Government

Business Analytics



Overview

Business challenge

The Groningen Regional Police Force needed to improve citizen satisfaction levels to meet the Dutch government's new targets. However, its existing paper-based satisfaction surveys were expensive to run, could not be tailored to different groups of respondents, and often failed to provide a representative sample of the local population.

Solution

The Force worked with DASC, an IBM Business Partner, to build a sophisticated online satisfaction survey using IBM SPSS Data Collection, which automatically tailors questionnaires to the respondent's situation – whether they are an ordinary citizen, a suspect, an offender, or a victim. The Force also used IBM SPSS Data Collection to survey employee satisfaction and occupational health online. Both solutions are now being adopted nationwide.



Groningen Regional Police Force gains insight into citizen and employee satisfaction

Using IBM SPSS Data Collection to obtain feedback and analyse performance online

Groningen, the north-easternmost province of the Netherlands, is home to more than 570,000 people. The Groningen Regional Police Force is responsible for a comprehensive range of police services in the region – from traffic management up to full-scale criminal investigations – and prides itself on its innovative approach to police work. It employs 1,800 people at 13 police stations in the city of Groningen and other municipalities across the province.

Like all of the Netherlands' 24 regional police forces, Groningen is required to achieve a variety of government targets. One of the targets is related to citizens' satisfaction with the service they receive from the police.

Citizen satisfaction

"We were given a target of increasing our overall citizen satisfaction rating by seven percent," explains Johan Huizing, Project Manager Quality Research for the Groningen Regional Police Force. "However, the way we were measuring satisfaction levels was not very precise, which made it difficult to identify the areas where we needed to improve.

"Every year the government conducts a national survey on safety and the police. In this survey, there were questions about the respondent's contacts with the police in the past 12 months and their opinion of the most recent contact. This was regardless of the type of contact the respondent had with the police – for example whether it was face-to-face, by phone or by letter or email. More importantly, it didn't take into account whether the respondent was an ordinary citizen requesting information or paying a parking ticket, a witness reporting a crime, a suspect, an offender, or a victim."

"As a result, the answers we received were sometimes not very helpful. If you ask someone who has been arrested whether they are satisfied with the service they have received, they are not likely to give you a positive answer! But of course, that is no reflection of whether the police officers who arrested them did a good job or not."

Reducing costs

The survey process was also slow and expensive: questionnaires were printed, posted to respondents, filled in, returned, and scanned into the Force's IT systems. Data was then collected from the scanned images using image capture software, and the results were validated manually.

Business Analytics

IBM Software Government

Business Benefits

- · Provides a more accurate and representative view of citizen satisfaction, helping to compare different areas and identify where improvement is needed.
- · Enables analysis of employees' health and mental wellbeing - potentially enabling the Force to identify warning signs of post-traumatic stress disorder and provide help.
- · Eliminates paper questionnaires reducing printing, postage, scanning and data validation costs.

"We decided to completely rethink the whole process and build an online survey system which would give us more flexibility and eliminate most of the costs of the paper-based process," says Huizing. "We secured some funding from the government to develop a solution that could be piloted in Groningen and potentially adopted by other regional police forces across the country."

Finding a solution

The Force reviewed a number of possible software products, and decided to build the new solution on IBM SPSS Data Collection. To help with the implementation, it chose to work with DASC, a consultancy that specialises in data collection and analytics.

"IBM SPSS software is well-known in the Netherlands as a marketleader in statistical analysis, and SPSS Data Collection was already being used by many organisations across the country, so we were confident that it could meet our needs," says Huizing. "The DASC consultants are real experts in SPSS, and they were good at listening to us and understanding our needs. They were very helpful with the functional design and implementation of the solution."

First measure, then improve

With the solution in place, the survey process is now more streamlined and delivers much greater insight into citizens' satisfaction with the Force. When citizens come into contact with the Force, they subsequently receive a letter asking them to complete an online questionnaire. The letter contains a code that is specific to the area they live in and to the type of contact they had with the police. When they log in to the survey portal and enter the code, it shows them the logo of their local police department, and displays a set of questions that are appropriate to their situation.

"The new process with IBM SPSS Data Collection is much more convenient, both for the citizens and for us," explains Huizing. "It also allows us to analyse the data and create reports much more easily, and on a much more detailed level – so, for example, we can break down the overall results for Groningen by police station, or look at different satisfaction levels for people who have contacted us by phone as opposed to face-to-face meetings.

