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Analyzing and shaping customer journeys

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Introduction

It is not easy to create and strengthen customer relationships while ensuring that customers enjoy interacting with your company and contacting your employees. And disjointed communications with your company make this even more difficult. Customers pick up the phone to call and have to “start all over again” after having already searched the web, asked their Facebook friends and Twitter followers for help and finally arrived at your website to look further for the right information.

Making a purchase and obtaining support can be like entering a maze or decoding an encrypted message. Your customers just want help—they want customer care. In his book, “Electronic Commerce: A Managerial Perspective,” Efraim Turban defines customer care as “a series of activities designed to enhance the level of customer satisfaction—the feeling that a product or service has met customer expectations.

The challenge of customer experiences

In the past 10 years, the trend has been for organizations to move from being product-focused to customer-focused. Yet, nearly everyone has a recent story about browsing a website and then having to call a company. And a phone call usually leads to a maze of robotic voice.

As the customer, you indulge the robot because you are required to, and you painstakingly make your way through the twisty, winding passages to finally discover a human voice on the other end. To your dismay, the human asks you the exact same questions again—consuming more of your valuable time—and then informs you that you must be transferred to a different department to give you the help you desire, costing you even more precious time. To no surprise, this unwanted process takes many minutes of your time. Don't allow your customers to face similar disjointed journeys.



Start of mobile, too difficult to complete



Search web site



Try self-service; get stuck



Home page, search for right phone number



Call IVR hell. “Who are you? Enter 1, 2, 3 for...”



“How can I help you? What have you tried... Did you see...”



Back to web to review new choices

Using a mobile- and web-integrated customer care solution, you can enable customers to then click their way right to audio, video, chat or screen-sharing conversations with your employees and use the browsing context, rather than several IVR tones to get them to the right person and directly share this mobile/web context. “Hello! I see you have already read the FAQ and downloaded the latest firmware.” Or “I see you were viewing and considering the NewProduct-1000. If you like us on Facebook at Facebook.com/newproduct1000, which I just shared it in your chat window, you will receive a 10% discount.”

Building effective customer relationships

Successful relationships are about mutual respect, predictability and valuable encounters. Your customers consider that they are on a journey to meet their specific needs, as opposed to targets or prospects being qualified or serviced at the lowest possible cost. They also don't see themselves as numbers within your sales and marketing pipelines. From their perspective, the process looks more like this, with themselves at the center:

This is their lifecycle.



Organizations need to focus customer care solutions on engaging this process from a customer's perspective to drive positive engagement and satisfaction. This will lead to transformational change for the relationship—for your employees and your customers. Helping your employees understand and appreciate this lifecycle is essential to attracting and retaining business, as well as creating customer loyalty and advocacy. Further integration with CRM systems and marketing automation data enable your live customer care processes to automatically identify and inform employees who the customers are and where they are in the context of this lifecycle:

- Where your customers are in their lifecycle (e.g. in the interest, trial, support or loyalty phases)
- When customers arrived. For example, when they first visited your site a month ago represents awareness, and when they referred a friend last week represents advocacy
- Length of time customers have been at this stage (e.g. a customer has been a loyal customer for two years but has not moved to advocacy)
- What it will take to move customers forward (e.g. if you offer discounts, badges/recognition, special offers, product upgrades and new capabilities)

Today's mobile and web-based technology with integrated real-time communications allows "in the moment" customer care to be delivered directly within your customer' current mobile and web experiences. This shows your customers that you respect their time—being accessible and delivering service in a predictable way to efficiently add value to their current activity—strengthens your customer relationships. We will discuss this further after first looking at the decision-making process that determines how to treat each specific customer.

Key analytical concepts

- Collect customer journey data
- Understand journeys to personalize
- Anticipate journey outcomes
- Retune using feedback

The power of predictive analytics

We live in the world powered by the web and communications in which one in every three people have access to the internet; close to quarter of a million phones are shipped each hour globally. The amount of data shared globally every day is astonishing, reaching exabytes (thousands of millions of gigabytes) each day. Analysis of this vast resource requires new techniques and tools, but creates a tremendous opportunity to make our online experiences much more personalized and effective.

