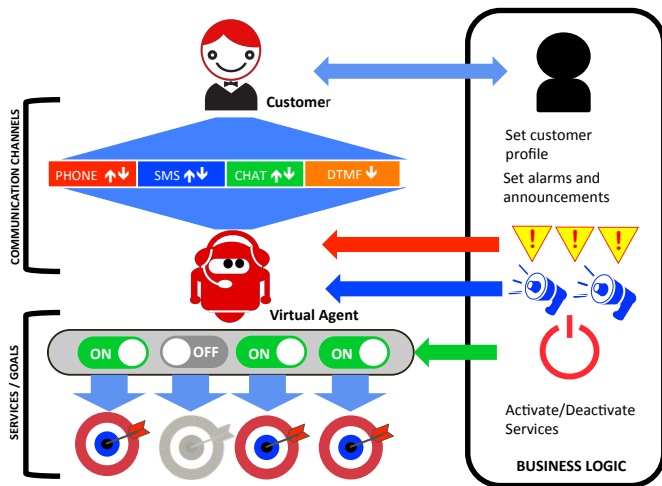# RESHAPING THE OMNICHANNEL EXPERIENCE

WITH DYNAMIC DIALOG MANAGEMENT

IM.MIND® is Interactive Media's platform for the creation and deployment of conversational applications for customer service, based on Natural Language Processing. IM.MIND® creates interactive NLP services that **adapt themselves dynamically** to the channel on which they are delivered, taking into account the context of the conversation. Virtual Agents created with IM.MIND® can be **developed once and deployed for multiple channels** (voice, various types of chat, SMS). Also, Virtual Agent can take the dialog with the customer in different directions depending on the history of the interactions.

With IM.MIND® **interactive NLP services focus on the business needs**, not on the technicalities that are specific for each channel. IM.MIND® is the perfect platform to consolidate the interactive services that may already have been implemented with different solutions on the different channels of a customer support service. IM.MIND® implements natural language conversations on the channels that more naturally support them (e.g. chat, voice channels with speech recognition resources), but is also capable of accommodating tone-based interaction, when required, dynamically adapting the DTMF menu to the user profile and to the context, so that the whole range of possible interactive channels is aligned as a coherent system.

The status of the interaction with the customer is preserved. If the communication with the customer has been interrupted at a certain point of a transaction, the Virtual Agent can pick up the same transaction from where it stopped, remembering the previous conversation. This is true even if the customer is contacting the service on a different channel, for instance with a phone call after a chat session.

Different user profiles, recent user activities, recent incidents, business decisions (e.g. the decision to activate a promotion, cancel a service, etc.) are all valuable information that can be taken into account by the Virtual Agent to change the dialog flow and make the interaction with the customer more personal and effective.

IM.MIND SCE (Service Creation Environment) is the framework component used to create the Virtual Agent application, while **IM.MIND SCR** (Service Control Room) is the component that controls the business logic.

Not all the channels are the same. IM.MIND® can leverage the specificity of the channel for a more efficient interaction or to invite the customer to use a separate channel (e.g. a web page) for easier access to information. In any case, whichever channel is selected by the customer, IM.MIND® makes sure that the interaction is kept consistent, using the history of the interactions (across all channels) and the business logic as inputs.

IM.MIND supports **Visually Augmented Voice Interaction**, where the Virtual Agent while engaging the customer in a natural voice dialog over the phone, also offers the possibility to use a web page as a parallel communication channel to show visual information and collect feedback that would be harder to express by voice.

DTMF menus are a primitive way to interact with the customer, but they are still a widely adopted approach to identify the customer's intent or to collect customers' data over the phone line. DTMF technology is cheap and people are used to it. As part of a migration strategy, IM.MIND® is capable of accommodating DTMF technology and creating dynamic DTMF menus that are consistent with the service logic and with the service offered by other possible channels (e.g. chat). This way, IM.MIND® can also be successfully used to aid a customer service in its growth, supporting the long term vision and the activation of new channels while consolidating the welcome services and the self-care in those channels that have already been deployed.

IM.MIND® clearly separates the roles of the Virtual Agent, that is in charge of the interaction with the customer, and of the business logic that governs the service.

The business logic determines:

- the services to deliver for each user profile;
- the alerts to communicate to the customer (as for instance, a recall on a product that the customer had purchased);
- announcements and promotions suitable for the user profile.

Once the Virtual Agent has been deployed it is ready to dynamically change the dialog according to the business logic's inputs. There is no need to rework the design of the Virtual Agent to modify the dialog after a change in the business logic.

This feature provides a great flexibility to the business side of the company, that can make the most out of the Virtual Agent installation and provide services and deliver messages that are not static but may change over time.

Interactive Media develops and deploys natural language-based omnichannel solutions for the automation of customer service interactions for voice and chat conversations. Active in the CX market since 1996 and doing Natural Language Processing since 2008, Interactive Media has had the time to prove itself: numerous happy customers can tell the tale.