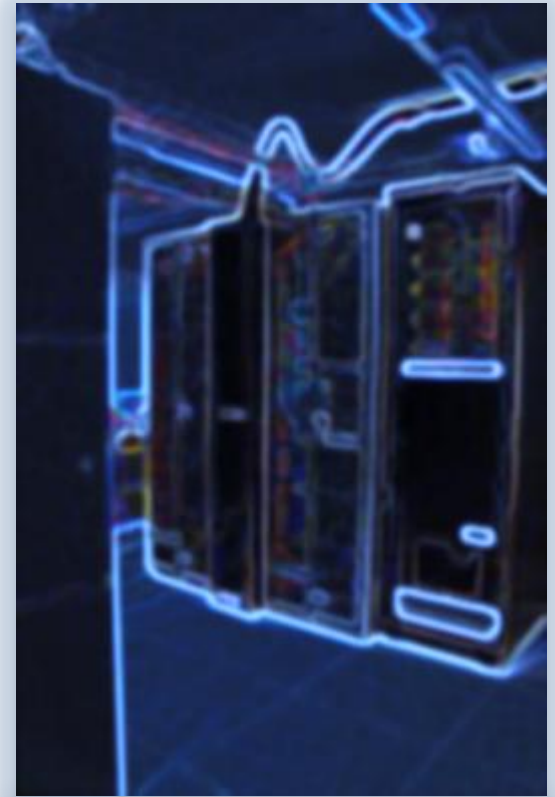


ICT services @KaHo

Kenneth Eeckeman



ASSOCIATIE
K.U. LEUVEN



Tempus

KAHO

Contents

- Introduction
- Vision
- User environment and advantages
- Scope of activities
- Platform and tools
- Conclusion
- Q & A?

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Introduction

- Environment?
 - Multiple campus sites
 - Innovation
 - Research
 - ICT education
 - Partnerships
 - Integration of 2 large educational organizations (2012-2013)
 - Sub-part of a large Association
 - Policies
 - Administration
 - Centralized IT solutions
 - Diversity users (Academic Students, Bachelors, Post)

Introduction

- Central ICT department & regional support
- Large/ small serverrooms ~campus
- Combining 1st, 2nd & 3rdline support
- Equal service for all users
- ICT department in real life is more:
 - Audio, video, ICT internal education, cash and payment devices, videoconferencing,...

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Vision

- Layered approach – bottom-up
 - Infrastructure and network
 - More than IT!
 - Airco
 - Power
 - Fire protection data centers
 - Security: privacy of data
 - Application hosting / performance
 - Monitoring and minimal disruptions
- Redundancy, fail-over and clustering on
 - Hardware, software and people!

Vision

- Each campus / site must be able to run independent for a scope of basic services
 - Authentication, authorization, file , print, collaboration, support, local Lan
- Importance: design of solutions takes the above into account!
- Bring Your Own Device

