#### **BusinessConnect**

A New Era of Smart

# Efficiënter prospecteren door predictive analytics

Evi Van De Velde – Pieter Van Bouwel











- Since 1991
- Market leader in Personal Financial Planning
- 15.000 customers
- Expertise:
  - Bank licence
  - Property licence
  - Certified IAB accountant and tax consultant
  - Licence life insurance



Optima Why Optima?









#### **Optima Database Marketing**

#### Telemarketing

# Direct mailing inviting to infosessions





#### Optima



## Our goals $\rightarrow$ how $\rightarrow$ who

#### • GOALS:

Effective and efficient use of our database? Right target? Check our selection criteria

#### • HOW:

Predictive Analytics: in-house vs proof-of-concept Seminars

#### • WHO:

Consultancy Website: ING case, references in Marketing & acquisition Python Predictions

#### That's how we started in Q1 2013

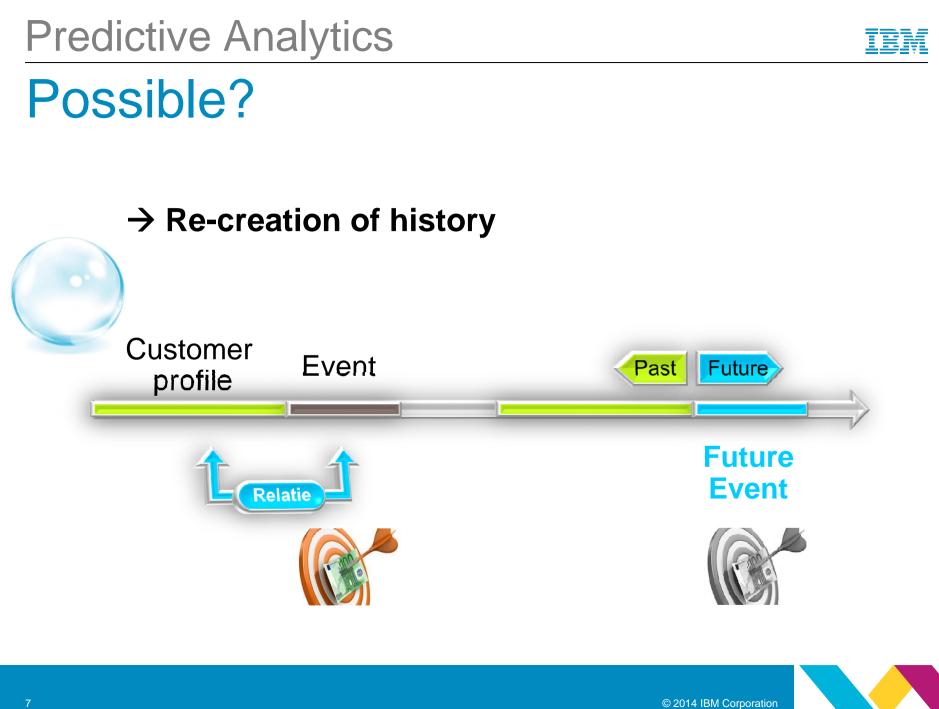


#### Predictive Analytics Solution



# Using all available information... View of the predict future events... u...in order to improve decision making





#### **Python Predictions**



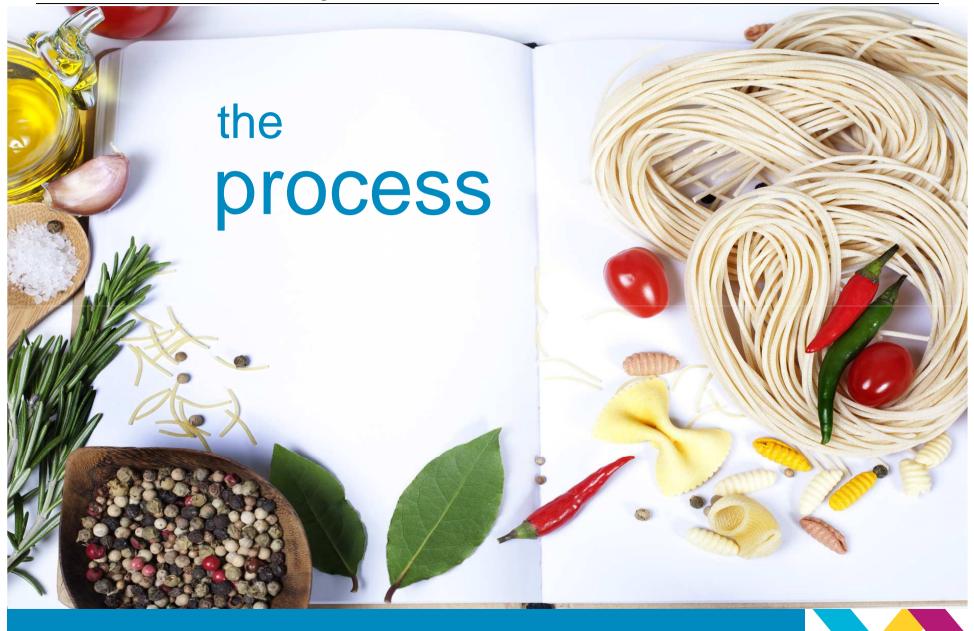
# Predictive Analytics in marketing, risk and operations

