

## Leading Cable TV and Telecom Provider Enhances Customer Experience with **a Customer 360 View Using StreamAnalytix**

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Today, the cable TV and telecom industry 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.

## About the Customer

The customer is a cable TV and telecom provider that operates in over nine US states and serves nearly 5 million customers.

StreamAnalytix 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



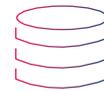
### A steady decline in demand and high churn rates

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-the-go.



### Lack of proactive and contextualized customer service

The data analytics were restricted to a historical analysis of a limited set of monthly calls. The absence of real-time dashboards and lack of customer data enrichment prohibited contextualization. Therefore, agents were unable to offer proactive support or take advantage of the upsell/cross-sell opportunity.



### The technology stack was not equipped to analyze large volumes of disparate data in real-time

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 could not ingest, process, and analyze this data in real-time.

## The StreamAnalytix advantage

StreamAnalytix provided a unified platform for the client's end-to-end data processing needs. The platform offers real-time data ingestion, data transformation, data enrichment, advanced analytics, machine learning, and data visualization. Along with these, an easy-to-use visual UI accelerates time-to-market for various tailored, enterprise-scale, and context-driven applications across customer touch points.

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

StreamAnalytix makes it easy to ingest and process large volumes of unstructured data as it arrives. The platform rapidly aggregates data from disparate real-time data sources, and quickly identifies correlations. The following sources and types of data are captured and monitored:

- **Clickstream data from set-top-boxes (STBs)**
  - The number of customers engaged with different product offerings such as broadcast networks, video-on-demand (VOD), and DVR Playback
  - Total viewership for each service offering
  - Viewing duration
- **Error reports**

The number of users currently facing broadcasting errors such as REBOOT VOD Playback and recording errors, distributed by geolocation
- **Contact center logs**

Call logs, call duration, abandonment rates, agent performance reports, and customer satisfaction scores
- **Campaign traffic data from across channels**

Ad views, click-through rates, orders placed, offers availed, and upsell/cross-sell data

## 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 and transaction data, historical interactions and buying behavior.

With this contextualization, the operator can instantly deliver the most relevant and effective experience while the customer is still in the moment.

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

StreamAnalytix 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 refresh predictive models for a customer 360-degree view continuously.

These models allowed the provider to move away from traditional CRM powered customer views. Now, richer customer data sets can be leveraged to provide relevant, real-time customer experiences, enabling use cases such as upsell and cross sell, call center analytics, and content targeting recommendation engines.

# Results

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

StreamAnalytix 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 customer service issues, and agents are provided with guidance for the next best action.

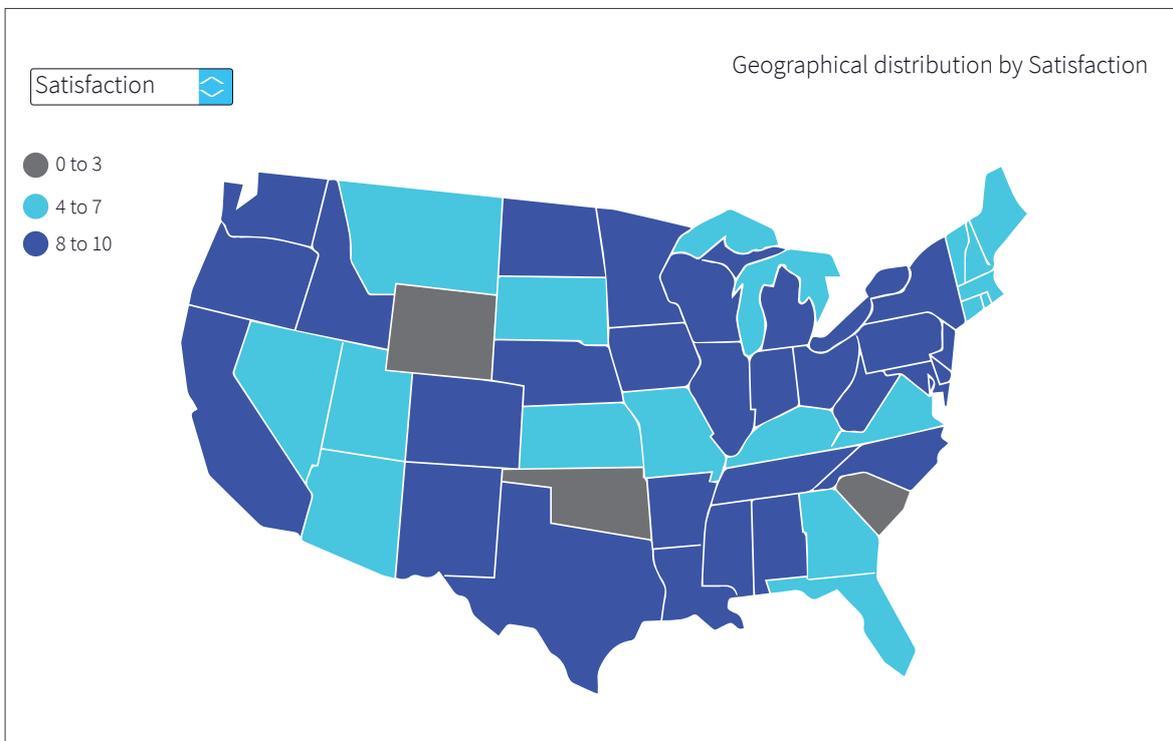
### Agent Monitoring Dashboard

5m 10m 30m 1h 3h 1d Date Range 04/01/2017 11:16:00 04/21/2017 11:16:00 GO

46776  
Today's Visits

41896  
Chats

Abandonment **37.82%**



Top 5 Agents

| Name    | SLA Met | Chat Abandonment |
|---------|---------|------------------|
| Agent44 | 82%     | 14.8%            |
| Agent49 | 75%     | 21.2%            |
| Agent53 | 71%     | 26.4%            |
| Agent42 | 69%     | 31.4%            |
| Agent41 | 68%     | 34.2%            |

Most Used Words

Include Filter  exclude Filter Bottom 20

Cancel, close account, terminate, dissatisfied, unhappy, over charged, manager, escalate

## 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 the state, count, and service, including a list of top error messages and more.

