

# «Μεθοδολογία της Έρευνας» Προσεγγίσεις και Πρότυπα... 21 Φεβρουαρίου 2013

## Μεθοδολογία Σύνθεσης Μεθόδων Εξόρυξης Επιχειρηματικών Δεδομένων & Έρευνας Αγοράς για την Βελτιστοποίηση της Πολιτικής Διατήρησης Πελατών

Απόστολος Ν. Γιοβάνης Γιώργος Πολυχρονόπουλος

Τμήμα Διοίκησης Επιχειρήσεων ΤΕΙ Αθήνας

## Πελάτες & επιχειρήσεις στην εποχή της κρίσης

## Πελάτες

Μείωση Εισοδήματος

Ραγδαίες Τεχνολογικές Εξελίξεις[

Πελάτες

Περισσότερο ενημερωμένοι Περισσότερο απαιτητικοί Περισσότερο ευαίσθητοι

## Επιχειρήσεις

F. Reichheld: μια αύξηση κατά 5% στη διατηρησιμότητα των πελατών μπορεί να βελτιώσει από 25% έως 100% τα κέρδη της επιχείρησης



True Loyalty = Satisfaction x Involvement x Affinity

Satisfaction: ικανοποίηση

Involvement: εμπλοκή πελάτη

Affinity: συναισθηματικό δέσιμο/έλξη για τη μάρκα

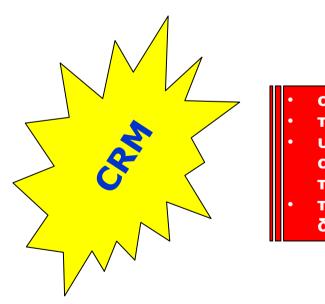
## Customer Retention – Διατήρηση Πελατών



Πηγή: Βιβλίο «PEAK» του Chip Conley

## **CRM (Customer Relationship Management)**

**Σύστημα διοίκησης** που επιτρέπει στον οργανισμό να εντοπίσει, να προσελκύσει και να αυξήσει τον αριθμό των αφοσιωμένων και επικερδών πελατών του, κάνοντας ορθή διαχείριση των πελατειακών σχέσεων μέσα από την κατανόηση, την εκτίμηση και τη διαχείριση των αναγκών των πελατών με βάση τη γνώση που έχει αποκτηθεί για αυτούς (Bradshaw και Brash, 2001).



- · οργάνωσης της επιχείρησης
- · τμηματοποίησης των πελατών
- υιοθέτησης στάσεων και συμπεριφορών που ικανοποιούν τους πελάτες
- την εφαρμογή πελατοκεντρικών διαδικασιών

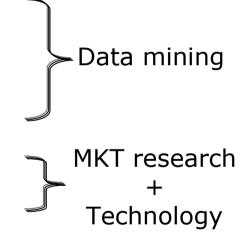
- βελτιστοποίηση της κερδοφορίας
- αύξηση των εσόδων
- αύξηση της ικανοποίησης του πελάτη

Εταιρεία Συμβούλων Gartner & Thompson και Moscardini, 2002

## Διατήρηση Πελατών - Μεθοδολογική προσέγγιση

## 1. Μεθοδολογία ανάπτυξης πολιτικών διατήρησης πελατών

- Μοντέλο πρόβλεψης διαφυγής Churn prediction model
- Τμηματοποίηση πελατειακής βάσης Churn segmentation
- Ανάπτυξη προγραμμάτων διατήρησης πελατών Retention campaigns development



