Introducing data science in big organizations: Increasing sales using geographic position

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Increasing sales in a “plateau-ed” market

The problem:
Notice a pattern?
• Closest to the Autobahn;
• Closest to a great lunch restaurant;
• Closest to relatives;
• Etc.
The objective was therefore to turn... into this.

In other words: make the selection process easier for the salesmen – with data behind it!
The data: (Transactional, CRM, Appointments)

Years of data: 2
Appointments analysed: 7.2K

Unique Shops: 6280
Orders: 49K

Prototypes tested: 10
Salesmen: 7
Success criterion:

A visit is successful if there is a sale no more than 5 days after said visit.
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Spoiler alert: our model reached 40%
Second time: after feedback from sales people

Data sets

- Historical sales visits
- Historical sales
- Customer targets

Data model

- (Potential Units / Revenue)
- Zip code
- Total revenue YTD
- Revenue between visits
- Days since last purchase
- Days since first visit
- Days since last visit
- Is first visit
- Consignment Stock
- Current target ratio
- Sales targets units

Sales Visits with sales within 5 days*

Decision tree/Random forest
Second time: after feedback from sales people

Data sets
- Historical sales visits
- Historical sales
- Customer targets
- Salesman position

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Decision tree/Random forest

Sales Visits with sales within 5 days*
You are in postnr 55125

Best clients:
• A: 98%
• B: 92%
• C: 87%

% Chance of sale

Click for more info
Visit "pulse" when visiting the right customer
Customer types

Gold Customers 16,7%
These are customers who we visit a lot, but they buy anyway, regardless of how many times we visit them. We should not focus so much on them.

Not enough attention 67,24%
These customers adhere to the Paretto principle. We visit them too little, but they yield much of our return.

Huge customers 0,8 %
These are self-sustaining customers. They buy on their own, a visit will not make that much of an impact.

Okay customers 15,16%
These are the bread and butter customers. They need to be visited, as they buy only when they actually see a salesman (but not always in high quantities).
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Over the course of the experiment (approx. 1 month, 2 salesmen, with the final product), we reached an increase of approx. 60%* on sales. (A/B testing)
Build
Build your proof of concept (or MVP) as a “hand carried” solution, as fast as possible to get initial feedback – make sure you are solving a problem.

Show
Show your MVP to the users. See their reaction, their usage and ask about the good and the bad.

Use
Give your users time to actually “consume” your solution and see if they can get any value out of it – don’t count your chicken until they hatch.

Feedback
Find out the pain points you haven’t solved yet and start over with the next release cycle (version x.0)

Hypothesis test
Hypothesis test
Hypothesis test
Hypothesis test

The process
Thank You