



*We Share Our Knowledge*

**Article no. 3**

**Bringing the Service  
Agent to the Customer**

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## 1. Background

So we have our Self-Service website up and running and our customers can register online and do anything, from learning about the company, to registering for services, to purchasing products. But something is still missing.

Most customers don't fully utilize all that our website has to offer, still choosing to call the service center and wait for the service agent to answer. Sometimes the customers even drive to the nearby service center. Why?

The reason is that most customers are still not willing to relinquish the "human factor", which makes it easier for them to trust the information given to them and the different actions required of them, whether costly or free of charge. They usually prefer doing those actions via telephone or face-to-face. Anything but operating alone in front of an impersonal computer screen.

Consequently, if we want our customers to start using our online-service options, we should "humanize" our website, as well as all other channels of communication that are currently impersonal.

This article will present several methods of "humanizing" our customer services and bringing the service agent to the customer, even in channels where the communication is usually automated.

## 2. So How Do You Bring The Service Agent To The Customer?

In this article, we decided to feature 4 different forms of customer service that can be implemented in any organization, using a variety of communication channels. These 4 methods can satisfy the customers' need for the "human factor", and render them confident enough to fully utilize the service options offered in our website, as well as in any other communication channels:

- A chat with an automated service agent
- A chat with a virtual service agent
- A voice chat with a human service agent
- A virtual video-guide.

Additionally, there is always the popular Live Text Chat with a human service agent. This is the simplest, most basic channel of communication, used in most of Israel's service websites. For that reason, we chose not to expand on this specific method.

### 2.1 A Chat with an Automated Service Agent

#### General description

The classic automated chat, or and Automated Service Agent (ASA), is based on text messages (IM) between the customer and a robot (Chat Bot), whose whole purpose is to answer customer questions, as if it were a human service agent chatting with the customer.

#### The Technology

The ASA is an application based on a quick and automated smart identification of words and idioms typed by the customer into a textbox, a semantic analysis of their meaning, an optimization of the text typed, and a return of the most optimal response out of the company's knowledge base, according to said analysis.

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This technology is known as Natural Language Processing (NLP), and is considered to be a pioneering Artificial Intelligence technology, enabling any processor to process human language and return relevant and accurate response, thus creating a quintessential person-computer / person-robot conversation.

This technology supports a variety of languages, including English, Hebrew, Russian and Arabic. It is also able to analyze texts written in any language, decode them and return an optimal reply in the same language.

### Customer Interface

The customer types a question in the textbox, in his own language. For instance: "How do I buy products in this website?" "Can I view my invoice online?", "Can I pay with a credit card?" etc.

The customer can also type just key words, and get a relevant reply. For example: "invoice", "xxx service", etc.

As it does not involve human response, the automated chat is available for customers 24/7, and enables them to escalate the automated chat to a live text chat with a human service agent at any given moment (pending on human agent availability).

### Usage Examples

Again, the automated chat software is linked to the company's knowledge module. This module contains all the information available to the customers in the specific chat form. Usually, this module contains a vast variety of FAQ's available to the customer in the specific channel (e.g. the website), that can answer most of the customers' questions, on topics such as customer account, username, passwords, forms of payment, online payments, invoice issues, product information, purchase instructions, service registration, shipments etc.

### Supported Channels

The automated chat is compatible with most websites and is also applicable on any cordless appliance that contains an IM software, e.g. mobile phones.

The automated chat can also be used via SMS (text messaging).

## **2.2 A Chat with a Virtual Service Agent**

### General description

Just like with the Automated Service Agent, this chat form is also based on an exchange of instant messages (IM) between the customer and a Chat Bot, and is also intended to provide service support, but with one substantial difference:

- The virtual agent is an animated 3D character. That is, when the customer opts for a chat with a virtual agent, a window is opened, presenting a character that can read the answers out loud, in addition to their being printed in the textbox. The character can move its lips to mimic actual speaking, in perfect synchronicity with the text and sound, thus simulating a face-to-face conversation with a human agent. This adds a visual facet to the automated experience, thus upgrading it to a near face-to-face experience.

