Customer **retention** for **prepaid base** management

Comprehensive value growth

78% of the world's mobile subscribers are prepaid – equating to billions of price-sensitive, transient consumers. TELCOs are fighting head-to-head to win customers over, but efforts to appeal to their customer bases remain largely ineffective.

With margins becoming increasingly thin, TELCOs must change tack. Instead of searching for a magic bullet that will fix all their customer loyalty problems, they should focus on breaking down their customer base management into atom-sized challenges and then building tailored solutions for every challenge. In addition, TELCOs need to address ever-increasing customer expectations. This presents a real challenge, as they don't necessarily have the agility or resources to achieve the required level of customer-centricity. What's more, service providers face challenges in adapting their legacy IT systems to meet the new requirements for improved customer experience.

To get ahead of the curve in creating a proactive strategy for managing their customer base, TELCOs need to look into the different stages of value growth based on both consumer context and different engagement stages.

A comprehensive value growth framework based on customer context and engagement stages

A value growth framework
for managing your prepaid customer base:

Engagement stages	New customer (up to 90-120 days)	Regular engagement	Irregular engagement	Out-of-regular engagement	Risky disengagement	Churned
ARPU level	Low-Mid	High	Low	Mid-High	Low	-
Churn risk	Mid-High	Low	Mid-High	Mid	High	-
Customer context	Typically, churn rates are high among new users as a large share of them are motivated by "generous" starter packs, or SIM cards have been purchased by tourists	These customers show regular behavior patterns. Most of them are happy with the service and ready to engage with you.	These customers use your services and engage with you infrequently, but they do so consistently. They might be using your service as a second SIM.	These customers are showing changes from their regular behavior. It is not clear if this irregular behavior is temporary or will lead to churn.	These customers have not shown any engagement for a long period of time. They may already be unreachable.	Customers who have not taken any action for a long period of time and / or have been unreachable for a significant period of time.
Value Growth Strategies	ON-BOARD	UPSELL/ CROSS-SELL	ENGAGE	PROACTIVE RETENTION	REACTIVE RETENTION	WIN BACK

ON-BOARD. In this early stage it's important to educate new customers, introducing them to your services and product portfolio. Identifying high risk customers (like tourists, fraudsters, and spinners, etc.) and taking actions to prevent potential revenue loss is also important.

UPSELL/ CROSS-SELL. The main goal at this stage is to increase the value of a consumer through up/cross-selling them prepaid services.

ENGAGE. Here you can use customer activation initiatives, like free data during weekend nights, to motivate the consumption of your services.

PROACTIVE RETENTION. You can use a predictive model to identify users with a high likelihood to churn or those with irregular engagement patterns. Users that are selected by a propensity model need to be targeted with proactive retention campaigns, while you can continue to up/cross-sell to the others.

REACTIVE RETENTION. Aggressive retention efforts are needed to retain customers at this engagement stage.

WIN BACK. Here, you need to execute customer win back initiatives through social media channels or other digital channels.

Customer retention:
3 main challenges
in prepaid customer base

Understanding the main obstacles to retaining prepaid customers

Telecom companies need to keep hold of their customers, and doing this effectively and observing the results requires an understanding of the biggest challenges. Here are the three main challenges that they face that we have seen over our many years of working with TELCOs across different continents and in different environments.

1. Limited number of signals for churn risk identification

Prepaid customers can leave at any time without any interaction with company. Unlike the postpaid service model, there is no clear moment in the customer lifecycle (such as end of services or handset leasing contracts) which can help TELCOs to identify potentially risky users and take action to retain them.

2. Identifying risky users early

Customers with high potential to churn need to be identified as early as possible. That's because the majority of users in a company's customer base with a high likelihood of churning could already be unreachable. For example, customers could already have switched to a competitor's SIM. The majority of prepaid service providers already have propensity churn models which yield highly accuracy rates. However, it is important to understand that even if you are able to identify a group of customers with a high likelihood to churn in the next 2 weeks, it could already be too late to reach the majority of those users. That is why the majority of retention campaigns have a low impact.

