



**Business benefits Geo-enabling SAP RE-FX
with SAP GEO.e**

Provincie Noord-Brabant

Provincie Noord-Brabant



Where do we come from?



Dutch Province of North Brabant

Provincie Noord-Brabant

Where are we working?



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Real Estate Department



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Specialist new applications
geo-information



Motivation

- Foundation of our new Real Estate department in 2009
- We had to comply with several internal and external regulations
- Our revolving budget for the real estate department is about 500 million Euro
- We had four separate business systems:
(property, finance, contracts, GIS)
- Our Administrative Organization was under pressure in regards to accuracy, completeness and timelines.





Objective and Real Estate Strategy

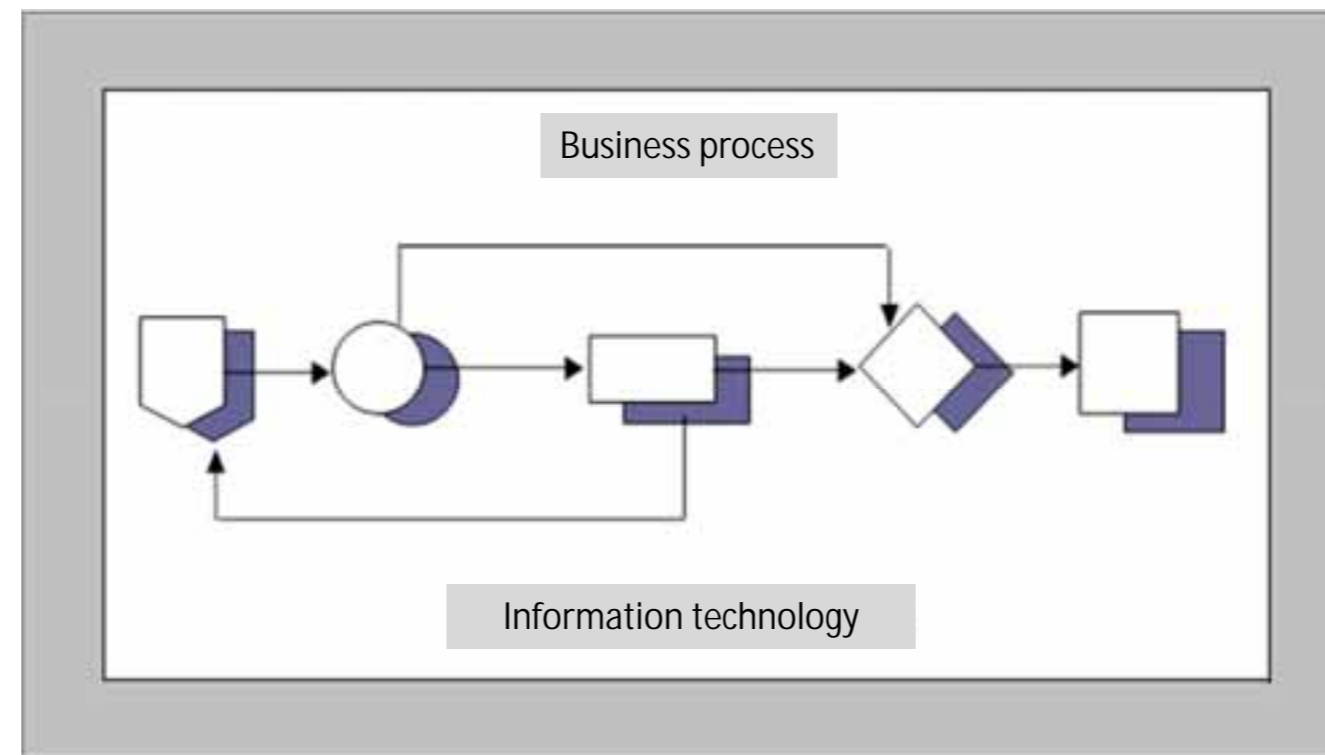
- Efficient business administration to keep the business in control
- Our strategy:
 - to be implemented with our current business system SAP and staying standard
 - to get a proper implementation and data consistency
→ "single source of truth"
 - the system must support the need and business experience of the users





Result

- using standard SAP module for Real Estate Management
- Using the SAP GEO.e for spatial visualization
- the result was purely business process driven and technology followed in the process