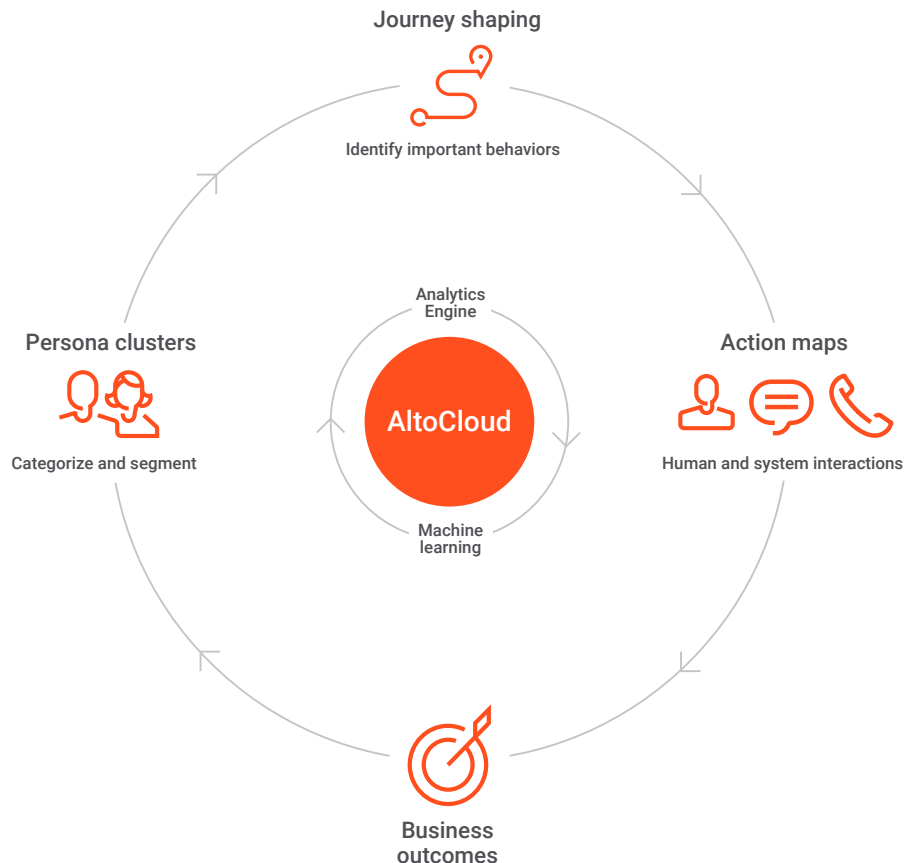
Data analytics has played a key role in the success of eCommerce in the last decade and has since manifested its value in several other domains, including biotechnology, education and health care.

However, in the customer service domain, the use of data analytics is far from optimal. Leaving large amounts of valuable customer data unexplored and unused can lower the quality of customer service. This can be attributed to many issues, and the lack of integration of various phases within the customer journey is a main one. This makes the experience very frustrating and forces a customer to provide the same piece of information, such as their account number multiple times in a short period. At the same time, a lot of valuable data about customer intentions or needs never reaches the agent who answers the call.

These problems call for a better use of data analytics in typical customer service scenarios, leading to improvements in customer satisfaction and cost efficiency of the contact center. Analytics allow for personalization of the customer journey and can make the experience more tailored to the needs of individual users—from the moment they start browsing the site to the second they finish a call with a customer service agent. Key steps to make a better use of analytics in these scenarios include:

- Collect data spanning the whole customer journey
- Apply analytics to better understand your customers and personalize the journey
- Use predictive analytics and machine learning to anticipate important events, i.e., outcomes
- Continuously tune the analytics platform using feedback

These steps can be visualized as a “continuous learning” cycle, as follows:



Key concepts

- Rich customer context
- Persona clusters and journey patterns
- Action maps
- Continuous Learning
- Business Outcomes focused

Let's explore these steps in more detail.

Collect data spanning the whole customer journey

Key concept: Rich customer context

The first step in harnessing the power of analytics relates to the availability of data about customers, their behavior, their profiles and more. Very often, a single piece of information can make a big difference in converting a customer. This is particularly important in delivering effective customer service. Unfortunately, customer service agents lack important information—rich context data—when answering the customer's call:

- What is the actual reason for the call?
- What does the customer see?
- What events in the customer journey resulted in the decision to call the agent?
- Have any of our customers faced a similar problem? How did we solve it?