Manutan	Acquisition	ING 脸	
	Cross- and Upselling	Pey Vark	
makro	<b>Customer Retention</b>	Direct Social Communications	
Cash & Carry Belgium	Credit Risk	Communications	
	Fraud detection	telenet	
	Debt collection	🔀 ΟΡΤΙΜΑ	
	Demand Forecasting	bpost	



#### **Predictive Analytics**



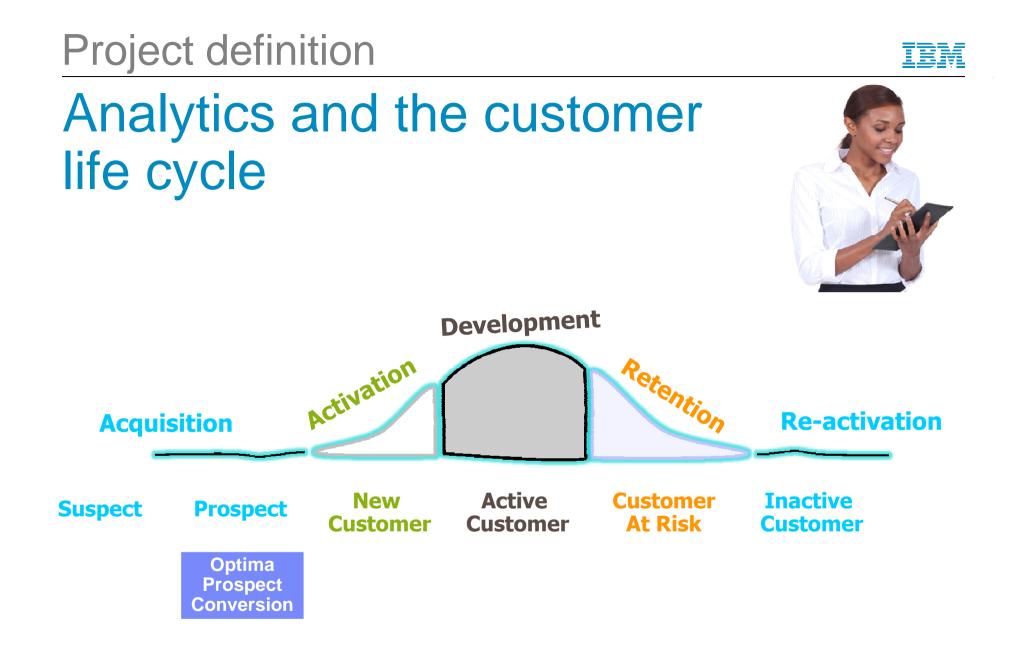






# project definition





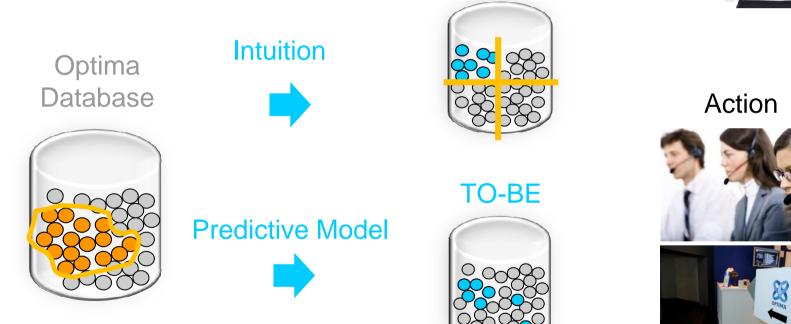
#### **Project definition**

# Challenge: which prospect to contact?





**AS-IS** 









# data preparation







Valuable

**Customer?** 





**Profile Period** 

# Create basetable

Data preparation

a campaign

**Profile Period** 

Valuable

**Customer!** 

- Campaigns from mid 2007  $\rightarrow$  end 2011

Target



# Create basetable

Data preparation

#### Predictors

Optima	<ul> <li>Campaigns</li> <li>Socio-Demographics</li> <li>106 variables</li> </ul>
Regional Information	<ul><li>Socio-Demographics</li><li>760 variables</li></ul>
External Data Provider	<ul><li>Firmographics</li><li>176 variables</li></ul>







