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# Genesys Engage On-Premises Use Cases

Genesys Predictive Routing for Sales (SL06) for Genesys Engage on premises

12/9/2024

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## Important

This use case is based on Genesys Predictive Routing for Customer Service (BO06) for Genesys Engage on-premises. The capabilities described in this use case are under shipping control. Contact your Genesys representative for additional details.

Place revenue generation at the center of your routing decisions by using AI to match each customer opportunity with the best agent

### What's the challenge?

Your existing routing strategy doesn't use machine learning to adapt to the changing patterns of interactions and optimize for sales conversions. You want customers to speak with a rep who can fulfill their need quickly and is predicted best to increase revenue, based on customer journey. Don't let your CX scores suffer!

### What's the solution?

Create a differentiated experience by connecting customers with your best-fit sales reps. Genesys Predictive Routing provides the finest grain matching between sales reps and customers and appropriately routes the interaction on the customer's preferred channel.

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## Use Case Overview

### Story and Business Context

Business leaders want to improve their business Key Performance Indicators (KPI), leverage the innovation in Artificial Intelligence and drive business decisions with the abundance of data and context available in their business. Predictive Routing uses machine learning to support optimization of Sales KPIs.

A Sales KPI is a metric measuring the sales outcome of an interaction, in contrast to Service KPIs, which measure a Customer Experience or efficiency outcome. Sales KPIs can be a sales conversion rate, a sales revenue amount, a retention rate, a collection promise to pay. This use case focuses on improving revenue for inbound voice calls, but can also be extended to other sales-related KPIs. The impacts of choosing another KPI or another channel type are documented in this use case wherever applicable.

Predictive Routing also applies to optimize Services KPIs. See Genesys Predictive Routing for Customer Service (BO06) for Genesys Engage on-premises.

Traditional routing is designed to match customers to agents through skills-based or group-based logic rather than improving KPI. Unlike traditional routing, Predictive Routing uses machine learning to detect patterns in historical data to build a predictive model. This model improves KPIs by ranking agents before making the match with customers. This model also addresses the operational challenges that occur in understaffing and overstaffing scenarios while balancing the service level with improving KPI.

Predictive Routing has built-in A/B Testing to demonstrate the uplift of the KPI provided through use of machine learning. Predictive Routing leverages a variety of Genesys or third party data sources in order to build high quality predictors.

### Use Case Benefits\*

The following benefits are based on benchmark information captured from Genesys customers and may vary based on industry, lines of business or Genesys product line:

Use Case Benefits	Explanation
Improved Customer Experience	Routing prospects to the sales reps best able to handle their sales request improves the customer experience.
Improved Employee Satisfaction	Increased sales success leads directly to improved satisfaction for sales reps.
Increased Revenue	Machine learning-based matching of sales reps to prospects based on sales value directly increases revenue.
Reduced Customer Churn	Predictive Routing identifies the best agent for each customer interaction, reducing the likelihood of customer churn to protect revenues.

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## Summary

Consider a retail bank that wants to upsell credit cards to its existing customers. Depending on the customer attributes (such as income), the bank wants to maximize both the conversion rate and the credit limit that the customer accepts, resulting in a higher overall revenue. This use case is based on a measure of sales revenue driven from a Sales reporting application (such as CRM).

The underlying premise of this use case is that a customer interaction is associated to a credit card offer, either from the explicit customer intention from IVR, web, or mobile or from a business rule such as next best action. Next best action is out of scope of this use case.

The Contact Center Manager or Business owner wants to increase overall revenue generated per agent. The Predictive Routing solution can help with achieving this objective.

Predictive Routing:

- Uses machine learning, a subset of Artificial Intelligence, to compare feedback of the actual outcome with the predicted outcome, helping to improve future agent-to-customer matches.
- Ranks agents predicted to maximize the expected revenue per interaction.
- Provides the finest grain match of customer contact with agent to help maximize revenue per agent. Provides an uplift on revenue using continuous learning to rank the expected revenue for agents servicing customers.

The direct result is that the average revenue per interaction increases. Predictive Routing usually also influences adjacent service KPIs like first contact sale, CSAT or NPS, handle time, and transfers. It is a common best practice to monitor all Sales KPIs and adjacent Service Levels to evaluate all impacts (out of scope of this use case).

## Use Case Definition

### Business Flow

#### **Predictive Routing for Sales**

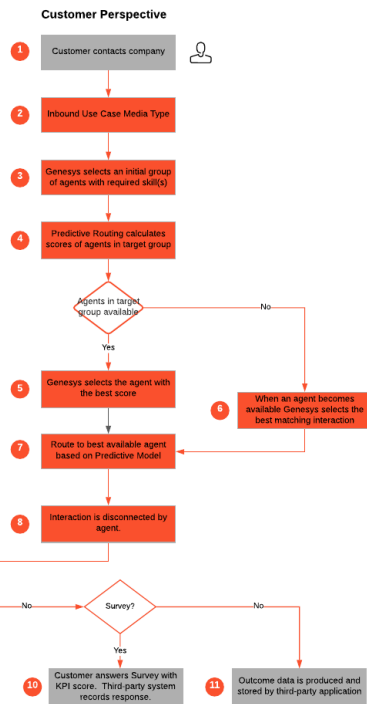
This business flow shows the use case from the perspective of the customer and agent.

