Build Your Business Like Never Before with WhatsApp-integrated chatbots

INTRODUCTION

Modern enterprises process and store a huge amount of structured and unstructured data. This data can be deciphered and converted into valuable insights with the help of AI-powered applications. AI chatbot can increase their data accessibility, easily connect with their customers, stakeholders, and have real-time communication with them. By integrating WhatsApp chatbot into CRM and ERP applications, businesses can manage customer relationship operations better. Conversational AI technology is an advancement that provides natural interaction with the users instead of the classical UI-based applications.

WhatsApp, Instagram, Facebook, and apps like these will soon surpass face-to-face meet time. These messaging platforms have become sophisticated with many features that go far beyond simply sending and receiving messages. They create new opportunities for us to interact not only with each other but with machines, IT, or ERP systems and leverage maximum benefits In the SAP Platform we have SAP CAI for building high-level chatbots to interact with the users like humans and resolve their queries. The SAP AI/ML provides the SAP CAI in BTP for the users. These SAP Chatbots can be deployed in various modules and platforms in SAP such as SAP CRM, SAP SuccessFactors, SAP PM & MM, and SAP Field Glass.

We at Mobolutions built an intelligent chatbot on WhatsApp with cognitive services which enable enterprises to perform a variety of tasks which include product research, customer support, follow-up communication, sales, and inquiry, automatically. A WhatsApp bot supports an enterprise to drive a higher degree of real-time accessibility from anywhere, anytime. We can create chatbots integrated with SuccessFactors to create leave requests, approve leaves, Employee Onboarding, status tracking, and various other processes that can be handled effectively. With SAP CRM integration with Chatbot, we can provide more benefits to the customer by tracking their queries, answering the product FAQs, rating the product, and even customer-product engagement.

The benefits of conversational AI are numerous, and it is really in need of reducing the workforce with simple conversable UI. AI chatbot reduces the workload of customer support for doing the basic FAQ answering or Product details. It can drastically change the engagement of the tedious approval process.

According to TechCrunch, WhatsApp now has 1.5 billion users and sees 60 billion messages sent per day

WhatsApp chatbots can help enterprises in performing a variety of tasks such as:

- Sending reminders, alerts, and notifications
- Responding to customer's complaints and queries in real-time
- Sending updates on the ticket status and resolution
- Gathering customer feedback.
- Approval process
- Getting ratings about products and features.
- FAQ answering

Mobolutions has enabled WhatsApp integration with a chatbot in the Plant Maintenance module of SAP Landscape. This implementation helps the enterprise to uncover tedious problems from operational cost, and processing time, to labour issues. Mobolutions propel this implementation into larger parts of production to have improved quality of service in real-time and get benefits of conversational AI along with it.

SAP Plant Maintenance (SAP PM) is an SAP product that manages all maintenance activities carried out in an organization. It consists of inspection, notifications, calibrations, audits, corrective and preventive maintenance, repairs, work orders, and other measures to maintain an ideal technical system. All the activities carried out under plant maintenance are interconnected with other modules; hence, this module is closely integrated with other modules.

We integrated WhatsApp with the SAP system through an API cloud communication platform named Twilio which allows software developers to programmatically make and receive calls, send and receive messages, and perform other communication functions using its web service APIs. Conversational AI service allows users to authenticate with WhatsApp thereby sending and receiving messages to other users who are using this platform.
Twilio assists in giving an experience of customer delight which emphasizes Authentication, Automation, Engagement, and Analysis
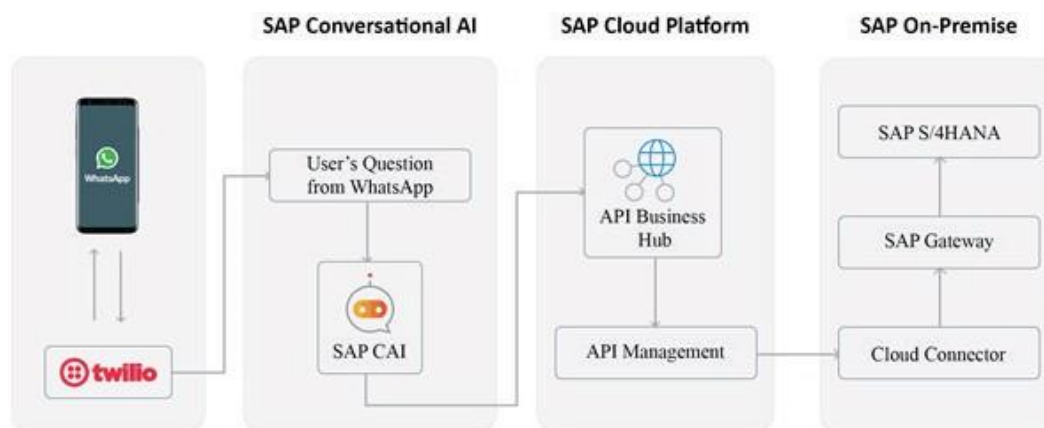

