, there is a GenWizard logo and a navigation menu with options: Home, Projects, Payment Processor-Modernization, AD, and Custom Transformation. The Custom Transformation menu is expanded, showing sub-items: Requirements, Architecture, Design, User Interface, Pseudocode, Master Data, Code Base, Test Cases, Test Scripts, and Test Data. The main workspace is titled "Architecture" and "Projects / Payment Processor- Modernization". It contains a large area with a "+" sign and a preview of a "Payment Processor- Moderniz... V1.0" document. A tooltip "Generate Application Architecture" is visible over the preview. At the top right, there are user profile icons and a "Select Client & Delivery Construct" button. At the bottom, there is a disclaimer: "Disclaimer: Generative AI output is a recommendation only and not a substitute for human judgement and diligence." and a GenWizard logo.

Generate Functional Architecture

- Home
- Projects
- Payment Processor-Modernization
 - AD
 - Custom Transformation
 - Requirements
 - Architecture
 - Design
 - User Interface
 - Pseudocode
 - Master Data

Architecture

Projects / Payment Processor- Modernization

+

Payment Processing App - Gre... V2.0
Functional

Payment Processing App - Gre... V2.0
Application

Payment Processor- Moderniz... V2.0
Technical

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Generate Requirements

- Home
- Projects
 - Payment_Processor
 - AD
 - Custom Transformation
 - Requirements
 - Architecture
 - Design
 - User Interface
 - Pseudocode
 - Master Data
 - Code Base
 - Test Cases
 - Test Scripts
 - Test Data
 - Deploy

Requirements

Projects / Payment_Processor

Features User Story



No Features found.
Please upload Features to get started

GenWizard

Generated and displaying 28 User Stories

User stories and associated features are published successfully.

Please generate user stories for Payment Processor application JS

To generate User Stories, Please confirm the Functional & Non-Functional areas to be considered.

Command Q&A

Ask a question

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Generate Technical Architecture

The screenshot displays the GenWizard user interface. At the top, the GenWizard logo and name are on the left, and user profile, notification, and SR icons are on the right. The main header reads "Mars Finance/Payment Processing".

On the left is a navigation tree with the following structure:

- Home
- Projects
 - Payment Processor-Modernization
 - AD
 - Custom Transformation
 - Requirements
 - Architecture
 - Design
 - User Interface
 - Pseudocode
 - Master Data

The main workspace, titled "Architecture" for "Projects / Payment Processor- Modernization", contains three cards:

- A card with a "+" sign.
- A card titled "Payment Processing App - Gre... V2.0" labeled "Functional".
- A card titled "Payment Processing App - Gre... V2.0" labeled "Application".
- A card titled "Payment Processor- Moderniz... V2.0" labeled "Technical".

Each card has a set of icons at the bottom for actions like share, print, delete, and refresh. A GenWizard logo and window controls are visible in the bottom right corner of the workspace.

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Generate Design

- Home
- Projects
- Payment Processor-Modernization
 - AD
 - Custom Transformation
 - Requirements
 - Architecture
 - Design
 - User Interface
 - Pseudocode
 - Master Data

Design

Projects / Payment Processor- Modernization

File Name	Triggered On
Payment Processor- Modernization_DesignDoc_20231102142554.docx	11/02/2023
Payment Processing App - Greenfield_DesignDoc_20231101142843.docx	11/01/2023

GenWizard

Generate functional architecture for the application. SR

Functional architecture generated

Generate functional architecture for the application. SR

Functional architecture generated

Command Q&A

Please generate detailed design document

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Generate Pseudocode

- Custom Transformation
 - Requirements
 - Architecture
 - Design
 - User Interface
 - Pseudocode**
 - Master Data
 - Code Base
 - Test Cases
 - Test Scripts
 - Test Data
 - Deploy

Pseudocode

Projects/Payment Processor- Modernization

< Create_card_token_and_extract_relevant_information_using_stripe_create_card_token_method_01 Create_card_token_and_extract_relevant_inform >

```
User Story : As a customer, I want to be able to delete my card details so that I can make sure they are not stored
Acceptance Criteria
Given a customer has entered their card details
When the customer clicks the Delete button
Then the card details should be deleted

START

//Define customer
customer = input customer details

//Define delete button
deleteButton = click delete button

//Check if customer has entered card details
```

