

churn reduction

reduce your churn with this TMForum based
end to end scenario



Reduce your churn with Augura

Customer acquisition costs up to 50 times more than customer retention, so increasing retention has become one of the priorities for every Telco Marketing Manager.

Anticipate customers likely to churn, reduce your churn rate, your retention costs and your efforts to retain the right customers acting with this [TMForum](#) based end to end scenario

All telecommunication operators are aware of the value of the information that lies in the huge amount of data they obtain from their clients. Analytics is an important toolset that has expanded in usage dramatically over the last decade and has developed further with the emergence of new Big Data technologies. And now, Analytical projects should be led by marketing managers, who can define their problems and the need for insights and integration needs with their actions, processes and systems. Like in most successful IT projects and strategies they undergo a business-driven strategy supported by management.

Churn prediction models try to understand the behaviours and attributes which affect customer churn. This model's accuracy is obviously critical. If the Marketing Manager is unaware of the clients' high risk of leaving, he will not act in time. Should the Marketing Manager act on satisfied clients, ARPU will be reduced without real cause. In any case the automation of the actions to be carried out with the insights obtained from the churn prediction models is equally critical. This is the only way telco marketing managers will be able to improve business indicators.

At Augura we tackle the scenario of churn reduction as a global scenario, that obtains final business results for the telco operator and does not remain solely as a problem of big data analytics which searches for an algorithm to explain losses. Our objective is the business objective: **churn reduction**.

*Marketing should lead
the big data analytics
projects, with business
benefits as main
objectives*



At augura we have created a process to ensure that business objectives are always acknowledged while simplifying and accelerating the implementation of use cases defined by marketing managers: Learn how we do it with Churn Reduction Use Case:



define business case

As in many other projects, before beginning to solve a problem, it has to be thoroughly understood. In Augura, part of our team have worked as telco marketing managers, and they have profound domain and knowledge in churn reduction, so they can help any CSP defining the problem with their specific needs.

Despite being a clearly defined problem, churn reduction requires knowing the particularities that each operator has in the input data and in the actions to be performed with the insights obtained, before starting to work.

split into building blocks

Reducing churn is a complex problem, despite being the most typical in big data analytics, and of utmost importance to the operator. To address it globally we decompose it into small reusable pieces, building blocks, and in this way we obtain better results. On the one hand the complexity per building block is smaller so the evolution to improve it will be much faster. On the other hand these building blocks are reusable and can be used to obtain answers to other telco marketing managers' problems.

In the case of churn there are up to 9 identified building blocks which will make up the global use case.



- 1. predicting each customer value:** Value based segmentation is often associated with customer billing. However, the calculation of customer value can be extended by using other data from the operator. Augura is able to recover and add a variety of data sources (use of services, associated costs, demographic data...), calculate customer value with all these data, and take the results to the operator systems and processes.
- 2. predicting each customer lifetime value:** This building block goes one step beyond customer value: it predicts the customer lifetime value over the coming years. It uses the same information used to calculate the customer value and many other, like churn rate, retention costs... to predict the future customer revenues.
- 3. predicting each customer churn score:** Augura can process data from many different areas of the company to identify behavior that is indicative of churn. For example demographic information, historic of products, usage of services, call-drops, complaints, care issues, or overage. Augura will produce a comprehensive report of customer churn risk either on a scheduled basis or on demand. This report constitutes the customer's unique identifier and associated churn risk score. The churn/retention manager can tune the output of this report by specifying a threshold churn risk score, so that only high risk customers, above this score, are returned in the report.
- 4. predicting each customer churn motivations:** This use case provides the most likely cause(s) for which the risk scoring for churn is high for each customer. Once the retention manager has the information, personalized offers can be made, reducing the retention cost. Moreover it permits the identification of churn cases which have no solution therefore avoiding unnecessary cost on unretainable customers. Finally it also allows to identify pain points in different areas of the company to establish improvement plans.
- 5. predicting each customer best retention offer:** Targeting customers with loyalty/retention offers which aren't adapted to their needs is a wasted customer retention opportunity. Once the customers with risk of churn, and the reasons for the risk, have been identified Augura can predict the offer with the highest acceptance probability. Augura can identify successful retention offers applied to different customers, and the analytic model is able to predict the best retention offer for each customer based on risk and reason for churn and other customer data.

6. **predicting each customer QoE:** Augura gives the operator the solution to obtain the QoE perceived by the end user. To obtain these values a multitude of data and indicators are collected from several systems (operation, network, billing, CRM,) and from agents installed in the customer's end devices. Augura calculates MOS index, the measurement of actual user experience, applying analytical techniques to detect patterns, revising and improving the characterization of MOS.
7. **key location profiling:** Augura can identify each customer's' key locations such as, their home or work by processing information on the location of each customer over time.
8. **customer location prediction:** Augura is able to predict when a customer will be at a specific location in the future from the same information processed in the previous building block.
9. **right channel & time:** With the above information Augura is able to establish when would be the best time to contact a customer and schedule actions that are more likely to enable contact.