3. Having an impact on risky users

Simply identifying risky users is not enough. To have a real impact on their bottom line, companies need a deep understanding of the main churn drivers and what tactics / offers could motivate users to remain. Prepaid customer base managers will frequently use so called "spray & pray" tactics when running retention campaigns – sending a single promo offer to a large share of the customer base as frequently as possible through a single channel and hoping that this will have an significant impact on total churn rates.

These tactics often lead to a deteriorated margin in the customer base and are a waste of the company's marketing budget, as a large share of customers receive these "promo" offers even if they were not even at risk of churning. Since it requires considerably more money, time, and effort to obtain new customers than it takes to retain existing ones, businesses should concentrate on cultivating their ordinary customers so they become extraordinary customers. Competition is also intense in almost every business sector. Once a customer is lost to the competition, they rarely return, which means the investment of both financial and human capital that was made is lost as well.

5 steps to building an **effective retention** initiative

1. Identify risky users more accurately by collecting data on their activity and interactions

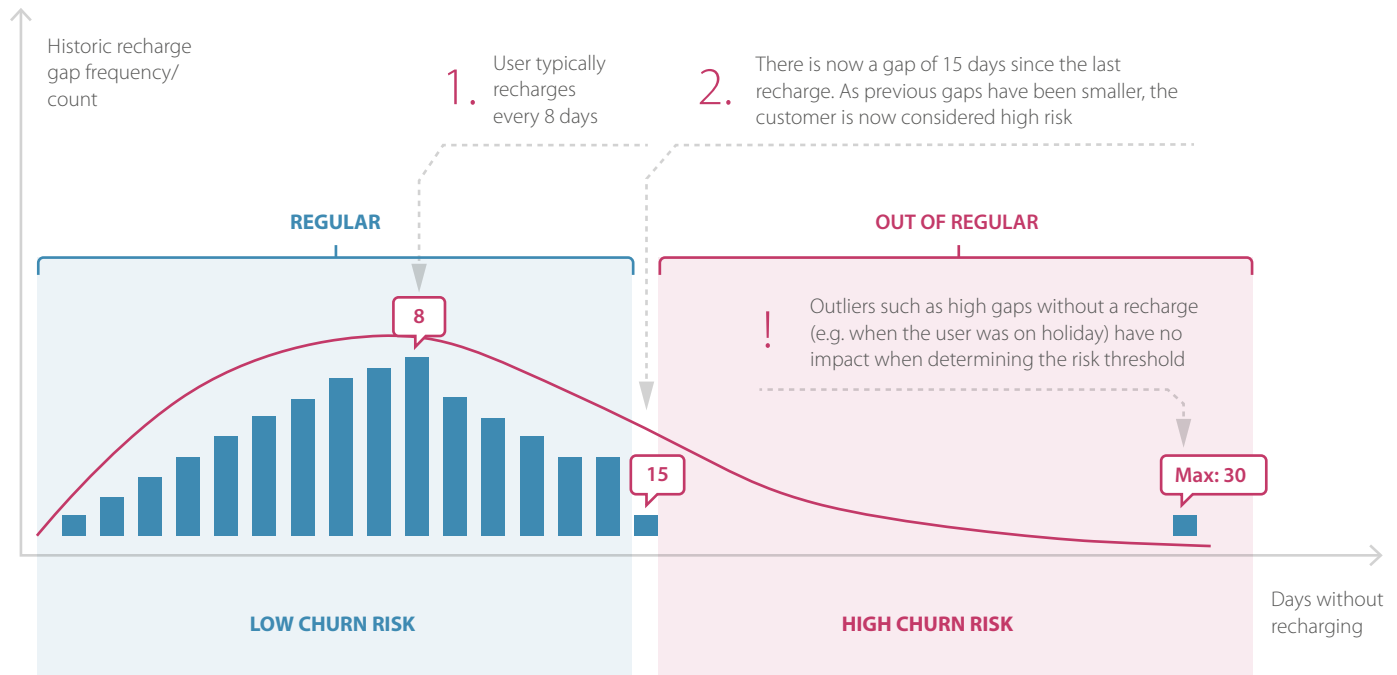| **1.** Collect signals	**2.** Map user activity patterns	**3.** Identify target groups for retention campaigns	**4.** Define tactics for retaining at risk users	**5.** Set up campaigns and governance

