

Whitepaper: With Competitive Pricing Analytics, CSPs Can Reduce Service Plan Revenue Leakage by 40%

Executive summary

An estimated 13% of Service Plan revenue (revenue attributed directly to fees paid by subscribers for voice and data services) is leaked by Communication Service Providers (CSP) because they do not have enough information to better understand the competitive pressure of the marketplace. In this white paper, we will show how sub-optimal pricing drives revenue leakage. Competitive Pricing Analytics (CPA) is a standard operating procedure in many industries, but is still a nascent practice in telecommunications. The technology exists. The data is available. Given global mobile operator revenue hit €895 billion in 2012, the opportunity to reduce the amount of leaked Service Plan revenue is enormous.

This white paper will show that by simulating every subscriber on competitive Service Plans, a pricing premium or ClintKPI will be revealed, giving critical pricing insight to the CSP on how much they can charge before incurring price-driven churn. Furthermore, the CPA enables Marketing to quantify the Competitive Threat KPI (CTKPI) for any given Service Plan, or even the entire base in terms of subscribers and revenue at risk. Knowing this helps the CSP run alternative pricing and loyalty offer scenarios to see how they allay the threat to churn and revenue. The key objectives of the competitive threat analysis are:

1. Increase revenue by reducing the amount of revenue leaked:
 - Reducing cannibalization of your own revenue when introducing new Service Plans
 - Right-sizing the Loyalty Offer required to keep subscribers from moving to a competitive Service Plan without giving away too much revenue
2. Quantify the Competitive Threat that other Service Plans and Offers in the marketplace are putting on your subscribers and your revenue

Without the benefit of good competitive pricing analytics, Marketing runs the risk of creating Service Plans and Loyalty Offers that unnecessarily reduce revenue from a given segment of users. Furthermore, Marketing is unable to quantify the pricing premium or ClintKPI that they have created through the strength and quality of their network, products, service, and brand. A CSP that leverages their data, in conjunction with Competitive Pricing Analytics is able to leverage the premium they can charge for their Service Plans before they incur price-driven churn and reduce revenue leakage by 40%.

Introduction

The strength of analytical capabilities depends on the operator, and to a certain extent, their size. While a Tier 1 operator may have a dedicated data warehouse IT department, and BI teams associated with the business units, smaller tier 2s and 3s may only have a data warehouse, with a limited data set to analyze. However, regardless of the resources devoted to analytics, it is rare to find a CSP executing

CPAs with a rigorous methodology, and frequency that is commensurate with the value it would yield. The primary use for the data warehouse is often reporting that gives managers their ability to get a view on how their business unit is functioning.

Clearly there is value in leveraging analytics for network optimization, and customer lifecycle marketing. Many predictive analytics software packages and data warehouse BI practices attempt to use usage statistics and subscriber segmentation as a substitute for a CPA. However, these alone are not sufficient for predicting the impact a pricing change will have on revenue. Competitive Pricing Analysis for Service Plans and Loyalty Offers should always be a part of pricing in order to minimize revenue leakage. When introducing new Service Plans and Loyalty Offers, there are two ways that revenue can be cannibalized, but are too often overlooked without a proper CPA:

1. Revenue lost when a subscriber reduces their monthly fees by switching to a newly created Service Plan
2. Revenue lost due to the customer accepting a Loyalty Offer that was not necessary because they were not a price-driven churn risk

Executives focused on revenue growth need to understand these cannibalization metrics because they help them understand their pricing position in the marketplace. A competitive and well-balanced portfolio of Service Plans will not over-cannibalize its own revenue, and not need to be heavily discounted by Loyalty

Offers. While it is likely impossible to introduce Service Plans and Loyalty Offers without some amount of cannibalization, CPA enables Marketing to quantify it, and then optimize pricing accordingly in order to reduce it. Clintworld has created a way to quantify the pricing premium or ClintKPI, allowing Marketing to understand the balance between the Service Plan revenue and Loyalty Offer discounts in order to solve for the maximum amount of revenue between them without incurring churn. Knowing the ClintKPI gives Marketing insight into the maximum amount they can charge a given segment of users given the set of competitive Service Plans available to them in the marketplace.

