Using data mining to optimize direct marketing campaigns for fundraising

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WWF Switzerland
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Agenda

- **What it's all about!**
- **Data Mining**

WWF Worldwide

+100

In over 100 countries
on 5 continents

+5,000,000

Supporter

1961

Founding year

+5,000

Employees

Mission: stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

WWF Switzerland

98%

Awareness

40 Mio.

Income

180

Employees

260’000

Supporters

WWF focusses on:

.. conserving the world’s **biological diversity**

.. ensuring that the use of **renewable natural resources** is **sustainable**

.. promoting the **reduction of pollution and wasteful consumption**

And all this to preserve our most precious treasure…

Agenda

- What it's all about!
- Data Mining Menu
  - « mise en place »
  - Appetizer
  - Main dish
  - Dessert

« mise en place »

Agenda

- **What it's all about!**
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  « mise en place »

  Appetizer
  Our segmentation

  Main dish

  Dessert

1st level segmentation

legal entities	major donors
prospects	adults
former supporters	children & adolescents

Income: CHF 25 Mio. (60%)

2nd level segmentation

high value	A -	A +
	B -	B +
low	C -	C +

low — commitment — high

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« mise en place »

Appetizer

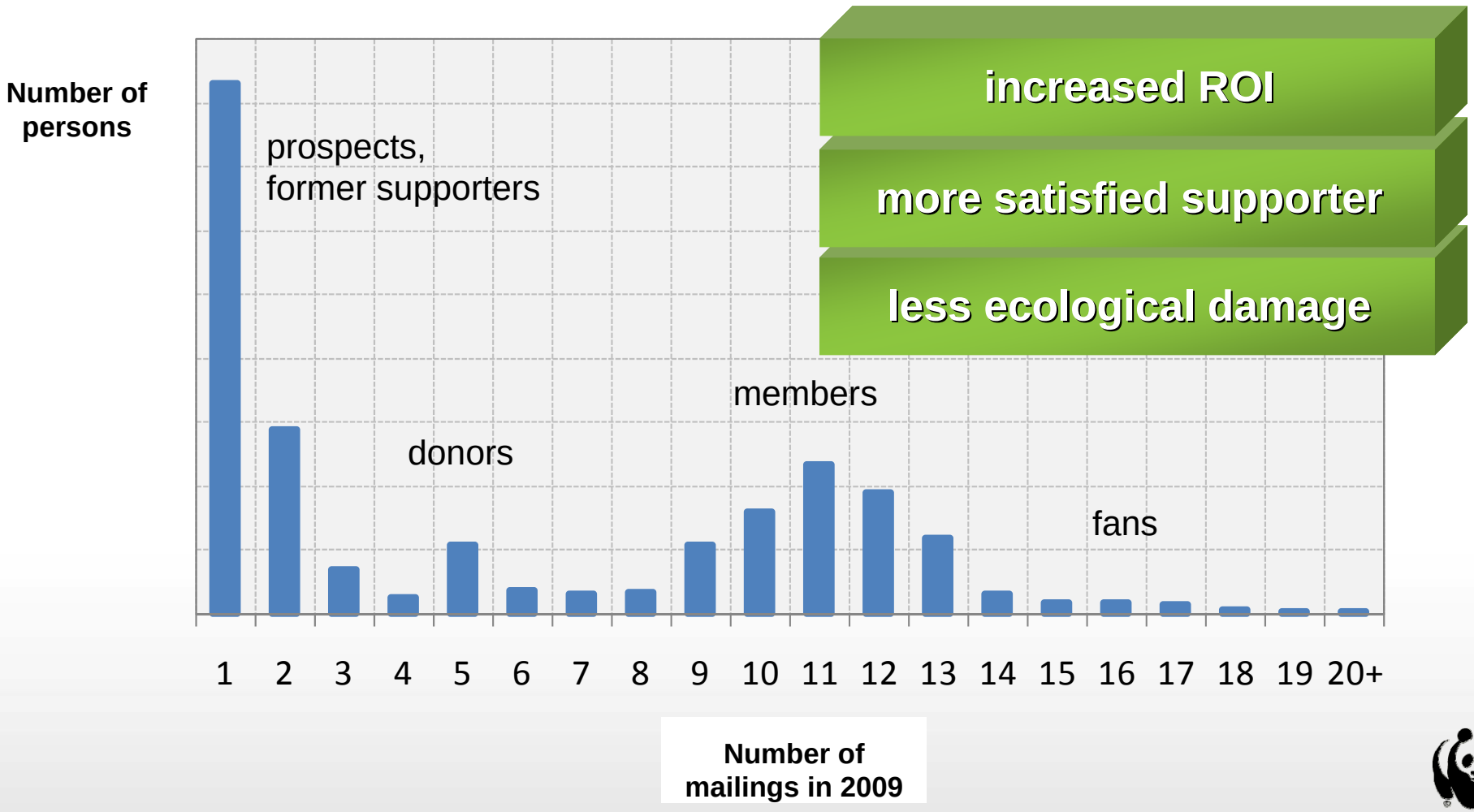
Management of return shipments

Main dish

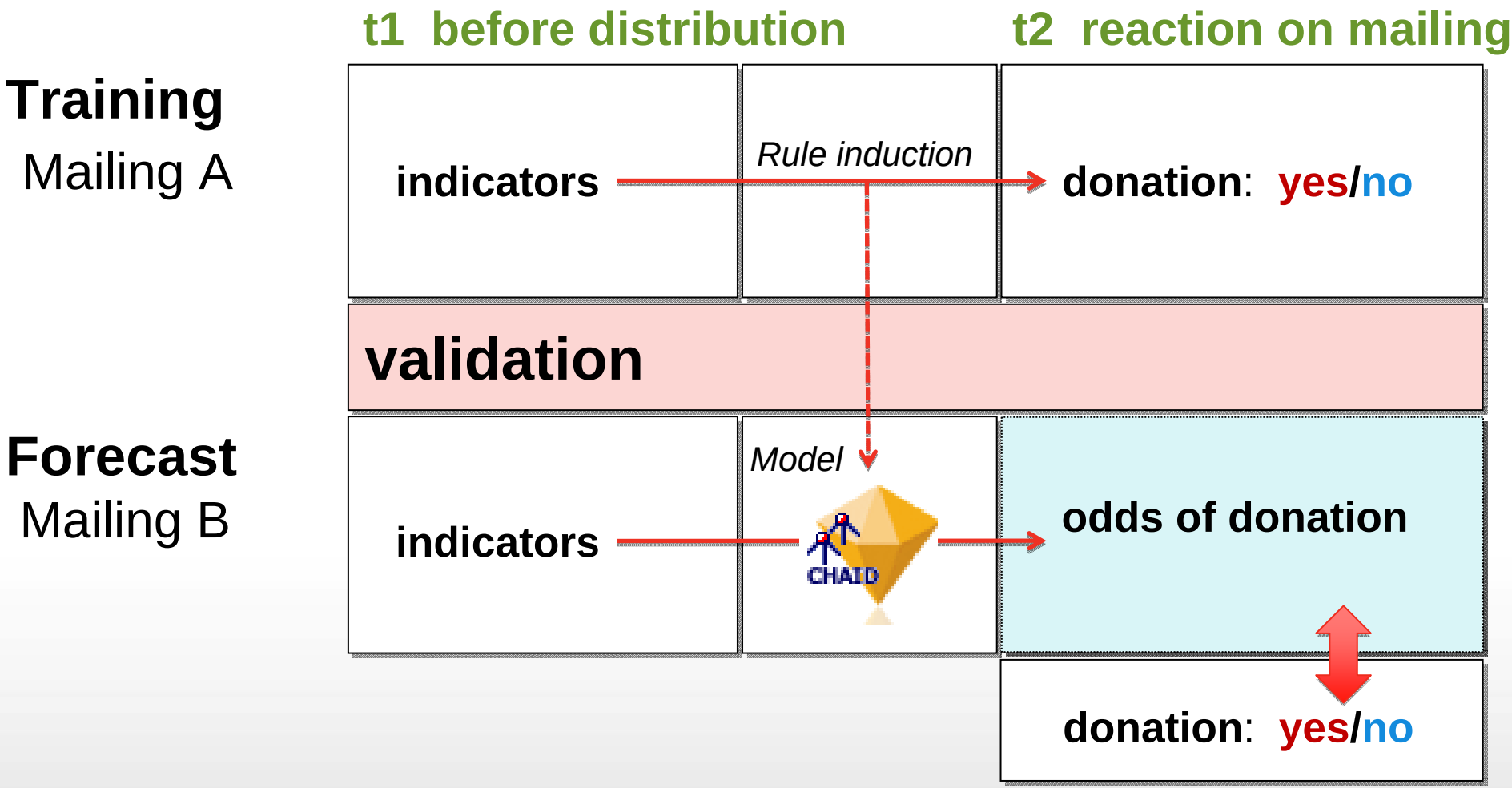
Fundraising mailings

Dessert

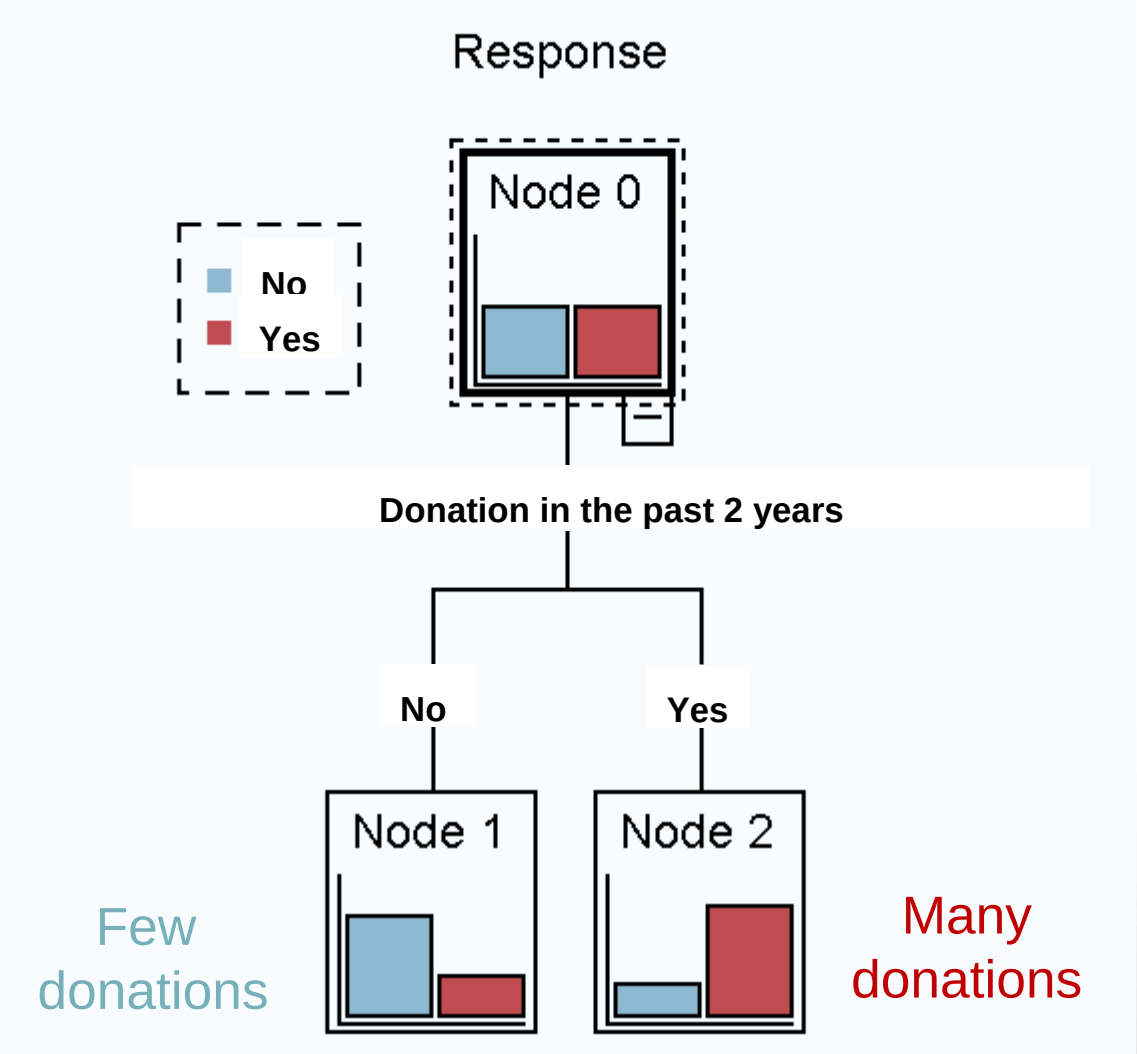
Optimization of the selection for mailings