## 2. Εφαρμογή στον κλάδο της κινητής τηλεφωνίας

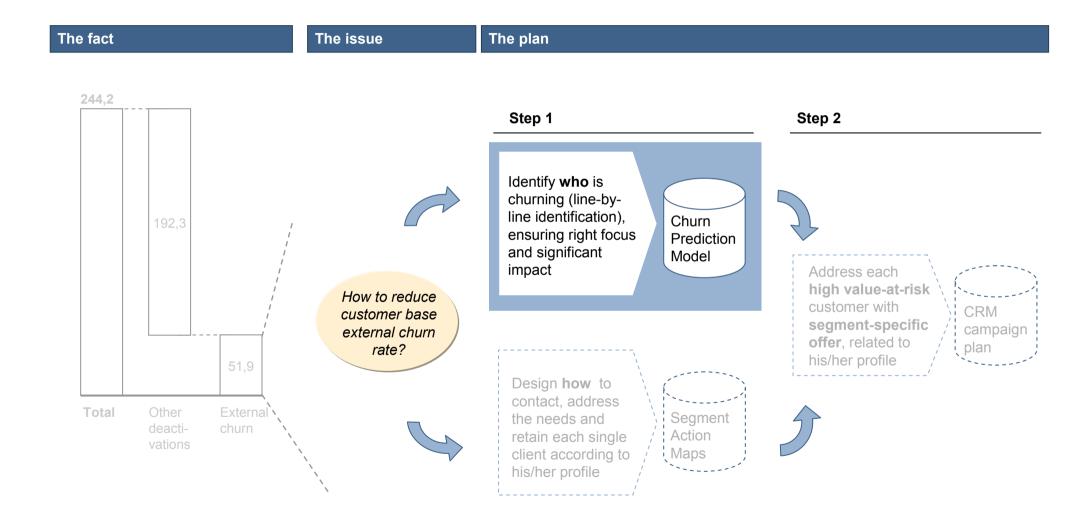
### **Customer retention**

The fact The issue The plan 244,2 Step 1 Step 2 Identify who is churning (line-byline identification), Churn 192,3 ensuring right focus Prediction and significant Model impact Address each high value-at-risk How to reduce customer with CRM customer base segment-specific campaign external churn offer, related to plan rate? his/her profile 51,9 Design how to contact, address Total Other Voluntary the needs and Segment deactiexternal Action retain each single vations\* client according to Maps his/her profile

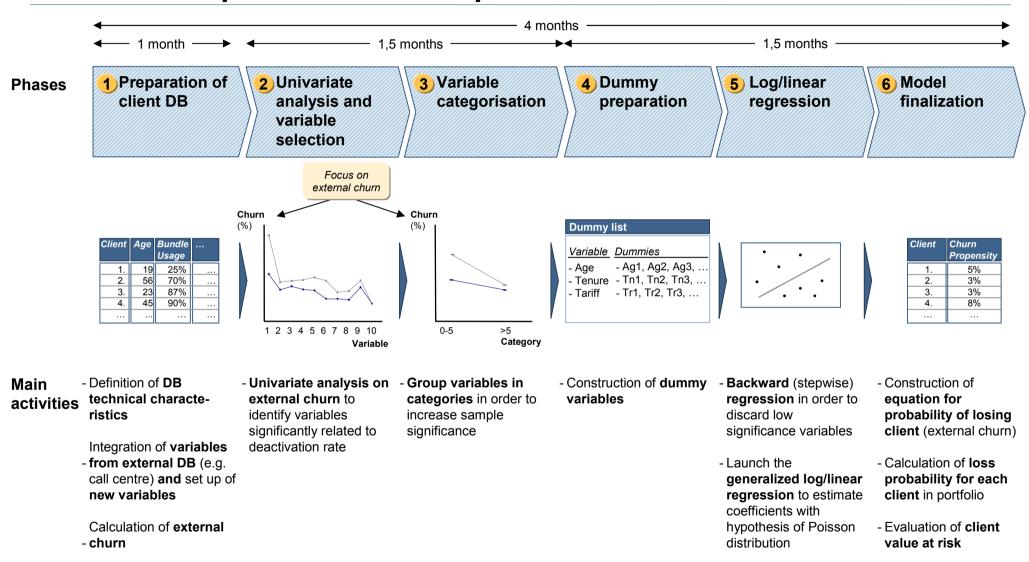
## **Proposed Methodology Steps**

- Churn prediction model
- Churn segmentation
- Retention campaigns development

## **Churn prediction model development**



## Phases of the prediction model update



According to the results of backward regression, 12 variables are used in churn prediction model update, after discarding those with low predictive ability and reviewing or introducing others

## Variables used in the churn prediction model update

	Variables tested in the churn prediction model update	Variable used in churn prediction model update			
Client personal data	- Age - Gender	- Age			
Contract characte- ristics	<ul><li>Tenure</li><li>Tariff plan</li><li>Payment type (e.g. bank payment)</li><li>Value segments</li></ul>	- Tenure - Tariff plan			
Mobile usage	<ul> <li>- % of outgoing calls to fixed lines over total calls</li> <li>- Total calls (average of last 6 months)</li> <li>- % of SMS revenues* over total revenues</li> <li>- % of calls during weekdays over total calls</li> <li>- Roaming clusters (nr. of months with minimum roaming activity)</li> <li>- Effective bundle usage (average of last 6 months)</li> <li>- % of minutes to competition over outgoing minutes</li> <li>- % of last 2 months calls vs. last 6 months</li> </ul>	<ul> <li>- % of outgoing call to fixed lines over total calls</li> <li>- Total calls (average of last 6 months)</li> <li>- % of SMS revenues* over total revenues</li> <li>- Effective bundle usage</li> <li>- % of minutes to competition over outgoing minutes</li> <li>- % of minutes outgoing over total minutes</li> <li>- % of last 2 months call vs. last 6 months**</li> </ul>			
Service fruition	- Number of upgrades - Complaint calls to Call Centre	- Number of upgrades			
Handset characte- ristics	MMS enabled - Handset age	- Handset age			
	Further variables correlated with churn have been identified	After the backward regression, 12 variables result highly correlated with the external churn			