#### Data preparation



## Create basetable

#### Fictive Example

Prospect ID	Age	Garden	# employees	Valuable Customer
Α	20	< 50m²	5	0
В	31	< 50m²	30	0
С	50	50-300m <sup>2</sup>	20	0
D	64	>300m²	200	1
Е	78	<50m²	8	0
F	35	50-300m <sup>2</sup>	1	0
G	48	>300m²	500	1







# model building



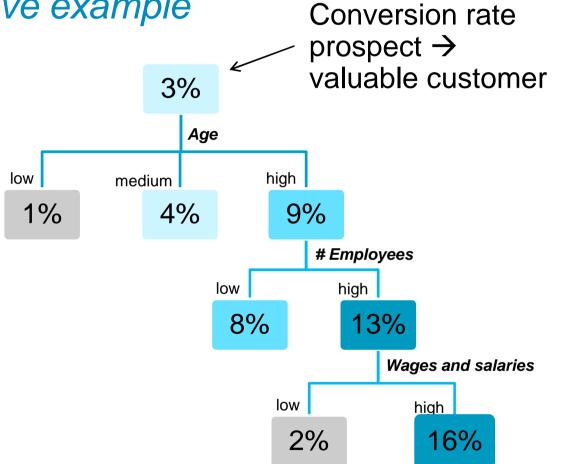


#### Model building

IBM

# **Decision tree**

Intuïtive example







Model building Final model		
Optima	<ul> <li>Campaign info (2)</li> <li>Socio-Demographics (3)</li> </ul>	
Regional Information	<ul> <li>Housing &amp; neighbourhood</li> </ul>	
External Data Provider	<ul><li>Company info (2)</li><li>Balance Sheet (2)</li></ul>	





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Final model scores					
Prospect ID	Age	Garden	# employees	Valuable Customer	Prediction
Α	20	< 50m²	5	0	1%
В	31	< 50m²	30	0	13%
С	50	50-300m <sup>2</sup>	20	0	25%
D	64	>300m <sup>2</sup>	200	1	72%
Ε	78	<50m²	8	0	5%
F	35	50-300m <sup>2</sup>	1	0	30%
G	48	>300m <sup>2</sup>	500	1	90%

#### **Final model scores**

Model building

. . .





# model validation







#### A CONTRACT OF A CONTRACT.

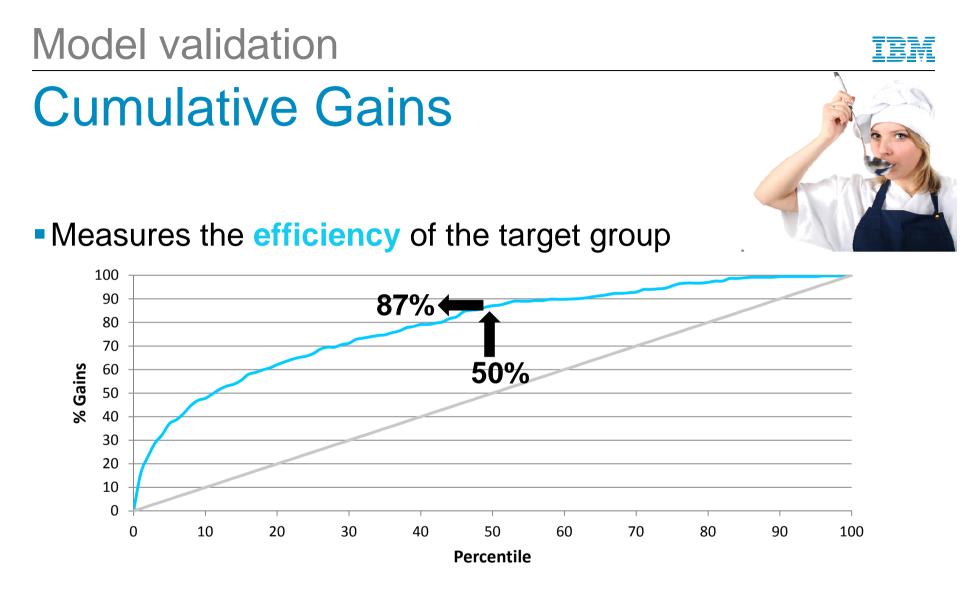
#### Measures the attractiveness of the target group.

