



Prodapt Chase
Extraordinary

Combining the power of RPA and AI to
keep customer experience unharmed
during Network Outages

Credits

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Chase
Extraordinary

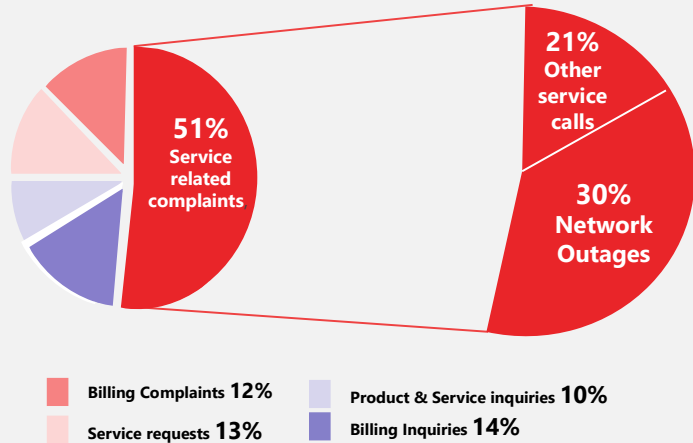
Prodapt

Reactive response in notifying customers on network outages negatively impacts their experience



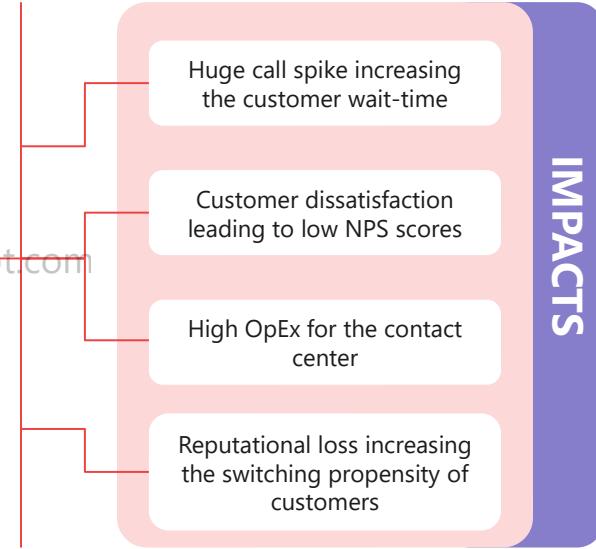
30% of calls in contact centers are related to **network outages**. Failing to notify and responding immediately during an outage might lead to increased call volumes in the contact center and prolonged wait-times degrade customer experience.

Distribution of calls received by the contact centers



Source: Based on Contact Centre data of various service providers

Proactive outage notifications, if not triggered quickly, has a cascading impact



Use proactive outreach to build confidence in the company's ability to resolve service issues.

Gartner

The insight describes how service providers in the connectedness industry can combine **RPA** and **AI** to build and implement a proactive **Two-way Conversational Framework** for their contact center to mitigate the above challenges and drastically improve NPS.

Two-way Conversational Framework for proactive network outage notification and resolution status

Build a **Two-way Conversational Framework**, a central intelligent platform to orchestrate bi-directional communication and provide seamless customer experience during common network outages.

Steps to implement a Two-way Conversational Framework

Step 1 Identification of outage information

Build a unified outage monitoring dashboard to capture and categorize relevant outages

Build a standardized process to identify relevant outages in network monitoring systems based on technology (Copper, Fiber, or HFC). Integrate them with an outage monitoring dashboard for BOT to auto-extract outages and store them in a central database.

Step 2 Proactive Notification

Perform validation and schedule notification

Perform automated validation and intelligent scheduling to send notifications to the impacted customers proactively in a well-organized structure. It helps achieve the predefined SLA, KPI targets and improves customer experience.

Step 3

Notify and engage with customers using a Conversational AI BOT

Send proactive notifications, and if the customer has additional queries, the bot can perform to and fro conversation using conversational AI

Provides seamless updates to the end customers on the service interruption, resolution status, and addresses customer queries if any.

Build a unified outage monitoring dashboard to capture and categorize relevant outages



The RPA BOT monitors and extracts details of the devices/services that have been interrupted from the various monitoring tools. It prevents the loss of information and stores it in a database to efficiently monitor, schedule, and notify the customer proactively.