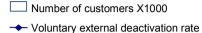
<sup>\*</sup> Calculated on n° of outgoing SMS times average SMS fee;

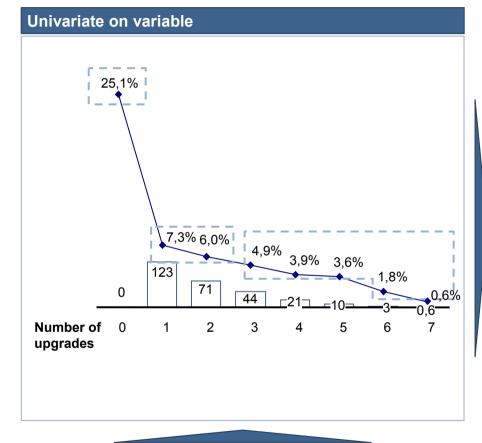
<sup>\*\*</sup> In order to evaluate increasing/decreasing call trends

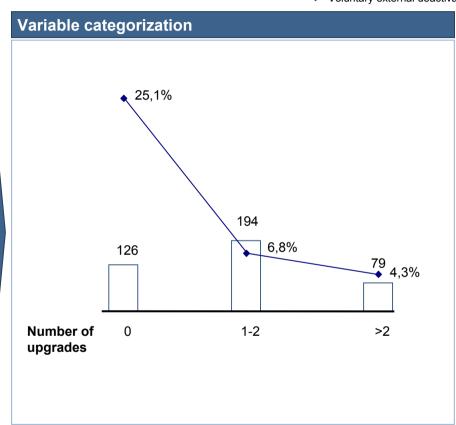
Variables have been grouped in wider categories, in order to increase sample population and, therefore, statistical significance

## **Variable categorization**

Annualized external deactivation rate\*







Univariate analysis allows to **highlight similar churn rate** behaviour along the variable trend

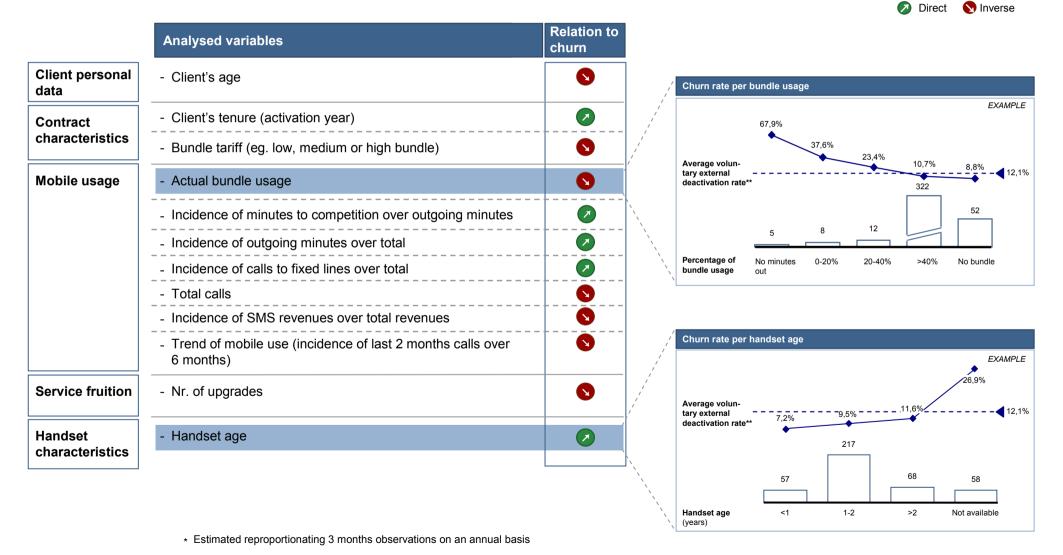
**Grouping variables** in wider categories presenting similar behaviour **allows to increase** the sample population and, therefore, the **statistical significance** 

Churn drivers have been identified among variables regarding client profile, contract characteristics, mobile usage, service fruition and handset characteristics