Analyzing rich context data about a customer can address many of these questions. And this is data that is available, easy and inexpensive to collect. No infrastructure is needed to start collecting it. In fact, if you use web tools like Google Analytics, you are already on the right track. All that is required is a couple of extra lines of JavaScript on your web pages and you can start collecting valuable data about behavior, location or needs of your customers. You also can retrieve additional information from their online profiles to potentially identify them and their previous history with you.

Apply analytics to better understand your customers and personalize their journeys

Key concept: Persona clusters and journey patterns

Analysis of the collected data is a key first step in understanding customers and their needs. Techniques such as segmentation (widely used in marketing) or clustering (one of the most basic yet powerful data-mining approaches) can help to understand your customer and patterns in their behavior.

Many tools and algorithms are used for clustering and can be categorized into two groups:

- Supervised methods require examples drawn from existing data that are used to train the algorithm to categorize new data. For example, 100 examples of customers who did or did not buy the product will allow the system to predict if a new customer will convert. These approaches are useful when you have deep knowledge about the data, such as how many distinct customer segments exist.
- Unsupervised techniques identify patterns or structures in the data without any prior knowledge. For example, an unsupervised clustering technique will identify the number of customer segments that should be formed and what the characteristics are of customers in each segment. These techniques are more complex to apply and customize for better results, yet prove very useful in many scenarios.

The most popular machine learning techniques that apply to these problems include support vector machines, decision trees, Bayesian techniques and neural networks—especially deep learning—that have received a lot of attention in the recent years.

Use predictive analytics and machine learning to anticipate important events

Key concept: Action maps

Predictive analytics represent more advanced and sophisticated data analytics techniques. They extend the reach of insights into the future and provide powerful tools for predicting user behavior, shifts in user interests or future occurrence of events. In the customer service context, predictive analytics enable several powerful features and allow you to:

- Anticipate when a customer browsing the product website will need agent support
- Identify and reach valuable prospects before they decide to call the agent
- Predict the number of customers calling based on behavior of your customers online

There are several predictive analytics techniques that use statistical models that prove very useful. Analytics of rich-user context data enables very interesting applications that help to make the customer journey successful, but also lower the costs of running a call center.

Predictive analytics engines typically exploit techniques based on regression models or Bayesian inference that achieve very good results in anticipating user actions, such as predicting that call will be initiated in the next two minutes or spending patterns of a new customer.

It is important to highlight that insights that a predictive analytics platform provides are an important step in personalizing the customer journey. However, they require concrete actions that lead to measurable benefits. The real value comes from actions that decision makers, executives or the marketing team take based on those insights. A good analytics platform will use sophisticated algorithms to create insights; a great analytics platform will provide concrete real-time actions based on those insights.

Continuously tune the analytics platform using feedback

Key concept: Continuous learning

The behavior and needs of customers change rapidly; assumptions about your customers and their interactions will make carefully crafted models inaccurate. To cater to this, most data analytics techniques enable a continuous learning approach—where the quality of predictions incorporate both implicit and explicit feedback using real-time communications data, such as:

- How your customers rate interactions with agents
- How agents used the actionable recommendations
- Which treatments can be applied to a persona cluster
- What business outcomes (purchases, resolutions, answers) were achieved

Key concept: Business outcomes

The customer is already giving you huge amounts of information about what they want within your mobile and web interfaces. With customer journey analytics, we can see what they wish to accomplish and what they have tried.

By applying predictive analytics to these customer journeys, your organization is better equipped to automate responses that shape the journey and apply the right knowledgeable resources to the most important customer needs. This drives higher customer satisfaction while delivering your desired business outcomes.



Direct customer communications from mobile and web

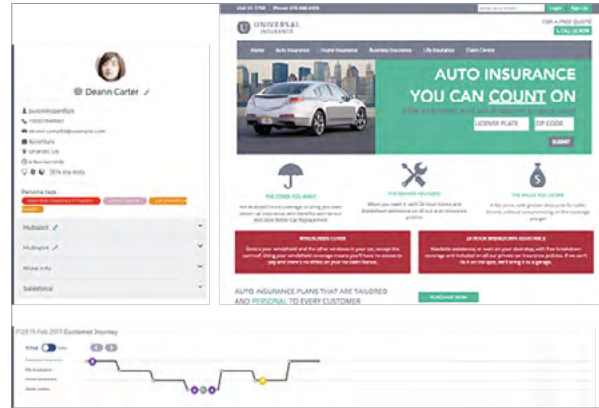
Having analyzed each customer’s journey and made decisions about actions and where to proactively offer assistance to selected customers, the next step is a completely seamless transition to communicating with the customers who need help.