FTTH Monitoring System

MY DASHBOARDS • ALERTS & ACTIVITY • REPORTS • SETTINGS

Broadband Nodes Down (-4 GMT) v2

STATUS DEVICE IP ADDRESS NODE_LOCATION PARISH TIMEZONE DURATION DCPH31M

●	JBA-MHLAIGAN001	10.227.30.45	Hurley, C&B7, MA5933	St Ann	1/11/2022 10:36:46 AM	00:02:52
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Cable (HFC) Monitoring System

Node ID	General Service Area	Power Node	Last Successful Poll	Hub
01821	Cypress FAP Jandrey-C&B	P-01816 (8/9)	Tue Dec 14, 1:50 pm	HI
01816	Red Hills-Cypress Road Paul Viller Road, Egan Hill, St Andrew	P-01816 (8/9)	Tue Dec 14, 1:50 pm	HI
01871	Red Hills-Parl Road Parl Road, St Andrew	P-01816 (8/9)	Tue Dec 14, 1:50 pm	HI
01992	Red Hills-Belvedere Road Belvedere Road, Regency 10	P-01816 (8/9)	Tue Dec 14, 1:50 pm	HI

Ticketing Platform

UNIVERSAL TICKET

Actions: Renewed Ticket History Job Help

Filter By: Clear Refresh ?

Event Type: [dropdown] ACTIVITY ID: %

Event Summary

ID	Event Type	Start Time/Creation Time	GL23/Pattern/Criteria
01021711	Known Pattern	2021 12 15 10:21	SDCO
01021701	Known Pattern	2021 12 15 10:01	MTSC
01021700	Potential Pattern	2021 12 15 10:02	CAUTION GPON
01021702	Potential Pattern	2021 12 15 10:02	STELL2 87M
01021703	Potential Pattern	2021 12 15 10:02	SPN TOWN 2
01021704	Potential Pattern	2021 12 15 10:02	SPN TOWN 2
01021801	Known Pattern	2021 12 15 09:40	DEPT
01021804	Potential Pattern	2021 12 15 09:32	PLUMB-C&B
01021807	Potential Pattern	2021 12 15 09:32	STELL2 WEST
01021806	Potential Pattern	2021 12 15 09:32	MARRET SHOP

Records 1 to 20 of 616

Outage Monitoring Dashboard



BOT extracts impacted node details

Outage Monitor Bot

BOT updates impacted node details

Outage Database

All extracted impacted Node ID/Device name getting stored in DB

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Build an Outage Monitoring Dashboard

This solution pulls outage information capturing the node/device details from various monitoring systems.

Extract data from the Outage Monitoring Dashboard

RPA BOT fetches details of the impacted nodes from the Outage Monitoring Dashboard.

Update data to the outage database

RPA BOT updates the extracted details into the database where they can be validated, scheduled, monitored, and notified to the customers.

Perform automated validation and intelligent scheduling to send notifications to the impacted customers proactively



Outage Database

- Use RPA BOT to monitor and capture the Impacted Node ID/Device name in the outage database
- Validate the extracted information based on defined criteria using RPA BOT
- Leverage the extraction BOT to update the database and notify the Notification BOT
- Fetch the required details from the outage database using the Notification BOT to proceed further

Validating outages with the CRM Database

Leverage **RPA BOT** to fetch customer contact details from the CRM database based on details extracted from Monitoring tool

- Customer Name
- Customer Contact Number

Validating outages with Field Technicians

Validate the outages by sending notifications to the relevant stakeholder and getting a confirmation. For example, confirming an outage with a technician from a particular region.

RPA Scheduler

Organizes and assigns RPA BOTs to notify the impacted customers based on the below technologies:

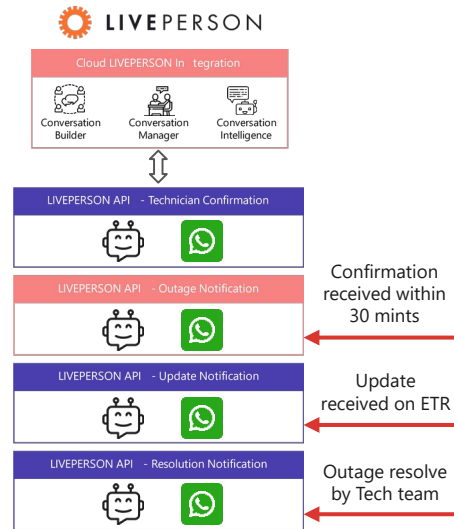
- Technology – Copper, Fiber, Cable
- Impact Time (2 iteration)
- Geographical location

Configure RPA BOT to trigger communications as below:

- **Outage Notification** – Send the notification once the service interruption is identified
- **Update Notification** – Send the notification based on the Estimated time to resolve (ETR) provided by the maintenance team
- **Resolution Notification** – Send the notification when the service is up

Recommendation

- If the impacted node is found in two consecutive runs, send the details of the node to the field technicians for confirmation. Else, treat the node as 'Not impacted'
- Integrate RPA BOT with a Conversational AI engine such as LivePerson to deliver notification to customers



Implement the RPA BOT in the auto-scheduling & planning phase to reduce human errors and improve efficiency in field service operations.