### Business and Distribution Logic

#### Business Logic

#### **Parameters and Business Rules - Predictive Routing Revenue**

**Routing Step 1** The system creates an inbound interaction when a customer voice call begins. This use case supports inbound voice involving Genesys routing. See Use Case Interdependencies for details.



## Business Flow Description

1. The customer company contacts the company using the inbound voice channel. This inbound interaction can be the result of a proactive rule on a web or mobile application.
2. One of the Inbound use cases for the corresponding media type handles the interaction and captures interaction context data. The exact data captured depends on the interaction and engagement type.
3. Based on the interaction context, Genesys selects an initial group of agents with the required skill(s) as possible routing targets to handle the interaction.
4. Predictive Routing calculates the scores of the agents in the target group using a machine learning model that takes into account the agents' historic performance on similar interactions.
5. When there are multiple agents available, Genesys attempts to route the interaction to the available agent with a highest score.
6. If there is an interaction surplus and an agent becomes ready, Genesys selects an interaction from the queue taking into account the priority of each waiting interaction, the score the agent has for each interaction, and the time the interactions were queued.
7. If no agents are available within the configured timeout, the routing strategy expands the potential target pool of agents by reducing the skill requirements and then repeats the target agent selection using Predictive Routing.
8. After dealing with the customer call, the agent disconnects the interaction.
9. The outcome is mapped to Genesys Info Mart attribute (for example, a disposition code or custom key-value pair).
10. Optional: The customer is offered a survey. The answer to the survey is stored in a third-party system.
11. Optional: Outcome data, such as case management closure, is produced and stored by a third-party application.

- Precondition: This use case requires one or more use

cases handling inbound interactions.

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## Routing Step 2

- The inbound interaction use case identifies the primary intention of the customer (Service Type) and the initial target skill expression is set.
- Any required additional customer or agent profile data available to the interaction in run time can be integrated through a project-based implementation.

## Routing Step 3

- This step queues the interaction and is designed to cover both agent surplus and customer surplus scenarios. When either one or multiple agents are available (agent surplus scenario), the flow immediately proceeds. Otherwise, Genesys queues the interaction until an agent is available (customer surplus scenario). The system starts to balance the service level with the business KPI through maintaining priority.

## Routing Step 4

- Once one or more agents are available, the necessary Customer Profile, Interaction Profile, Agent Profile, and predictor information is passed to Predictive Routing as a scoring request. The request is processed by the relevant machine learning model, resulting in a score for each available agent for that interaction. This process caters to both customer surplus and agent surplus scenarios.

## Routing Step 5

- The rank for each of the interactions against each of the agents is returned to routing to weight the customer-to-agent matching towards the agent(s) that can deliver the highest revenue.
- In an agent surplus scenario, the score of the highest ranked agent will be compared to the configured minimum score threshold. If the agent score exceeds that threshold, the system routes the interaction. If not, then the interaction is held, pending either a higher ranked agent becoming available, or the threshold reducing.
- In a customer surplus scenario, where multiple interactions are waiting when an agent becomes available, the agent's scores for each waiting interaction are compared to the minimum score threshold. If the agent score exceeds the threshold for at least one interaction, the system routes the highest scoring interaction for that agent. If not, then the agent remains unassigned, pending either a lower scored interaction becoming available, or the threshold reducing.

## Routing Step 6

- The minimum score threshold is reduced over time according to the pre-configured fallback strategy.
- The checks in Routing Step 5 are repeated regularly until an agent or interaction is identified.
- Normal target expansion, such as relaxing skill level as configured within the underlying distribution strategy, occurs.
- The continual re-prioritization of the interaction also occurs as do any treatments and the queued customer experience.

## Routing Step 7

- If at least one of the revenue values is above the threshold, the interaction is routed to the agent with the highest revenue.
- The system delivers the interaction normally, handling any ring on no answer and exception situations

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(applicable to voice, chat or email) as defined in the underlying use case.

- The customer and the agent are connected.

### **Routing Step 9**

- The outcome of the interaction is captured through the agent desktop or a server-side process. Genesys APIs are invoked automatically or after an agent action to map the outcome to a Genesys interaction attribute: custom attached data or disposition code.
- Info Mart captures this attribute with the Info Mart interaction record.

### **Routing Step 10**

- Optionally, the customer receives a survey (the survey results are not connected with Genesys and are intended to evolve with the survey use cases)
- The survey is completed (optionally) and the outcome is collected and stored by a 3rd-party application.

### **Routing Step 11**

- Optionally, the outcome data is produced and stored by third-party application.

## Distribution Logic

The details of the distribution of an interaction to an agent are defined in the underlying inbound use cases. Refer to the preceding flow to understand how Predictive Routing influences the distribution logic.