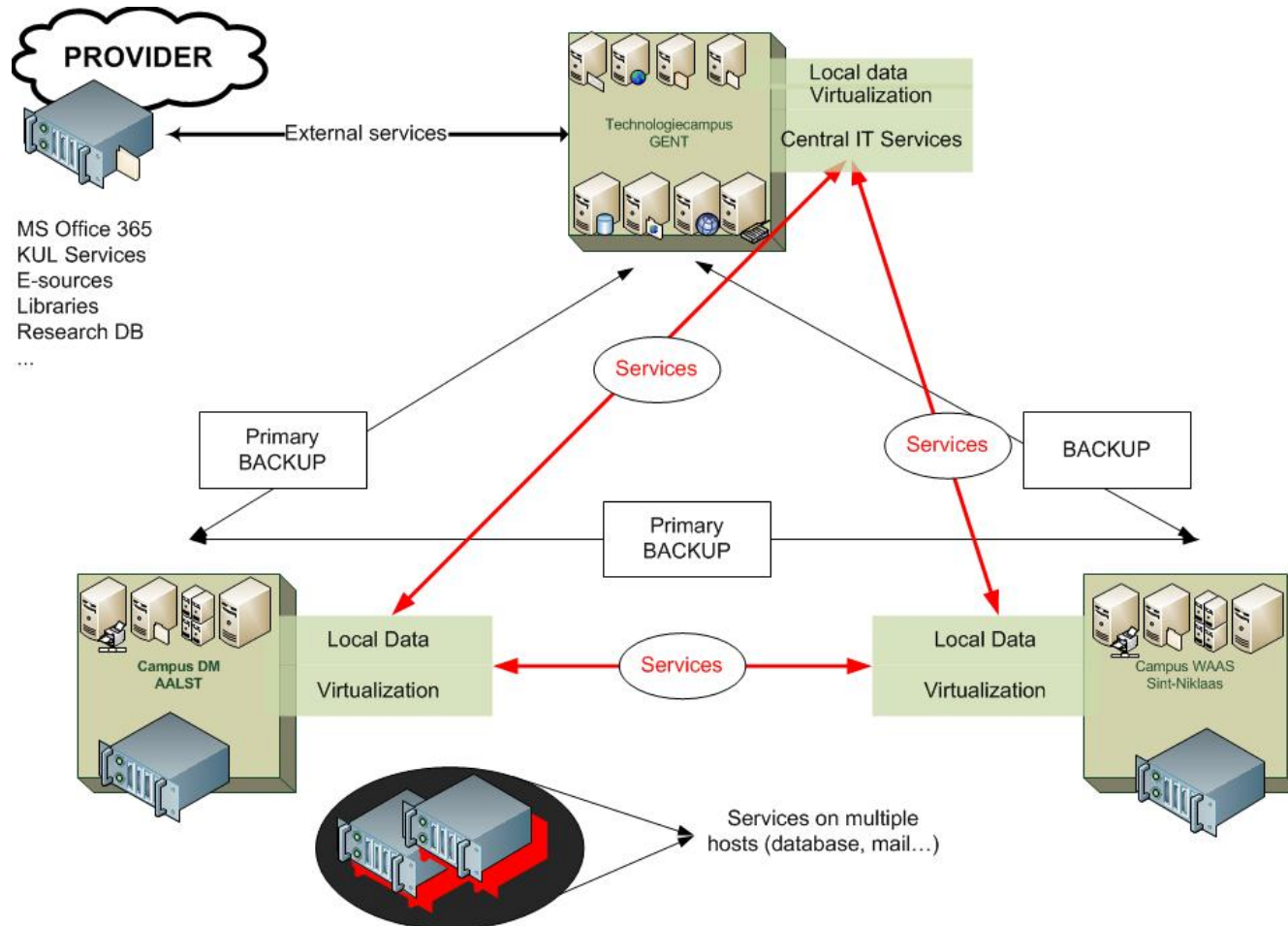
Vision

- Importance of Virtualization
 - Education is open 24h 7/7
 - Scheduling of rooms is easier
 - Fits diversity of students in computer classrooms
 - Maintenance options
 - Uptime of resources