Operators leak nearly 10% of revenue annually because they do not know how much a subscriber is willing to pay

If customers were only focused on getting the lowest price, with all things being equal with regards to service, then there would be no amount of premium that a customer would pay just to stay with their CSP. Fortunately, that is not the case and there is a pricing premium that CSPs create through the quality of their network, customer service, and brand management. In fact, these create a level of inertia for subscribers paying over the premium, which delays the rate of churn and gives the operator time to react to competitive changes in the marketplace. In order to fully optimize the value of a subscriber, the operator must know this premium. Clintview, a CPA software suite, assists in the entire process of computing this premium, the ClintKPI. Convincing CSPs to continuously calculate it, and drive pricing decisions with it is the purpose of this paper.

Of the €895 billion in Service Plan revenue mobile operators made in 2012, we estimate that nearly 10% or €89.5 billion was leaked because pricing was not optimized for the premium subscribers are willing to pay. The sources of leakage caused by sub-optimal pricing vary among CSPs:

Revenue Optimization	Percent of All Service Plan Revenue Leaked
Cannibalization By New Service Plan	6%
Unnecessary Loyalty Offer	3%
Insufficient Loyalty Offer	1%

1. Cannibalized Revenue By New Service Plan Launch: The amount of revenue lost due to a subscriber migrating to a newly created Service Plan that reduced their cost.
2. The Unnecessary Loyalty Offer: The amount of revenue lost due to the acceptance of a Loyalty Offer by subscribers that are not at risk to churn because of price.
3. Insufficient Loyalty Offer
 - Insufficient Loyalty Offer: Revenue lost to churn because the Loyalty Offer presented was not sufficient to retain the subscriber
 - Low Affinity Upselling Offer: Revenue lost due to Rejected Offers that were too high for subscribers to accept.

As an example, let us assume XYZ Mobile generated €3 billion in revenue in 2012. During the course of the year, XYZ introduced two new Service Plans to address a new market segment, and to address a threat posed by a competing operator Z2 Mobile. Using the leakage estimates above, XYZ may have lost as much as €300 million in revenue:

- €180 million – Cannibalized Revenue by New Service Plan
- €90 million – Unnecessary Loyalty Offers
- €30 million – Insufficient Loyalty Offers

Managing ARPU to the ClintKPI requires effort:

- Continuous analysis of the ClintKPI for every subscriber
- Creation of Upsell Offers that move a subscriber's fees closer to their ClintKPI
- Creation of Loyalty Offers that make it more appealing for a subscriber to stay with their operator, either on their existing plan, or move to a more optimal plan
- Measuring the acceptance rate of modified Service Plans

The solution that is outlined below explains how managing ARPU to the ClintKPI is feasible, and an effective way to minimize revenue leakage.

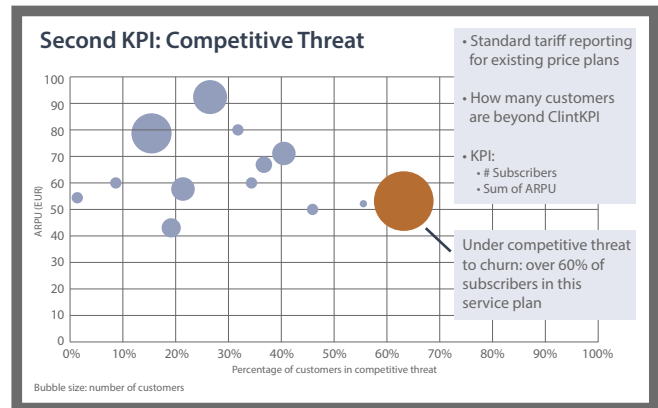
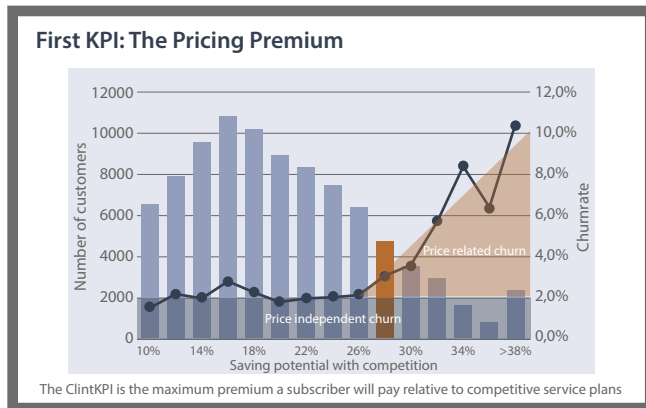
Competitive pricing analysis: drive pricing toward the maximum that the subscriber is willing to pay

Up to this point, we have defined the problem in terms of revenue leaks driven by sub-optimal pricing. To resolve the revenue leak however, we need to find the maximum price a customer would pay, rather than switching to a Service Plan that is better for their usage pattern. This is where the CPA comes in.