There are different groups of signals that TELCOs can collect in order to better understand how likely a user is to churn - these include the user's activity, their interactions with the company, and their interactions with competitors.

Groups of signals	Sub-type	Description
User activity	**Top ups**	• Balance of top ups through different channels (e.g. scratch cards, direct at POS, etc.)
	Usage of services	• Usage of traditional services (i.e. SMS sent, MBs used, calls made) • Usage of VAS services • Usage of other services (e.g. mobile financial services)
	Network activity	• User is active on the network (i.e. their SIM is installed in their phone and connected)
Interactions with company	**Interactions through traditional channels**	• Visits to point-of-sales • Inbound calls to call centers
	Interactions through digital channels	• Interactions in digital customer care channels • Interactions through social media
	Service evaluation surveys	• Transactional NPS surveys • Service evaluations through digital channels
Interactions with competitors	**Competitor browsing signals**	• User calling competitor's call centers • User receiving calls from competitor's agents • Browsing of competitor's signals

2. Determine the churn risk early based on individual activity patterns

1.	2.	3.	4.	5.
Collect signals	**Map user activity patterns**	Identify target groups for retention campaigns	Define tactics for retaining at risk users	Set up campaigns and governance

Prepaid recharge gap distribution for individual user*

Historic recharge gap frequency/count

1. User typically recharges every 8 days

2. There is now a gap of 15 days since the last recharge. As previous gaps have been smaller, the customer is now considered high risk

REGULAR

OUT OF REGULAR

! Outliers such as high gaps without a recharge (e.g. when the user was on holiday) have no impact when determining the risk threshold

