Claro Brasil

NET **Claro** **Embratel**

Using big data and analytics to improve customer experience

the experience of Claro in the use of Big Data to transform the relationship with its customers, improving results, increasing profitability and boosting the quality of service

Schedule

- **Who we are?**

- How we have used Analytics

- Examples

We are a Giant Company

Claro-Brasil

Top Telecom operator in
     Latin America

Claro-Brasil

➢ **Biggest operation of Grupo América Móvil**

➢ **60,1 MM** mobile phones

➢ **11,1 MM** fix telephony

➢ **8,6 MM** Broadband

➢ **9,9 MM** Pay-TV

In continuous evolution...

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PRODUCT FOCUS
Product Innovation

CONNECTION FOCUS
Connecting people, houses and companies

SOLUTION FOCUS
Convergence in multiservices

for complete and converged solutions

Enhance the customer experience Based on a complementary and integrated infrastructure

From a product-focused company

A strategy that goes beyond Connection

Scenarios for Industry in Brazil

Value of Infrastructure

ability to avoid telecommunications commoditization

View Claro Brasil

D Scenario

A Scenario

C Scenario

B Scenario

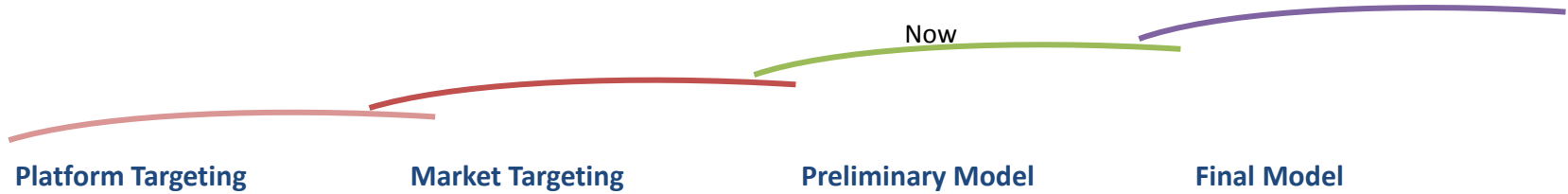Ability to generate additional value

Content and Application Value

Schedule

- Who we are**?**

- **How we have used Analytics**

- Examples

It begins with the construction of a preliminary model, with the addition of variables not yet studied

Development stages

Now

Platform Targeting	Market Targeting	Preliminary Model	Final Model

	Platform Targeting	Market Targeting	Preliminary Model	Final Model
History	▪ 14 variables ▪ Decision Tree ▪ Very different results per platform	▪ 14 variables ▪ Decision Tree ▪ The answer was always directed towards geographic separation (segments of cities, DDD's, etc.)	▪ 500 variables in 1 month ▪ 12 models (3 platforms x 4 segments) ▪ Machine Learning Techniques (gradient boosting)	▪ We'll add more history to the response variable
Conclusion	▪ Need 3 models per platform	▪ We defined 4 groups with different behaviors	▪ We grouped in 1 "model" per platform with satisfactory result	

Ilustrative

From the inclusion of other groups of variables, the model is enriched

	Data	Details
Already included in the template (+500)	**Register**	▪ Sales channel information, demographic partner and wired area
	Consumption	▪ Voice, data and SMS consumption
	Billing and payment	▪ Amount of invoices, payment data / defaults
	Devices	▪ Model and technology of the device
	Market data	▪ City Segmentation, Human Development Index (HDI)
	Community	▪ Identity of community to which each user belongs
	Products	▪ Possession of products at home or CPF
To be potentially included	**Customer Care**	▪ Calls in service channels with their respective reasons
	Campaigns	▪ History of participation in marketing campaigns and their results

Ilustrative

In the exploratory analysis and modeling phase, besides the construction of the models, we have the generation of strategic insights

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Analysis of variables already available, through modeling techniques.
Still in very simplified views, because of the low amount of data

Analysis Products

A

Modeling

- Construct models of propensity for convergence, with explanatory power / prediction;

- Direct better audiences;

- Optimize effort and leverage results;

- Selection of the most relevant variables.

B

Generating Insights

- By-product of analysis for modeling;

- Understanding of audiences with different conversions;

- Simplified view of model and complex for strategy.