Send proactive notifications and perform to-and-fro conversation using the Conversational AI BOT



Illustration of WhatsApp-based to-and-fro communication between the Conversational AI BOT and the customer during a network outage

Outage Notification

BOT initiates WhatsApp with the help of LivePerson to send the notification on the outage to customers once it is identified on the monitoring tool

WhatsApp Notification – Outage

Notification of Impacted Node.
Dear Customer We are aware that your service has been disrupted due to network interference. Our team is investigating the issue to determine the restoration timelines.

10:42 pm

Update Notification

BOT initiates WhatsApp with the help of LivePerson to send the notification of the update to customers once the maintenance team provides ETR

WhatsApp Notification – Update

Notification of Impacted Node.
Dear Customer Thank you for your patience as we carry out the necessary work to address your service disruption Our estimated time for restoration is 20H. Please DO NOT reply as this is an automated message'.

6:00 pm

Resolution Notification

BOT initiates WhatsApp with the help of LivePerson to send the notification of the resolution to customers once the service is up

WhatsApp Notification – Resolution

Notification of Impacted Node.
Dear Customer We are pleased to advise that your service has now been restored Thank you for being a loyal customer and we appreciate your continued support.

10:44 pm

CONVERSATIONAL AI BOT

RPA BOT

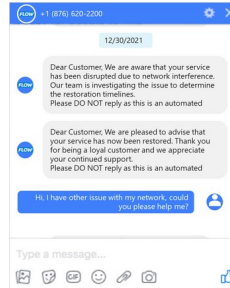


Conversational AI Engine



RPA BOT integrates with Conversational AI engine to deliver notification to customers after the outage has been identified

The Conversational AI BOT handles all standard customer queries. For complex queries, it diverts the customer to a Contact Center Live Agent.



Customer can raise their queries or seek further information over chat

Recommendation

Develop a conversational BOT using tools like Google CX/Dialog flow CX/IMB Watson/LivePerson to deliver notifications.

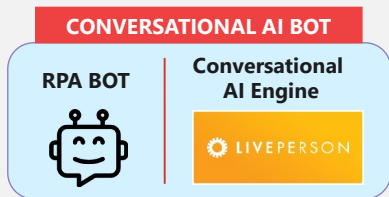


Customer

Snapshot of a two-way conversation between the customer and the conversational AI BOT



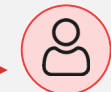
Scenario 1: Customer posts a simple query on billing which is easily and quickly handled by the Conversational AI BOT.



Conversational AI BOT handles maximum queries posted by customers



Customer asks queries to seek further information over chat

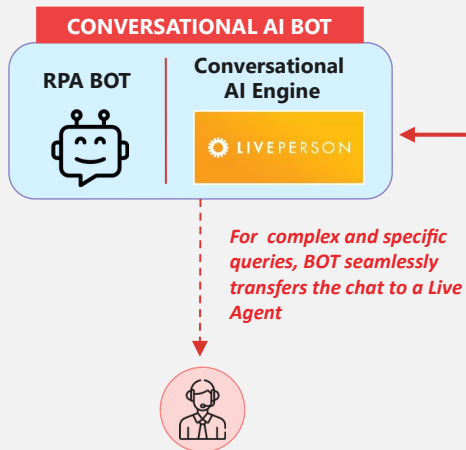


Customer

Snapshot of a two-way conversation between the customer and the conversational AI BOT



Scenario 2: Customer posts a more complex query related to network issue which the Conversation AI Bot is unable to handle. It seamlessly transfers the query to a Live Agent without impacting customer chat experience.



Fly +1 (876) 620-XXXX

Fly Dear Customer, We are aware that your service has been disrupted due to network interference. Our team is investigating the issue to determine the restoration timelines.

Dear Customer, We are pleased to advise that your service has now been restored. Thank you for being a loyal customer and we appreciate your continued support.

Hi, I have other issue with my network, could you please help me?

Fly Hi, Welcome to Fly! I'm Luci, your helpful Virtual Assistant. I'm here to resolve your quick & easy queries.

To start, please share how I can assist you. You can type short sentences or phrases like "I want my bill balance" or "pay bill"

I am facing a network issue and would like to upgrade my broadband

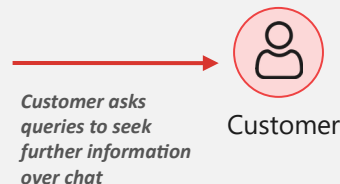
Fly I am unable to assist with this. I'll need to connect you with a live agent to assist. Please give them some time while they review our conversation and get back to you.

You are now connected to Karen.