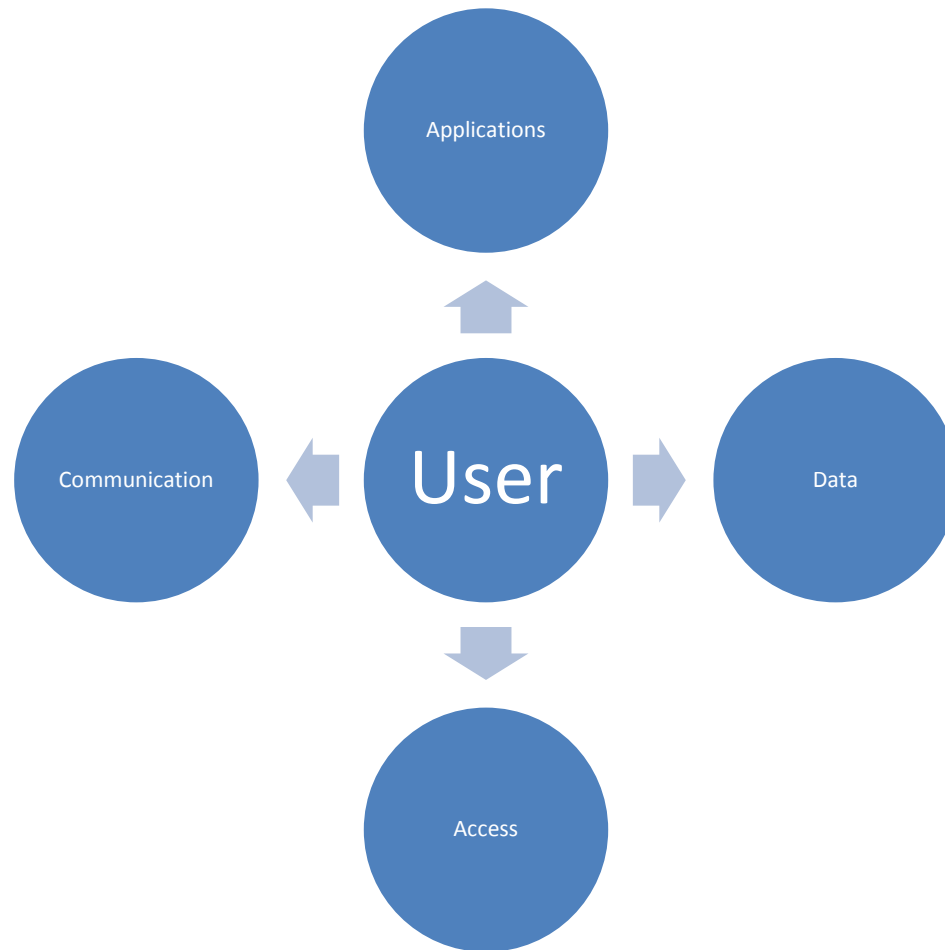
Vision

- Choosing the right platform or product?
 - Product and functionality: matrix
 - In-house support + internal staff
 - Financial cost (installation, license, support contract)
 - Is the product a (current) default, what future does it have?
 - Long term support, end of life?

Vision



Vision



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- User environment and advantages
 - Student wishes
 - Staff wishes
 - General advantages
- Scope of activities
- Conclusion
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Student wishes?

- Easy and user-friendly applications
- Mobile devices support (smartphones,...)
- Different hardware and OS support
 - Mac, Tablets, Laptops
 - Linux based , windows
- Internet Browsers: iexplore, firefox, chrome, safari....

Student wishes?

- Advantages of being a student
 - Acceptable software pricing (or free)
 - MSDNAA, Dreamspark,...
 - ADOBE: difficult!
 - Laptop deals including assurance
 - Ex. Contract DELL within Association
 - “samenaankoop”; “campusshop”
 - = large contracts with companies to keep prices to a minimum

Staff wishes?

- Same wishes as students (teachers)
- Remote and mobile working
 - Homeworking (as in the office)
- Collaboration
 - students, colleagues, companies, researchers...
- Storage requirements & Archiving
- Miscellaneous software needs

Staff wishes?

