Ministerie van Binnenlandse Zaken en Koninkrijksrelaties

Dutch government cloud

Dennis Kerssens (program director)
29 September 2016 at EURECA event

Agenda

- Why a governmental cloud?
- What is in scope?
- What do we implement and what is the effect on sustainability?
- Planning?
- Key takeaways!

Triggers for cloud strategy

Costcutting

Any time
Any place,
Anywhere

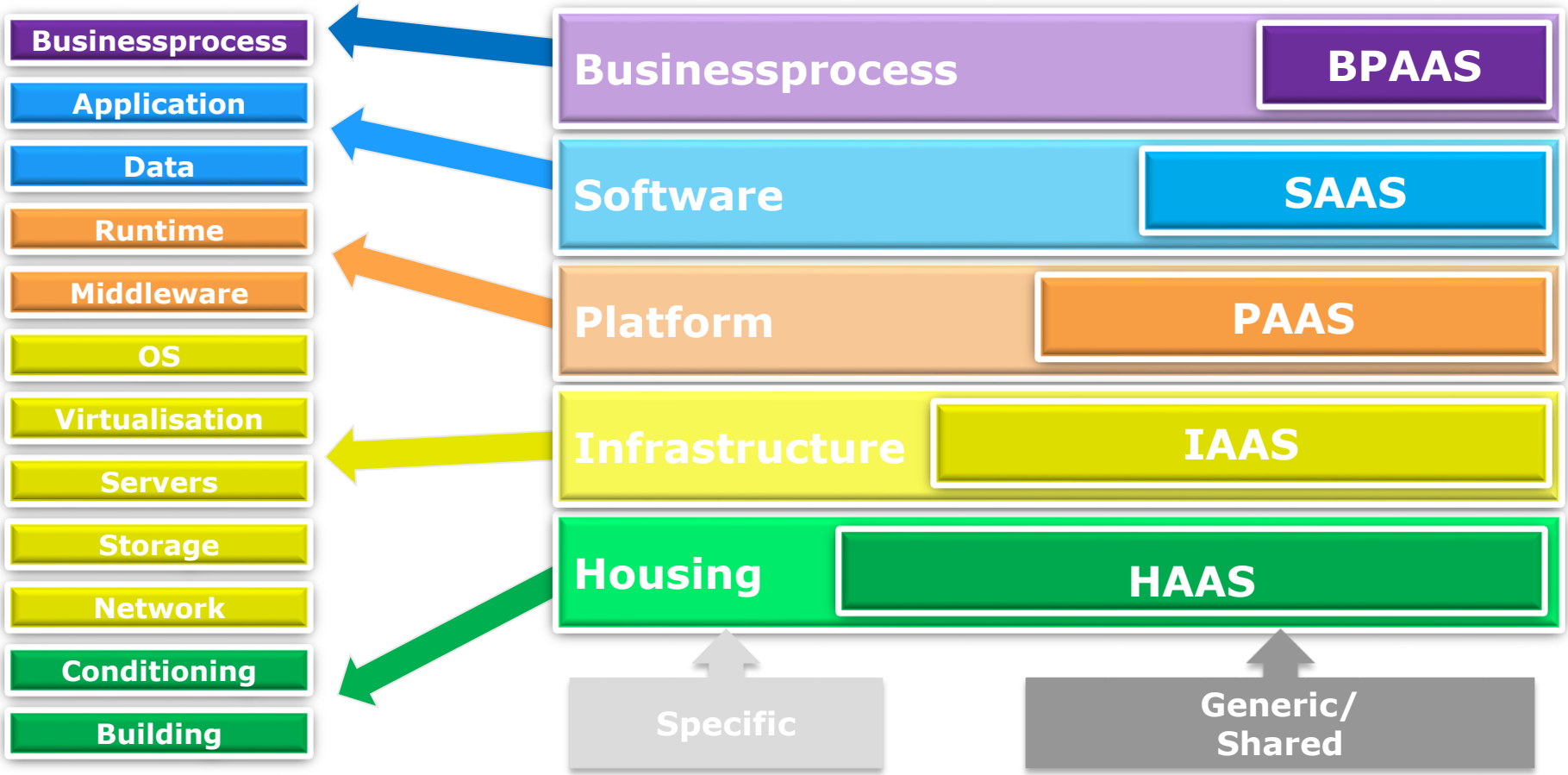
Need for speed

Sustainability

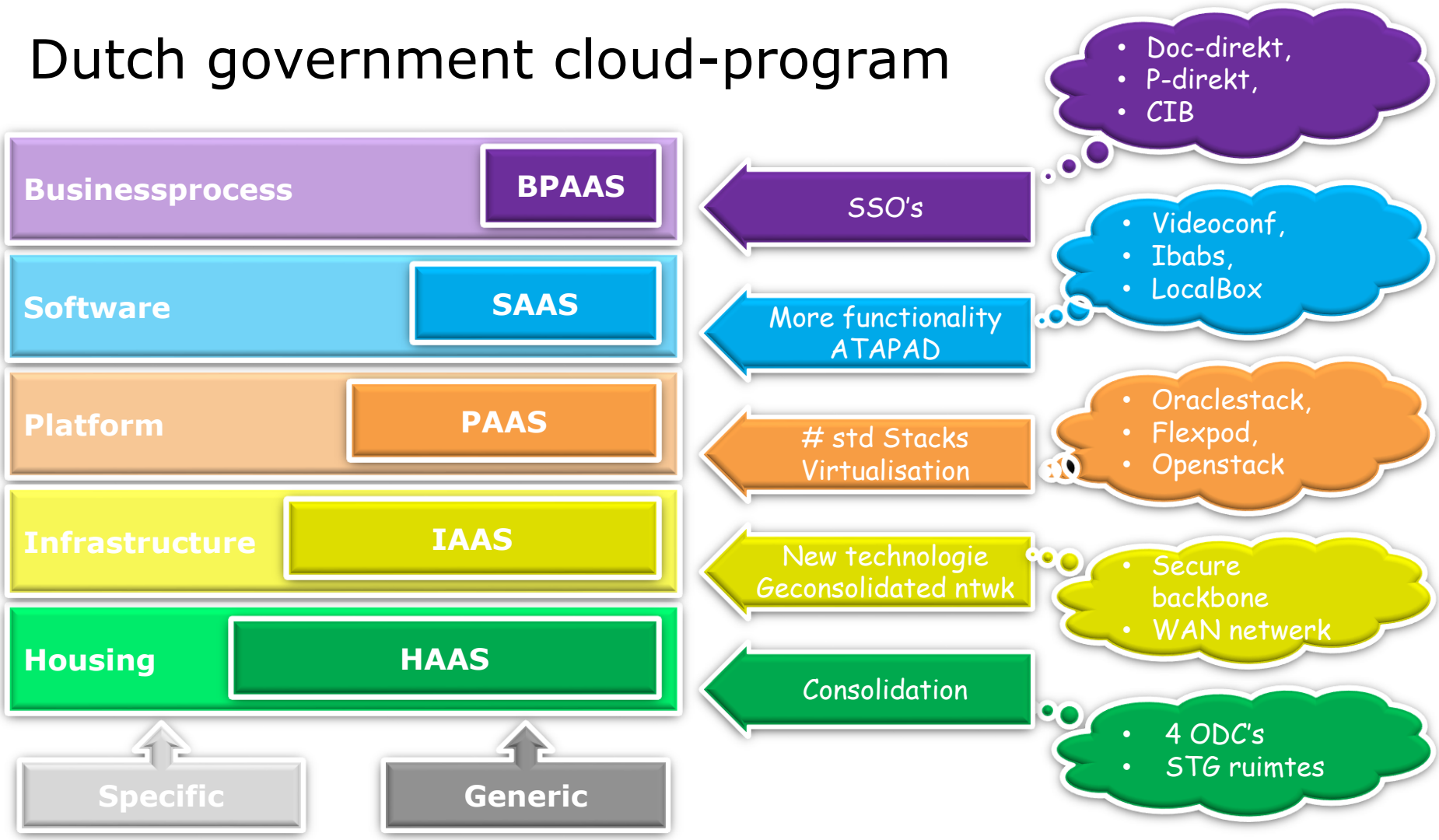