It is not necessary to implement all the building blocks in order to implement the case of global use of churn reduction, nor is it favourable to choose a 'big bang' strategy. we can start by implementing a few building blocks, which can be started in a simpler manner, and evolve these by later incorporating more sources of data, more variables, more building blocks.....

In this way, in short time, you can obtain the first benefits in marketing objectives and subsequently increase the performance of the use case.

BE LEAN!



Lean approach
Start the project with several building blocks, with less complexity and start generating business benefits from the beginning.

Improve each building block in short cycles, adding new data, generating new variables...

Add new building blocks to improve the churn reduction use case

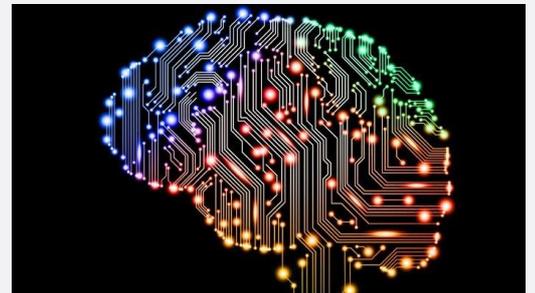
collection and preparation of data

To enable the model increase its accuracy for each building block, it must have all the data that may affect. Augura is able to obtain this data from different sources throughout the organization and prepare it to be incorporated into the analytical model. Typical sources are OSS/BSS databases, datawarehouse, BI reports, logs from network elements...And we are able to integrate the sources of data origin to automate the absorption of data on the platform. Our in-depth knowledge in telecom B/OSS systems allows us to identify all the relevant data sources in your company.

The most underestimated tasks begin once all the data sources have been collected; the processing of all the information until the obtention of the required data sets for each building block. It has been estimated that data scientists invest 80% of their time in this stage. Our data processing from different sources experience and the building blocks approach, enables us to reduce the efforts and time necessary in this task.

in-depth analysis

Augura's team of data scientists looks for the algorithms to find the model that best fits the operator's actual cases. Our data scientists team have the most common algorithms, such as those based on trees (decision trees, random forest, gradient boosting...) clusterization algorithms (KNN, K- means...) seasonal serie analysis (Box Jenkins) even the most novel algorithms based on the deep learning (deep neutral networks) at their disposal.

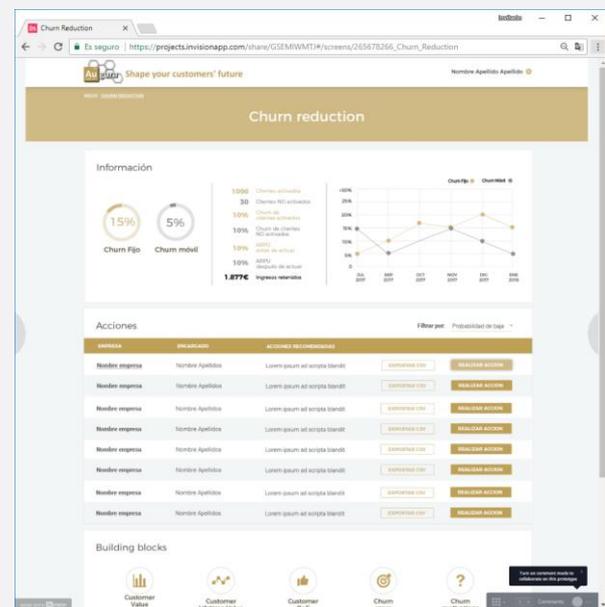


Beyond the prediction: Act!

These predictions are only the first step in reducing the churn, which is the final objective. Augura's team (powered by Optare solutions) based on vast experience in systems integration for telecommunication operators worldwide, can incorporate these insights into the processes and systems needed across the organization, automating all the task. (CRM, NBA, Marketing Automation...)

measure and monitor

From the fully customized user interface, the operation of each use case and each building block can be monitored at all times. More interesting business metrics can be added. You can also follow the metrics of the analytical models of each building block to verify that the prediction improves in each iteration.



Reduce your churn with Augura Churn Reduction Use Case

Augura, powered by Optare Solutions, offers a Managed Service for Telco Marketing Managers designed to extract valuable and actionable insights from your data and translate these insights into real actions in your company to increase revenues.

Contact us:

 augura@optaresolutions.com

 +34 986 410 091

 augura.optaresolutions.com

 bit.ly/augura_linkedin

 twitter.com/Augura_Services