Predictive Routing provides a routing lever that can be used to control how customer-to-agent matching behaves in customer surplus mode to distribute the interactions based on agent occupancy.

## User Interface & Reporting

### Agent UI

This use case does not include specific agent desktop requirements. During the routing phase, data is attached to the interaction that the agent can see.

### Reporting

#### Real-time Reporting

Predictive Routing does not include real-time reports. Operational reports are available in the Predictive Routing UI.

Operational reports include:

- KPI Outcome



- Feature Coverage
- Model Accuracy

## Historical Reporting

The historical reports available through GCXI include the following:

- Predictive Routing Operational Report - tracks Predictive Routing operational statistics.
- Predictive Routing A/B Testing Report - tracks A/B testing results for Predictive Routing models and predictors.\*
- Predictive Routing Agent Occupancy Report - tracks Agent Occupancy while Predictive Routing is being used to optimize routing.
- Predictive Routing Daily Queue Statistics Report - tracks KPIs for each Queue while Predictive Routing is being used to optimize routing.
- Predictive Routing Detail Report - provides interaction level detail data about Predictive Routing use and its impact on KPIs.

\*A/B reports can be developed from any standard or custom Info Mart data. If the outcomes data is NOT integrated with Info Mart, the creation of A/B reports must be evaluated as a separate effort.

## Customer-facing Considerations

### Interdependencies

All required, alternate, and optional use cases are listed here, as well as any exceptions.

All of the following required:	At least one of the following required:	Optional	Exceptions
None	<p><b>Inbound</b></p> <ul style="list-style-type: none"> <li>• Genesys Call Routing (CE01)</li> <li>• Genesys Personalized Routing (CE02)</li> </ul>	<p><b>Digital</b></p> <ul style="list-style-type: none"> <li>• Genesys Email Routing (CE16)</li> <li>• Genesys Chat Routing (CE18)</li> <li>• Genesys Social Media Routing (CE19)</li> </ul> <p><b>Workforce Engagement</b></p>	<p><b>Outbound</b></p> <ul style="list-style-type: none"> <li>• Genesys SMS &amp; Email Notifications (CE12)</li> </ul>

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All of the following required:	At least one of the following required:	Optional	Exceptions
		<ul style="list-style-type: none"> <li>Genesys Performance Management (EE14)</li> </ul>	

## General Assumptions

- Requires Product Management approval.
- Predictive Routing solution is offered to on-premises customers in a hybrid architecture that incorporates core functionality served from components deployed in your own environment.
- Predictive Routing is offered as a managed service by Genesys Professional Services, who deal with all aspects of machine-learning model creation and maintenance. A Professional Services package is mandatory for implementation and support of Predictive Routing.
- The standard deployment materials address Inbound voice interactions based on Genesys Info Mart data only.
- Integration of additional data sources, whether Genesys or 3rd-party, requires a dedicated assessment and implementation by Genesys Professional Services.
- Customer must have implemented a use case for one or more channels and have deployed Genesys Info Mart reporting. These use cases populate the data used to build predictors and models, which direct how interactions are routed. Note that the capture and analysis of FCR KPIs is not part of Genesys Info Mart out-of-box statistics and is developed during model creation.
- This use case is for revenue optimization but can be extended to other Sales KPIs.
- Prerequisites: An implemented use case for one or more channels and Genesys Info Mart reporting. These use cases populate the predictors used to direct routing and the data necessary to build the models. This solution cannot use data that is not present.
- The standard deployment materials address Inbound voice interactions only, and Genesys Info Mart data only.
- The capture and analysis of Sales KPIs is not part of Genesys Info Mart out-of-box statistics and is developed during model creation.
- The revenue definition chosen in this use case is illustrative and needs to be adapted for each project.

Note the exceptions where Predictive Routing cannot be integrated listed in the interdependencies section:

- Self-Service use cases
- Outbound preview and agent reservation used for Predictive and Progressive outbound

## Customer Responsibilities

- Customer has already optimized traditional routing strategies and processes and wants to achieve further improvements.

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- Customer has all compatible versions of URS, IRD, Genesys Info Mart, GCXI, and Pulse; or upgrades have been scoped in to the project plan.
  - Customer has the necessary systems and processes in place to track results and measure impact over the life of the model.
  - Customer identification is available and stored in Genesys Info Mart.

## Related Documentation

### Data Loader

Enables you to upload data, including dataset configuration and upload scheduling.

- Deploy Data Loader
- Configure Data Loader to upload data
- Configure Data Loader for Feature Engineering
- Set up data for import

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### Routing and Reporting integrations

The URS Strategy Subroutines component integrates with your existing Genesys Routing environment. Genesys Reporting produces reports based on KVPs that capture Predictive Routing interaction handling and outcomes.

- Deploy the URS Strategy Subroutines
- Integrate with Genesys Reporting

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### Model performance

The GPR web application is the user interface that provides reports on feature coverage and model accuracy.

- Monitor trends and performance
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## Document Version

- Version **V 1.1.4** last updated **December 10, 2024**