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## The Technology

The chat with the virtual agent is also based on the Natural Language Processing (NLP) technology, as described above. It does not require any human participation and supports a variety of languages such as English, Hebrew, Russian and Arabic.

## Customer Interface and Usage Examples

Just like with the automated chat, the chat with the virtual agent is based entirely on Open Systems, and allows interfacing with the company's knowledge base. It is available for customers 24/7 and can answer most of the questions presented by the customers, just as with the automated agent.

Advantages of the virtual agent versus the automatic agent:

- The virtual agent can transfer the customer to a relevant webpage, in real time. For instance: if the customer typed "I wish to purchase product X", he will be automatically transferred to a page containing that product's information, as well as other products in the same category and at the same time, the customer will also receive a text and voice answer along the lines of "please review the product presented in this page".
- The virtual character can be a very simple one, or a branded one, e.g. it can "wear" a logo T-shirt, etc.
- Companies using the virtual agent chat in their website also name the character, to personalize it even more. For example, IKEA.co.uk uses a virtual character called Anna.

## Supported Channels

The chat with the virtual agent is designed for websites, but is also applicable with wireless appliances that have Wi-Fi or WAP/i-mode installed, i.e. PDA's or Smartphones, as well as other mobile phones.

## **2.3 A Voice Chat with a Human Service Agent**

### General description

Unlike the previous chats described above, where the communication is between the customer and a robot, the voice chat is aimed to connect between the customers and a human (conventional) service agent, through the same means of conversation the customer would have, had he chosen to call the service call center? By bringing the human agent to the customer in channels previously not engaged by human representatives (such as the internet), we dramatically reduce the chance that the customer will relinquish his activities in the channel (while we wish that he continue). By simply clicking the "Push to Talk" button, the customer is immediately and securely connected via the website to a representative in the support/service center. This is done by routing the call to the representative, according to the webpage from which the customer chose to make the call and pending on representative availability in different service centers (not necessarily 24/7). The voice chat complements the method described above and enables quick escalation both from an automated/virtual chat and from a live text chat to a voice chat with a human service agent.

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## The Technology

The voice chat is based on VOIP (Voice Over IP) or Voice over the Internet technology. It is important to note that the same is applicable for Video Conferencing between the customer and the service agent, using similar IP based technologies, thus enabling the customer to not just hear the human agent, but also see him in real time.

## Customer Interface and Usage Examples

Aside from the possibility of chatting with the agent on any topic, without the relative limitations of the automated/virtual chats, the voice chat also allows for a few unique features:

- The service agent and the customer can co-browse the website during the chat, so that the agent can guide the customer to the relevant information requested. He can also assist in filling online forms required for the purchase of a certain product, or help the customer register for services, all in real time.
- The service agent can Cross Sell or Up Sell at any given moment during the chat, by "pushing" marketing messages. This is called Push Page or Push Link, i.e., the agent prompts a relevant page in a new window, containing information about a certain product or service he wishes to inform the customer about. This way, the voice chat feature is used not just for customer support/service, but also for marketing and sales purposes.
- If the customer is already registered to the website, the agent can identify him and pull out all the personal data saved about this customer in the company's knowledge module, thus personalizing the chat and getting to "know" the customer. This will enable the agent to give a more focused, customized and accurate service, and offer the customer tailored marketing packages.

These abilities also exist in video conferencing between customers and service agents, and in some cases, in live text chats as well.

## Supported Channels

The voice/video chats were originally designed for websites, but can also be implemented in IP supported mobile phones (usually 3G phones, smart phones and PDA's), as well as internet based wireless phones (such as Skype-enabled phones).

## **2.4 A Virtual Video Guide**

### General description

The virtual guides, too, are animated 3D characters. But unlike the virtual chat character described above, the virtual video guides are designed in a much more complex animation technology and they are the closest image there is to that of a real person, with sounds, motions and coordination very similar to that of a human being. The purpose of virtual guides is that they become personal guides for the customers, assisting in activities and information searches and solving different problems. These guides can also be used for a variety of marketing activities.

These guides operate according to Pre-Defined Scenarios. The guide presents the customer with the options available to him at any given moment, and the guide's reaction is a prerecorded one, according to the option chosen by the customer. This is called Step-By-Step Support.