Modules in Chatbot-Whatsapp integration:

1. WhatsApp Twilio integration.
2. SAP CAI.
3. SAP cloud platform integration.
4. SAP On-Premises Integration

WhatsApp Twilio integration:

WhatsApp is a highly secure channel for general messaging. The end-to-end encryption in the chatbot makes the application more secure and suitable for B2B, B2C, and C2C scenarios. To avoid spam messages, WhatsApp has never made APIs to generate messages using web channels. So, we need Twilio to perform messaging. Twilio is a cloud communications platform as a service. Twilio offers APIs to programmatically make and receive calls and send and receive messages.
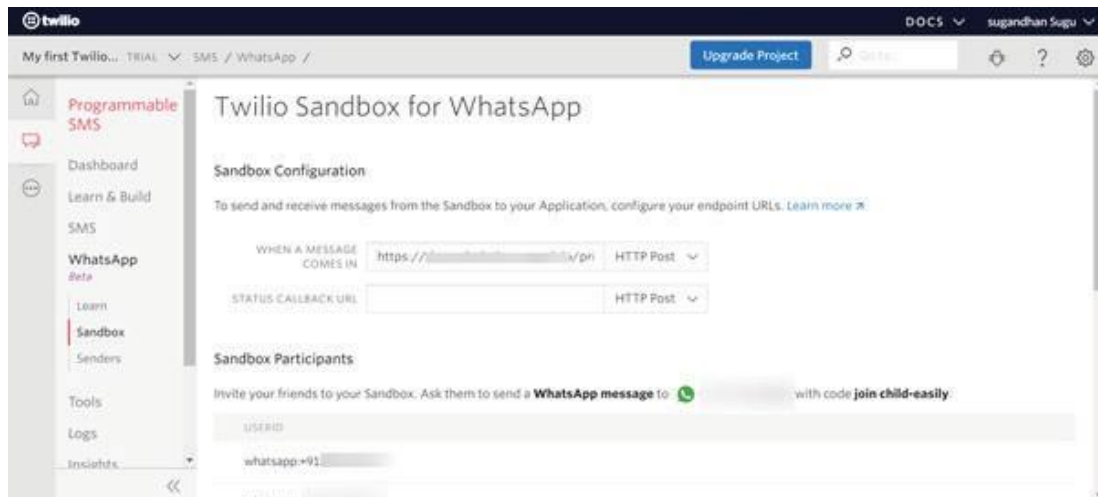

SAP CAI Integration:

In our product, we integrated with the PM business process. So, when a valid question is raised on the chatbot, the required answer needs to be pulled from the On-premises server. The question raised by the user is analysed for the core components residing in the text message and the components related to the PM such as notifications and work orders. These conversational AI strategies are used to fetch the data from the back-end system.

