

Fontys Hogescholen

Security Scan City supported by BI

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Agenda

- introduction
- case: Tilburg
- main goal
- collecting data for answering questions
- need for new information
- MissLogo2009
- summary

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Introduction

- One of the largest cities in the Netherlands: Tilburg, wants
- to utilize the possibilities of Business Intelligence (BI)
- to strongly increase the safety of its citizens within a problem district

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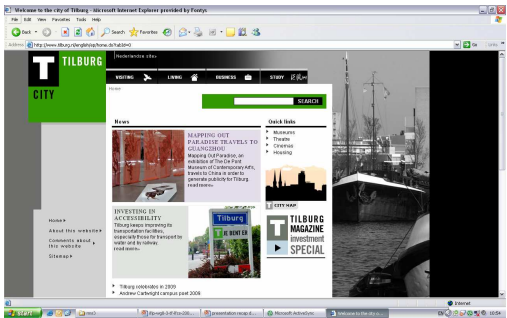
Case: Tilburg (1)



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Case: Tilburg (2)

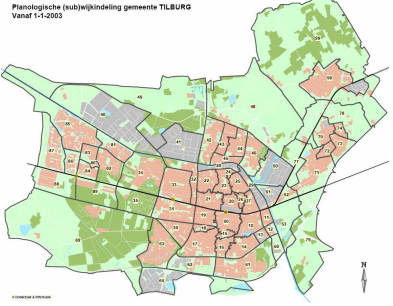


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Case: Tilburg (3)

Planologische (sub)wijkindeling gemeente TILBURG
jaar 1-1-2009



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Care for Safety

Zorg voor veiligheid
 Kennisnet sociale veiligheid
 in Tilburg voor de jaren 2008-2010

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Indicators

Wat Delict: Horegeest (al gestart)
Probleemschets Horegeest zorgt voor verandering in de wijk, daarnaast creëert het een slecht pedagogisch klimaat voor opeenvolgende kinderen. Door horegeest is er kans op onveilige gewaarwording (brand, beroving etc.)
Doelstelling Afname van het percentage Tilburgers dat overlast ervaart van horegeest met 10% in 2010 tov 2007
indicator • Aantal meldingen van overlast van horegeest via Meld Misdad Anoniem
 • Aantal meldingen van overlast van horegeest via CM
 • Aantal meldingen van overlast van horegeest via politie
Verantwoordelijk Veiligheid, Saskia Lauper

Wat Delict: Grow- en smartshops (al gestart)
Probleemschets Growshops zijn de spin in het web voor illegale wietweelt. Vaak is er sprake van georganiseerde criminaliteit en zijn de leveranciers van kant en klare kweekplanten en ook de afnemers.
 Smartshops leveren naast paddo's een breed scala aan middelen die nog niet verboden zijn.
 Afname van het aantal growshops van 23 (2007) naar 10 shops in 2010
Doelstelling • Aantal grow- en smartshops
indicator • Aantal integrale controles door politie/ bevestigingsdienst/ handhaving van alle grow- en smartshops
 • Aantal tevens op de integrale controle politie/bevestigingsdienst/handhaving van alle coffeshops
 • Aantal ingetrokken en niet-verloofde vergunningen
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Wat Persoon Apple's - overlastveroorzaker (al gestart)
Probleemschets Personeel of gezinnen die overlast geven in de wijk moeten worden aangepakt.
Doelstelling Verminderd woon- en drugsvervalst vanuit woningen met 10% in 2010 tov 2007
indicator • Aantal 'Nuis'opdrachten
 • 100% scenario 's voor besproken gevallen in Zorghuis
 • Aantal slachtoffers woningopruimen
 • Aantal meldingen van overlastgevende personen in BPS
 • Aantal complexe overlastklachten in CM
 • Aantal zaken in beslag
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Main goal

- to identify specific persons based on certain characteristics
- who show criminal behavior within the district
- and to deny them access to the district for a certain (long) period based on their behavior

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Also ...

- tracing people who, at the moment, show no criminal behavior, but likely adapt this behavior due to the influence of their direct environment (family, friends or neighbors)

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Essential

- to point out criminal networks by identifying patterns of illegal activities and relationships between persons within the district
- because of the privacy aspect and the political sensitivity, the mayor in collaboration with the minister, gave a one time permit
- under very strict conditions and control procedures

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Collecting data

- to bring together a broad range of available *electronic* data about the district and its inhabitants
- store this data in a secured environment
- to analyze this data and make reports
- by a strictly select team of specialists


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Data sources (1)

- social allowances (city)
- income numbers (tax administration)
- reports of criminal activity (police department)
- medical records (national health institute)
- vehicle and motor ownership records (national road traffic institute)
- historical criminal records (justice department)


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Data sources (2)

- living area and family connections (city)
- air and infrared photo's
- building and house ownership (city)


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Answering questions (1)

- Who is a criminal?
- What families are terrorising the street or district?
- Which criminal networks are present in the district?
- Which criminal activities happen frequently in the district?


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Answering questions (2)

- What criminal activities have notable connections?
- What other unexpected but useful patterns can be found in this data?
- Which criminal individuals in the district will be classified to temporarily leave the district, in order to improve the safety of the district?


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Answering questions (3)

- Which individuals are qualified to receive special guidance to prevent them from growing towards criminal behavior?
- In what way, based on the different analysis, can the social atmosphere between the inhabitants of the district be improved?

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Need for new information

- replace the existing two year statistical rapport
- by a modern environment
 - of flexible and dynamic analysis and reports with actual information
 - (geographical) dashboards
 - statistical research results based on data mining

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Objectives

1. the progress dashboard, based on the 26 KPI's by Tilburg itself
2. a real-time dashboard with geographical division of the city
3. (statistical) analysis, required a fully operational BI system on a large database

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MissLogo2009

- Erasmus program
- 2008: Mechelen (Belgium)
- 2009: Eindhoven (Netherlands)
 - 50 students and lecturers from several European countries
 - during two weeks based on a business case local government
 - working with business intelligence tools
 - www.misslogo2009.com
- 2010: where?

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European aperitif



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Hard working



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And enjoying




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Summary

- realistic business case about safety within a city
- using Business Intelligence to analyze
- using this case for (European) education purposes
- any questions?



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