8

15

Max: 30

LOW CHURN RISK

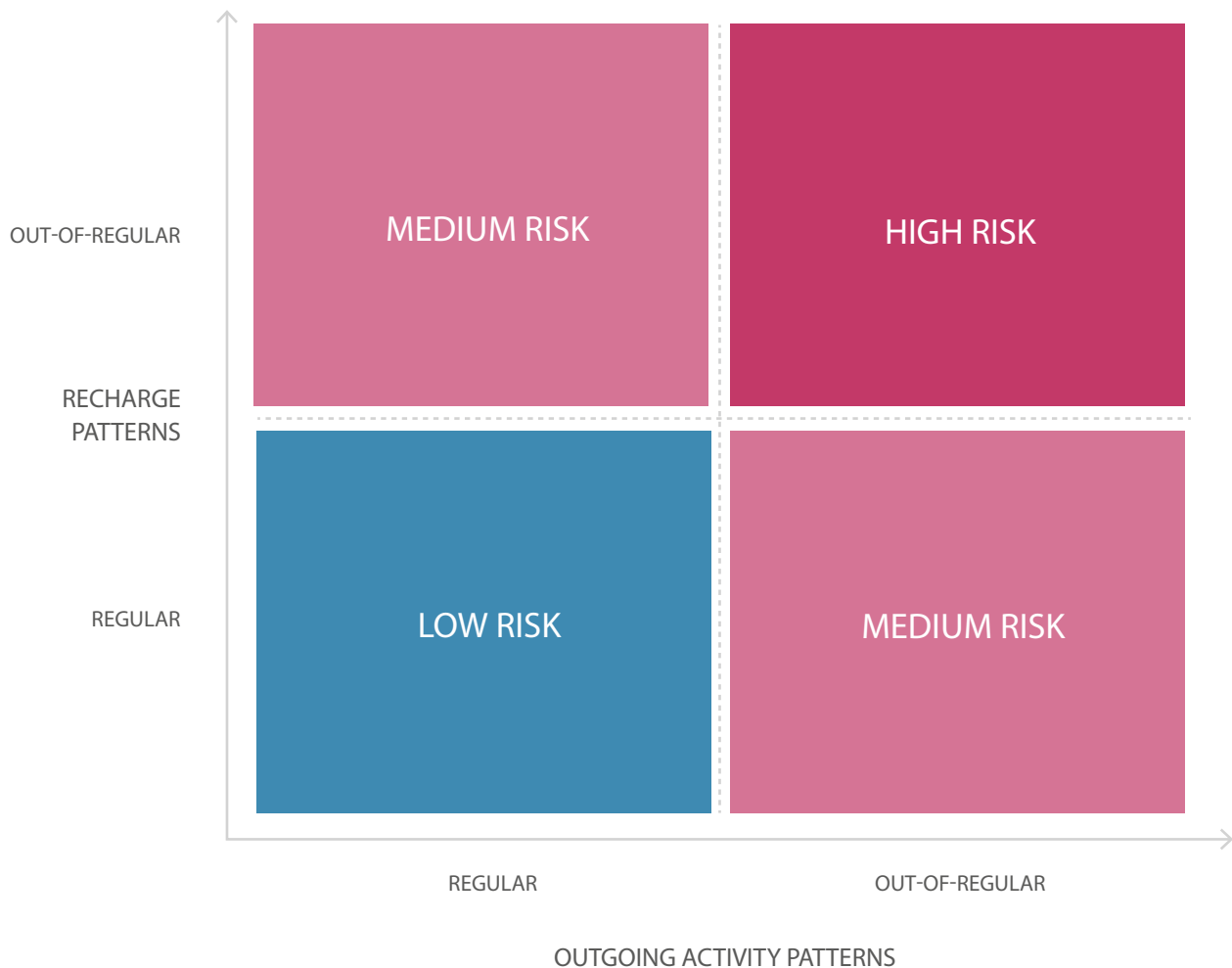**HIGH CHURN RISK**

Days without recharging

In this example, the current gap between recharges is compared against historic recharge patterns each time. If current recharge gap is the same or similar to the user's historic gaps, the user is assigned a low churn probability. If the current gap starts to deviate from the user's historic recharge patterns, the user's churn probability increases. A single deviant recharge gap does not define the user's churn probability as its weight in the recharge distribution is low.

Churn risk segments

Mapping individual users by different activity patterns allows TELCOs to better understand their different segment users based on their risk level. There are different signals that can measure risk levels, such as whether an individual user is following his/her regular pattern of activity or not. Recharge activity and custom-er outgoing activity are usually the main signals used for segmenting customers based on risk. Other types of customer activity information can also be mapped this way (e.g. on-network activity, customer usage of specific apps, etc.) and used to improve understanding of custom-er context and risk level.

RECHARGE PATTERNS

OUT-OF-REGULAR

MEDIUM RISK   HIGH RISK

REGULAR

LOW RISK   MEDIUM RISK

REGULAR   OUT-OF-REGULAR

OUTGOING ACTIVITY PATTERNS

3. Use machine learning and signals to identify target groups

| 1. Collect signals | 2. Map user activity patterns | **3. Identify target groups for retention campaigns** | 4. Define tactics for retaining at risk users | 5. Set up campaigns and governance |

Simple segmentation is not enough to ensure campaigns are effective. Users for retention campaigns need to be carefully selected using the latest machine learning algorithms and all of the signals that have been collected.