Model validation

Lift Graph

Lift 10% Percentile

The top **10%** of the population is **5x** more likely to convert to a valuable customer than the average prospect



Targeting the top **50%** of the population for telemarketing campaigns or meetings results in **87%** of total conversion



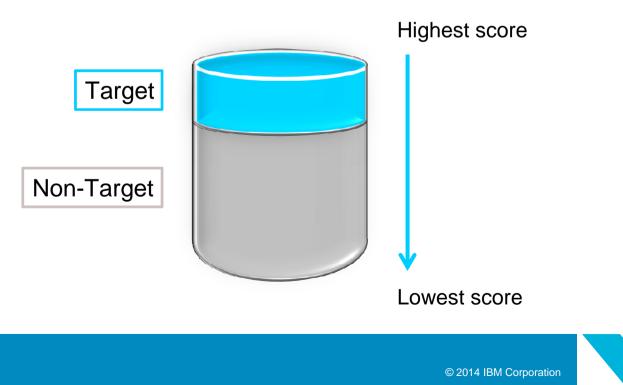




Implementation of the new model

- Scoring of total prospect database
- Profiling of top 5% versus bottom 95% of prospects









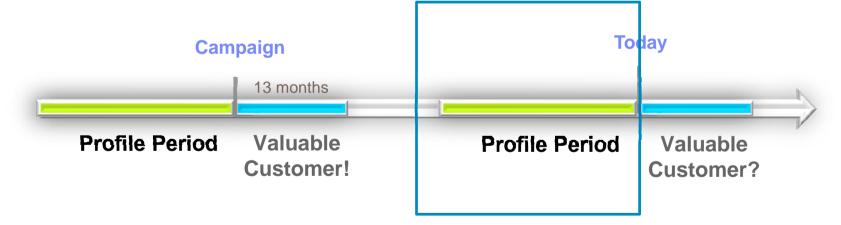
#### Model usage



# Score prospect database

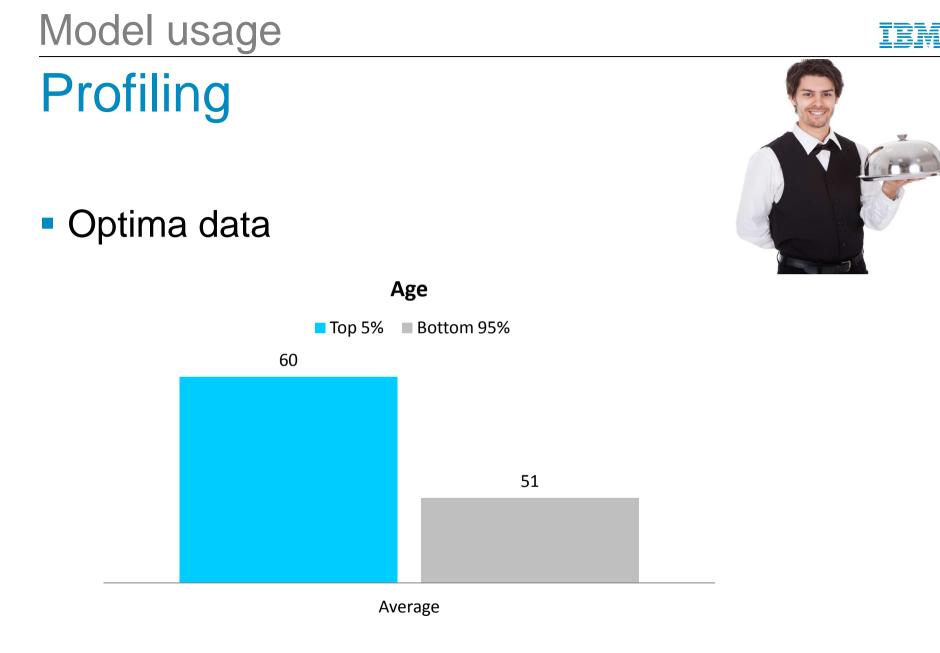
#### Timeline



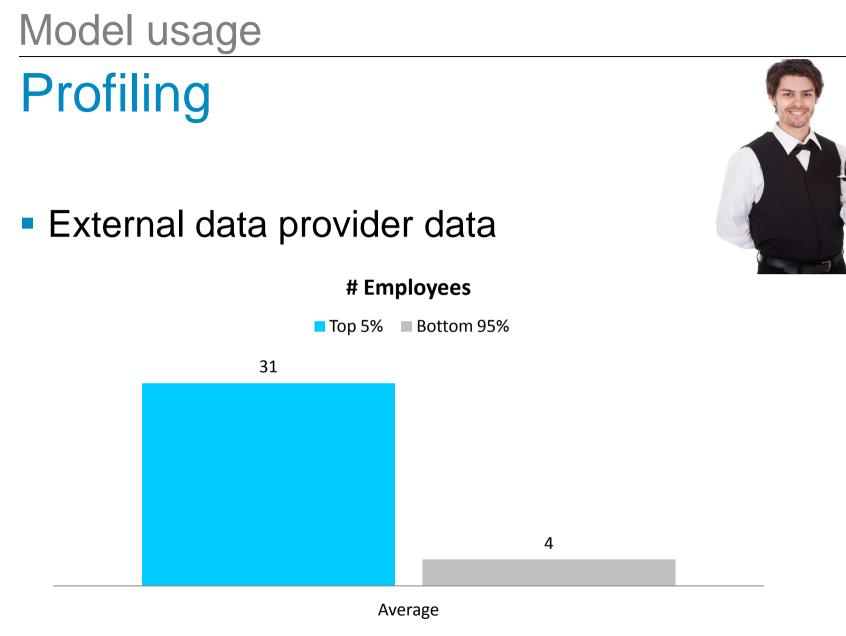


#### Scoreset, based on the prospect profiles in june 2013











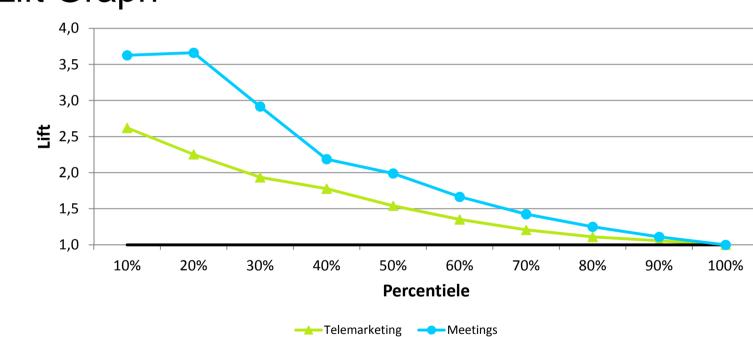






# In-field test results





The top **10%** of the prospects converted 2.5 to 3.5**x** more to an Optima customer than the average prospect



#### Lift Graph

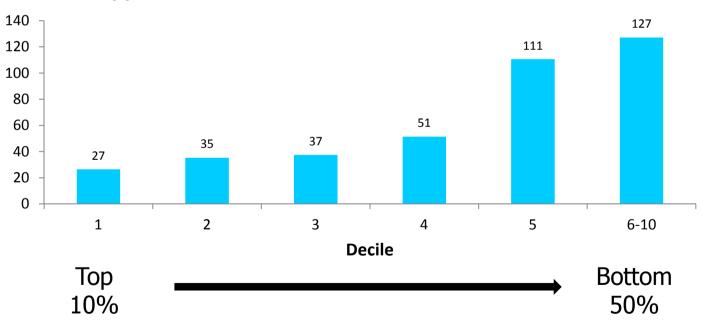




## In-field test results



Opportunities



#### **Opportunities needed for one successful conversion**

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#### Conclusion

- Stable and performing solution
- Integration of different data sources into a compact Predictive Model
- Clear profiling of the target prospects
- In-field tests with higher conversion rates





## Next steps

- Optima criteria  $\rightarrow$  Predictive Model
- •Usage of top 70%  $\rightarrow$  decrease of 18% costs (mailing, telemarketing)
- Renewal score with lessons learned end 2014
- Next step in customer journey: cross selling to valuable customer



# Optima – Python Predictions



## **Questions?**



#### Plan uw financieel geluk

Hebt u al nagedacht over uw financiële toekomst? Daar begint u beter nu mee dan later. Onze experts helpen u met het opstellen van een evenwichtig plan met aandacht voor uw inkomen, vermogen, pensioen en nalatenschap. Maak nu een afspraak met uw Optima-expert via **www.optima.be**.

Vraag geen advies, maar eis een plan.