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## The Technology and Supported Channels

These virtual characters are broadcasted to the customer using different video formats (e.g. MPEG-4, 3GP, Adobe Flash, Flash Lite, etc.). These formats can be used on personal computers, websites, mobile phones, service kiosks, and even on IPTV.

The virtual video guides do not depend on other technologies and are easily implemented by software installation and periodical updates.

## Usage Examples

- Usage on personal computers – the customer's ISP virtual guide is installed as software on the personal computer, and can assist with problems such as connecting to the Internet. The guide will check whether all the Internet connection specifications are intact and will create an initial connection call. This is all done while the customer is offline. If the guide can't solve the problem, it will ask the customer to call a human support agent at the support call center.
- Mobile phones usage – a unique way to teach subscribers how to use data services and other advanced services and also a way to urge customers to try new services offered by the mobile service provider.
- For instance, a customer wishing to learn how to send a text message or an MMS from his mobile phone can receive a step-by-step tutorial on his mobile phone. Initially, he will be asked by the guide whether he wants to send a text message, read a received message or save a message. If he chose to create and send a message, a textbox will pop up, into which he will be asked to type the message. Then, he will be asked to type in or choose the recipient's phone number, etc.
- Internet usage – the virtual guide can be the website's "tour guide", directing users to the requested information and showing them around the website, while incorporating links, navigation tools and the site's search options. The guide can also help the customer fill out online forms as well as other "complex" online activities. The guide can also recommend trying out new services on the website, and encourage customers to purchase different products using the Cross-Sell/Up Sell techniques.
- Service kiosks usage – the virtual guide implemented in the kiosk is designed mostly for orientation purposes. For example, a customer entering a bank can go directly to the kiosk and inform the virtual guide about the purpose of his visit. The guide will then direct him to the relevant queue. The guide could also help the customer make the necessary actions at the kiosk, if possible (e.g. deposit checks), thus giving immediate service and saving the customer from waiting in line. Additionally, the guide could offer the customer new products and services (such as savings and loans), while he is still in the kiosk.
- IPTV usage – the virtual guide can instruct the customer how to order/cancel Pay-Per-View orders, give information about rates and prices, appear on a promo for a certain Pay-Per-View show, etc.

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### 3. So, Why Do We Even Need This?

Nowadays, as technological innovations evolve daily, and as more and more communication channels become available to our customers, people want to have the choice when and how to communicate, and have the communication be quick and efficient, yet still contain the "human factor" mentioned above.

In order to simultaneously comply with all these demands (availability, variety, immediacy, precision and the personal touch) and still obtain a commercial advantage, we need to provide our customers with service and support systems that are constantly available to them (24/7), in as many communication channels as possible (internet, mobile phones, wireless, service centers etc.) and enable them to get the answers they need, as quickly and as accurately as possible, without having to refer to other sources (first contact resolution). We must also enable the customer to communicate in a user-friendly, secure manner, i.e. – a human manner. We must use at least a few of the methods depicted in this article, whether our organization is in the telecom, finance or retail industries, and whether we are a service or a product providing organization.

If we succeed in properly implementing these methods, not only will we cater to all of our customer's demands, but we will also achieve the following goals:

- ✓ Improving services rendered and optimizing customer service – thus positioning ourselves as a world class customer service organization.
- ✓ Enhancing customer satisfaction and dramatically upgrading customer experience.
- ✓ Reducing expenditure (by using service technologies instead of human service agents).
- ✓ Lowering abandonment ratios from different channels.

Ultimately, all these and others will essentially contribute to a raise in our ARPU (Average Revenue Per User).

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## About Synergy

**Synergy** is an international consulting company, specializing in Analytical CRM solutions.

**Synergy** offers marketing oriented business ventures, formed by a team of leading local and international industry experts.

**Synergy** aims to provide its customers with the ability of acquiring commercial advantages by informative analysis of their customers' shopping data.

**Synergy** has vast experience in working with leading commercial organizations, both locally and internationally, and its clientele includes foremost industry leaders in the communications, financial and retail fields.

For more information, visit our website at: [www.il-synergy.com](http://www.il-synergy.com), or email us at: [info@il-synergy.com](mailto:info@il-synergy.com).

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