## Univariate analysis of external churn drivers

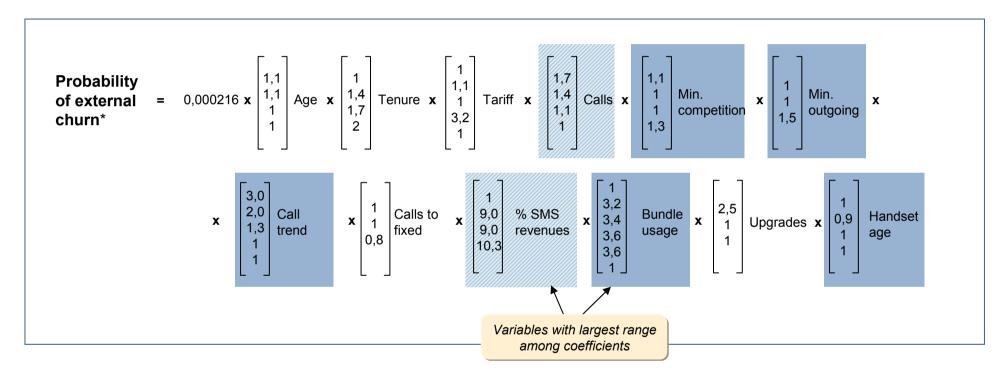
Annualised external voluntary deactivation rate\*, Thousand of customers

Proportionality among variable and churn rate:



## **Equation to predict the external churn**

= Arrays of coefficients

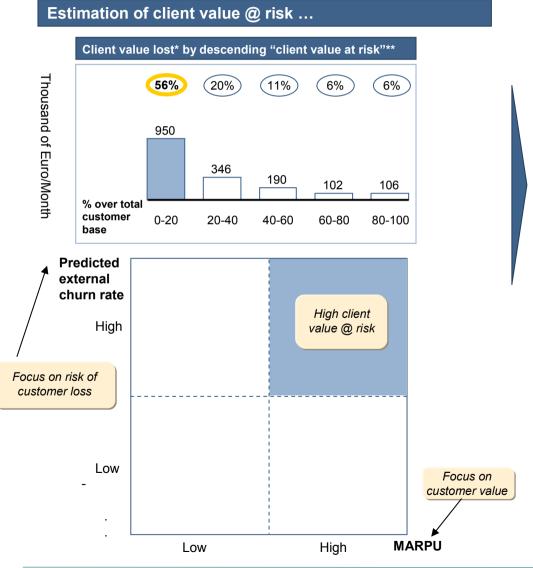


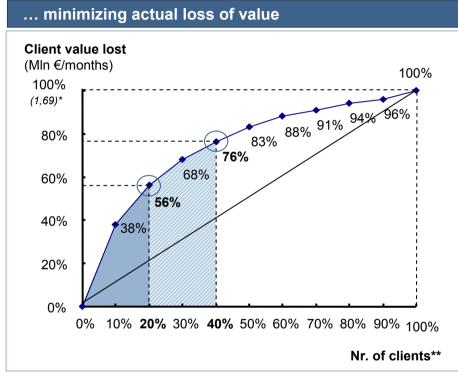
#### Variable explanation

- **Age** = Client age
- **Tenure** = First activation year
- Tariff = Tariff plan
- Calls = Total calls (average of 6 months)
- Min. competition = % of minutes to competition over outgoing minutes
- **Min. outgoing** = % of minutes outgoing over total
- Call Trend = % of last 2 months calls over 6 months
- Calls to fixed = % of outgoing calls over fixed lines over outgoing calls
- **SMS revenues** = % of SMS revenues over total revenues
- **Bundle usage** = Effective bundle usage (%)
- **Upgrades** = Number of upgrades
- **Handset age** = Age of the mobile device

## Identification of customers with highest level of value at risk

Nr. of customers, Euro/month,





- Customer prioritization by the estimated client value @ risk
- Highest value @ risk population (first 10% of customer base) represents more than 1/3 of total actual value lost