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Generate Code

- Custom Transformation
 - Requirements
 - Architecture
 - Design
 - User Interface
 - Pseudocode
 - Master Data
 - Code Base**
 - Test Cases
 - Test Scripts
 - Test Data
 - Deploy

Code Base

Projects / Payment Processor- Modernization

Code Base

Name	Version	Download	Upload To Repository	Workspace	Triggered By	Triggered On
PaymentPro	v1				aravinth.krishna.k.n	11/02/2023
PayGreenPro	v1				aravinth.krishna.k.n	11/01/2023









Generate Test Cases

Testing

Projects / Payment Processor- Modernization

Test Cases **60**

Summary Traceability | Detailed Traceability | Quality

Actions	Title	Description	Expected Result	Triggered By	Triggered On
 	Receipt for Payment	Verify that a customer can receive a receipt for their payment	The customer should be able to receive a receipt for their payment	aravinth.krishna.k.n	11/2/2023
 	Verify Payment Confirmation	To verify that the customer is able to see a confirmation that their payment was successful	The customer should be able to see a confirmation that their payment was successful	aravinth.krishna.k.n	11/2/2023
 	Payment Details on Receipt	Verify that the payment details are displayed on the receipt	The payment details should be displayed on the receipt	aravinth.krishna.k.n	11/2/2023
 	Verify Payment	To verify that the customer is	The customer should be able to	aravinth.krishna.k.n	11/2/2023

- Custom Transformation
- Requirements
- Architecture
- Design
- User Interface
- Pseudocode
- Master Data
- Code Base
- Test Cases**
- Test Scripts
- Test Data
- Deploy

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Generate Test Scripts

Testing

Projects / Payment Processor- Modernization

Test Scripts

Publish Test Scripts

Functional Area	File Name
DefinejournalfieldsforPayprocprogram	DefinejournalfieldsforPayprocprogram
Setjournallogfilename	Setjournallogfilename
Logkey-valuepairsfromPayPalIPNrequest	Logkey-valuepairsfromPayPalIPNrequest
WriteSEPAQRcodeasSVGimage	WriteSEPAQRcodeasSVGimage

- Custom Transformation
- Requirements
- Architecture
- Design
- User Interface
- Pseudocode
- Master Data
- Code Base
- Test Cases
- Test Scripts**
- Test Data
- Deploy

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Deploy the application

- Custom Transformation
 - Requirements
 - Architecture
 - Design
 - User Interface
 - Pseudocode
 - Master Data
 - Code Base
 - Test Cases
 - Test Scripts
 - Test Data
 - Deploy

GenWizard

Environment provisioning is in progress. Please check the notification for the completion

Technical Architecture has been generated successfully

Environment is successfully provisioned

Environment is successfully provisioned

Environment is successfully provisioned

Command Q&A

Please deploy

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Launch the application

GenWizard

Mars Finance/Payment Processing

Deploy

Projects / Payment Processor- Modernization

[Review results](#) | [Track progress](#)

Name of Application	URL	Triggered By	Triggered On
PayGreenPro	https://genapps-f2154d31cd55.azurewebsites.net	senthil.p.kaliappan	11/02/2023

Projects

- Payment Processor- Modernization
 - AD
 - Custom Transformation
 - Requirements
 - Architecture
 - Design
 - User Interface
 - Pseudocode
 - Master Data
 - Code Base
 - Test Cases
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<https://genapps-f2154d31cd55.azurewebsites.net>

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GenWizard



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Build to Operate

Operability Console

Release 1.0 | Test

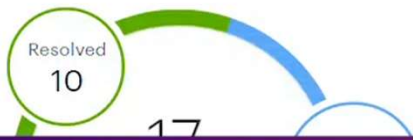
Operability Readiness



- Requirement**
 - Operability Requirement Coverage
- Architecture**
 - Topology Configuration
- Build and Test**
 - Operability Coverage
 - Security Coverage
 - Stability Coverage
 - View All
- Support Readiness**
 - Critical Defects
 - Pending Test Cases
 - Performance Blockers

