

# Transforming customer 360 for the connected consumer

Turning transactional interactions into personalized conversations in real-time

## Introduction

The rise of the hyperconnected digital consumer has given birth to a new form of brand-customer relationship – one that's not constrained by channels, devices, or locations. Today's connected consumers engage with brands on their terms and expect an experience that's meaningful and personalized in real-time.

But brands don't have it easy. With massive volumes of real-time data being generated for each customer and a growing number of touch points due to omnichannel customer journeys, the need to view all of this data in a single screen view has become imperative.

More and more brands are struggling to achieve this unified view. According to Gartner, fewer than 10% of companies actually have customer 360 views. Though technology has made it possible for them to collect massive amounts of information, it is still a challenge to integrate static and historical data with real-time customer intelligence.

How can modern enterprises get access to a single-screen view that provides a complete picture of every customer's past, present, and future? How can they work towards winning

customer trust and loyalty while being rooted in data that delivers reliable and actionable insights? In this white paper, we will seek to answer these questions and highlight the importance of real-time customer 360 for today's data-driven organizations. We'll talk about the challenges of the existing systems, the limitations of a siloed, traditional data model, and the payoffs of adopting a complete real-time customer 360 solution.

## The need for real-time customer 360

As customers interact with businesses in new and innovative ways across channels and devices, they expect immediate responses with real-time personalization at every point of engagement.

However, traditional systems fall short of providing a real-time customer view and connecting it with historical customer information. That's where real-time customer 360 plays a key role.

Real-time customer 360 enables a deep understanding of the current state of the customer at the moment of your current interaction with the context of the entire past.

Some prominent applications of customer 360 include micro segmentation and targeting, running dynamic marketing campaigns, proactive error resolution, and contextualized customer service in real-time.

## Challenges of the traditional system

1 No true 'single unified view'

Due to siloed internal systems, critical customer information is spread across multiple systems. This prevents organizations from getting a unified view of the customers and personalizing their experiences. Companies must move to new systems to manage and

2 create connected customer experiences that surface the right information to the right people at the right time.

immediate action in response to real-time customer actions. In scenarios where responding in seconds or minutes is critical, this can be a significant competitive differentiator. By adopting an advanced real-time data processing framework, organizations can obtain the insight required to act prudently at the right time.

## 3 Scalability to accommodate and process very large data

Storing and processing large volumes of data requires a high degree of efficiency that traditional systems may not provide. Advanced data processing frameworks based on distributed programming techniques are not only fast and

more efficient, they are also more scalable and have their own machine learning library for big data processing.

#### Difficulty in processing unstructured data

Unstructured data must be processed before it is ready to serve as an input to any machine learning algorithm. While traditional systems don't allow data preprocessing, an advanced framework like Apache Spark provides the capability to process and structure data to make it consumable by machine learning algorithms.

### Minimal machine learning

Traditional systems prevent organizations from effectively identifying new data sources and applying machine learning algorithms. With advanced frameworks, companies can leverage the growing volumes of customer information to predict customer behavior, proactively serve their needs, and deliver a superior

## The ideal real-time customer 360 solution

To overcome the limitations of a traditional system, organizations need a solution that provides an 'always on' unified view of the customer's past, present, and future. The solution must also be capable of predictive modeling and effectively address privacy concerns.

Here are the key attributes of a complete real-time customer 360 solution:

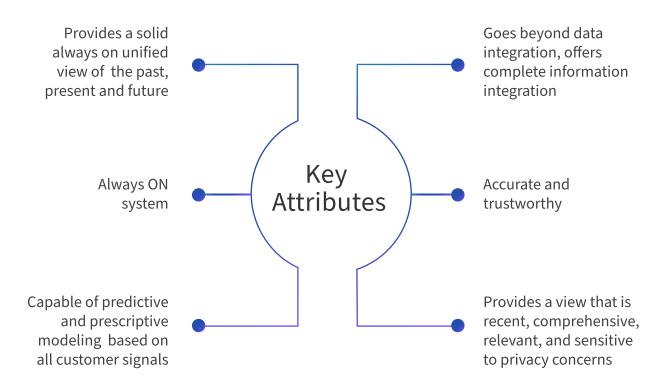


Figure 1: The 6 key attributes of a real-time customer 360 solution

## Why implement real-time customer 360?

While most organizations are taking rapid strides towards a 360-degree view of the customer, they still have a long way to go. Industry analysts believe that issues like costs, employee buy-ins, and siloed data are primary factors holding back enterprises in the quest for a unified real-time customer view.

However, those that can move beyond these hurdles will eventually reap the benefits of higher customer satisfaction and increased revenues.