- “Delegated rights”
 - Ownership of mailgroups
 - Ownership of external access
 - Limited administrative procedures
- “independent” labo / class environment
 - Impact on licensing server
 - Importance of central software store

User environment and advantages

General advantages

– EDUROAM

- Each site of your organization shares a common wireless environment

User environment and advantages

- Wireless access to resources
- Web-interfaces -> internet browsers
- Downtime during day minimized
- Single-sign on: 1 account, 1 login
- Remote access to personal data
- Virtual classroom: time advantage
- BYOD

User environment and advantages

- Mobility versus local office
- Collaboration without borderlines
 - Filesharing, calenders, tasks, wiki,...
- Green Printing (papercut)
- Student and Staff portal: single point of information
- Automated helpdesk & email notification

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 - Audience / user community
 - Services
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Scope of Activities

- Design, optimization and integration
- Aim on multiple target audiences
 - Administration
 - Education
 - Research
 - Collaboration
- Security

Audience / user community

- Many flavors in the User community
- Single versus multiple identities
- Miscellaneous Roles in the organization
- External users (companies,...)
- Anonymous (questionnaire, survey...)

Services

- Helpdesk and support
- Infrastructure and network
- Development
 - Applications
 - Web applications
 - Web sites
- Business analysis
- Advice and top-management support
- Orders and follow-up, external repair
- Administration (maintenance contract,...)

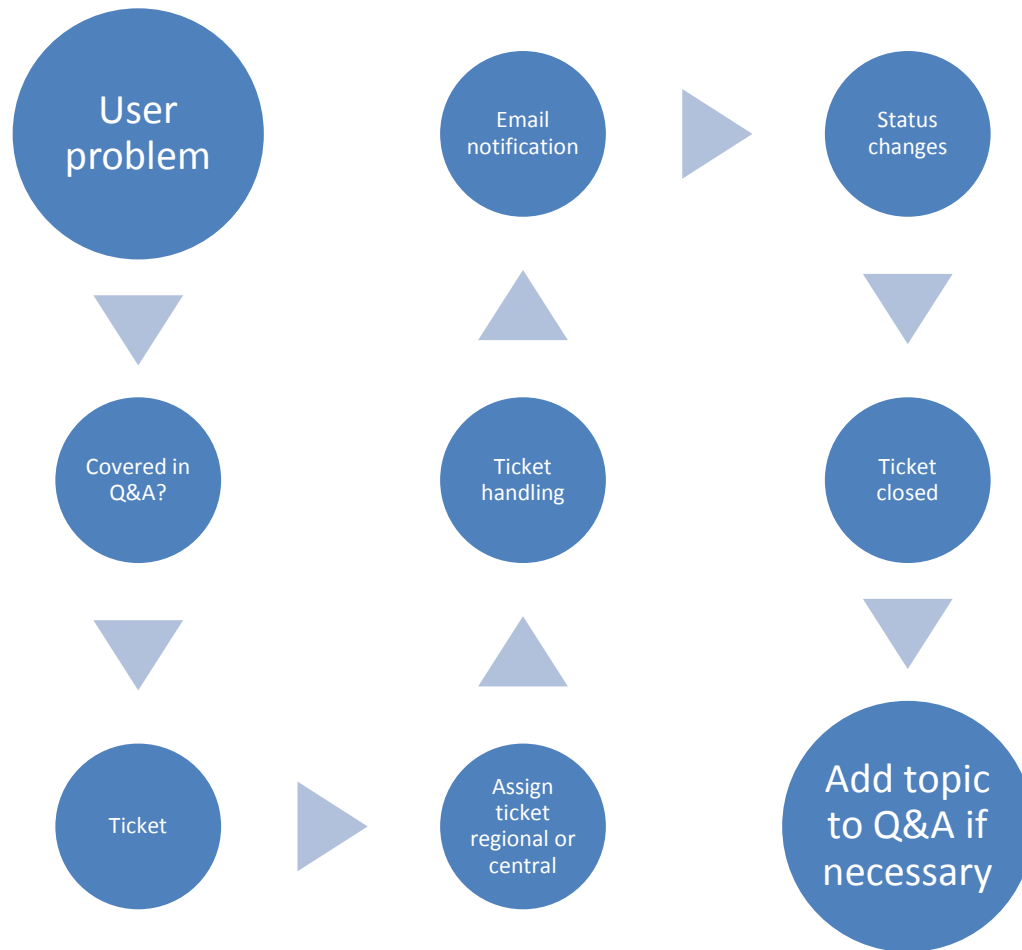
Helpdesk and Support

- Helpdesk and support staff
 - On site interventions (hardware issues, etc)
 - Installations user workstations and software
 - Ticket handling
 - Maintenance Q&A pages
 - User manual production

Helpdesk and Support

- User friendly
 - Procedures
 - Visible
 - Clear workflows
 - Single point of contact on the outside
 - MPOC internal side
- Rental of devices
 - AVM, laptop,.....