Security threats

IT-trend / New technology

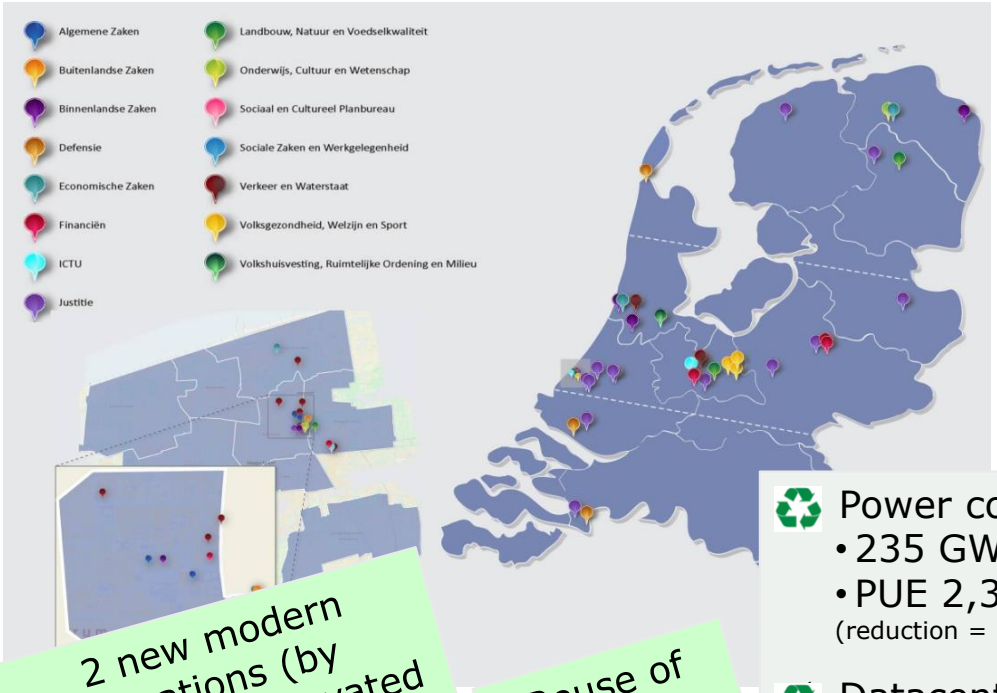
Referencemodel Cloud

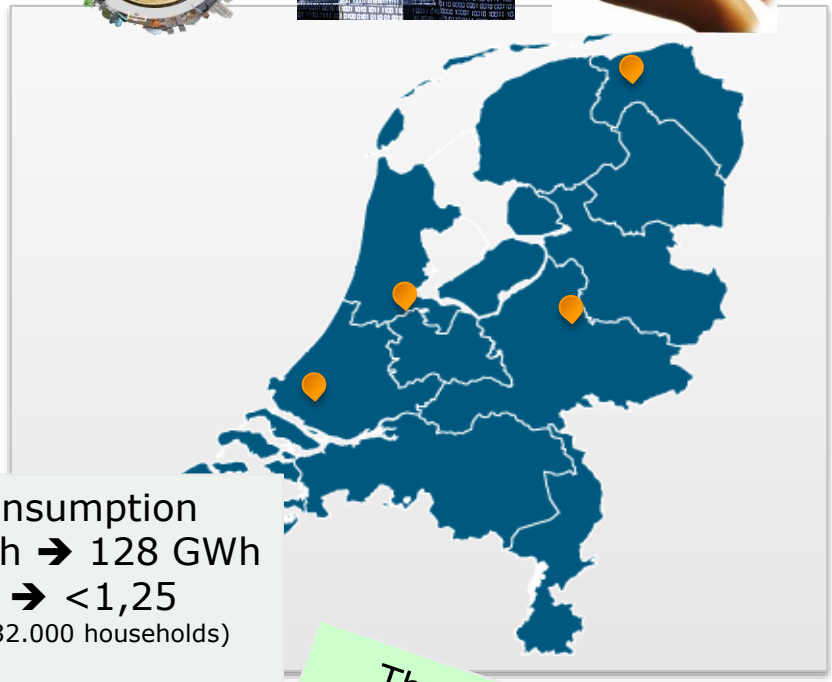


Dutch government cloud-program



Housing | **HAAS**





2 new modern locations (by design), 2 renovated locations