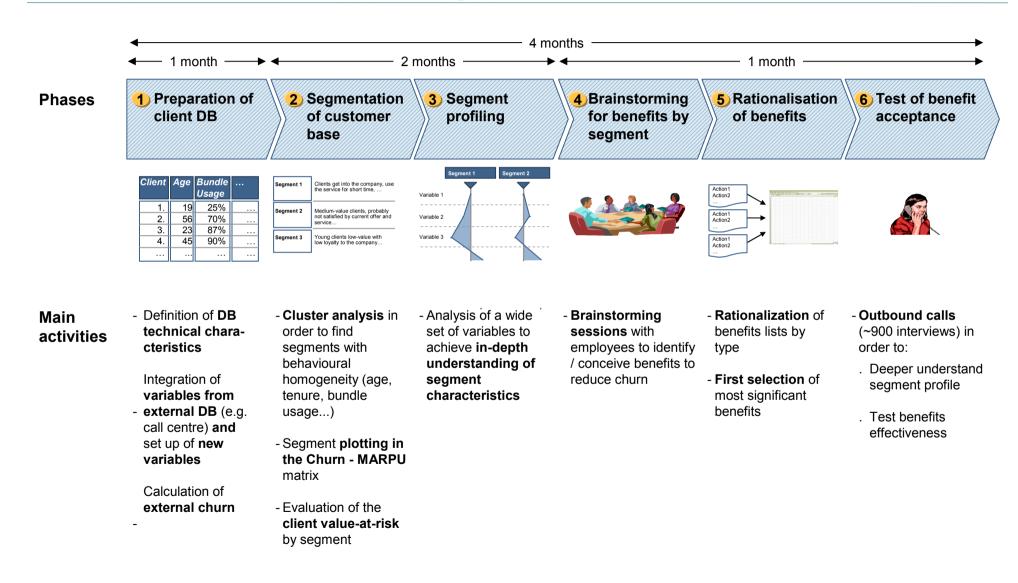
## **Proposed Methodology Steps**

- Churn prediction model
- Churn segmentation
  - Segmentation
  - Interviews on benefits acceptance
- Retention campaigns development

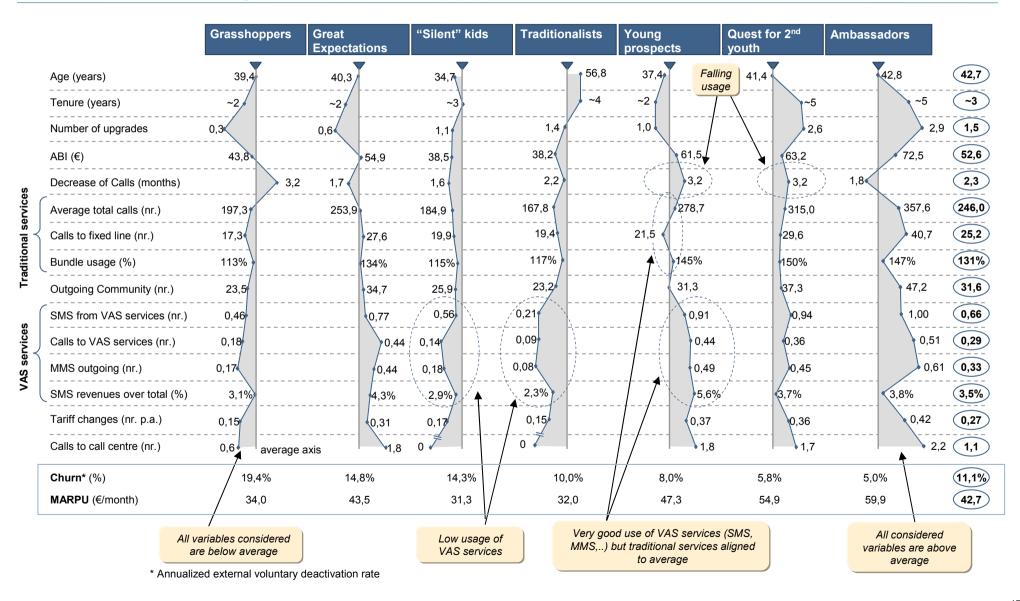
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The fact The issue The plan 244.2 Step 1 Step 2 Identify who is churning (line-byline identification), Churn 192.3 ensuring right focus Prediction and significant Model impact Address each high value-at-risk How to reduce customer with CRM customer base segment-specific campaign external churn offer, related to plan rate? his/her profile 51,9 Design how to contact, address Segment the needs and External Total Action retain each single client according to Maps his/her profile

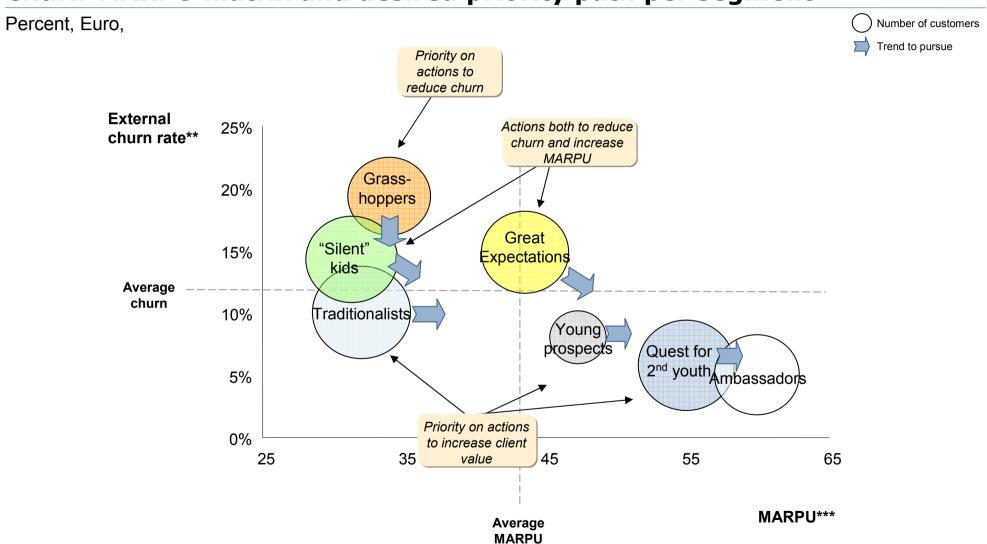
## Phases of the customer base segmentation



