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ITSI at *Rabobank*

Securing sustainability of competitive
business services with ITSI

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Danny Bos | VP, Manager Monitoring Services **Rabobank**

27 September 2017 | Washington, DC

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Agenda

1. Who are we?
2. Our case
3. Our results
4. Our journey
5. Looking back

Who Are We?



Eduard Lekanne

- ▶ BSM, CMDB ITOA Senior Consultant at UMBRiO
- ▶ Splunk Architect for 2+ years
- ▶ Working with ITSI for one+ year



Danny Bos

- ▶ VP, Manager Monitoring Services at Rabobank
- ▶ 18 years within Rabobank IT
- ▶ Master in Buss Process Mgt & IT

The Urgency of the Situation...

2014

Opnieuw storing bij Rabobank

AMSTERDAM - Rabobank is maandmiddag wederom getroffen door een storing waardoor internetbankieren niet te bereiken was.

De storing was rond 12.00 uur 's ochtends begonnen. De oorzaak was nog niet bekend. Vorige week kampte de bank ook met problemen en in mei en februari werden internetbankieren ook al getroffen door storingen. Of er een verband is, is niet duidelijk.



2/3 De oorzaak wordt momenteel gezocht

allestoringen.nl niet aanbod van Rabobank er wat mogelijk te maken

Home Top 10 Bedrijven Storingen Pro Diensten Over ons

Home / Bedrijven / Rabobank

Alle dect-telefoons gratis bezorgd.

Rabobank

Rabobank is een bank voor particulieren en ondernemers. De cooperatie biedt betalingen, spaarplannen, verzekeringen en credit card. Voor de goedkeuring van een speciale random reader nodig, een soort calculator die na invoering van de pin code een tijdelijk wachtwoord genereert waarmee gebruikers kunnen hun saldo controleren of geld overboeken.

Mededeling

Door technische problemen zijn de Rabobank klanten vertraging onderworpen bij het verwerken van de opdrachten van de mobiele bankieren en internetbankieren, waardoor de status 'in behandeling' heeft gekregen. Het is niet mogelijk om opdrachten dienen niet te worden uitgevoerd te worden. Het is niet mogelijk voor zowel particulieren als ondernemers. Aan een oplossing wordt gewerkt. Excuses voor het ongemak.

Ok

Telfort NL 16:24 71%

Mededeling

Het gebruik van de Rabo Bankieren App is momenteel niet mogelijk. Rabobank werkt aan een oplossing. Excuses voor het ongemak.

OK

Rabobank v3.0.0

wordt geladen...

Jordi v/d Bovenkamp @JOR_ID

.@Rabobank Twee jaar zouden jullie over nadenken en #carnaval begint bijna.... gaat het lukken?

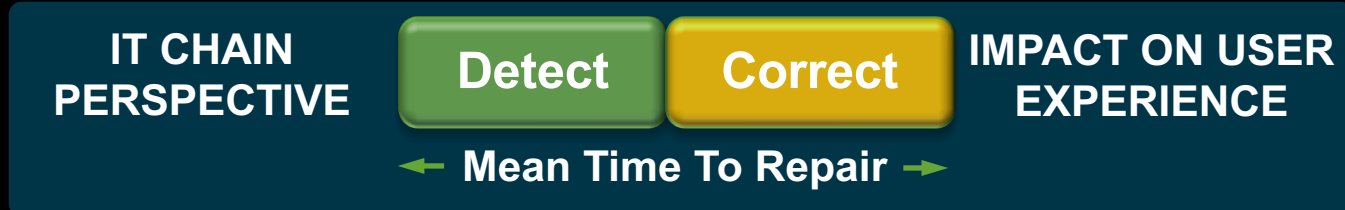
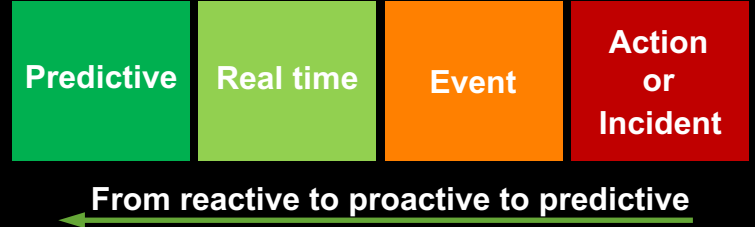
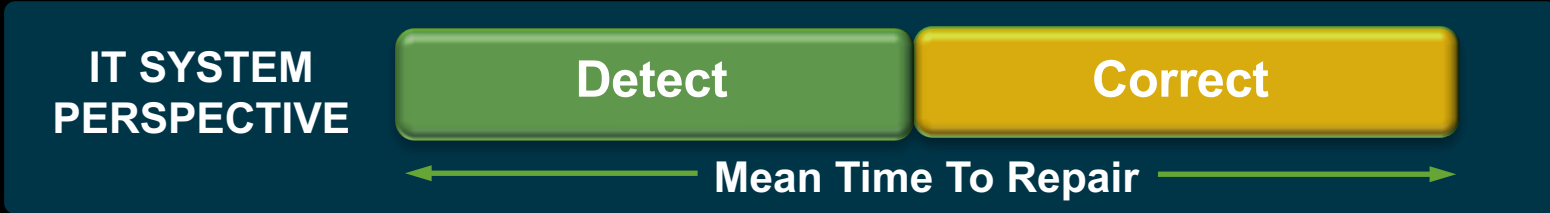
RETWEETS 2 LIKES 26