Ex. Automated helpdesk & email notification



Ex. Automated helpdesk & email notification

User entrance
for ticket

Helpdesk

Home | AMOSA | ICT Extern | Diversiteit en mobiliteit | Ga ervoor 2012 | Enquête afgestudeerden | **Helpdesk** | Rond Nalr | Personeel | Studietoelatingen

Deze site: Helpdesk

Siteacties

Veel gestelde vragen (FAQ)

Maak een keuze uit onderstaande categoriën, indien uw vraag en/of antwoord niet voorkomt kan u een ticket aanmaken.

Aanmelden / Toegang / Accounts <ul style="list-style-type: none">(Personeel) Aanvraagformulier voor gebruikersaccounts(Studenten) Wanneer heb ik toegang tot Toledo, na mijn activatie?(Studenten) Hoe kan ik mijn wachtwoord wijzigen?(Studenten) Toegelaten speciale karakters voor paswoorden(Studenten) Ik kan mijn toegelaten niet raadplegen via Mijn loketAndere vraag over Accounts	Toledo <ul style="list-style-type: none">(Studenten) Hoe en wanneer komen studenten in Toledo en hun cursussen?(Studenten) Ik moet steeds de instelling KAHO Sint-Lieven kiezen, maar dat helpt niet. Wat is er fout?(Studenten) Ik veranderde van opleiding, wat nu met de officiële community's?(Studenten) Vind ik hier iets over het bestellen van leermaterialen?(Lid) Hoe kan ik minder meldingen krijgen in de What's recent?(Personeel) Welke tips heb je bij de module What's recent?(Studenten) Toegestane karakters in wachtwoordenAndere vraag over Toledo	Hardware (PC's en laptops) <ul style="list-style-type: none">Studentennotaboekproject / www.campusshop.be(Personeel) Prive-aankopen bij HP VIP SHOPAndere vraag over Hardware
Software <ul style="list-style-type: none">Hoe kan je in MS Office een Excel of word bestand opslaan als pdf?Anti-Virus oplossingen bij KaHo Sint-Lieven(Personeel) Aanvragen software(Studenten) Software voor studenten(Personeel) Procure scherminstellingen(Personeel) Opleidingen Word 2010, Powerpoint 2010, Excell 2010 (2012-2013)(Personeel) Office 2010 + Skype plugin: Opmaak kopiëren in Word, Excell, ... faalt.Andere vraag over Software	Mediatheek / AVM <ul style="list-style-type: none">Handleidingen apparatuurAndere vraag over Mediatheek/AVM	Printers <ul style="list-style-type: none">(Personeel) Gebruik van kopiërs en kopieertoestellen binnen KaHo Sint-Lieven(Personeel) Aanvraag bestelling inktpatroon printerAndere vraag over Printers
Netwerk <ul style="list-style-type: none">(Personeel) Technologiecampus Gent - aanvraag netwerkaansluitingHoe kan ik een connectie maken met het draadloze netwerk op de campus?Hoe verbinden met het eduroam wireless netwerk?Externe toegang tot de K-schijf voor studentenAndere vraag over Netwerk	Mailproblemen <ul style="list-style-type: none">Instellingen voor email voor KaHo Sint-LievenGebruik van de SPAM Quarantine filterHoe een mail versturen naar studenten?Andere vraag over Mail	Websites <ul style="list-style-type: none">(Personeel) Basishandleiding Intranet(Personeel) Aanvragen van webruimte en webadres(Personeel) Hoe kan ik RSS feeds instellen voor intranet.kahol.beAndere vraag over Websites
Facilitair <ul style="list-style-type: none">Gebruikershandleidingen voor telefonie(Personeel) Hoe een Lokaal reserveren?Andere vraag over Facilitair	Andere <ul style="list-style-type: none">ICT Gebruik en Afspraken per departementAndere vraag stellen	