First, identify the Service Plan(s) to be simulated in the CPA. Then identify the competitive plans in your market (may include your own) to compare. Depending on how you would like to segment your results, you can either run simulations for each subscriber, for each segment, or just run a simulation for every subscriber on that Service Plan. Simulations may take business rules into account to ensure comparisons relevant. For example, simulate competitive prepaid plans on current prepaid customers. Simulations may also represent scenarios you want to study such as prepaid feature phone migration to postpaid subsidized smartphone Offer.

With the result set for a given segment for a given Service Plan, chart the churn rate against the potential savings of switching to the best alternative Service Plans. The ClintKPI is the point at which the slope of the churn rate trend is consistently greater than 0. The illustration on the left shows the result set of a simulation. The yellow vertical bar is the ClintKPI, or the maximum price that a subscriber, or segment of subscribers is willing to pay for their Service Plan. The delta between their Service Plan and the lowest price Service Plan in the simulation is the premium that the subscriber is likely willing to pay. If theirs is the lowest price Service Plan in the simulation, then its price can be increased to the point where price driven churn begins.

The result of the simulation makes it easy to compute how many subscribers are in danger of price driven churn, and the associated revenue at risk. We call this the Competitive Threat KPI (CTKPI).



Building a competency in competitive pricing analysis scenarios

Developing a CPA habit in the organization takes effort and investment. To get started, first partner with IT to assess the data warehouse capabilities and develop requirements for those missing. Primarily focus on what data that is available and how churn is identified. It is generally assumed that usage data is stored. If there is information on quality of network experience (e.g. dropped calls, slow data transfer), or service experience (e.g. calls into customer service, hold-time, etc.) then that will help analyze other determinants of churn while calculating the ClintKPI.

Next, source a pricing analytics platform. There are many analytics platforms to choose from. Those that focused solely on telecom will have a schema that is better suited for Service Plans and Offers, as well as other telecom specific determinants of churn. Another important factor is how integrated is the platform with your data warehouse. Finding a platform that has already been tightly integrated with your data warehouse, and has a jointly planned roadmap will help you take upgrades to either platform in the future. Too much customization can make it near impossible to stay on the product roadmap and thus eliminating your ability to take on upgrades without further customization. Clintview has been integrated at the product level with Oracle and Teradata speeding up the setup time, and making future upgrades easy.

With the data warehouse and pricing analytics platform in place, you can now assess last fiscal year's cannibalization due to new Service Plans. You can also assess the cost of accepted Loyalty Offers. Model all of your Service Plans and Offers as well as those of the competition. Define segments of users either by demographics, Service Plan, Device, etc. As an aside, if you are a CSP with multiple business units (Broadband, IPTV, Wireline, etc), then you can also do a Competitive Pricing Analysis of the bundled Offer.

There are four scenarios that we can detail out now that we understand the principle of the ClintKPI. There are some assumptions to keep in mind as we go through each scenario. First, historical usage data is available for analysis, and it includes some form of churn indication. Next, the operator has an analytics platform that is able to process the massive amount of usage data operators generate against every competitive plan in the market. For the scenarios below, we will use Clintview as the telecom pricing analytics platform as it is installed in five European operators and thus has a track record of success for these scenarios.

New service plan creation

Before adding a new Service Plan to the portfolio, we strongly suggest performing a CPA on your own portfolio to determine: 1) the improvement in CTKPI of the customer base (if this does not improve, why introduce the plan at all?), and 2) the amount of potentially cannibalized revenue from your other service plans. To do this in Clintview, first you would model the new Service Plan, a rather simple task taking less than 10 minutes. Once modeled, you could either define a segment of users to simulate on this new plan, or use the entire subscriber base. In this case, we would suggest simulating the entire base so as to eliminate any chance of your assumptions skewing the data. The resulting change in CTKPI of this simulation will show you the extent to which the danger of price-driven churn could be reduced. Next, the results will (in combination with historical migration data) highlight which current users are likely to change plans, and how much they would save by changing plans. This serves to quantify the revenue at risk of cannibalization. Lastly, the CPA will quantify the potential to reduce churn and the saved revenue that represents.

Predicting cannibalization

New Service Plans will primarily be accepted by existing subscribers because of a price advantage, or due to some increase in perceived value. In the graph above, price-induced migration is limited to subscribers that will realize cost savings. Regardless of the potential saving, there will always be subscribers that migrate due to other reasons (pricing independent migrations). With this information the effect of cannibalization can be computed.