	Churn Risk Segments	Recommended Action	Churn Risk	Ability to successfully contact user	Best approach to select target group for retention campaign
More Active	New users (up to 90-120 days)	Onboarding	▮▮▮	▮▮▮	• Build propensity models to identify users with a high likelihood to churn • Target only users with the highest likelihood to churn
More Active	Low Risk	Upsell	☐	▮▮▮	
More Active	Medium Risk	Proactive Retention	▮▮☐	▮▮☐	• Build propensity models to identify users with a high likelihood of falling into the High Risk segment • Only target users that are most likely to fall into the High Risk segment. Continue upselling to the rest of the segment.
Less Active	High Risk	Reactive Retention	▮▮▮	▮☐☐	• Target all users in this segment who appear on the network, as the majority of these users are already unreachable (e.g. they have changed SIMs in their phone)
Less Active	Churned	Win Back	NA	☐	

4. Understand the main churn drivers in order to choose the most effective tactics

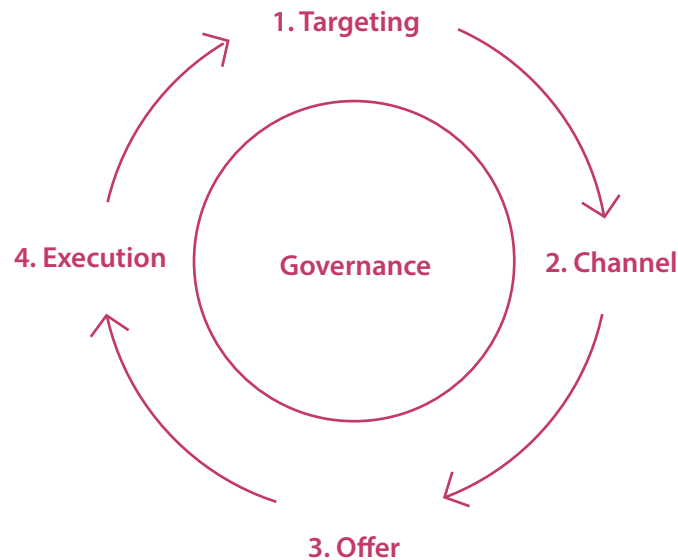| 1.	2.	3.	4.	5.
Collect signals	Map user activity patterns	Identify target groups for retention campaigns	**Define tactics for retaining at risk users**	Set up campaigns and governance

It is critical to understand the main drivers of churn within your customer base and to identify what tactics will help you to address them.

Disconnection types in prepaid			Drivers	Addressable w/ retention offers*?	Recommended tactics
Total disconnections	**Churn**	**Voluntary churn**	**Voluntary churn**	Yes	Run proactive and reactive retention campaigns based on user engagement stages. Identify users who interact with competitor's call centers and websites, and launch anti-port-out campaigns
			Service quality	Yes	Identify users who are unhappy with services (e.g. complaining through customer service channels) and try to contact them or solve the main root causes of their service quality issues
			Multi-SIM churn	Yes	Launch consumption initiatives, or promotions based on referrals or on-net services, in order to become the primary SIM
			Spinners churn	No	Identify potential spinners and exclude them from the retention campaigns
			Tourists	No	Identify potential tourists (e.g. SIMs activated in the airports, railways, etc.) and exclude them from the retention campaigns
			Other / structural churn (e.g. changing living location, death, etc.)	No	-
	Migration (e.g. from pre to post)	**Involuntary churn**	**Bad debt**	No	Have a proactive process for managing bad debt
			Fraud	No	Fraud monitoring and identification
			Other forms of involuntary churn (e.g. theft)	No	-

*Addressable' churn means it can be stopped or reduced

5. Optimize every step to drive the impact on your bottom line

1.	2.	3.	4.	5.
Collect signals	Map user activity patterns	Identify target groups for retention campaigns	Define tactics for retaining at risk users	**Set up campaigns and governance**

Every area of retain campaign execution needs to be optimized to drive the impact on your bottom line. It all starts with targeting - risk identification using user signals and advanced analytics algorithms. Then it is about choosing a channel for the campaign that is convenient, technically eligible, not used too frequently (so the communication doesn't feel like spam) and relevant to the user. The offer itself has to impact longevity and be relevant from the point of view of both value and resources. Finally, the execution has to be effective and with a sense of urgency and clarity, but also user friendly with as few steps as possible required to receive the bonus on offer. Continuous impact cannot be achieved without clear governance processes which ensure timely process deliver and that learnings are captured.