Rich communications technologies are available today to allow chat, voice, video and screen sharing to be directly embedded within web pages and mobile applications. These technologies include HTML5, WebRTC and vendor-specific products.



The decision on how best to serve the customer and to which agents to route this online interaction can now be made using all customer journey information. That is, routing is based on much more than just a few questions when the customer finally decides to interact, but rather everything the customer did in their journey is usable—whether or not they thought they might need help when they started.

In addition to selecting the right agent based on the journey, the agent is also empowered with much more valuable information, including customer-profile information, reasons for calling, cross-sell recommendations, location, current page and any search terms, as well as visualizations of the customer journey and time spent on different pages. This is all in addition to the integrated voice, video, chat or screen-sharing. With this greatly expanded information, the agent experience can include the following elements:



Opportunities across business functions

The integration of smart analytics and learning with embedded customer communications opens a range of new customer experience opportunities across various business functions that may go beyond current contact center thinking.

- **Inside sales:** Understand and identify website visitors and enable inside sales teams to reach out at the right moments to connect through the website.
- **eCommerce:** Analyze and shape customer journeys with real-time communications and content offers to increase conversion rates and average order values.
- **Marketing:** Integrate with campaigns and banner ads to qualify and move prospects into the sales pipeline more efficiently.
- **Customer service:** Improve customer experiences with faster resolutions and make customer service reps smarter and more effective.
- **Development teams:** Utilize APIs and software development kits (SDKs) to create tailored solutions with real-time communications that leverage analytics for line of business applications.

The agility of cloud solutions

Moving into new customer journey approaches can be achieved rapidly and effectively by leveraging cloud-based software as a service (SaaS) solutions. Traditional call center solutions are delivered on-premises, where you are responsible for the acquisition and maintenance of all the hardware and software required to support the connections between your customers and your employees.

This infrastructure includes many specialized and single purposed products that bridge different types of networks, including telephony/PSTN and internet-connected devices.

However, changing and extending your existing on-premises infrastructure can be costly and time consuming. It is much faster to add new capabilities from the cloud and then integrate this over time, as necessary, into existing on-premises contact center infrastructure. The agility benefits of this incremental cloud approach for new capabilities include:

- **Administration:** Cloud or SaaS solutions do not require specialized equipment, so they are quick to deploy. Your employees are provided with a URL, along with user IDs and passwords. The SaaS provider also handles software updates, backups, security of your data, etc.
- **User experience:** Your employees can access SaaS solutions from any internet-connected device, anywhere in the world. No software or servers are required. Adoption rates of SaaS applications are extremely high, compared with on-premises enterprise solutions, according to a recent Gartner report. In fact, Gartner estimates that over \$1 billion was spent on software products that were deployed, but not used.

- **Cost:** SaaS solutions benefit from administration and user experience improvements that drive down total cost of ownership. No hardware investment is required and you pay as you go for software usage. And fewer IT support resources are required to maintain and manage upgrades, patches and equipment reliability challenges associated with on-premises solutions.

Conclusion

This paper has outlined a new approach for dramatically better customer journeys that improve and consolidate your customer's experiences and leverage their full mobile and web context over the internet, rather than forcing them into disjointed phone calls when they need help. You can utilize simple-to-implement, standard web browser APIs and mobile SDKs that help you crack the code to turn your mobile apps and websites into complete customer care portals that incorporate embedded real-time communications without any complex telephony IT projects.

From that first simple step, you can augment your understanding and relationship with your customers by using predictive analytics to automatically drive more intelligent customer engagement. All this can be achieved incrementally through agile cloud-based solutions—without disturbing any current voice call center investments.

About the authors

Genesys Altocloud is on a mission to make customer contact more human, delivering personalized experiences, smarter interactions, faster resolution and more satisfied customers to every business. Find out more at altocloud.com.

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