Modelling: learning from the past



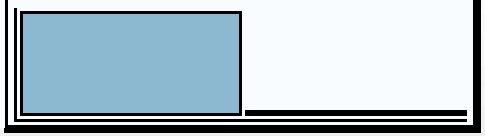
Type of model: decision tree



The whole decision tree

Node 87

Category	%	n
0.000	97.248	636
1.000	2.752	18
Total	1.385	654



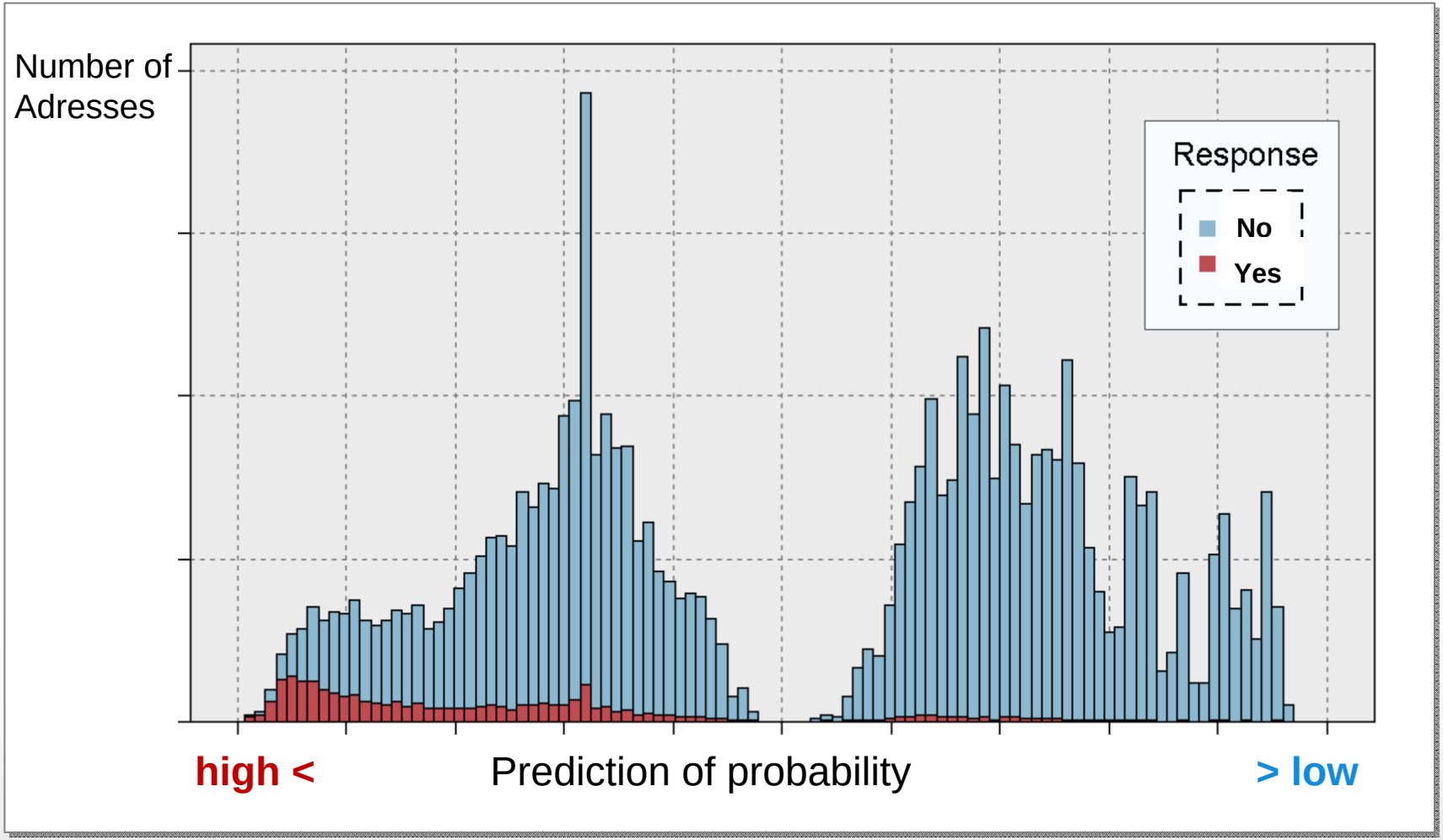
Few donations

Node 99

Category	%	n
0.000	1.794	24
1.000	98.206	1314
Total	2.835	1338

Almost only donations

Prediction
applying the model to new data