"This means we can compare the performance of different departments and different areas, and decide how best to allocate our resources to achieve improvements. As a result, we have been able to discover several critical points of improvement since the online survey was first introduced. Due to this success the IBM SPSS solution is now being adopted by other police forces across the country."

Using predictive analytics to monitor occupational health

While the citizen satisfaction survey project was in process, the Force also began working on a survey to collect data on employee satisfaction and occupational health.

Government

Solution Components

Software

• IBM® SPSS Data Collection

IBM Business Partner

DASC

"The citizen satisfaction survey project won an innovation award from the MOA, the Dutch Centre for Marketing Intelligence and Research. But the best testament to our success is the fact that both the citizen and employee surveys are being adopted by other police forces around the country."

 Johan Huizing, Project Manager Quality Research for the Groningen Regional Police Force "Police work is tough, and it can take its toll both physically and mentally," comments Huizing. "Post-traumatic stress disorder (PTSD) and burn-out affect a number of police officers every year, so we wanted to see if there was a way to predict their occurrence and provide help before the problems get too bad. So we used IBM SPSS Data Collection to create a questionnaire that would assess the mental and physical health of more than 40,000 police officers and other employees around the country on an annual basis.

"By correlating the data we obtained from the survey against the number of cases of burn-out diagnosed in the following year, we have been able to identify a number of 'indicators' – common factors that act as warning signs that an officer is at risk and should be given help."

Conclusion

The introduction of IBM SPSS Data Collection software at Groningen Regional Police Force and other forces across the Netherlands has already delivered considerable benefits by providing a simple, convenient and precise method of collecting data from citizens and police officers, and analysing it quickly and effectively.

"The citizen satisfaction survey project won an innovation award from the MOA, the Dutch Centre for Marketing Intelligence and Research," concludes Huizing. "But the best testament to our success is the fact that both the citizen and employee surveys are being adopted by other police forces around the country. As the solutions are adopted more widely and the amount of data we collect increases, we hope to be able to perform more sophisticated analyses that will help us improve police services in the Netherlands even further."

About DASC

DASC is an IBM Business Partner based in the Netherlands, which specialises in analytical process management solutions. DASC managing partners have years of experience and a thorough knowledge of business intelligence, predictive analytics and enterprise feedback management. The company helps customers create innovative solutions based on IBM Business Analytics software.



About IBM Business Analytics

IBM Business Analytics software delivers complete, consistent and accurate information that decision-makers trust to improve business performance. A comprehensive portfolio of business intelligence, predictive analytics, financial performance and strategy management, and analytic applications provides clear, immediate and actionable insights into current performance and the ability to predict future outcomes.

Combined with rich industry solutions, proven practices and professional services, organisations of every size can drive the highest productivity, confidently automate decisions and deliver better results.

As part of this portfolio, IBM SPSS Predictive Analytics software helps organisations predict future events and proactively act upon that insight to drive better business outcomes. Commercial, government and academic customers worldwide rely on IBM SPSS technology as a competitive advantage in attracting, retaining and growing customers, while reducing fraud and mitigating risk. By incorporating IBM SPSS software into their daily operations, organisations become predictive enterprises – able to direct and automate decisions to meet business goals and achieve measurable competitive advantage.

For more information

To learn more about IBM SPSS software, contact your IBM sales representative or visit: ibm.com/spss/

To learn more about products, services and solutions from DASC, visit: dasc.nl



© Copyright IBM Corporation 2011

IBM Nederland hoofdkantoor Johan Huizingalaan 765 1066 VH Amsterdam

Produced in the Netherlands February 2011 All Rights Reserved

IBM, the IBM logo and ibm.com are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. A current list of other IBM trademarks is available on the Web at "Copyright and trademark information" at: ibm.com/legal/copytrade.shtml.

IBM and DASC are separate companies and each is responsible for its own products. Neither IBM nor DASC makes any warranties, express or implied, concerning the other's products.

References in this publication to IBM products, programs or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program or service is not intended to imply that only IBM's product, program or service may be used. Any functionally equivalent product, program or service may be used instead.

All customer examples cited represent how some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.

IBM hardware products are manufactured from new parts, or new and used parts. In some cases, the hardware product may not be new and may have been previously installed. Regardless, IBM warranty terms apply.

This publication is for general guidance only.

Photographs may show design models.



Please Recycle