## ustomer base segmentation



## Churn-MARPU matrix and desired priority path per segment



<sup>\*\*</sup> Annualized external voluntary deactivation rate

<sup>\*\*\*</sup> Calculated as billed revenues + interconnection and roaming revenues - interconnection and roaming costs

# Identified actions in brainstorming sessions: the example of Great Expectations



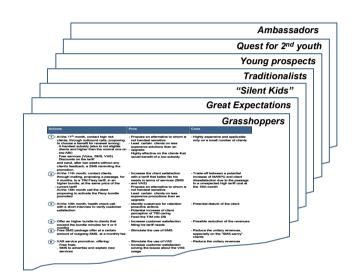
- 5 brainstorming sessions with 8-10 employees from CRM in order to draw actions to reduce churn
- Meetings conducted to favour "free thinking"
- Minimization of hierarchical constraints

Actions	Pros	Cons
At the 11 <sup>th</sup> month, contact high-risk clients, through outbound calls, proposing to choose a benefit for renewal among:     A handset subsidy (also to not eligible clients and higher than the normal one on low ABI)     Free services (Voice, SMS, VAS)     Discounts on the tariff, and send, after two weeks of no client feedback, an SMS reminding the promotion	otherwise receiving low subsidy	- <b>Highly expensive</b> and applicable only on a small number of clients
2 - At the 11th month, contact clients, through mailing, proposing a passage, for 4 months, to a Flexy tariff, in a higher bundle, at the same price of current tariff At the 15th month call client proposing to - activate the Flexy bundle promoted	<ul> <li>Increases client satisfaction with a tariff that better fits his/her needs in terms of services (SMS and VAS)</li> <li>Proposes an alternative to whom is not handset sensitive</li> <li>Leads certain clients on less expensive promotions than an upgrade</li> </ul>	- Trade-off between a potential increase of MARPU and client dissatisfaction due to passage to unexpected high tariff cost at the 15th month
3 - At the 10th month, health-check call, with a short interview to verify customer satisfaction	<ul> <li>Identify customers for retention proactive actions</li> <li>Potential increase of client perception of caring</li> <li>Feed info DB</li> </ul>	
Offer higher bundle to clients that exceed the bundle minutes for 4 or 6 months	- Increase <b>customer satisfaction</b> fitting his/her tariff needs	- Possible reduction of revenues
5 - Free SMS package offer at a certain amount of outgoing SMS, at a monthly fee	- Stimulate use of SMS	- Reduce unitary revenues, especially on "SMS-savvy"
6 - VAS service promotion, offering: . Free trials . SMS to advertise and explain new	- Stimulate the use of VAS	

For each action, coming from brainstorming sessions and categorized by type (benefits, promotions, ...) the correspondence to segment characteristics has been evaluated, in order to finally obtain a comprehensive list of actions

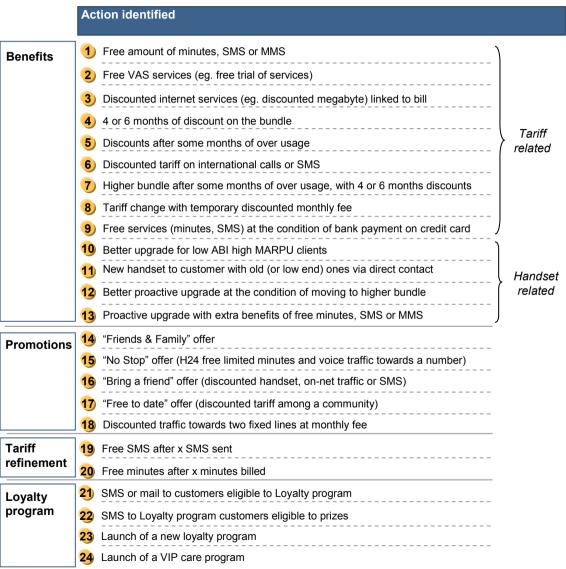


### Rationalization of the benefits



### Rationalization criteria

- **Categorization** of the actions by type (benefits, promotions, tariff refinement, loyalty programs)
- Qualitative evaluation of the action correspondence to segment characteristics and objectives