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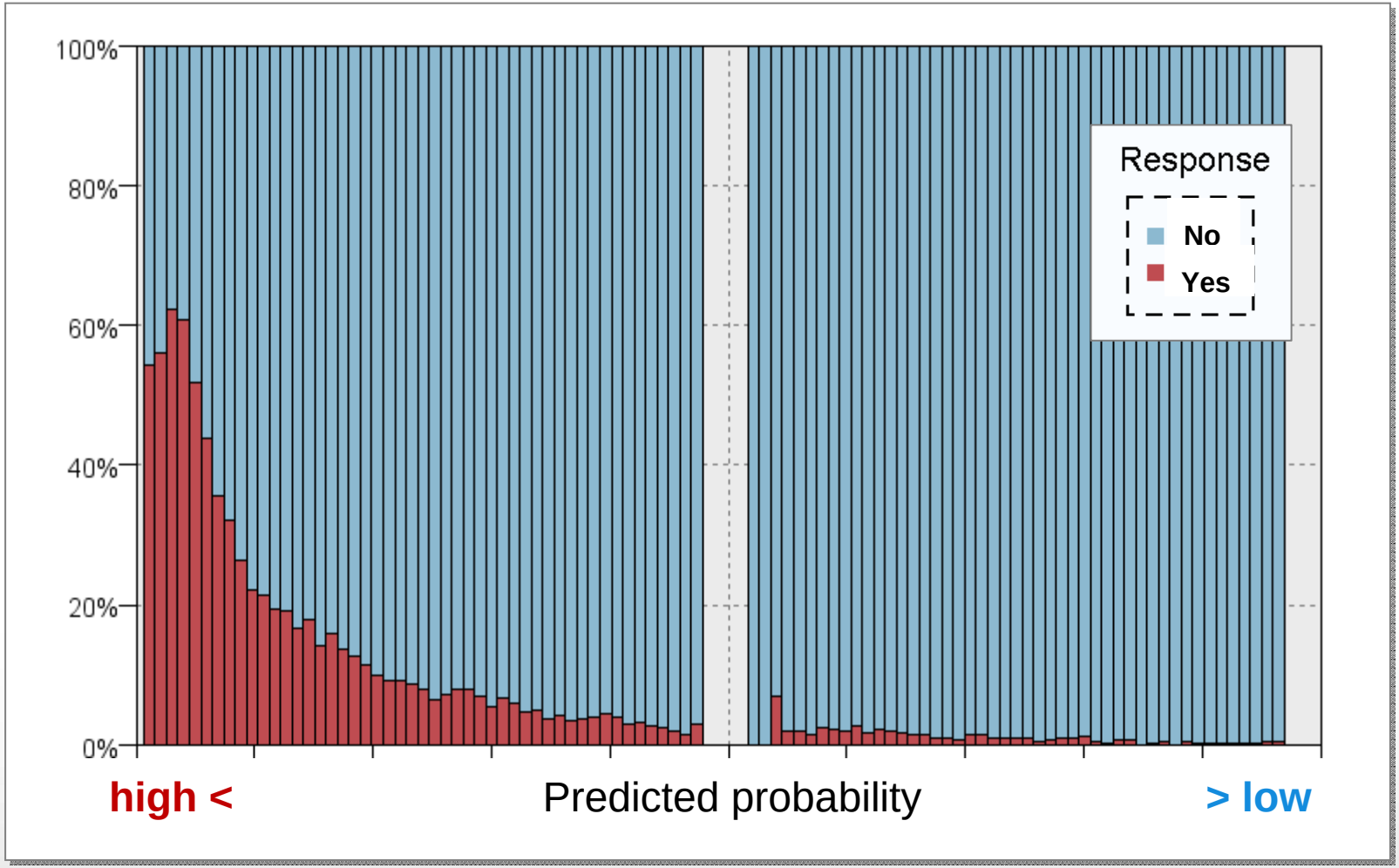
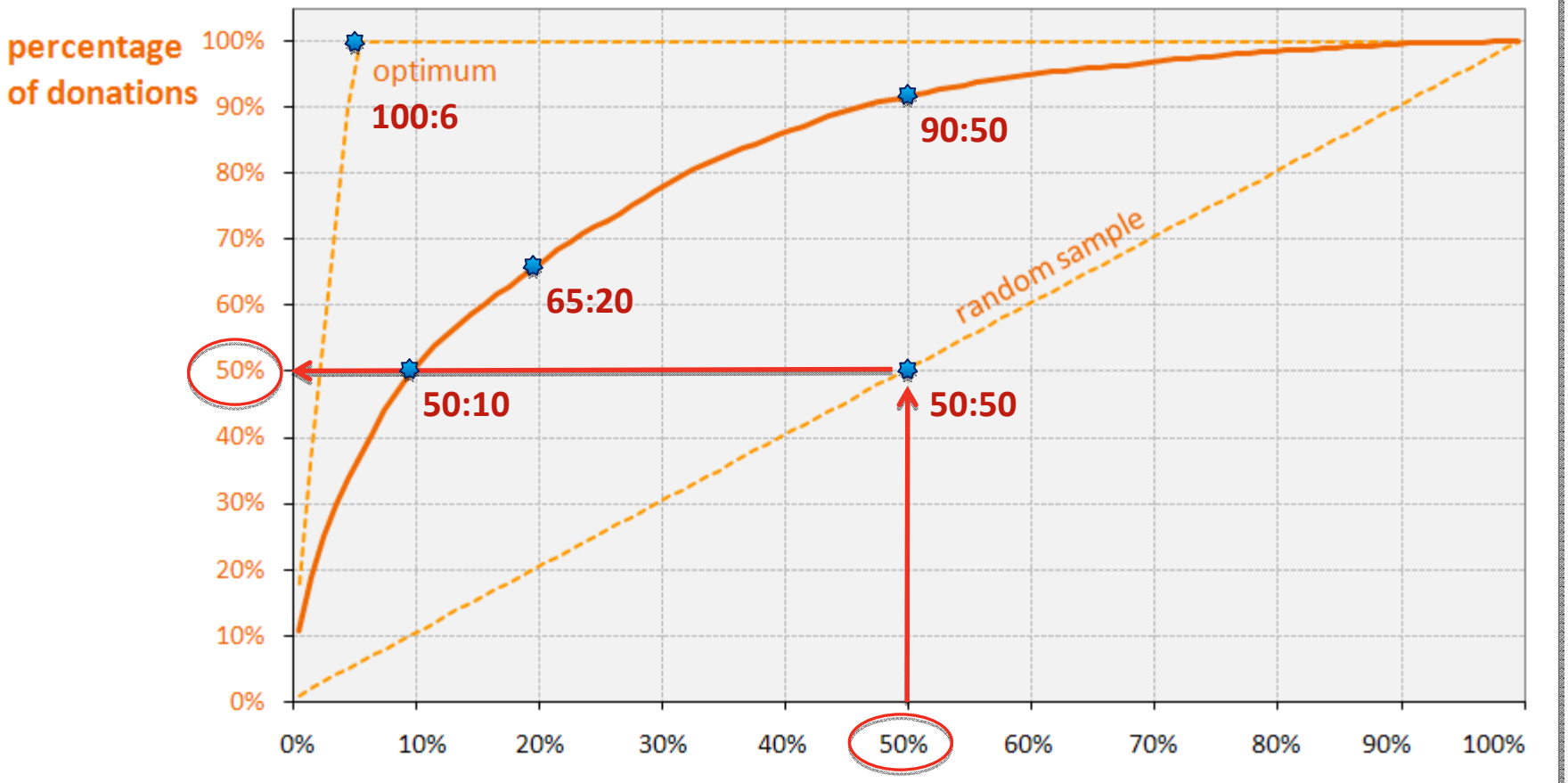
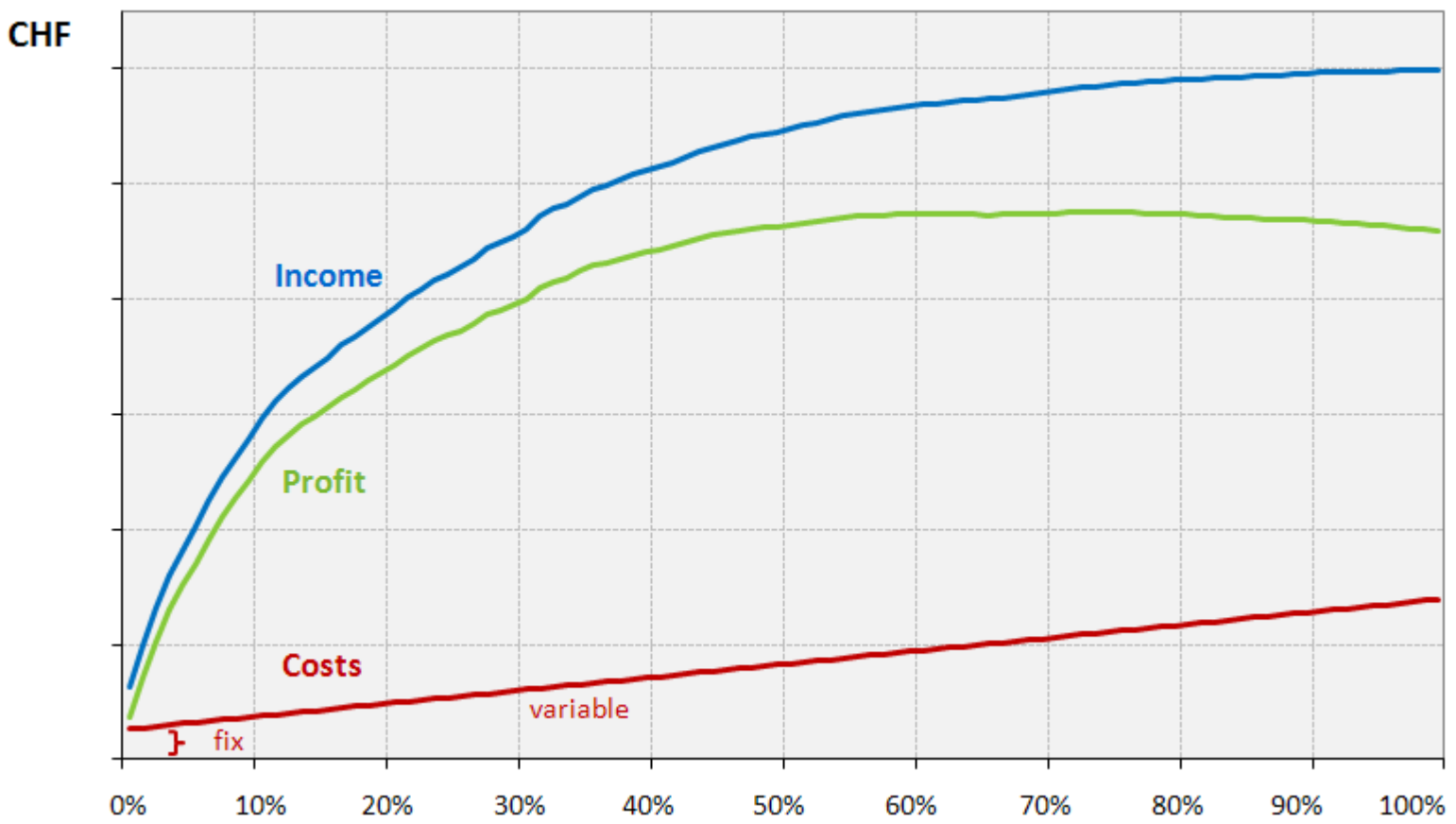