Project flow

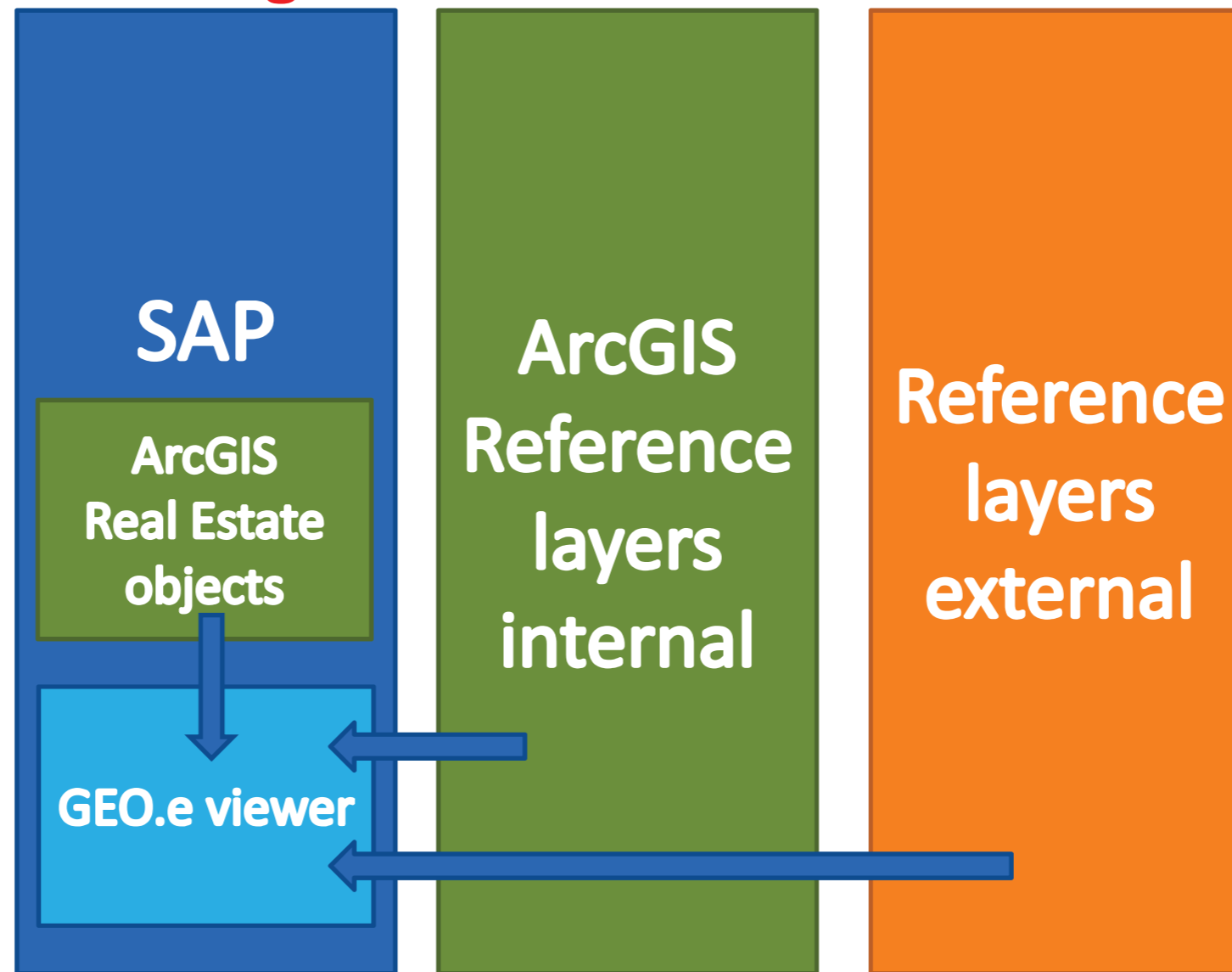
Rapid time to Go Live

- Needs of the Real Estate Department defined (April 2012)
- Market research (June 2012)
- Visit Reference Site of 'Service of Domains' (June 2012)
- Contracting of consultants for SAP RE (Sep 2012)
- Contracting SAP for GEO.e (Feb 2013)
- ESRI Agreement for separate ArcGIS Servers
- Creation of the business blueprint
- Installing hardware and software
- Remote implementation of GEO.e (May-Aug 2014)
- Video interview for the Dutch ESRI Conference (Sep 26, 2013)
- Start of manual data entry into the system (Oct-Dec 2013)
- GoLive Jan 2014





GIS integration with SAP Geo.e viewer



Internal search on contract type

The screenshot shows the GEO.explorer application interface. On the left, there is a search filter panel with the following fields:

- Zoeken: Contract
- Geen numerieke filter
- Contractnummer: [input field]
- Contract actief: [dropdown menu]
- Contract type: [dropdown menu]
- Hoofdgroepen: [dropdown menu]
- Bereiksthema's: [dropdown menu]
- Deelkeleidthema's: [dropdown menu]
- Zoek: [button]
- Leeg: [button]

Below the search filter is a results table with columns: Contract ID, Contract Type, Linked Object. The table contains 18 rows of data, all with 'ZA03 Aank Onro' as the Contract Type and 'PCL 1000021' as the Linked Object.