Here are the key benefits of implementing real-time customer 360:



Figure 2: Benefits of implementing real-time customer 360

## How a Cable TV network improved customer experience with real-time customer 360

Today, the cable TV and telecom industries are in a phase of rapid disruption. In this much-saturated market, cable TV service providers across the world are facing immense competition for customer retention and new customer acquisition.

This competition comes not only from traditional players, but from a new breed of digital players like Netflix, Amazon Prime, Roku, and more.

These digital players collect vast amounts of customer data and are using predictive analytics and machine learning to deliver highly personalized, contextual, and content-driven interactions. Conventional cable companies are feeling the pressure to make use of similar technologies and tools to stay competitive and know what their customers truly want.

Gathr enabled this leading cable TV and telecom provider in the US to enhance its customer experience by providing a 360-degree view of its customers for micro segmentation and targeting, running dynamic marketing campaigns, proactive error resolution, and contextualized customer service in real-time.

## Challenges



## Steady decline in demand and high churn rates

With intense competition from the new age streaming services, the cable TV giant was scrambling to increase the stickiness of their subscription services. They needed the ability to offer real-time, context-based, marketing to personalize services and offers on-thego.



## Lack of contextualized customer service

Data analytics were restricted to a historical analysis of a limited set of monthly calls. Absence of real-time dashboards and lack of data enrichment prohibited contextualization. Agents were unable to offer proactive support or take advantage of the upsell and cross sell opportunites.



## Low grade technology stack

Large volumes of data were being created from disparate sources such as set-top boxes, marketing campaigns, error reports, and customer service calls and requests. The existing technology stack lacked the ability to ingest process, and analyze this data in real-time.

#### The Solution



## Ingestion and preprocessing of large volumes of real-time data from multiple sources

With intense competition from the new age streaming services, the cable TV giant was scrambling to increase the stickiness of their subscription services. They needed the ability to offer real-time, context-based, marketing to personalize services and offers on-the-go.



# In-memory data enrichment for contextualizing interactions across touch points

As data arrives, the platform further enriches real-time actions with historical customer data and trends such as name and age, geolocation, existing enrolled services, billing records, etc. This contextualization enables the operator to deliver the most relevant experience while the customer is still in the moment.



## Self-learning models for customer 360 on real-time data

Gathr makes it easy to build, train and deploy self-learning algorithms based on digital customer touch points. The system then automates decisions and initiates actions in real-time. These models are built using historical data and then applied to real-time data to continuously refresh predictive models for a customer 360 degree view.

#### Results

#### Actionable insight from contact center monitoring in real-time

Gathr enables monitoring and tracking of agent calls in real-time through call analytics, dashboards, and alerts. In-progress calls are monitored automatically for defined language, escalation attempts, churn language, etc. Immediate alerts can be raised for

#### Real-time visualization and detection of service errors

Streaming event data from error reports are analyzed in real-time to detect how many customers are facing errors (such as reboot, VOD playback, DVR recording and playback errors). The reports are distributed by state, count, and service, including a list of top error messages and more.

#### Micro customer segmentation for relevant offers and personalized experience

Gathr enabled a single, current marketing view of the customer merged with historical buying behavior. The platform provides a snapshot of engagement levels by various

## **About Gathr**

Gathr is a unique real-time streaming analytics platform that elegantly brings together all the attributes discussed in this paper under one product.

It provides an easy-to-use UI based development, deployment and operations platform for streaming data applications based on a best-of-breed open source technology stack. It integrates seamlessly with Hadoop and NoSQL platforms and provides linear scalability to process millions of events per second with a handful of nodes.

Gathr takes away a common concern of today's technology decision makers of which technology to pick among the rapidly emerging and numerous options thanks to its unique abstraction architecture providing a common interface over multiple streaming engines like Apache Storm and Spark Streaming with more additions possible making it a future-proof and robust option for your streaming analytics needs.

Well-known companies are successfully using Gathr to dramatically cut short their cycle time to get to production with their streaming analytics use-cases in a matter of weeks.

Gathr enables real-time tracking of service usage and customer engagement levels. For instance, real-time custom dashboards display data points such as the top network by customer count, viewership count, and viewing duration. Results can be further filtered by focus areas like geolocation, customer segments, time of day (to identify prime time), and more.

For instance, the application can identify when a subscriber has nearly finished watching an on-demand video they are watching; and subsequently offer personalized recommendations for new content.

## How can Gathr help?

Gathr, an enterprise class real-time streaming analytics platform based on a best-of-breed open source stack can help organizations across industry verticals to quickly and reliably take into production a wide range of streaming data applications. It enables use cases in areas such as the Internet of Things (IoT), sensor data analytics, e-commerce and Internet advertising, security, fraud, insurance claim validation, credit-line-management, call center analytics and log analytics. It also enables enterprise IT and business transformation with horizontal capabilities like streaming ETL to speed up slow batch processes to near-real-time.