Model performance
Gains chart

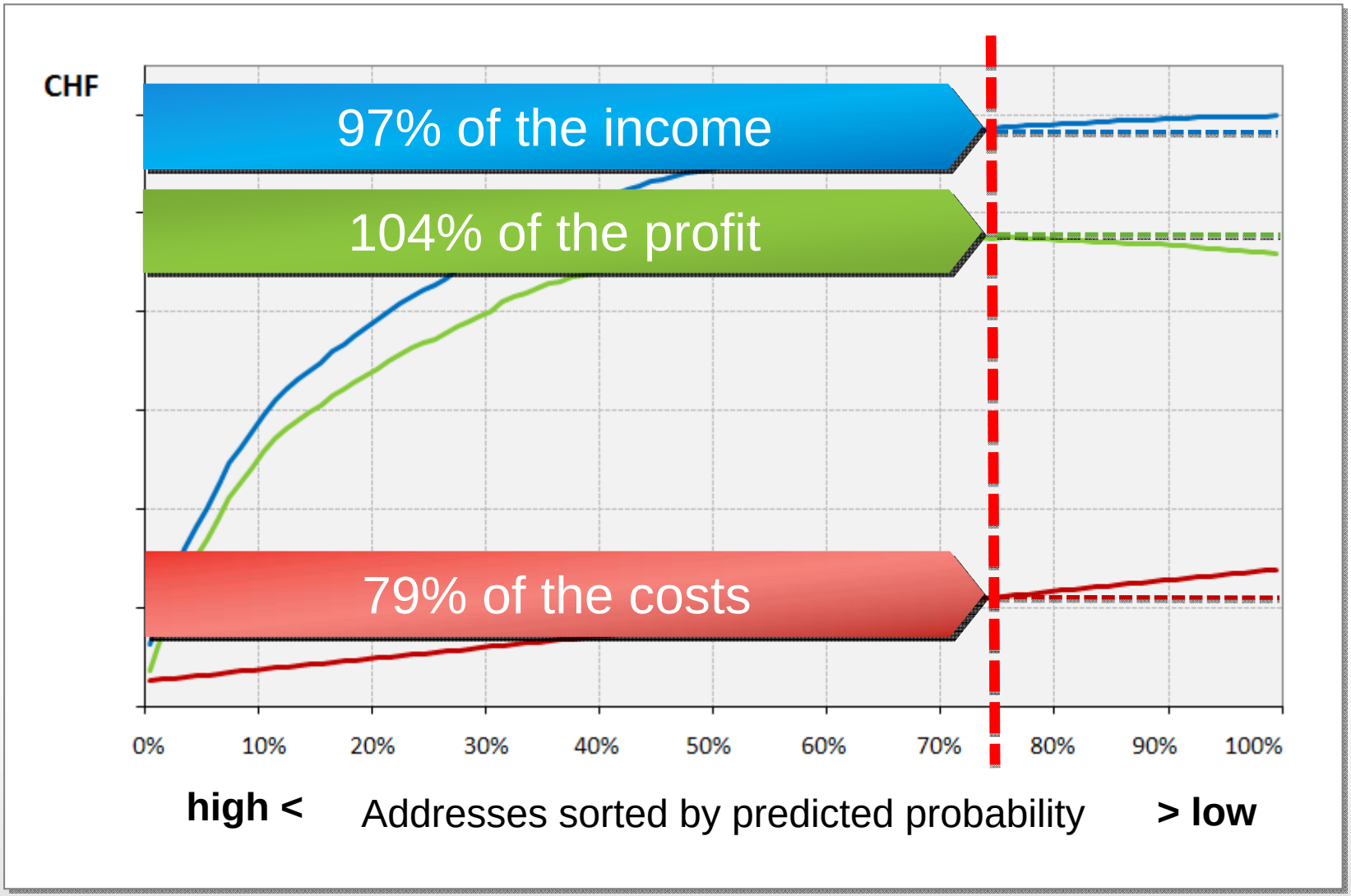


Model performance
Monetary

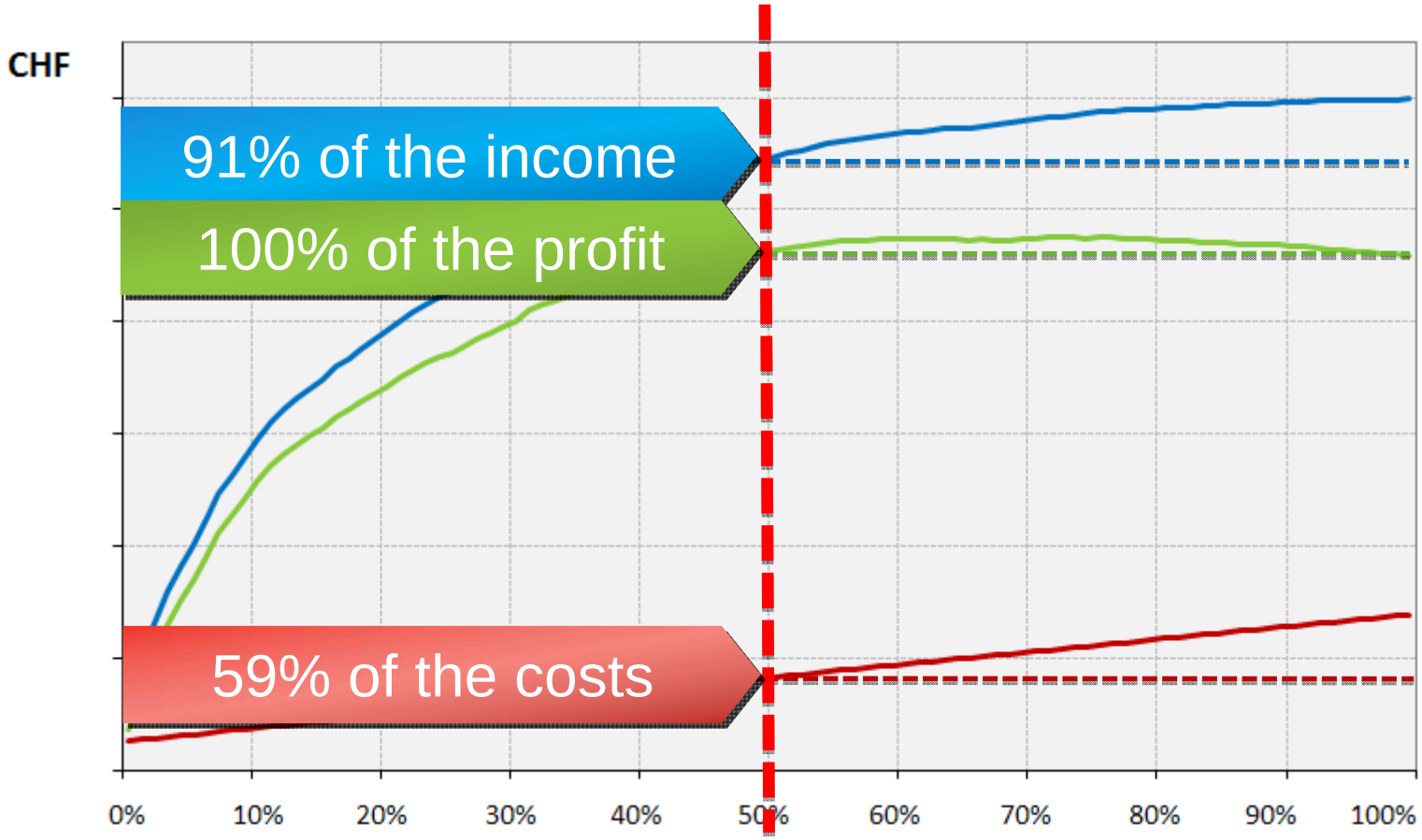


high < Addresses sorted by predicted probability **> low**

Determine the cut of point
Profit maximization

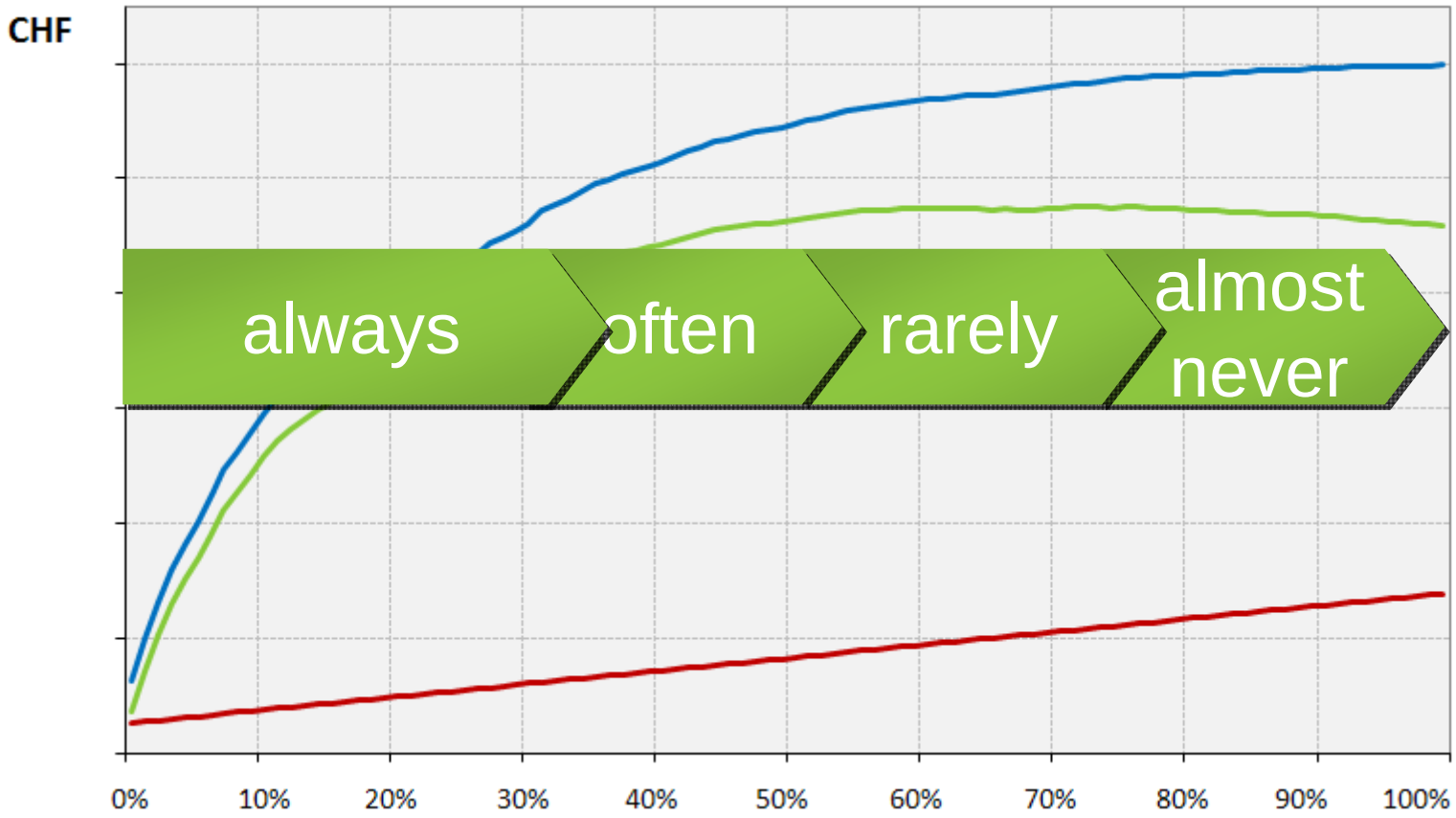


Determine the cut of point 2
Return on investment



high < Addresses sorted by predicted probability **> low**

Determine the optimal frequency
Rotation