Reuse of warmth

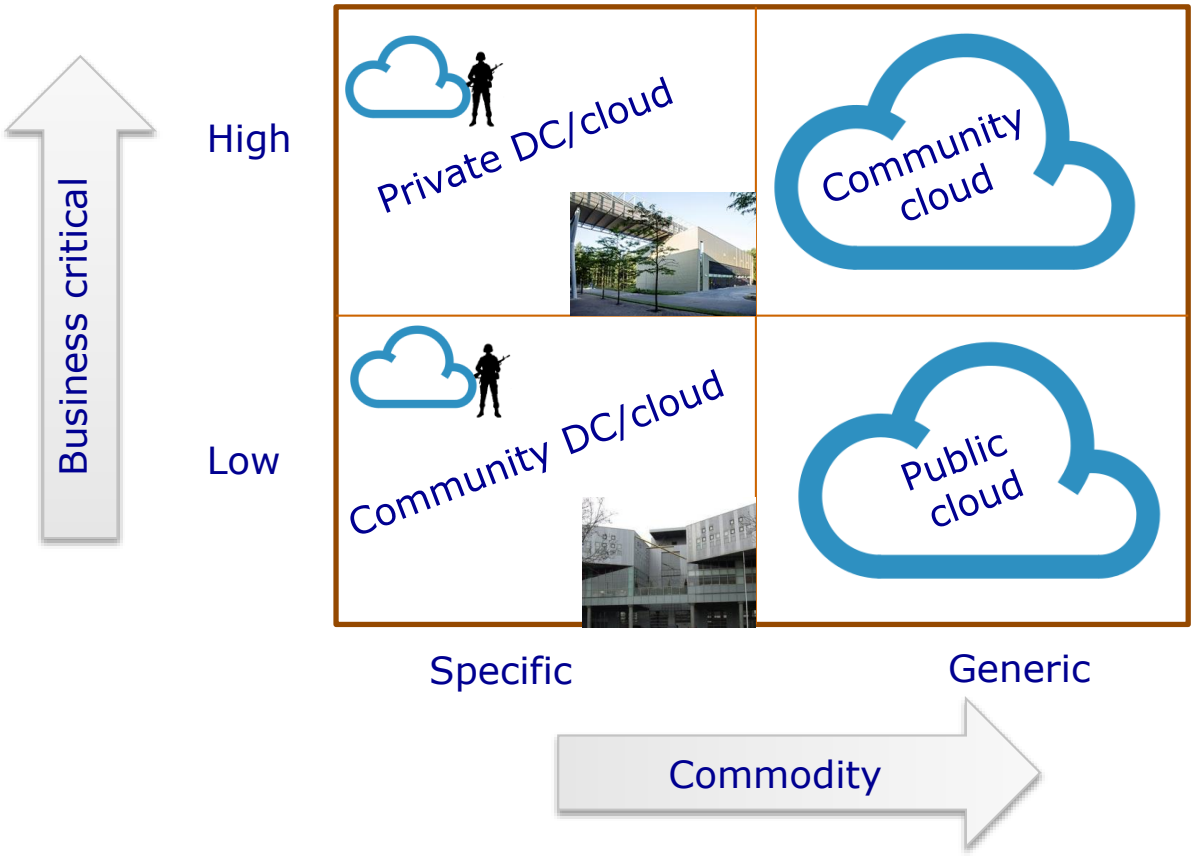
- Power consumption
  - 235 GWh ➔ 128 GWh
  - PUE 2,3 ➔ <1,25

  (reduction = 32.000 households)
- Datacenters
  - 64 ➔ 4

  (room for 48 million terrabytes)