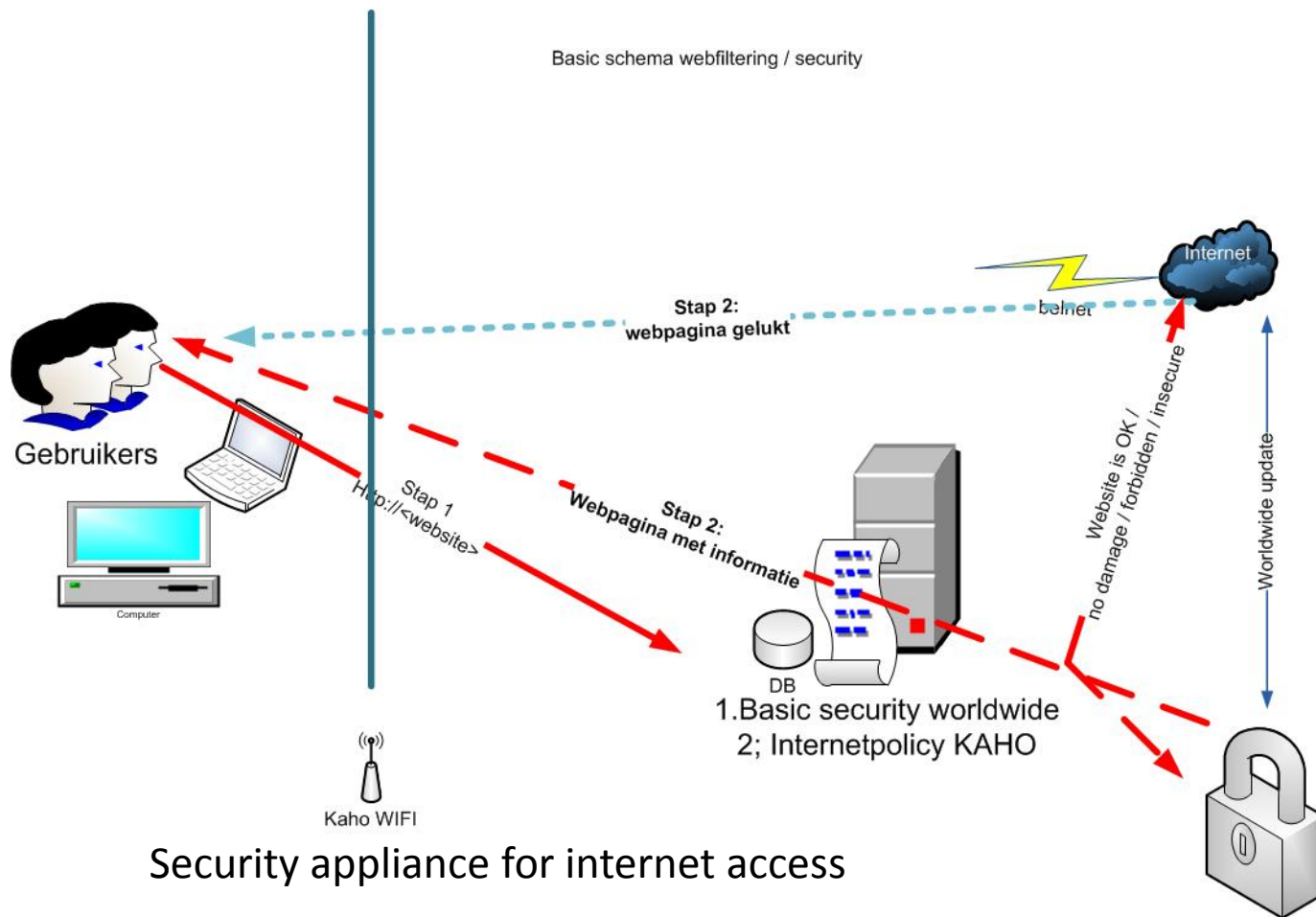
Infrastructure and Network

- Network
 - Installation, upgrades and configuration of network devices, cabling
 - Securing network devices and implementation security devices
 - Webfiltering, firewall, reverse proxy, ISA/TMG, Wifi
 - Routing, DNS, DHCP and other network services
 - Radius (EDUROAM wifi network)
- Servers
 - Design, installation and maintenance
 - Virtualization (hyper-v and vmware)
 - Storage configuration and maintenance