The results are displayed on custom dashboards that continually update in real-time.

### REPAIR DATA

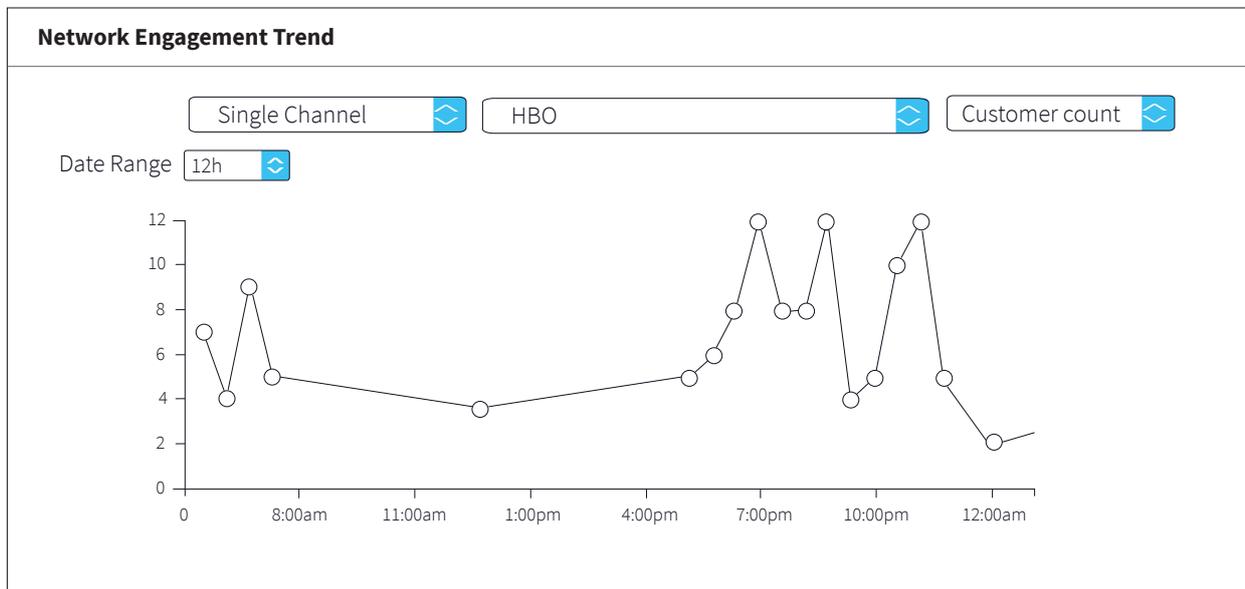
Time Range

| Trouble Type Description       | Count |
|--------------------------------|-------|
| CSRE/CANT SEND/RECEIVE EMAIL   | 1168  |
| SLOW/SLOW THROUGHPUT           | 1085  |
| SOME CHANNELS OUT              | 1040  |
| AUDIO QUALITY IS BAD           | 760   |
| NDT/NO DIAL TONE               | 601   |
| ASO/ALL SERVICES OUT           | 478   |
| VOD NOT WORKING/INSTRUCTIONS   | 435   |
| DVR FUNCTIONALITY NOT WORKING  | 423   |
| INSIDE WIRING/JACKS/CONSTCOMPL | 423   |
| PHYS/PHYSICAL                  | 422   |

## Tracking of service usage and engagement levels

StreamAnalytix 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, and subsequently offer personalized recommendations for new content.



# Micro customer segmentation for relevant offers and personalized experience

StreamAnalytix enabled a single, current marketing view of the customer merged with historical buying behavior. The platform provides a snapshot of engagement levels by various customer micro-segments allowing vendors to roll out personalized, contextual offers in real-time, targeting this micro-segmentation. Also, a single view of all running campaigns enables performance monitoring, allowing a view into campaign views, click rate, and orders placed.

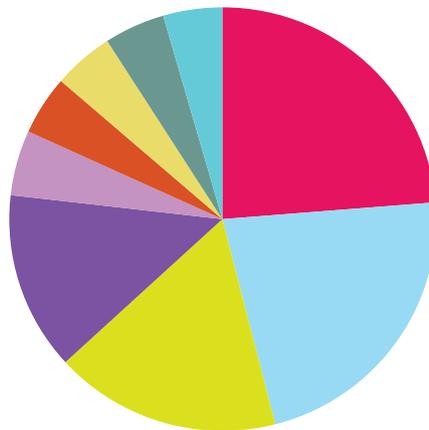
## OMNICHANNEL SEGMENT

Channel  Segment

Bottom 20

Success

Date Range 12h



- M1: Wireless white-collars (537)
- Unknown (742)
- M2: Mature mid-techs (774)
- Y1: Young and wireless (156)
- Y3: Young startups (167)
- F2: Suburban spenders (473)
- Y2: Emerging techies (134)
- M3: Offline seniors (147)
- F1: Early-adopting elite (147)