

## KPN transforms its approach to direct marketing



*Gaining new insight with a propensity modelling solution built on IBM SPSS software*

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### Smart is...

***Using statistical models to predict which customers will respond best to which marketing offers***

KPN used IBM® SPSS® Statistics to create propensity models for more than 30 key products. These models are used to mine customer data to discover which products are most likely to appeal to which customers. The models were then united into a single overall model, enabling accurate segmentation and predictive analysis that supports a more intelligent allocation of marketing budgets.

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KPN is one of Europe's leading telecommunications and ICT services companies. In its home market in the Netherlands, KPN offers fixed-line and mobile telephony, internet and television services to consumers, as well as end-to-end telecommunications and ICT services to business customers. The company also operates several highly successful mobile brands in Germany and Belgium, and its subsidiary Getronics provides ICT services to companies within the Benelux region and across the globe. In total, KPN has more than 40 million customers and 33,000 employees, and reported revenues of €13.5 billion in 2009.

KPN serves more than a million business customers in the Netherlands, and has considerable experience in providing telecommunications services to companies of all sizes, in all sectors. To meet the needs of these different types of business customers, KPN has developed a range of several hundreds of products, many of which are sold via direct marketing channels.

“Of course, as with any company, our marketing budget is limited, and we have to decide how to allocate funding to obtain the best possible return,” explains Michiel van Straten, Senior Data Analyst at KPN. “I work in the business marketing intelligence team, and it is our job to find new ways of identifying opportunities to increase revenues from new and existing customers. IBM SPSS Statistics is a key tool in helping us achieve this.”

### Supporting accurate segmentation

KPN's business marketing intelligence team uses the latest version of IBM SPSS Statistics to segment customers into groups based on their corporate profile, the products they have purchased, their usage of fixed-line, mobile and broadband services, their retention rate and numerous other criteria. This helps KPN target its direct marketing campaigns more effectively.

“We began using IBM SPSS Statistics to perform highly sophisticated analyses based on ‘propensity models’ for more than 30 of our most important products,” explains Van Straten. “In basic terms, a propensity model allows you to look at the profiles of a group of customers who have bought a certain product, identify the key characteristics



## Business Benefits

- Identifies the customers who are most likely to buy each product, helping to target direct marketing campaigns and increase customer response by 400 to 1,000 percent.
- Provides startling insights through predictive analysis: for example, that making one additional marketing interaction every six months could increase KPN's revenue from certain groups of customers by 50 to 70 percent.
- Creates compelling graphical presentations that make it easier for non-specialists to understand complex analyses and make good business decisions.

of that group, and then look for other customers with the same characteristics who haven't bought the product yet. Customers with similar characteristics are likely to buy the same products, so targeted marketing is likely to yield good results in terms of increased revenues and profits."

There was one snag, however: with individual propensity models for each product, it was impossible to coordinate marketing efforts across the whole product portfolio.

"We wanted to avoid sending too many different offers to each customer: instead, we wanted to focus on targeting each customer with the product that was most likely to appeal to them," explains Van Straten. "To this end, we needed to work out how all the individual propensity models interacted with each other by linking them into a single overall model. IBM SPSS Statistics gave us the tools we needed to make this happen."

## Modelling complex interactions

The business marketing intelligence team used IBM SPSS Statistics to import customer profiles and sales data from the company's CRM system, prepare the data, analyse it, and present the results using a variety of easy-to-understand graphical reports.

"One of the great things about IBM SPSS Statistics is that it handles the whole process from end to end," comments Van Straten. "And it's very easy to use, so you don't have to be a technical expert or know anything about programming."

## Delivering new insights

The results of the analysis were extremely interesting. The team was able to divide customers into three different segments: those who were expected to generate the highest proceeds, those who were in the middle, and those who were unlikely to increase their spending on KPN products.

"We decided to test our findings by monitoring actual customer purchases over a six-month period, and we found that there was a very good correlation with what the IBM SPSS Statistics model had predicted," says van Staten. "The group for whom we had the highest

## New Intelligence

## Identifying opportunities and maximising revenues



### Instrumented

Information on customer profiles and sales records is imported from KPN's customer relationship management system into a central data mart for analysis.



### Interconnected

IBM SPSS Statistics uses a matrix of interconnected propensity models to analyse the data and segment customers into different groups, based on their predicted purchasing and retention behaviour.



### Intelligent

The business marketing intelligence team can model the probable outcomes of different marketing decisions – enabling KPN to make better decisions about how best to allocate its marketing budget.



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## Solution Components

### Software

- IBM® SPSS® Statistics
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— Michiel van Straten, Senior Data Analyst at KPN

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expectations was indeed the group that provided the largest growth in income. Moreover, we found that customer response to our direct marketing and telemarketing campaigns increased by 400 to 1,000 percent when we used the propensity models.”

## Transforming marketing strategy

KPN then decided to do some further work with the model to analyse the probable outcomes of increasing the frequency of marketing interactions with the top segment of customers.

“We have always been quite conservative about the frequency of our marketing campaigns, because we don’t want to annoy customers by contacting them too often,” says Van Straten. “So we had a policy of only making three marketing contacts within each six-month period. However, we had done some qualitative market research that suggested that the top segment of customers actually felt that we didn’t contact them enough. We decided to use IBM SPSS Statistics to model the results of increasing the contact frequency with this group, to see what effect it might have on revenues.”

### ► The Inside Story: Getting There

The propensity modelling project provided an opportunity for KPN’s team to demonstrate its high level of IBM SPSS Statistics skills.

“We’ve become experts in IBM SPSS Statistics, so we rarely need to call the helpdesk for support – but we have built a very close relationship with their team,” says Van Straten. “The really impressive thing about their approach is that they genuinely listen to our suggestions, and feed them back into their development process. As a result, the most recent version of IBM SPSS actually incorporates some of the features we requested.”

As with any business analytics project, the analysis itself is only half the battle: the other key element is to convince key stakeholders within the business to trust and act on the research.

“With IBM SPSS, the presentation options are very powerful and flexible – and in business terms, this is very important, because it’s no good performing a lot of brilliant analyses if you can’t explain the results to the key decision-makers in the business. We say it as a joke, but in a way it’s true: effective presentation is practically as important as getting the numbers right in the first place!”

The IBM SPSS reporting tools enabled the business marketing intelligence team to present a strong, easily understandable case for enhancing the company’s direct marketing strategy – and as a result of this new insight, KPN has made a number of significant changes to its approach.

The IBM SPSS Statistics model strongly supported the findings of the qualitative research: by increasing contact frequency from three to four times within a six-month period, KPN's income from the top segment of customers would actually increase by between 50 and 70 percent. And increasing from four to five contacts would have a similar effect.

"It was an eye-opening result," says Van Straten. "The IBM SPSS Statistics model showed that we were almost certainly being too conservative about how often we contact this group of customers. As a result, we have decided to budget for an additional marketing campaign in the next six months, and we are very keen to find out whether it has the predicted effect on revenues."

### For more information

To learn more about IBM software, contact your IBM sales representative or visit: [ibm.com/spss/](http://ibm.com/spss/)

To learn more about KPN visit: [kpn.com](http://kpn.com)



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