Thermic cooling unto 26°C

Housing | **HAAS**

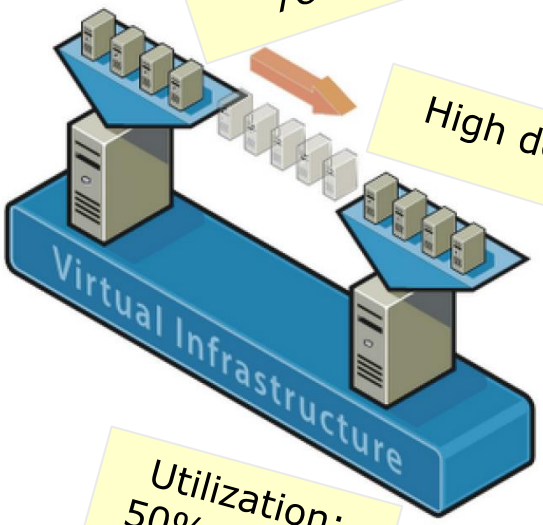


Infrastructure

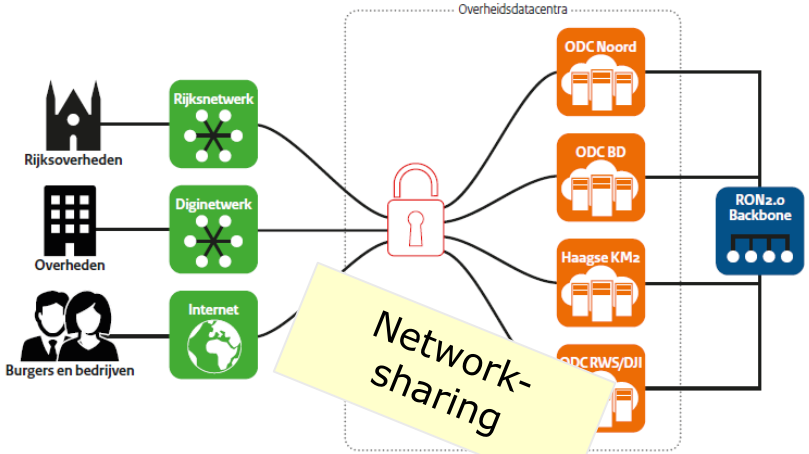
IAAS

Virtualization:
78% m2

High density



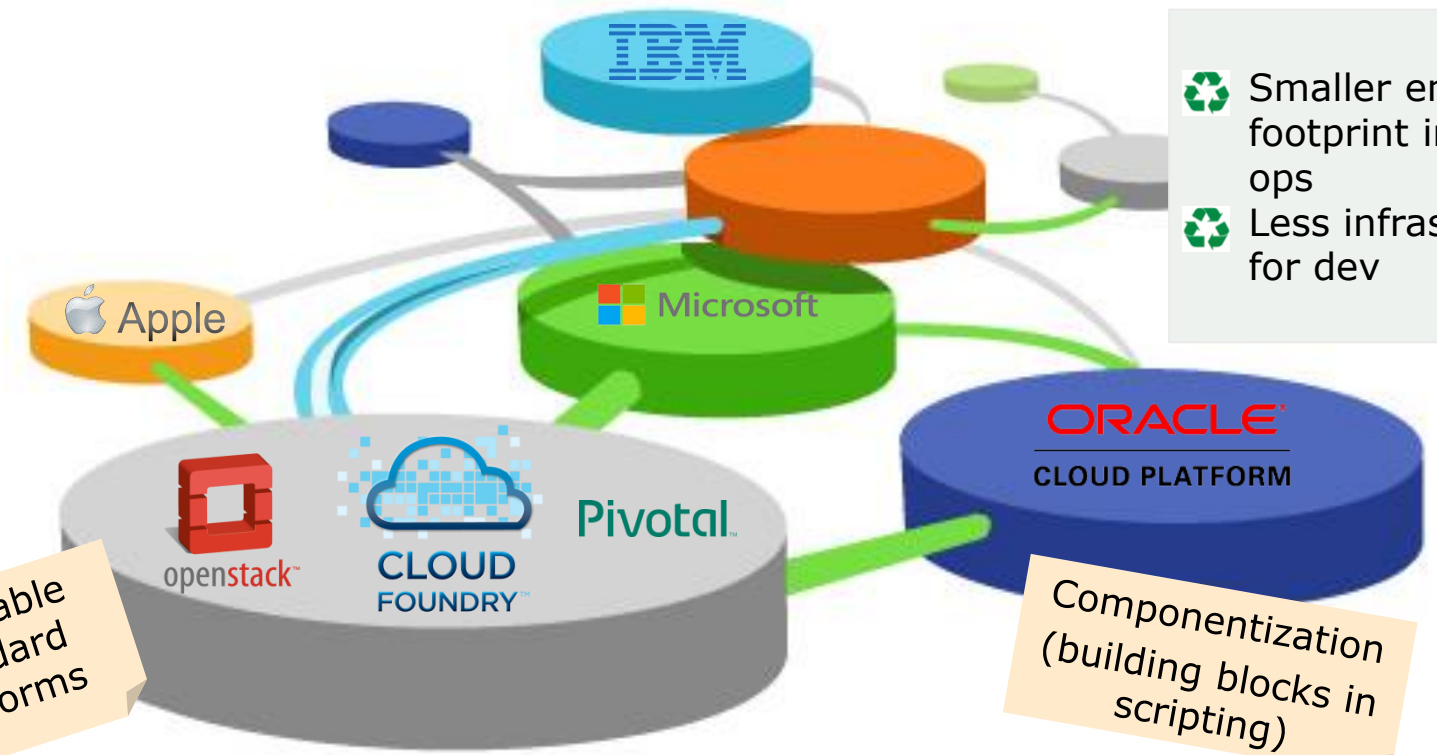
Utilization:
50% > 90%



Network-sharing

Less machinery and cables

Platform | **PAAS**



- Smaller energy footprint in dev & ops
- Less infrastructure for dev

Shareable standard platforms

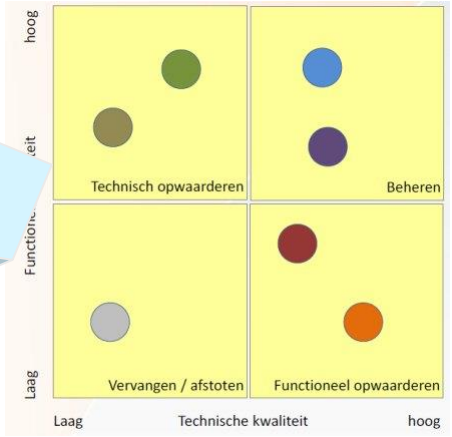
Componentization (building blocks in scripting)