Any incoming message from WhatsApp will be forwarded to the SAP Chatbot. The conversational AI technology analyses the intent of the text using NLP and relevant skills when the question is triggered. We need to fetch the data from on-premises through the API business hub in the BTP cloud.
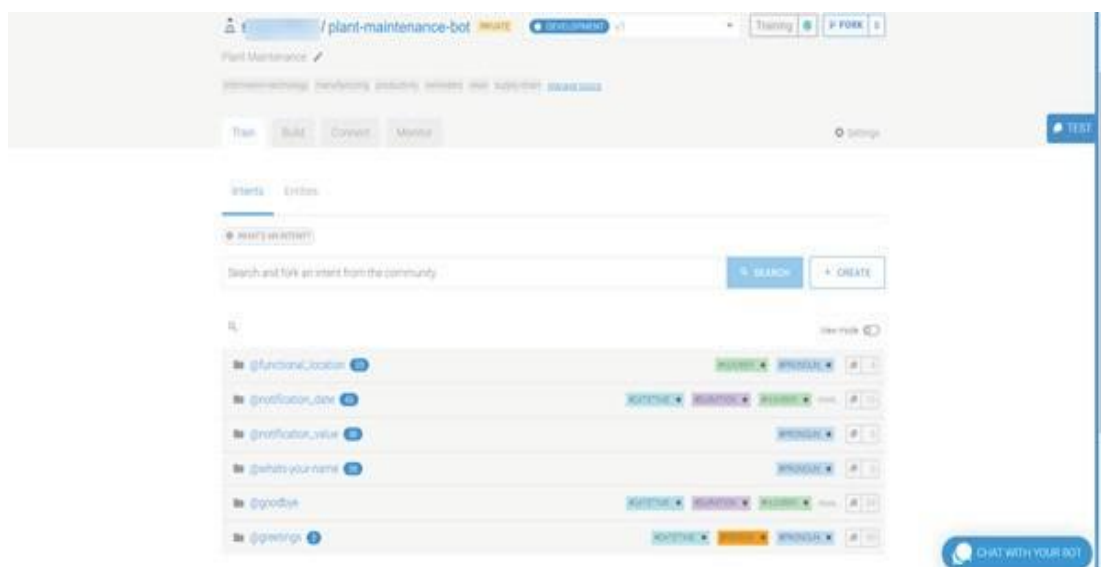
SAP Cloud Platform Integration.
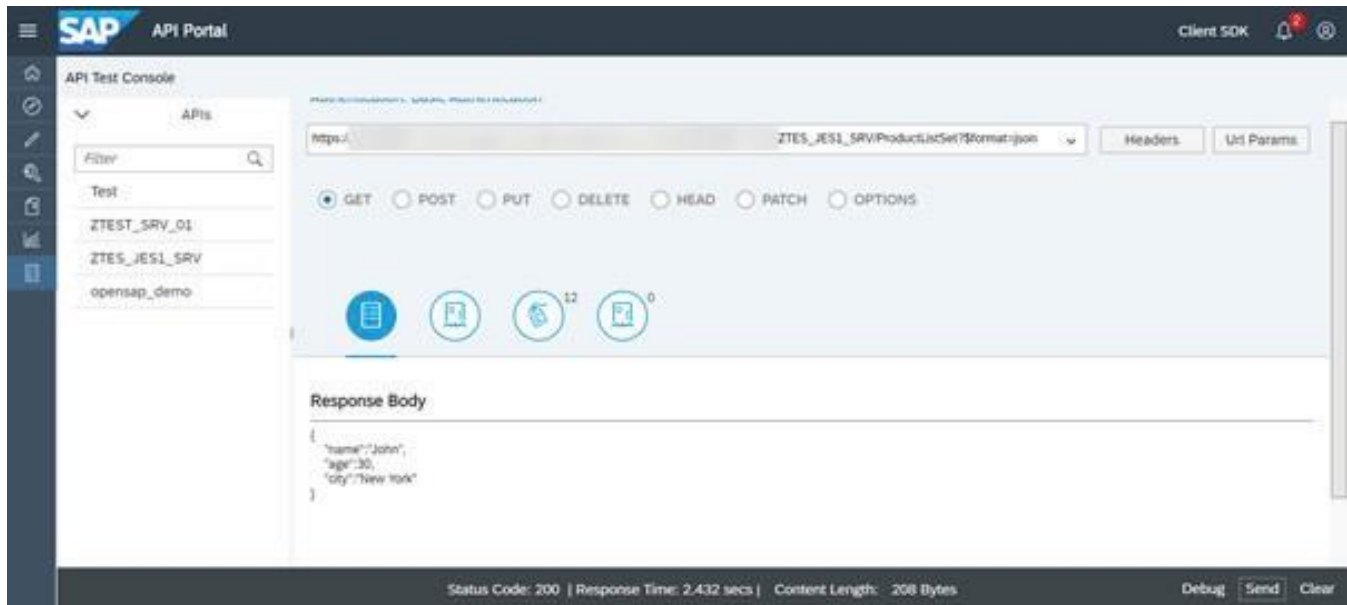
Initially, we created the ODatas on-premises and exposed it to cloud using API management. By creating the API policies, the incoming and outgoing requests can be handled. Using API management, we expose the data as web services. This API business hub acts as the exposing medium for our on-prem OData services to the Cloud.

SAP On-Premises Integration.

On-Premises OData is created for the PM tasks. By Cloud connector, we have exposed the OData services to the BTP by creating the destinations.