## **Proposed Methodology Steps**

- Churn prediction model
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  - Segmentation
  - Interviews on benefits acceptance
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A wide telephone survey (~900 interviews) highlighted different preferences per segment and room for gradually introducing new types of benefits apart from the handset subsidy

# Test of benefit effectiveness: findings of the outbound interviews

#### Interview test

### **Objectives**

- Test effectiveness of benefits and offers identified during the brainstorming sessions
- First indications on segment preferences
- Broadening of customer base profile

### Methodology

- Selection of short list of benefits and offers to be tested
- Random draw of a significant customer sample (only active clients)
- Interviews carried out by CS operators
- Almost 900 interviews

### Part (1) Customer Identification

- Identification of main user
- Evaluation of overall customer satisfaction

## Part 2 Research on benefit and promotion preferences

- Evaluation of benefit preferences
- Evaluation of alternatives to the contract renewal
- Evaluation of offer preferences

### Part (3\*) Research on customer behaviour

- Investigation on usage preferences (e.g. fixed vs. mobile telephone)
- Investigation on behaviour towards subsidy and tariff (e.g. behaviour in case of bundle over-usage)

### **Main findings**

- Benefits other than subsidy for handset (free minutes, discounts on bundle), enjoy very good acceptance rate within customer base
- Still, it appears early to expect significant impact from benefits related to innovative offers (VAS services, internet)
- Diverse expressions of preference on a per segment level, confirm the importance of using distinctive action plans per segment
- The persistence of strong preference of handset-related benefits suggests, anyway, a gradual approach to the changes of benefit structure

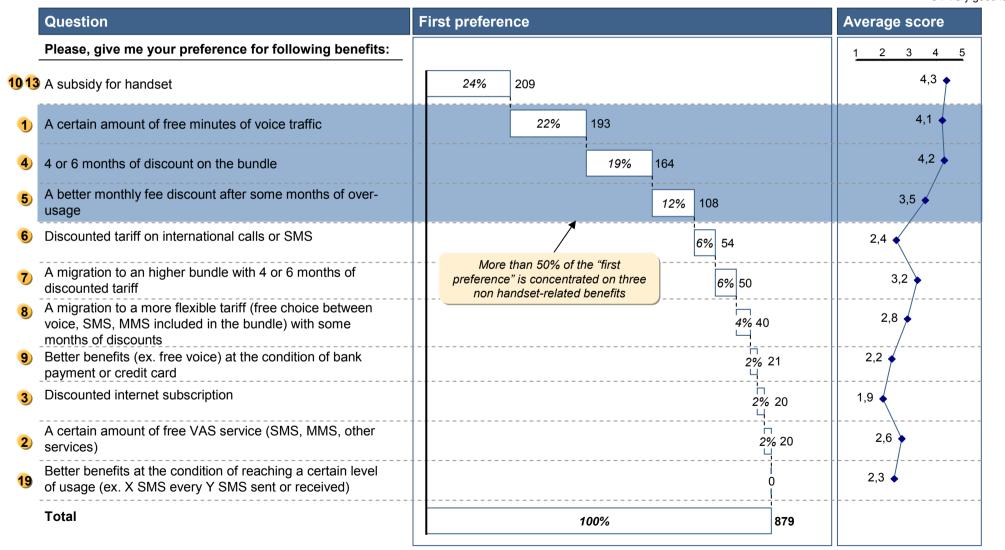
The survey showed a very good acceptance of benefits other than subsidy (free minutes, discounts on bundle)...

## Investigation on benefit acceptance

Nr. of interviewed clients, Average score

Legend:

1 : Very bad idea
5 : Very good idea



... and confirmed that the 7 churn segments have different preferences towards possible retention benefits...