Where the Potential Savings for every customer is multiplied by the Acceptance Rate tied to its individual Savings Potential.

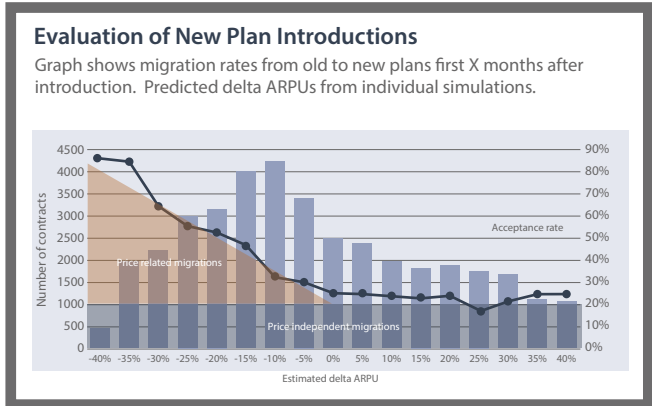
$$\text{Cannibalization} = \sum_{\text{All Customers}} \text{Potential Savings} * \text{Acceptance Rate}$$

Analyze competitive service plans

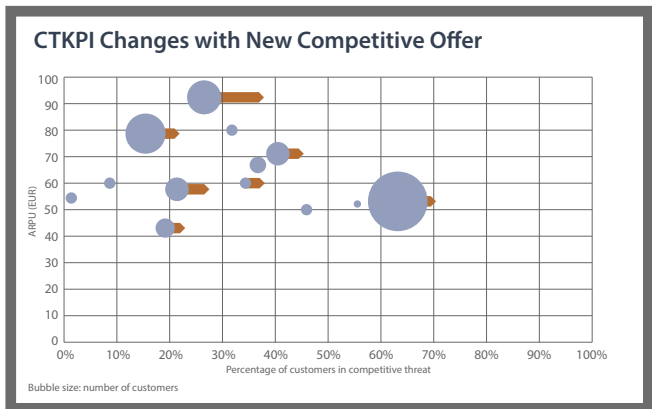
When the competition introduces a new Service Plan, a CPA will serve to clarify the potential impact to churn and revenue. First, model the plan in Clintview. Again, this task is not a complex task and will take a handful of minutes to execute. Then run the simulation on either the entire base, or a segment of the base. As an example, you may choose to run the simulation on the subscribers of a particular Service Plan that you feel is in direct competition with the competitor's new Service Plan. The results will show the change of CTKPI compared to the old situation.

However, the results will also show how much a discount a subscriber needs in order to placate their temptation to switch. With this information, an operator can launch a highly targeted, proactive loyalty campaign that does not give away more than is necessary in order to retain their subscriber base.

This analysis of "Competitive Threat" makes it easy to evaluate the efficacy of a new Service Plan based on its affect on revenue, taking into account the impact of cannibalization:



Note that as the amount of savings decreases, so does the acceptance rate.



Next step: assess the value of a competitive pricing analysis

Hopefully by now the value of Competitive Pricing Analysis is clear. However we strongly suggest you assess the potential value of a CPA of your Service Plans by picking a few Service Plans and their associated users. A simple assessment will help build the business case for optimizing the Service Plan and Offer portfolio, which may involve creating new Service Plans, and migrating subscribers to them.

The full CPA assessment will enable Marketing to quantify the pricing premium that every subscriber is willing to pay for their usage. Knowing this premium should drive pricing of New Service Plans and Offers. Our experience tells us that the incremental revenue of this premium to CSPs is nearly 10% of their Service Plan revenue. By developing CPA capabilities within the organization, amount of lost revenue can be reduced by as much as 40%. To put it in perspective, most developed market Tier 1 Operators can assume they will recapture hundreds of millions of Euros. Most other industries with the same revenue goals as telecom employ CPA in order to ensure they are not unnecessarily foregoing revenue. Telecoms have a lot on their plate as the market has shifted with the advent of smartphones. However, focusing on tangential revenue streams such as premium content will not yield as much benefit as CPA. Marketing owns the business case. Marketing needs to partner with IT. Together, they will make a significant rise in revenue, with a small amount of incremental investment, and little bit of hard work.

With the data warehouse and pricing analytics platform in place, you can easily assess last fiscal year's cannibalization due to new Service Plans. You can also assess the cost of accepted Loyalty Offers. These figures will almost automatically build the case for CPA.

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