 - Hardware en application monitoring
 - Remote access (ILO) and central management
- Serverroom design

Infrastructure and Network

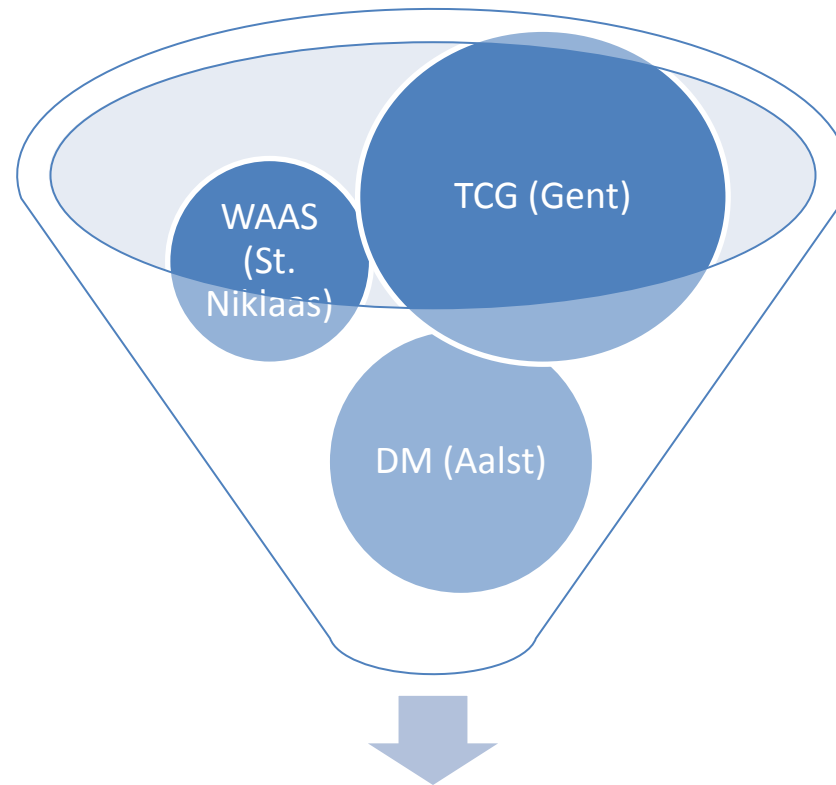
- Server applications
 - Design and implementation
 - Mail services (exchange, office 365)
 - File, Print and other basic services
 - Remote applications and environment
 - Citrix, RDGWS, UAG, Direct Access (win7)
 - Replication
 - Clustering
 - Backup strategy
 - Monitoring
 - Web services
 - And many others....