Automate Early

Explore



Automation 02

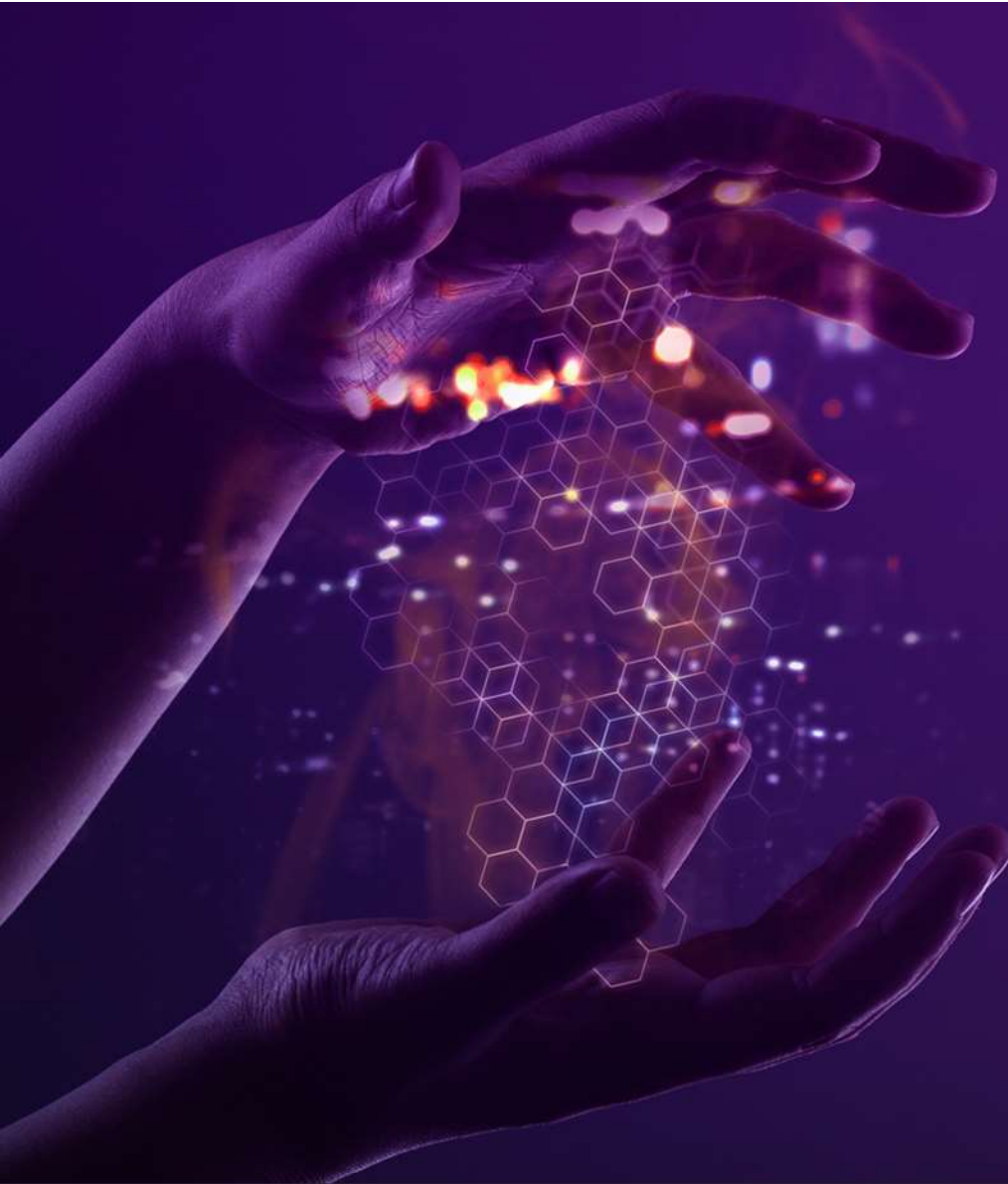
Insights on Production Impacts

Explore

Distributed by Type

Incidents 11

Distributed by Severity



Getting started...



Start with experiments – across Business & IT



Define GenAI strategy working with partners



Selection of right LLM and tooling for organization needs



Knowledge base with right data and content is the foundation



GenAI + AI + Automation + Human in the loop

Thank You

A large white outline of a stylized arrow pointing to the right, set against a purple gradient background. The arrow is composed of several straight lines forming a wide, elongated shape with a pointed right end. The background transitions from a dark purple on the left to a lighter purple on the right.