

Injecting the "value" into ML-driven customer value management

Introduction

CSP marketing teams are becoming increasingly enthusiastic players in evolution of analytics, as they discover the power of data and develop their skills in designing effective campaigns. Yet, when it comes to adding machine learning (ML) into the mix, significant hesitancy remains. Surprisingly, only a limited number of these players are currently experimenting with ML's vast capabilities in order to take their campaigns to the next level.



Overcoming barriers to ML adoption

The reluctance to adopt ML in CSP marketing can be attributed to the following challenges:

Data availability

- Near-real time data is either not available or experiences significant delays
- Customer requirement signals being missed due to disconnections between legacy systems
- Lack of connection between online and offline channels hinder creation of personalized offers

Model challenges

- Model design and deployment is still a relatively new skill set in customer value management (CVM) teams
- Data management and governance is a maturing area and troubleshooting impedes model deployment
- Platform compatibility issues between newly deployed inbound, outbound and loyalty CVM platforms
- Certain geographies cite privacy as an issue, requiring further efforts on contact preference management

Organizational limitations

- Sourcing skilled data science talent is a continuing challenge
- Lack of coordinated action between teams (e.g. competing messages from digital, CVM and care teams)
- Prolonged campaign creation processes due to limited understanding of algorithm outputs, compounded by minimal involvement in algorithm development and a reliance on data science teams from other parts of the organization

Unleashing ML's potential in marketing

Amdocs is partnering with customers on a range of projects to help develop their ML capabilities, with a focus on the issues below.

Data availability

To reduce disconnections between systems, it is essential to be able to connect activities of an individual user or prospective user across touchpoints, devices and channels, allowing them to gain a near real-time 360-degree view of the customer. Amdocs is developing capabilities that enable CSPs to:

- Convert data to 'business ready' data marts
- Design customized profile attributes that are aligned with the CSP's business strategy and objectives
- Analyze revenue and usage trends to identify the customer behaviors (triggers), the right treatment (offers) and the timing for maximum likelihood of conversion



Mastering model design

Marketing challenges requiring the use of high-volume data are the greatest beneficiaries of ML (e.g., improving accuracy around campaign delivery, testing and optimizing customer segments/personas). Leveraging over 20 years' experience working with tier 1 operators globally, Amdocs is developing best practices that enable CSPs to:

- Define an optimal set of business rules
- Identify when existing decision trees are too complex and an ML model is required
- Run simulations on real data to optimize decision making and subsequent investment

Meanwhile, as "micro-moments" become increasingly important in marketing, Amdocs is developing models to empower CSPs to understand and respond to moments of heightened intent when consumers are looking to search, buy or take action. For CSPs to fully leverage these models, seamless integration of data across channels and a combination of data and algorithms are required to construct a comprehensive understanding of customer needs. Then, to enable effective implementation, Amdocs collaborates closely with customers to establish robust business cases for each project, ensuring maximum return on investment (ROI).

Envisioning customer centric campaigns

Establishing trust between humans and machines using "explainable AI" techniques and new policies and procedures is key to ML adoption. To fully integrate ML and automation across the organization, CSP marketers should actively participate in comprehensive programs led by the office of the Chief Data Officer. Such programs should tackle issues of trust, ethics, governance and security around use of data and ML. Meanwhile, to enhance messaging, inbound, outbound and digital marketing teams will need to increase coordination efforts. Machine Learning (ML) will complement these efforts by optimizing campaigns in a scientific manner, simplifying the process, and ensuring that customers receive an optimal number of well-crafted campaigns that tell a coherent story.

Such efforts will be supported by Amdocs, who in close collaboration with CSPs, implements governance best practices, including a central contact policy and a matrix of interaction rules (such as cooling periods, recurrence, and priorities) to position their customers to deliver seamless omni-channel customer experiences and maximize the value derived from ML-driven strategies.



Amdocs helps those who build the future to make it amazing. With our market-leading portfolio of software products and services, we unlock our customers' innovative potential, empowering them to provide next-generation communication and media experiences for both the individual end user and large enterprise customers. Our 31,000 employees around the globe are here to accelerate service providers' migration to the cloud, enable them to differentiate in the 5G era, and digitalize and automate their operations.

Listed on the NASDAQ Global Select Market, Amdocs had revenue of \$4.58 billion in fiscal 2022.

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