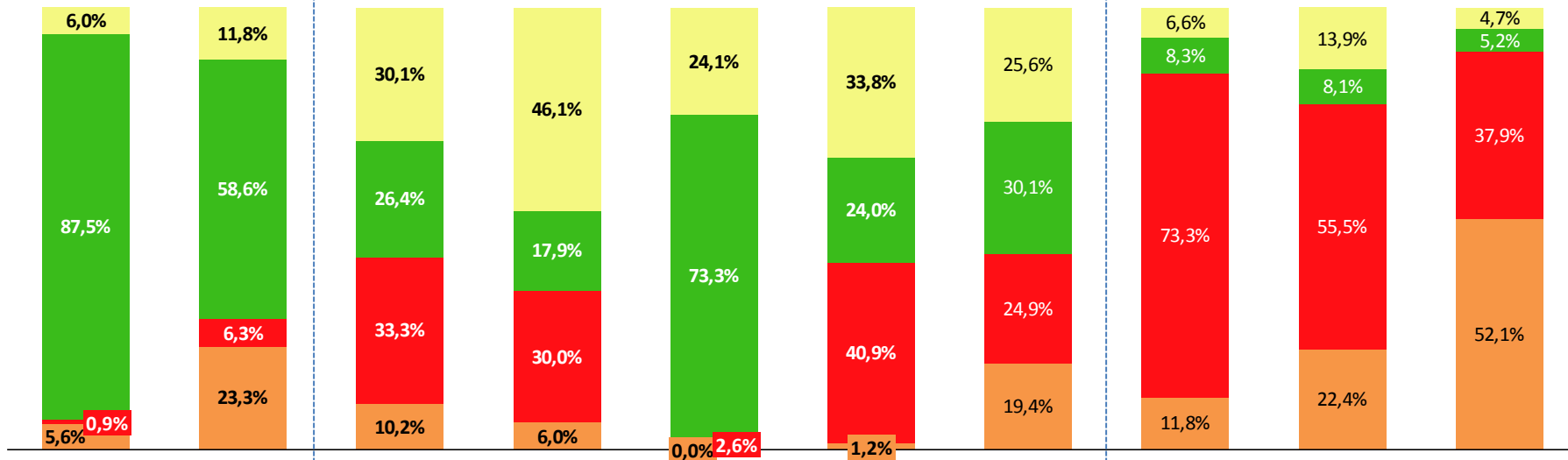- Who we are**?**

- How we have used Analytics

- **Examples**

Sales acceleration plan

Claro Brasil

Legend: Low Capture x Low Desc | High Capture x Baixa Desc | Low Capture x High Desc | High Capture x High Desc

Rich, high capture, low disconnect "Cruising Speed"

Middle class, increased disconnect "No energy"

Medium and low income, low catch and high disconnection "Down hill"

Column 1 (Rich):
- 6,0%
- 87,5%
- 5,6%
- 0,9%

Column 2 (Rich):
- 11,8%
- 58,6%
- 6,3%
- 23,3%

Column 3 (Middle class):
- 30,1%
- 26,4%
- 33,3%
- 10,2%

Column 4 (Middle class):
- 46,1%
- 17,9%
- 30,0%
- 6,0%

Column 5 (Middle class):
- 24,1%
- 73,3%
- 0,0%
- 2,6%

Column 6 (Middle class):
- 33,8%
- 24,0%
- 40,9%
- 1,2%

Column 7 (Middle class):
- 25,6%
- 30,1%
- 24,9%
- 19,4%

Column 8 (Medium/low income):
- 6,6%
- 8,3%
- 73,3%
- 11,8%

Column 9 (Medium/low income):
- 13,9%
- 8,1%
- 55,5%
- 22,4%

Column 10 (Medium/low income):
- 4,7%
- 5,2%
- 37,9%
- 52,1%

One CMS (Content Management System)
It allows the segmentation of content and offer of suitable content to the right person
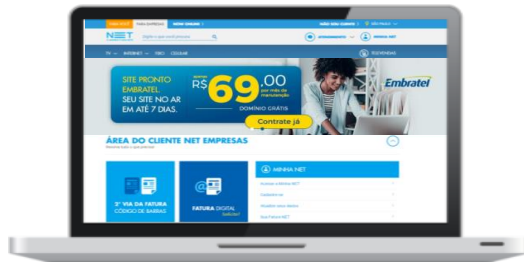
CROSS CONTENT AMONG SITES:
Communication from Cloud
Embratel in site NET

1. Online sales
2. Digital Service
3. Segmented communication
4. Quick Mailing
5. Predictive Recommendation
6. Self-management of the Technical Visit
7. Active digital channels
8. Convergence between brands
9. Artificial intelligence
10. NOW Online

GIS Engineering Study
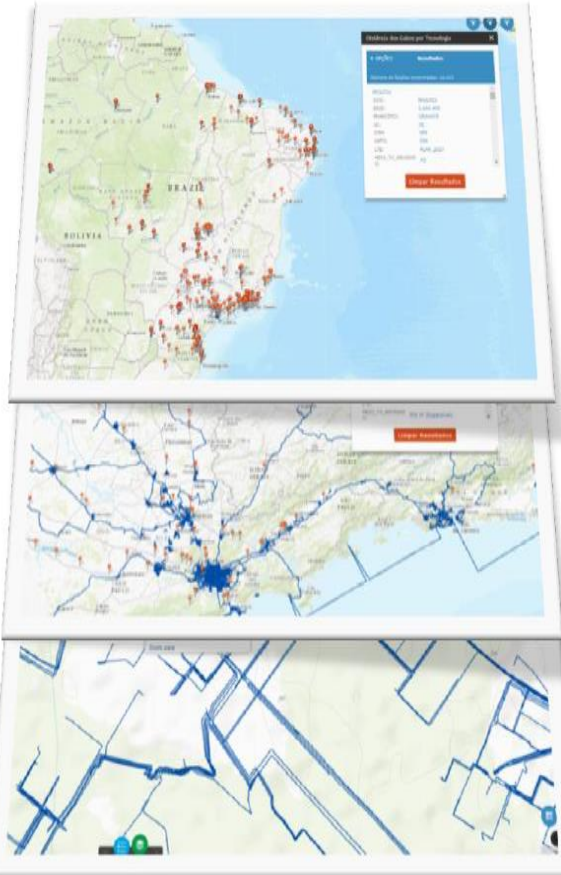
- Where is my fiber network?

- Where are my sites / antennas?

- Where is the infrastructure of the main competitors?

- What are the sites with leased transmission medium?

- Which sites do I have the possibility of replacing the third party transmission by myself?

- Which sites are served by Satellite?

- etc..