Early retention
use case

Customer retention program saves risky new prepaid subscribers

THE CLIENT

Our client is an innovative mobile virtual network operator performing under the 4G LTE network of a major telecommunications company in the USA. The company is focused on foreign nationals living in the US, providing them with convenient and cost-effective mobile services.

THE NEED

The client had been experiencing rapid growth of its prepaid business, but this was accompanied by a relatively high churn among new subscribers. The client wanted to lower the churn rate among these users by improving retention program.

THE OBJECTIVES

• Build an automated predictive model to identify new customers with the highest risk to churn.

• Reduce churn rate among selected customers at a reasonable cost with the personalized retention campaigns.

New prepaid subscribers → The most risky customers ← OFFER 1

Precise selection of target group

SMS & Email

← OFFER 2

AI driven churn prediction model

Individualized retention campaigns

THE SOLUTION

Exacaster Customer 360 Profile deployed

We deployed the Exacaster Customer 360 Profile platform to start daily tracking of important behaviors, service usage, and churn signals. Collection & unification of important customer information allowed to build a necessary foundation for churn predictive model.

Identify risky customers

Exacaster's automated, AI-driven propensity model for churn prediction was deployed to identify high risk customers.

Only customers who were identified as most at risk where targeted with retention campaigns. This constituted 8% of new customers who subscribed to prepaid plans.

Proactively reach out and address customer concerns

• We contacted individual customers well before their prepaid plans were due to expire. The frequency of communication was personalized in each case to achieve the best result.

• The targeted customers were offered two different loyalty packages. Follow-up analysis of behavioural patterns across these two categories provided valuable insights for tuning up campaigns.

• The process was fully automated, with no human intervention required.

Churn rate reduction

Before the retention campaign was launched, only 32% of new prepaid subscribers classified as 'high risk' renewed their plans. The company was struggling with a high churn rate of 68%.

As a result of our campaign, the company's churn rate has decreased significantly. Half of all subscribers who received personal offers purchased new mobile plans and were retained as customers.

68 %

50 %

Before campaign   **After campaign**
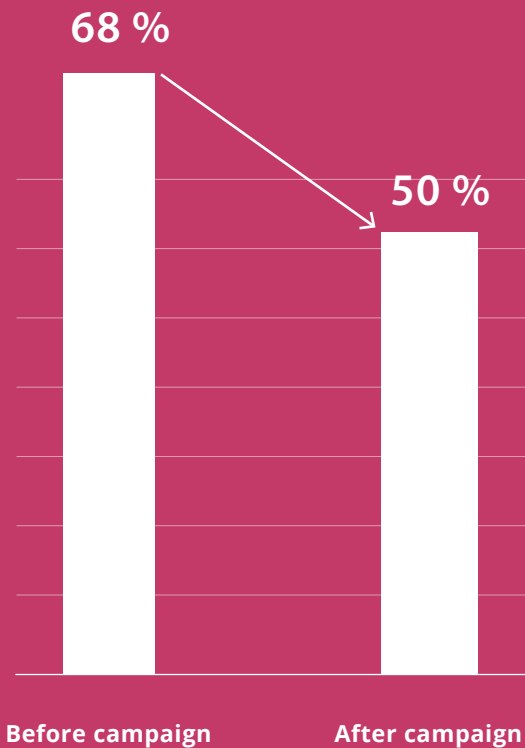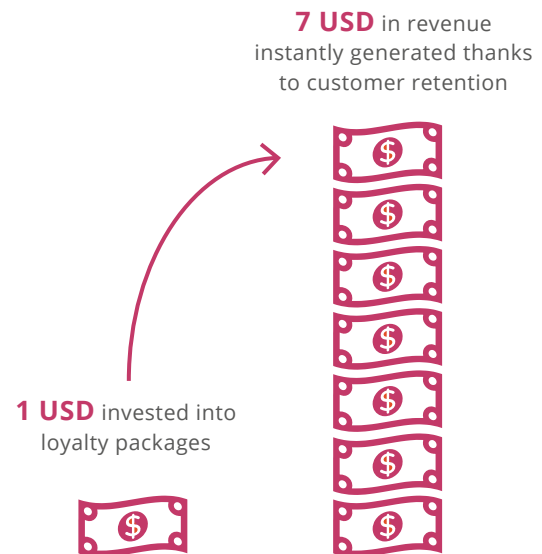
Customers chose higher value plans

