Customer 360 – Connecting the Dots Using AWS

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Context: What is Customer 360?

Customer 360 is a concept where Communications Service Provider (CSP) is aware of customers' interactions across the enterprise and then harnesses the data, knowledge and intelligence created by the interactions, to improve customer experience and business outcomes.

Customers are increasingly interacting with CSPs digitally, in addition to human interactions. They call care centers, use CSP portals, mobile apps, as well as the company's services, devices and access networks. These interactions leave behind breadcrumbs of data, which are predominantly stuck in silos. If captured, aggregated and correlated, this data can provide insights that will enable CSPs to proactively identify and fix customer issues, spot trends and anomalies, reduce churn and friction in the customer journey, help make recommendations, improve personalization and intimacy, all of which enhances customer experience, lifetime value, opex position and margins.

CSP Challenges:

Agents are under pressure to reduce call times and are expected to resolve the issue quickly and get the customer off the call. So they choose rolling a truck if they cannot easily isolate and fix the issue, which is inconvenient for the customer and costly for the company, not to mention there is no guarantee that the truck roll will resolve the issue. At ~$8 a call and ~$80 a truck roll the numbers add up to tens of millions of dollars annually, across the subscriber base. Identifying and reducing avoidable calls and truck rolls on a real-time basis, can have bottom line impacts immediately and into the future.

Golden scripts used by agents to trouble shoot issues may not be sufficient or useful for deeper analysis to identify patterns and correlations that are needed to stitch together a complete picture of the customer interactions and issues, in real time.

Sample Use Case:

If a customer's broadband service is erratic, that information is most likely recorded by a NOC system that monitors network performance. If that information can be harvested and made available on a near real time basis to people or systems that interact with the customer, such issues could be proactively resolved without rolling a truck to the customer premises, especially if the problem lies elsewhere and not in the customers premises.

Care agents are trained to check network performance metrics like Signal to Noise Ratio, Transmit and Receive power, node outages etc. However it provides only a point in time measurement and may not indicate patterns or trends that analyzing time series data will reveal. Additionally the silo-ed nature of organizations, systems and processes also inhibit 360 degree view of the customer.

Conclusion:
- CSP Operational Support Systems and Business Support Systems (OSS and BSS) generate massive amounts of data as a result of customer interaction, digital and human, and transactions processing.
- Gathering, processing and squeezing insights out of the data is complex, daunting and time consuming.
- The task of defining, validating and prioritizing hypotheses based on RoI, then building, testing and training ML models requires a sound approach, domain knowledge, data engineering and data science expertise.

How BusinessOne Can Help:

BusinessOne brings Communications industry domain knowledge and experience in resolving such issues facing CSPs. With a catalog of use cases and a proven RoI based approach to isolate the right use cases, along with proficiency in AWS tools, we do the heavy lifting required to wrangle tera/peta bytes of data, to provide real-time insights that can vastly improve the ability of the agent to diagnose and resolve customer issues in real-time. Additionally, we have also developed, tested and trained Machine Learning models for CSPs which can used to proactively identify and then resolve customer issues. When integrated with your OSS/BSS this capability can be operationalized at scale and can accelerate business outcomes.

Key Words:

- Customer Experience
- Customer Engagement
- Customer Intimacy
- Net Promoter Score
- Churn Reduction, Call Reduction
- Truck Roll Reduction
- Opex Reduction
- Operations Efficiency
- OSS/BSS
- Proactive Issue Resolution
- Machine Learning
- Predictive Analytics
- Analytics
- Pattern Recognition

Sample Solution Architecture for Customer 360