In the Use case, we built with WhatsApp and SAP PM, the users can directly engage with the WhatsApp app to get updates from their SAP PM. If a user asks for the work orders created for a   week, then SAP CAI chatbot will fetch all the work orders created in the back-end system and displays it. If the user wants to view only the high-priority notifications, he can   view them too. He can also query notifications/work orders on date, priority, plant, and work centre.
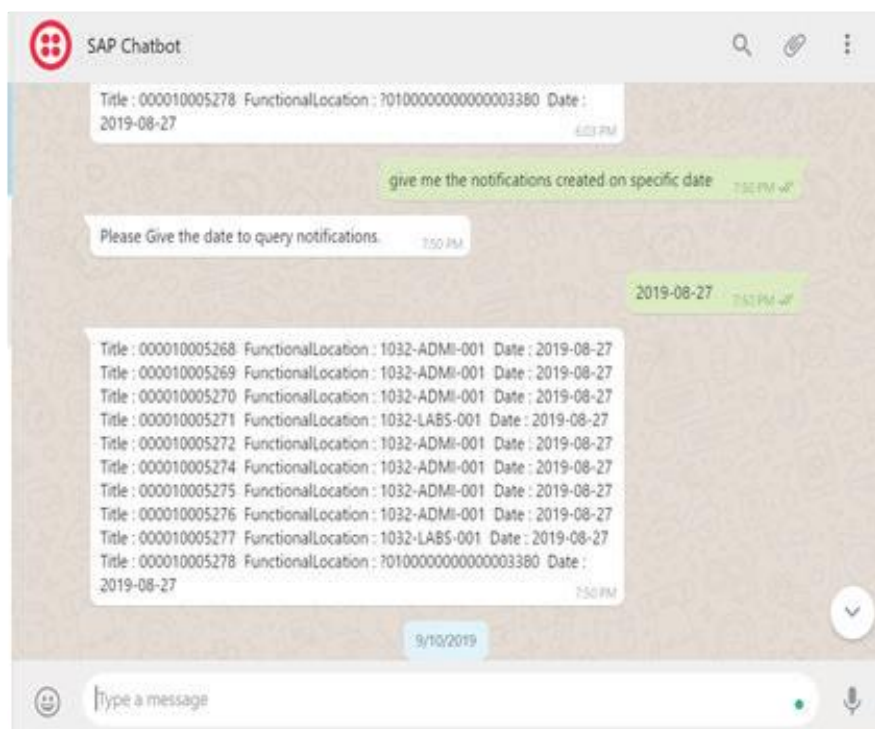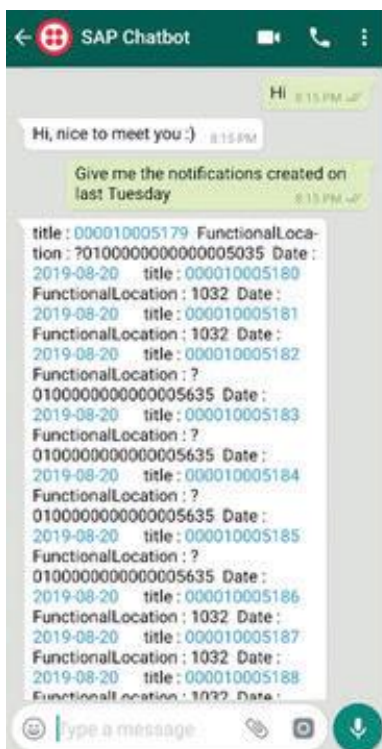
Benefits of Implementing Conversational AI with WhatsApp Messaging Reliably message your users anywhere in the world

Know the instant a message reaches your users. Real-time delivery and read receipts give you critical message delivery insights.

Communicate securely with end–to–end encryption

WhatsApp messages are encrypted from Twilio to the device, and secured over HTTPS from your application to Twilio, enabling private conversations with your user.

Deepen customer trust with branded messaging

Your WhatsApp branded business identity serves as a familiar face users see when you message them, increasing their trust in you and loyalty to your business. Twilio will securely interconnect the SAP landscape with the users' WhatsApp and thereby offers the versatile benefit of conversational AI.

Alerts and Notifications

Use WhatsApp messaging to reliably send mission-critical messages from flight notifications to booking confirmations and delivery alerts.

Customer Support

Enable sales and support teams to answer product or customer service questions using your customers' preferred messaging app.

User Verification and 2FA

Securely protect customer accounts using WhatsApp's end-to-end encryption with reliable and fast message delivery for authentication.

CONCLUSION:

WhatsApp has become a ubiquitous communication platform over the mobile with even business enterprises leveraging its capability to explore new business opportunities and strengthen key business relationships. As modern enterprises store huge amount of structured and unstructured data, this data can be judiciously converted into valuable insights using AI-powered applications. AI chatbot is one such AI application that can enhance data accessibility and easy connectivity, thereby forging a real-time communication with them. With high-level integration of chatbots with ERP applications, businesses can manage customer relationship operations much better.

Mobolutions, a reputed SAP partner has redefined WhatsApp communication by building an intelligent chatbot on WhatsApp with cognitive services that lets enterprises perform a variety of tasks including product research, customer support, follow-up communication, sales, enquiry and more automatically. To know more about our chatbot integration with WhatsApp and how we can help drive higher degree of real time accessibility, communication flexibility and customer visibility, call us at <Enter phone number> or email us to sales@mobolutions.com.