



## Nikolay Anisimov, Sergey Menshikov:

### *From Plain Telephony to a Rich Contact Experience*

A retrospective look at the evolution of communications technology in contact centers

*Below is an overview of the evolution of communication means between customers and businesses, the associated technologies, and the demands this change is placing on people and resources.*

#### Plain Telephony Call Centers

As soon as the telephone was invented, customers began calling companies. Large, successful companies received many calls and, in response, staffed a number of employees to answer them. The call center was born.

To effectively manage a call center and increase its productivity, a number of technologies were introduced, such as an ACD (automatic call distribution) to queue incoming calls and route them fairly between representatives; the IVR (interactive voice response) to interactively obtain information from the caller, as well to provide self-service functionality; CTI (computer-telephony integration) to allow enterprise software to control the process and facilitate screen pop-ups with customer information; dialers to free agents from tedious dialing and waiting for customer's to answer; call recorders to ensure quality of communication and more.

The mechanisms of call distribution back then were very simple and based mainly on agent availability. An agent was considered

available for a call when they were in a ready state and not working with another call. If, however, an agent was handling a call, then a new call would not be distributed to them. Agents' statistics were also defined and calculated based on that approach. For example, agent occupancy was calculated as the portion of time the agent spent on calls out of the total logged-in time.

#### Enter Chat and E-mail

With the invention of the Internet and its deep penetration into all spheres of human activities, new communication services such as email and chat emerged. It is not a surprise that they were immediately adopted as new communication channels in contact centers.

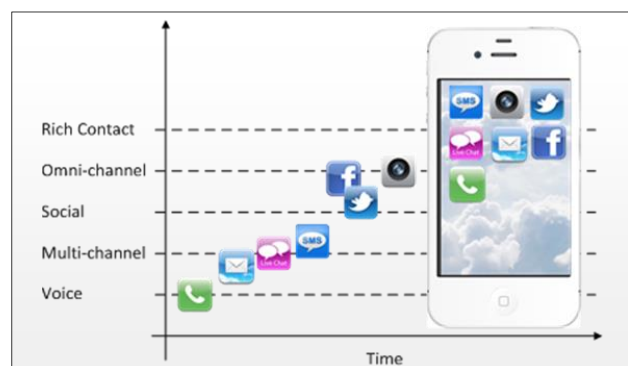
However, in many cases this adoption was not done in concert

involved in processing these multichannel interactions by being on a one-media (e.g. "e-mail:") team, or switching their availability from one channel to another periodically throughout the day, or working in a so-called pull mode when an agent would manually take an email or chat from a common queue.

Automated "blended" processing of multi-channel interactions faced a number of technical difficulties at this time. Initially email messages and chat sessions were treated and routed to agents similar to voice calls. This resulted in some unexpected issues:

When an agent, assigned to work with voice calls and emails, received an email and began working on it, they could not receive a new voice call because they were considered by the router as being busy. It is often desirable to distribute voice calls to agents who are working with emails, as typical voice calls cannot or will not wait, while email processing could be deferred for a while; however, this was not possible at the time.

Moreover, an agent working with a single chat session could not work on another chat session while waiting for the first customer to finish typing their response – again, the router treated the agent as being busy with an interaction that could not be interrupted by another interaction. A



with call routing applications in the call center environment. New channels were added in an *ad hoc* fashion as additional applications to agents' desktops. Initially agents were



well trained agent is able to successively work with three or even more chat sessions simultaneously, thus the serial treatment of chat interactions resulted in a loss of productivity.

It became extremely clear that a more sophisticated approach or technique for assigning simultaneous or multichannel interactions to agents was needed. Moreover some improvements to agent statistics were also utterly required.

These problems become more urgent and exaggerated as additional channels were introduced, such as web forms, fax, SMS, etc.

## Now Social?

Social communication came as a part of the next generation of Internet applications commonly referred to as Web 2.0. This generation of applications is characterized by the creation of social networks and microblogs such as Facebook, LinkedIn, and twitter.

People spend a lot of time utilizing these applications, extensively communicating with one another, exchanging opinions, sharing pictures and videos, etc.

Marketing departments perceive this social media as a new opportunity to engage customers and form a new class in communication channels – the social channels.

Due to the fact that customers use those “channels” to discussed brands or vent about problems and issues between peers, vendors have to envision an approach to monitor social networks to identify relevant information (e.g. posts, tweets,

statuses, comments) and even act upon it.

As social networks can generate a lot of traffic, the information detected has to be filtered, relevant and then distributed to agents. Often, the solution is for the agents themselves to be members of these networks to respond appropriately.

Attempts to map these new “channels” to old routing techniques, applying standard telephony KPIs are challenging.

There is a need for a new systematic approach of how to route, manage and report on social media interactions.

example, to seamlessly switch from one channel to another, while retaining the communication context.

The notion of an Omni-channel contact center requires the development of a solid technical foundation enabling the processing of multichannel interactions including routing and comprehensive reporting.

## Rich Contact Experience

The surging of mobile technologies in the last few years has presented a new opportunity to evolve contact center technologies.

Mobile technologies allow for establishing a new *rich contact*: the



## Omni-Channel to the Rescue!

The exploding number of communication channels in the contact center environment resulted in attempts to unify channels and separate interaction-processing logic from channel-specific details.

This resulted in the new notion of Omni-channel contact centers. It is assumed that such contact centers will have the means to easily interact with numerous channels allowing, for

complete communication channel between a customer and a contact center that can carry any number of interactions of different media types simultaneously.

For example, a customer may communicate with a car insurance contact center by their mobile device about a car accident they were involved in. The customer speaks to an agent via a voice channel explaining the situation. At some point of time, the customer may take



some photos of the car damage and could send them to the agent as picture messages while on a call.

Within rich contact the customer may use any channel available such as chat, voice, messaging, and video in parallel and/or in any order, any number of times. Emerging and future channels will also be

incorporated into rich contact without changing contact processing logic.

Such freedom in media use increases productivity of both the customers and agents during transactions.

However, a chat and voice transaction with different customers

simultaneously imposes different loads on a contact center representative than a chat and voice call with the same customer, existing omni-channel systems will not be able to take advantage of this increase and cannot meet the new expectations of the evolving customer base.

\*\*\*

At [Bright Pattern](#), we are advocating a new paradigm of *rich contact experience* and believe that contacts between customers and contact centers will become richer and more complex, dramatically improving the quality of customer service. To make this happen we introduce a new approach to arranging agents' work by distributing to them multiple cross-channel interactions, therefore improving their productivity and utilization.