On the right, there is a map showing a geographical area with several blue highlighted polygons representing contract locations. A red callout box points to the search filter and the results table, containing the text:

Internal search on:
- Contract
- Building
- Rental objects
- Parcel (section)

Another red callout box points to the map, containing the text:

Geo-enabled contracts in SAP RE-FX

At the bottom of the map, there is a detailed information box for a selected object:

Complex N 641
OGC 1000200006
PCL 10002175042
Ruimte Ontwikkeling
Oudeboesch N 641,
Oudeboesch F 311-312-
296-217-587
Functie:
Ingangsdatum: 01.01.2014
Einde: 29.04.2014
Contractwaarde:
728.866,01 EUR

Tab Geo.e in SAP RE-FX (Real Estate)

The screenshot displays the SAP RE-FX Geo.e tab interface. The main window shows a map with various colored overlays representing different real estate objects. A red circle highlights the 'Geo.e' tab in the top navigation bar. A red arrow points from a text box to this tab. Another red arrow points from a text box to the 'Business Layers' legend on the right side of the map. A third red arrow points from a text box to a specific object on the map.

Geo.e tab

Business layers:

- Contract type
- Rental objects
- Buildings
- Parcels

geo-enabled rental objects in SAP RE-FX

Complex N 841
PCL 10002175048
Godebosch, F 312 (ged)
Status: AAN
Totaal Gebruiksoppervlakte: 1,374 HA

esri

Q05 (1) 3ED * N-W-00105 - 06
Provincie Noord-Brabant

Esri ArcGIS embedded in SAP Geo.e

The screenshot displays the SAP Geo.e interface with an embedded Esri ArcGIS map. The map shows a residential area with various layers overlaid. Three red callout boxes with arrows point to specific features:

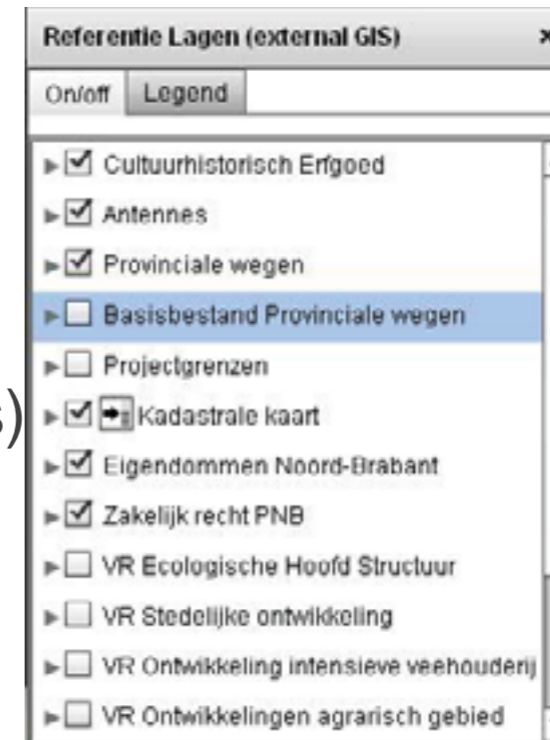
- Search function:**
 - Dutch Geocoder
 - BAG-basis (NGDI)
- Basemaps:**
 - NGDI Base Registrations (PDOK/BRT-base)
 - Dutch air photo
 - Esri basemaps
- Reference layers:**
 - intern / extern
 - NGDI Base registrations BGT / BAG / BRK

The interface includes a search bar at the top right, a layer list on the right side, and a detailed information window for a selected parcel. The map is titled 'Provincie Noord-Brabant'.