Infrastructure and Network



Security appliance for internet access

Size ICT on campus



ICT infrastructuur KaHo SL

Development Platform

- C#
- MOSS with .NET 3.5 + Sharepoint Designer
- Default. .NET 4.0 or +
- Visual studio and Teamfoundation (SCRUM)
- ReSharper (jetbrains)
- WCF and WPF
- SQL Reporting Services

Development Projects

- Persona Human Resources application
 - Customer: 8 schools
 - Registration, calculations, reporting,...
 - E-portal applications for holiday requests, etc.
- Internship students, Portfolio
- Account services
- E-learning application (MOSS,.NET and DRUPAL)
- Surveys
- Workflow applications
 - Room reservation, payments, skill tools...
- Project websites with general branding

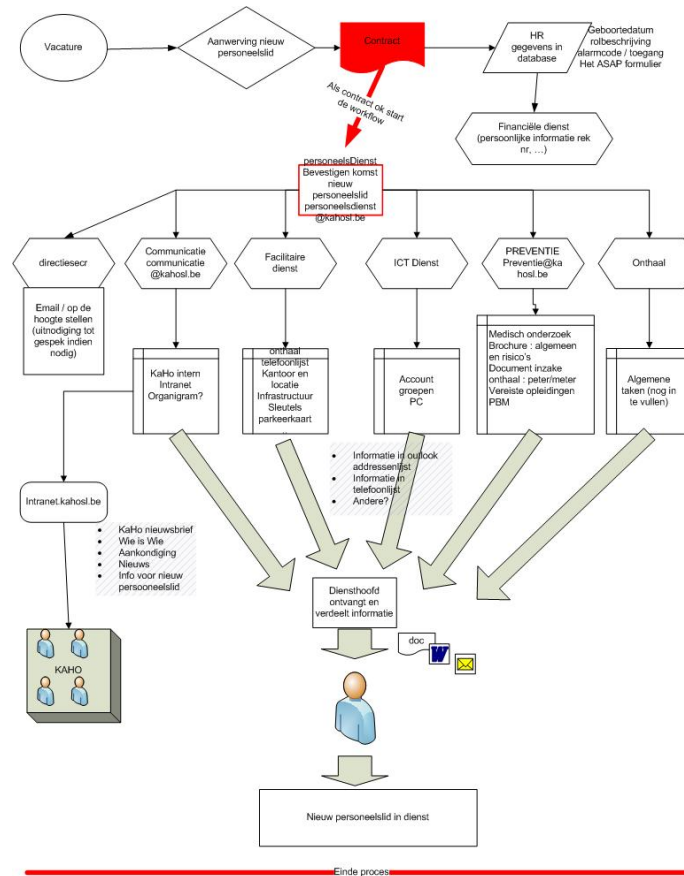
Business analysis

- Project lead for optimization of processes
- Participating from analysis to implementation
- Risk & Integration management
- Documentation
- ICT needs a global overview

Business analysis example (1)

- Goal: optimize the start of new employees
 - Several administrative processes
 - Several technical processes
 - Several functional topics
 - Less paper
- Platform: MOSS workflow, email notifications

Business analysis example (2)



Advice and top-management support

- ICT business view and policy
- ICT position of organization
- Reporting financial results and status
- Innovation and Research
- Advice on policy documents and procedures (Association)

Orders and follow-up

- Administrative process of ICT equipment orders and purchasing
- Centralized business model
 - 1 vendor versus multiple vendors
- Default order chain and contracts
 - Umbrella topology for all sites: ROI!
- Lifecycle parameters and values
 - Central approach for all equipment

Administration

- SAP Student lifecycle (KUL Association)
- Finance department: proAcc and Procure
- HR department: Persona (int. Devel), Acerta
- Student internship: Int.Devel

Platforms and tools

- Windows and Linux OS
- MS Office suite products
- MS System center solutions
- MS SQL and MySQL
- IIS, MOSS, DRUPAL
- Visual studio, Resharper
- And many others...

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Conclusion

Start an ICT department from scratch requires:

- Network connectivity, video conferencing
- Physical serverroom
 - UPS, Storage, servers,
 - Support contracts
- Central administration / Student registration
- Central user / identity directory
- Agreements and deals for equipment
- Clear education content and requirements
- ...

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Q & A?

