

kadaster



customer's involvement and product improvement

LEAN Methodology
in Geo-Information processes

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Programme

- Introduction:
Cadastral in the Netherlands
- Geo-Information:
Processes and Methodology
- Case:
*Improved actuality of the
topographic map*
- Results and developments





Cadastral Surveying



Registration of property



Land Consolidation



Cable- and Pipelines



National Registrations



National Mapping



Geometrical Positioning



Information and Services

products and market

key-
registration

Products:

- * standard (1:25K topographic map, and consecutive smaller scales (1:50K-1:M))
- * customised

Customers:

userboard

- * governmental: esp # Ministry of Defence, # Ministry of Infrastructure & Environment
- * public sector: # watermanagement, # forestry, etc
- * private

Methodology (1): process & technique



LEAN - Toyota Production System

AutoGen – Automatic Generalisation

map scale
1:25.000



map scale
1:250.000



Important infrastructure

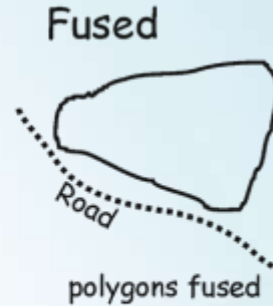
Less important features

Prominent terrain features

Methodology (2): technique

Automatic
Generalisation:

*generalisation
concepts*



Methodology (3): LEAN



what does the customer want?

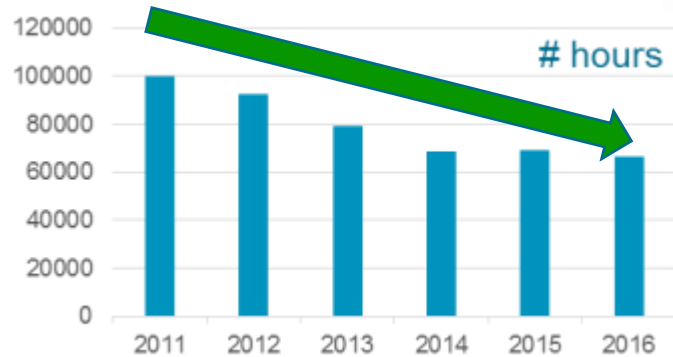
Value

actual / current state >> *future state process*

National LEAN award 2015



facts and figures “was / now”



data-quality



delivery-reliability
5 times a year



turnaround:
3 years > 2 weeks

Challenges

- employees commitment: elimination of fieldwork and use of panoramic images
- process in detail (“informal parts”)
- in-time-availability of (aerial) images
- who (and where) are my users?
- continuous improvement



Actual <> Future (1)



Actual projects:

- demand driven!
- mapping in 3D of small landscape elements
- mapping of obstacles with pointclouds (helicopters, drones)
- inventory of asbestos roofs
- research on “rainproof”: decreasing surface porosity in urban areas
- research on use of virtual guidance lines

Actual <=> Future (2)

Future (challenges):

- actuality of (aerial) images
- continuous delivery
- >integrated/compound products
- >use of external data, including crowdsourcing
- integrating UN Sustainable Development Goals



A word cloud featuring the phrase "Thank You" in multiple languages. The words are arranged in a roughly rectangular shape. The most prominent words are "GRACIAS", "ARIGATO", "SHUKURIA", "TASHAKKUR ATU", "THANK", "YOU", "JUSPAXAR", "DANKSCHEEN", "BİYAN SHUKRIA", "TINGKI", "GRACIE", "MEHRBANI", "BOLZİN", and "MERCİ". Other smaller words include "MERCI", "KOMPASUNIDA", "MAAKE", "MERH", "PALDIES", "GAEJITHO", "GOZAIMASHITA", "EFCHARISTO", "AGUYJE", "FAKRAUR", "CHALTU", "YAQHANYELAY", "WADEEJA", "MAITEKA", "HUJI", "UNWALGNEESH", "SUKSAMA", "EKMET", "DENKAUJA", "HEMACHALHYA", "ATTO", "DHIWYADKAD", "ANBIA", "MERHI", "SPASIBO", "HEMACHALHYA", "UNWALGNEESH", "HATIR", "GUT", "EROKUJU", "SİKOMO", "MAKETRI", "MIMMONCHAR", "NUHUH", "SHACHALHYA", "SPASSIBO", "SHACHALHYA", "NUHUH", "CHALTU", "YAQHANYELAY", "VOSPAGARATAN", "HATIR", "GUT", "EROKUJU", "SİKOMO", "MAKETRI", "MIMMONCHAR", "DANKSCHEEN", "JUSPAXAR", "BANKA", "TAVTAPUCH", "MEDAWAGEE", "GAEJITHO", "MERASTAWHY", "MERHI", "PALDIES", "GRACIE", "MEHRBANI", "BOLZİN", "MERCİ", "KOMPASUNIDA", "MAAKE", "MERH", "PALDIES", "GAEJITHO", "GOZAIMASHITA", "EFCHARISTO", "AGUYJE", "FAKRAUR", "CHALTU", "YAQHANYELAY", "WADEEJA", "MAITEKA", "HUJI", "UNWALGNEESH", "SUKSAMA", "EKMET", "DENKAUJA", "HEMACHALHYA", "ATTO", "DHIWYADKAD", "ANBIA", "MERHI", "SPASIBO", "HEMACHALHYA", "UNWALGNEESH", "HATIR", "GUT", "EROKUJU", "SİKOMO", "MAKETRI", "MIMMONCHAR", "NUHUH", "SHACHALHYA", "SPASSIBO", "SHACHALHYA", "NUHUH", "CHALTU", "YAQHANYELAY", "VOSPAGARATAN", "HATIR", "GUT", "EROKUJU", "SİKOMO", "MAKETRI", "MIMMONCHAR".