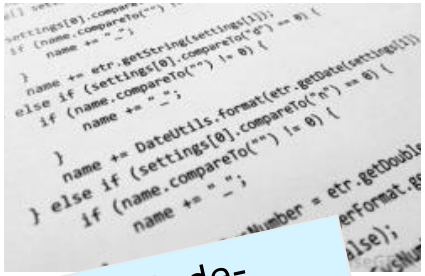
Software

SAAS

Interdepartemental use

Application rationalization



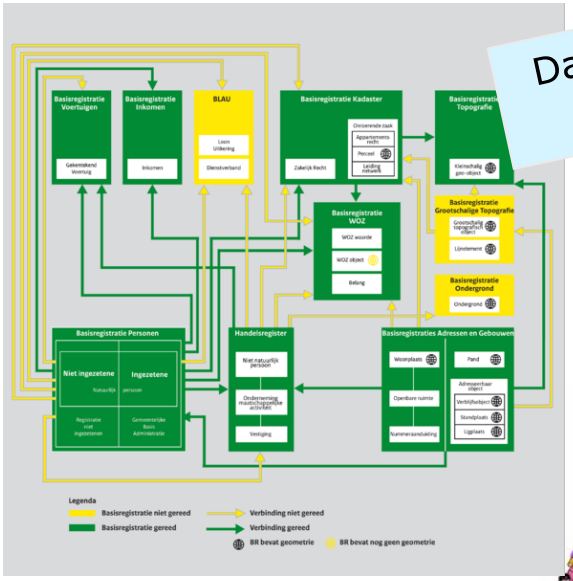


Code-optimization

- Smaller energy footprint in dev & ops
- Less infrastructure for dev

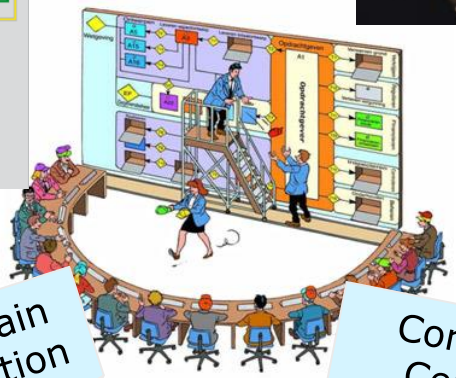
Businessproces

BPAAS



Data reuse

Any Time, Any Place, Any Device

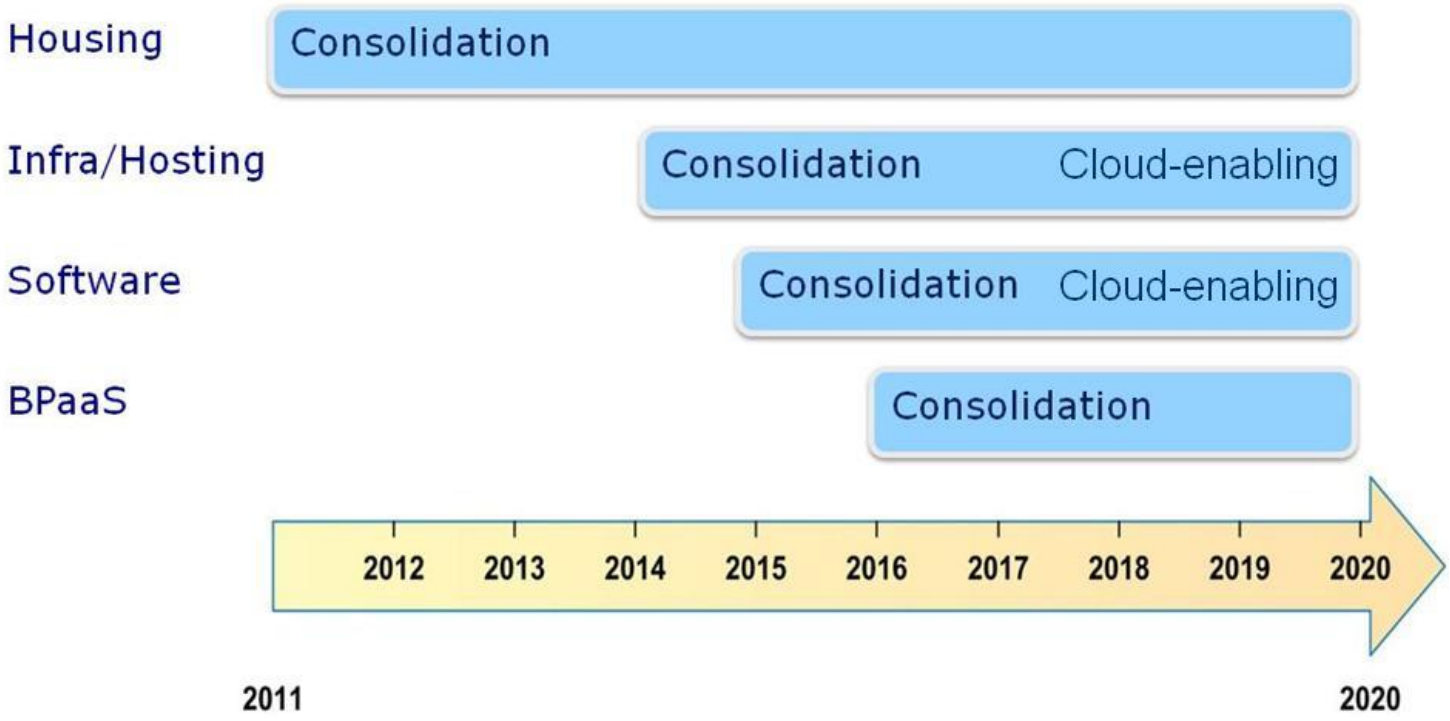


Value chain optimization

Compact Central Government

- Less travel movement (reduction on CO^2)
- Less storage

Planning


Housing
Consolidation
Infra/Hosting
Consolidation
Cloud-enabling
Software
Consolidation
Cloud-enabling
BPaaS
Consolidation
2012
2013
2014
2015
2016
2017
2018
2019
2020
2011
2020

Key takeaways

Architecture:

- Step by step
  - Consolidated Datacenters
  - Consolidated Infrastructure
  - Rationalized Platforms
  - Rationalized Application
  - Rationalized Organization
- By design: less cost, more benefits
- Change via experiments
- Sustainability: integral approach (f.i. not only hardware optimization, but also code optimization)
- Sustainability KPI’s in management contracts
- Change is driven by imposed budget reduction

-The End-