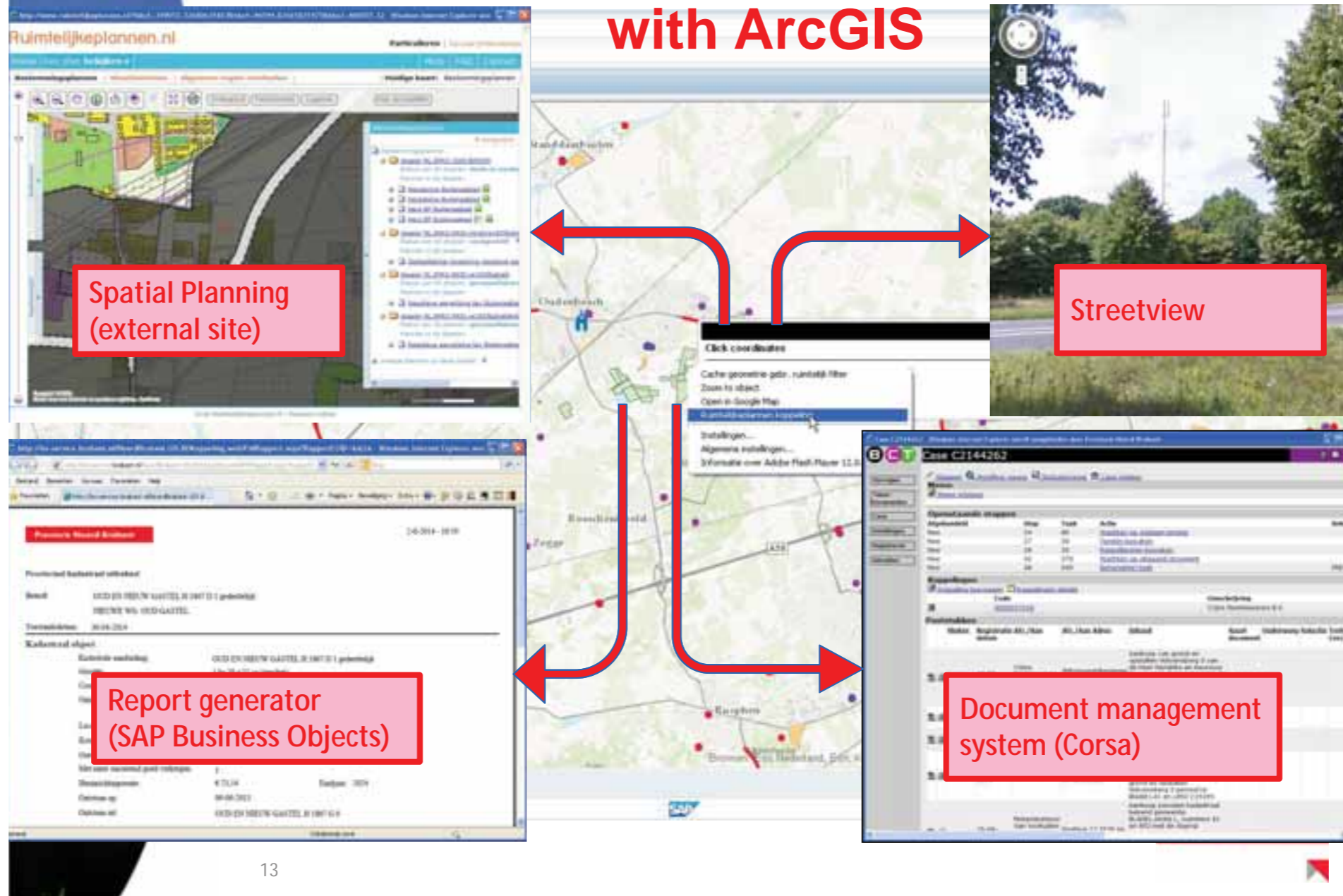


Reference layers from ESRI ArcGIS embedded in SAP GEO.e

- Heritage
- Provincial roads
- Cadastral map (objects/subjects)
- Antenna register
- Regulation space (5 layers)
- Ecological Network (2 layers)
- Present Property Administration for control
- Plan Designs; for buying plots
- ...



Linked systems to geo-enabled SAP Geo.e with ArcGIS





From GEO-centric to process-centric

- Work process in SAP is leading
- No Geo map with additional business Information
- Contract in SAP RE-FX is the starting object
- current ownership records in GIS can be easily compared with SAP RE-FX by overlaying layers
- Present Viewer EGK Land Registry is now obsolete
- Creation of an object in SAP and then adding geometry by “finger-painting” or copy the geometry from a feature service coming from GIS
- From Oct-Dec 2013 about 4,000 objects were created





Final conclusion

- Working with GIS in a trusted environment
- One environment for all needed information
- Integration with other information systems
- GIS in the capillaries of the organization!
- Satisfied users!!