90% of the targeted subscribers that were retained purchased prepaid plans with longer durations. This constituted an outstanding result considering the majority of these customers only signed up to short term plans when they first subscribed with the company.

Low sensitivity to discount level

Offer tests showed there was no significant difference between customers targeted with different levels of discount.

Retention campaign instantly paid back

The costs of the retention offering were very modest compared to the total revenue generated from new subscriptions by high risk customers.

7 USD in revenue instantly generated thanks to customer retention

1 USD invested into loyalty packages

Next Gen Customer Base Management enabled by **Customer 360 profile**

Customer 360 Profile creates unified view of individual customer

Being unable to gain insights from data is detrimental to customer experience. You can't provide an excellent experience if you don't know what your customers want when they engage with you, or if you cannot predict what they will need in the near future. Unfortunately, this is the reality for many service providers. They struggle to extract insights from the data they have in order to respond quickly to customer needs. This is where machine learning can be a great asset. By implementing our state-of-art Customer 360 Profile, telecoms will gain a truly unified view of their customers' data. This unified view is central to unleashing the power of artificial intelligence (AI), or more specifically, machine learning.

Our use cases are enabled by our **Customer 360 Profile**, which captures all customer data from siloed systems

Satisfaction
Promoter

Location
Budapest

Social Media
8.6 thousands followers
on Instagram

Quality of service
2 dropped calls
last week

OTT usage
Spotify:1,5 hours
Youtube: 40 minutes
Google maps: 15 minutes

Interests
BBC news
Food & Sports
Music videos

Device
iPhone XS

Traditional services
Call time: 138 minutes
SMS: 20 messages
Data: 3.5 GB

Customer care data
1 closed issue regarding
incorrect invoice last week

Digital service usage
Entertainment: 4 hours
Virtual care: 40 minutes
Financial services: 25 minutes

Purchase & billing
ARPU: 32$

**Digital channels
& interactions**
Self-care app used
to pay invoice

Why Exacaster?

Data-rich telecoms have what it takes to transform themselves into true leaders of customer-centricity with the right technology. Our Customer 360 Profile represents a fantastic opportunity for any service provider to offer next generation customer experience. Along with opportunities to delight your customers and strengthen relationships, it will also prevent your most valuable customers from churning while optimizing your costs.

ABOUT US

We are a big data and predictive analytics technology company.

Solutions
We provide end-to-end AI solutions for TELCO companies, helping them to address key marketing, personalization and customer experience challenges. These include prepaid and postpaid retention, prepaid up-sell, pre-2-post migration, and postpaid NBA/NBO.

Platforms
We offer Customer 360° and Customer Journeys platforms for enabling TELCOs to build, operate and personalize consumer experiences across all their touch-points.

Services
Through consultations and hands-on implementation, our skilled data science and data engineering teams help TELCOs accelerate their journey to effective decision-making based on big data and predictive analytics.

Keen to learn more?
We talk telco language

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Exacaster