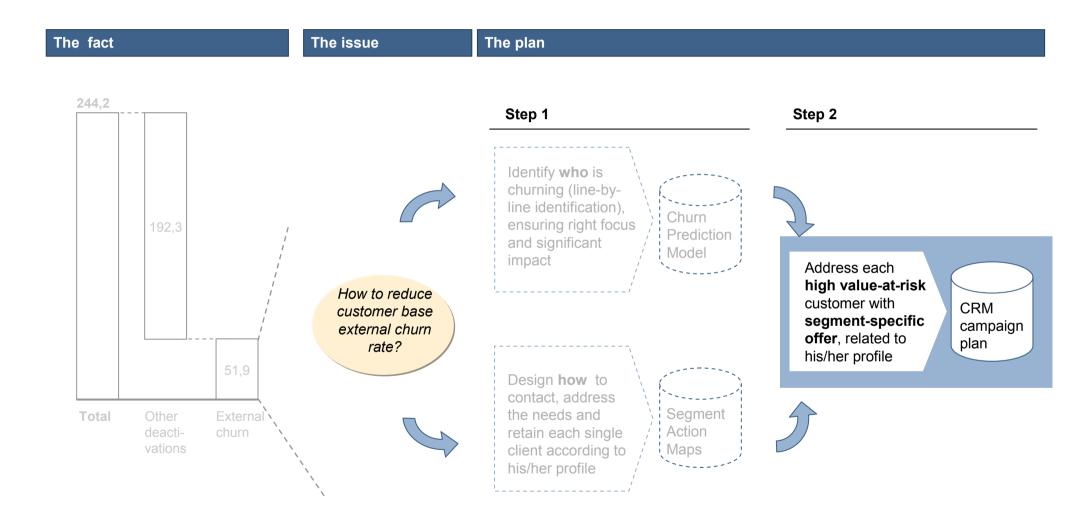
## **Investigation on benefit acceptance:** first three preferences per segment

% of preferences	First choice Second choice Third choice						
	Grasshoppers	Great Expectations	"Silent" kids	Traditionalists	Young prospects	Quest for 2 <sup>nd</sup> youth	Ambassadors
<b>013</b> A subsidy for handset	29%	20%	22%	22%	2 19%	22%	33%
A certain amount of free minutes of voice traffic	3 17%	3 19%	2 19%	1 28%	28%	1 25%	3 15%
4 or 6 months of discount on the bundle	23%	1 22%	3 16%	3 19%	11%	3 21%	20%
5 A better monthly fee discount after some months of over-usage	7%	16%	13%	13%	3 17%	8%	10%
6 A discounted tariff on international calls or SMS	5%	4%	6%	3%	8%	10%	8%
7 A migration to an higher bundle with 4 or 6 months of discounted tariff	5%	7%	7%	9%	4%	3%	7%
Other benefits*	13%	12%	18%	6%	13%	10%	8%

## **Contents of the document**

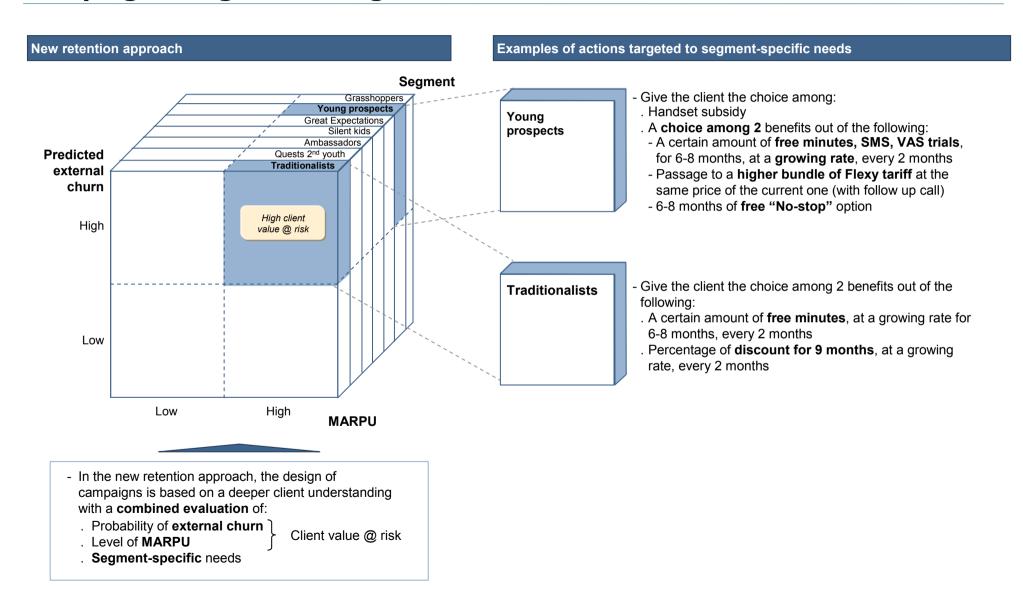
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## **New CRM approach to retention campaigns**



Implementation of new retention approach leads to improve retention effectiveness, through campaigns specifically targeted to different segment needs

## **Campaigns targeted to segment needs**



## Illustration of the campaign process

**EXAMPLE** 

### 3-step application:

- 1st CRM system adaptation to include proactive retention campaign
- 2<sup>nd</sup> Preparation and launch within CS environment
- 3rd Roll out into **POS**, ensuring access to same Siebel tool





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# Ευχαριστώ για την προσοχή σας