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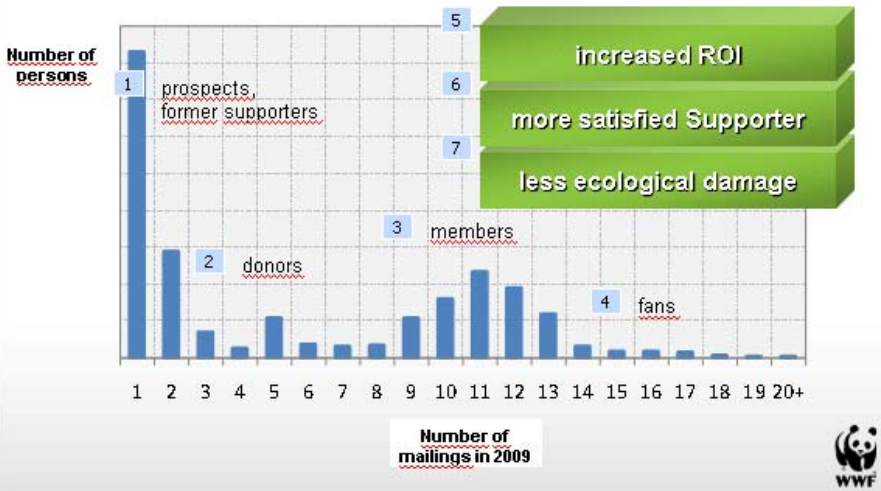
Summary

Optimization of the selection for Mailings



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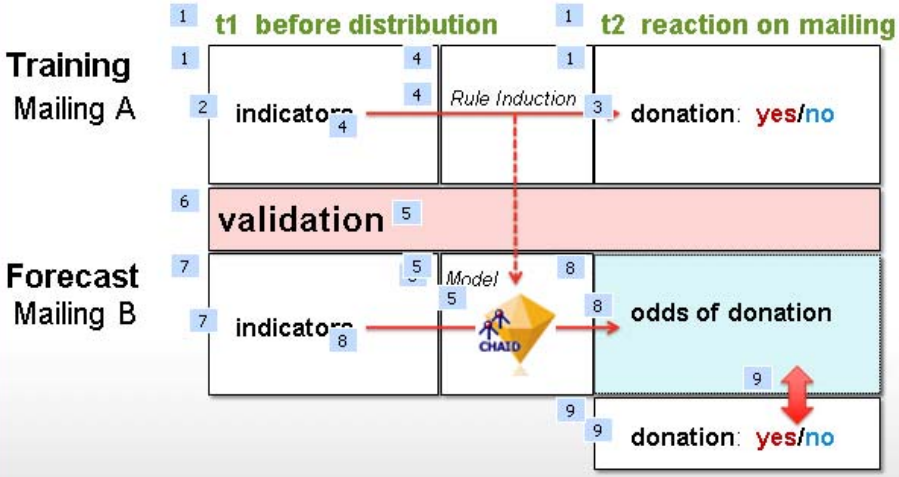

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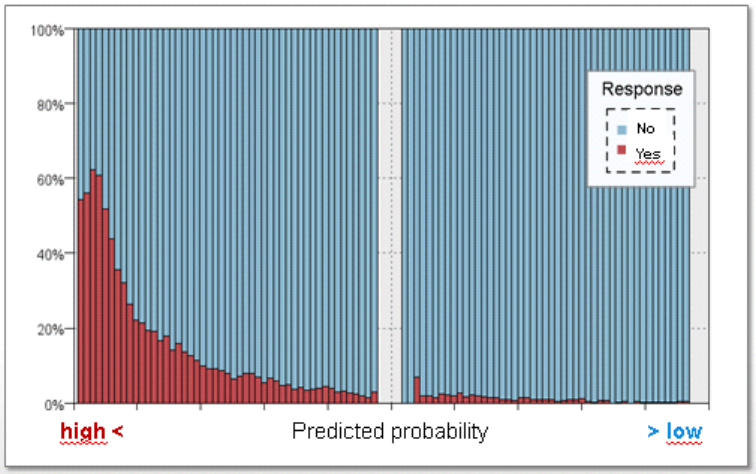

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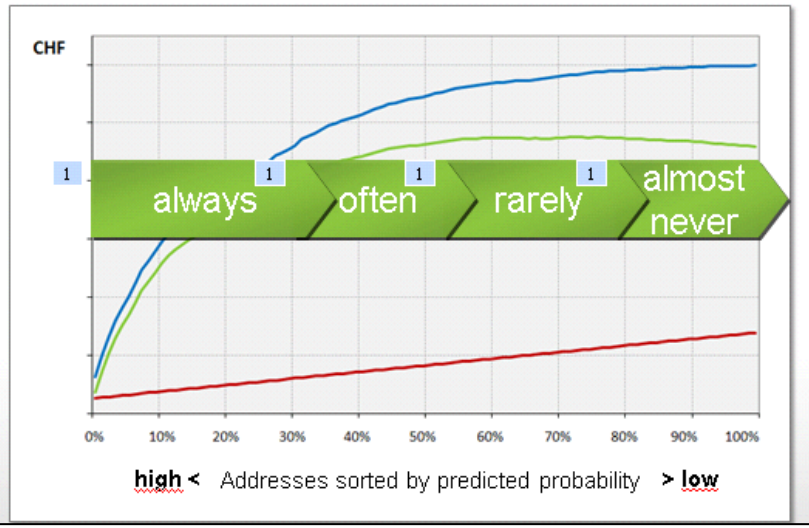

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What else we use IBM SPSS Modeler for

- **Modeling for Cross-/Upselling**
- **Ad hoc analyses for strategic decisions**
- **Returning analyses**
  - Monthly Cockpit
  - Analyses on the Level of products and campaigns
  - Data quality checks

Successes

- ✓ **From gut instinct to knowledge**

  Implementation of organizational transformations

- ✓ **More value for donated money**

  Increased return on investment

- ✓ **Several marketing-changes resulted**

Future

Optimizing the rotation

Online/Offline-Mix

Thank you!