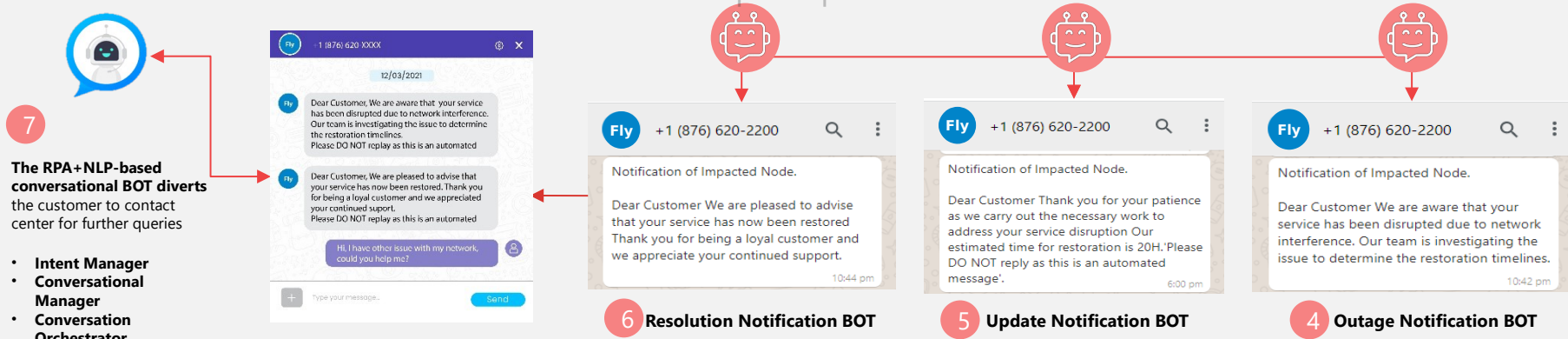
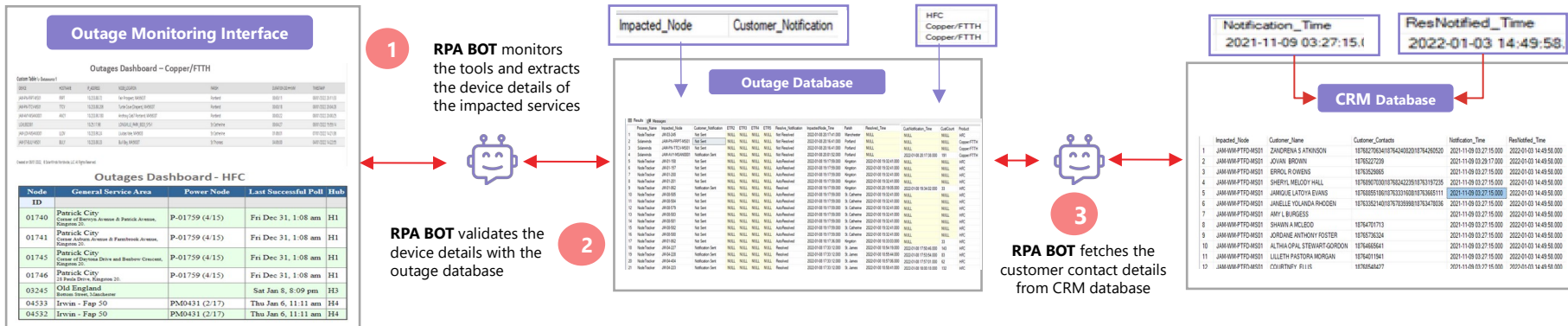
You are now chatting with Karen

Hello there. Thanks for reaching out to Fly. My name is Karen, I am sorry to hear that you are facing an issue with your network. I will be happy to assist with having this resolved for you. May I have your name please?

Type your message... Send



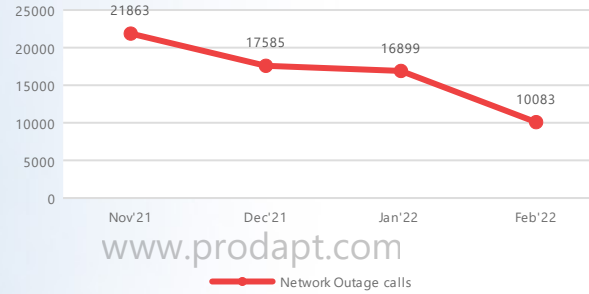
A leading service provider in LatAm transformed network outage notification workflow by leveraging the Two-way Conversational Framework



Business benefits achieved by a leading service provider in LatAm by implementing the Two-way Conversational Framework



Network Outage calls



54% reduction in calls related to outages



Boost in agent productivity



25% reduction in the operations cost



Satisfied customers



THANKS!

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THANK YOU!

