THE ROLE OF INTELLIGENT VIRTUAL ASSISTANT IN TRANSFORMING CUSTOMER EXPERIENCE

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Abstract:

In this competitive market, organizations are always on the lookout to transform their business units into more profitable ones. Artificial Intelligence solutions have transformed the way business units function. One such AI solution Intelligent Virtual Assistant (IVA) has had a major positive impact with respect to customer experiences/customer interactions in contact centers.

The global IVA market is expected to grow by approximately 37% during the period 2016-2024 and reach USD 12 billion by 2024. Telecommunications, Retail, Hospitality and Consumer Banking are the sectors where IVA’s have been primarily implemented. The deployments in these sectors have resulted in significant business benefits as highlighted below.

The supplier market for IVA consists of both global and niche suppliers. Predictive Analytics is the key capability that determines the success of an IVA solution. The IVA should learn with each customer interaction which would further refine the interaction process and responses without any human intervention.

Multi-lingual capabilities, Integration with third party systems such as SAP, Oracle etc. and speech-to-text capabilities are not well established at present and provide the scope for further technological improvement of the IVA solution.
What is an IVA?

Artificial Intelligence (AI) technologies have been continuously evolving and transforming the manner in which businesses are driven. Intelligent Virtual Assistant is an AI technology that has the capabilities to perform tasks like humans. IVA interacts with customers through websites or applications and responds to queries immediately without the need for human intervention.

Intelligent Virtual Assistant uses Natural Language Processing (NLP), Machine Learning, Data integration, Speech recognition and other such technologies to provide an efficient customer engagement platform. Below is the architectural layout of an IVA. Third party software and services (Salesforce, SAP, Oracle etc.), Knowledge Bank (Product and service details, Query resolution guidelines etc.) and Customer interaction database (data from previous customer interactions) are the critical backend tools with which the solution is integrated.
The need for IVA:

With businesses going digital, customers are increasingly preferring online interaction methods rather than telephonic conversations with a customer/ sales representative. The real time conversational nature and accurate personalized responses of Intelligent Virtual Assistants has been critical in providing seamless and satisfying customer experiences. Customer experiences directly impact the overall revenue of a business. Hence, providing the ideal customer experience is what each organization is striving for. Forrester reports have highlighted the importance of time to respond and have quoted based on their analysis that “71% of consumers say that valuing their time is the most important thing a company can do to provide them with good service”.

Intelligent Virtual Assistants are proving to be the ideal solution to respond to customer queries in a timely, precise, actionable and most importantly human manner. IVA has been majorly adopted in Telecom, Hospitality and Retail sectors to reduce the total contact center operation cost.

Retail Industry - Disney stores a global retail giant, have always looked for innovative solutions to improve their business. Disney wanted to reduce the number of informational calls made by customers to their contact centers for shipment, tracking and return purposes. Disney deployed an IVA solution to meet this objective. The deployment was a massive success. Approximately 45000 questions per month with an accuracy of 97% was achieved.

Telecommunications Industry - Movistar, part of the Telefonica group, has an extensive presence in Latin America. Movistar wanted to deploy a solution through which they could decrease the total support center operating cost. The IVA solution was assessed and deployed and resulted in reduction of incoming support calls and emails by approximately 75%.

“Disney store deployed an IVA solution to reduce the number of calls made to their contact center for order tracking and returns policy. The IVA solution drastically reduced the number of calls and answered 45000 questions per month with an accuracy of 97%”

“Movistar, a Chilean Telecommunication giant deployed IVA to improve it’s self-service capabilities and reduce the number of support calls and emails. The IVA solution reduced the incoming calls and emails by approximately 75% in the first year”
Business benefits of IVA

- Reduced number of customer calls for query resolution
- Minimum customer attrition as a result of automated interactions
- Quick response time
- Ease of interaction
- Digital self-service platform
- 24x7 availability
- Greater response accuracy
- Minimum human intervention
- Identify customer trends
- Cross sell and Upsell products/services and promotional offers

- Improved Customer Experience
- Higher Revenues
- Cost optimization
- Operational Efficiency
How does an IVA work?

Phase-1: IVA’s are available both on websites and applications and are usually the first point of contact for the customer. In the first phase the customers put forth their query and the IVA acknowledges the question.

E.g. Customer: What is the total outstanding amount for my postpaid connection number +91-1234567890 as on 30th December, 2016?
IVA: Sure. Please wait till I verify your details.

Phase-2: If the IVA has the required details it immediately responds to the customer, else it moves on to the next phase of iteration.

E.g. Consider the IVA already has the details.
IVA: The total outstanding amount for the number +91-1234567890 in the name of Mr. ABC is INR 2580. Is there anything else I can help you with?

Phase-3: In this phase the IVA checks it’s internal and external databases for the most relevant response.

E.g. If the response has not been provided in the previous phase, the IVA checks the customer records based on the number provided and finds the outstanding amount till the date mentioned and then responds to the customer.

Phase-4: Only if none of the above actions and checks yield the desired response the IVA immediately connects to a live customer support representative. The transition is seamless in the backend and the representative checks for the required information and responds to the customer.

E.g. Considering that the customer records do not contain the outstanding amount details till the required date, the IVA transitions the conversation to a live agent who responds to the customer with the outstanding amount.
Supplier Market Landscape

IVA is predicted to be the most influential customer AI technology by the year 2020. This estimation coupled with the increasing customer adoption has led to a heterogeneous market for IVA with the presence of Global as well as Niche suppliers.

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<tr>
<th>Global Suppliers</th>
<th>Niche Suppliers</th>
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<tr>
<td>[24]7 Inc.</td>
<td>Aivo</td>
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<td>Artificial Solutions</td>
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<td>IBM Watson</td>
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For an organization looking to deploy an Intelligent Virtual Assistant solution, the choice of IVA solution should be made based on a balanced assessment of the internal requirement as well as the solution capabilities. The following capabilities are critical to the efficient functioning of an IVA:-

1. Self-learning predictive analytics tool
2. Conversational format and speech-to-text capability
3. Data Integration and Third Party Software Integration
4. Contextual tracking and ability to Cross sell/ Upsell

“Predictive learning or self-learning is the key feature of any IVA solution and the level of predictive learning that a solution can perform defines the functional superiority of the solution”
Conclusion

- Intelligent Virtual Assistant Solutions have been deployed for customer-centric business units such as sales, marketing and support. Solutions for other business units such as HR, Procurement and Finance are still in its nascent stages. Suppliers have expressed that IVA solutions for other business units can also be effective if the total volume of interactions is high (more than 1 million).
**Article**
Intelligent Virtual Assistant

**Metadata**

**Industry to be impacted**

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<td>Personal Products</td>
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<td>Hi-tech</td>
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**Domain to be impacted**

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**Focus Area**

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<td>Supply chain Risk</td>
<td>Input Cost</td>
<td>Price Outlook</td>
<td>Sustainability</td>
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**Keywords Used**
Intelligent Virtual Assistant, Predictive Analytics

**References**

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