NOS

Rabobank

News anchor sitting at a desk with Rabobank logo in the background.

The Challenge of Monitoring...



Preventive / predictive → IT Operations Data Analytics

We needed an approach which is:

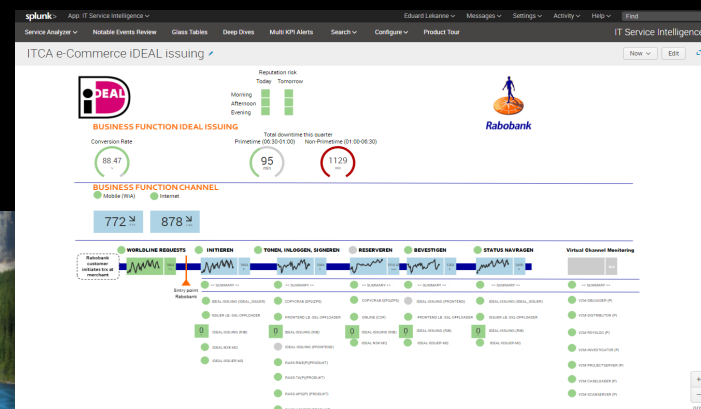
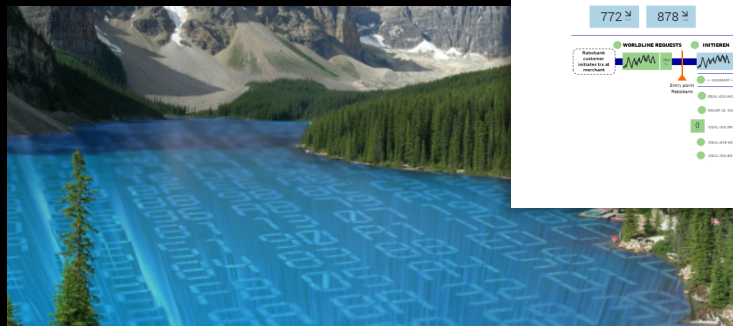
- User Centric, impact on user experience
- Based on Business Risk Appetite
- More End2End, holistic chain perspective
- Both Inside Out & Outside In
- Fast Root Cause & Impact Analysis
- Fast remediation
- Extra benefit = effect of change management

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130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FL-SW-01"
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Why Splunk and ITSI at Rabobank



2016

Searching for a more holistic approach

Splunk glass table session was a success. Business wants ITSI

2015:

Vision on data:
Collect once, store once, use many. Splunk as data lake

2014:

Log file Management:
Splunk was a fact

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Rabobank Started with the iDeal Case...



iDEAL

- ▶ Introduced in 2005
- ▶ Most important [e-commerce payment system](#) in the [Netherlands](#), based on [online banking](#).
- ▶ Allows customers to buy on the Internet using direct online transfers from their bank account. (Like PayPal)
- ▶ 9.5M iDeal transactions per month

- BIA → Business Risk Appetite
- Max. 240 minutes downtime in prime time every quarter (2017)
- Planned & unplanned together!

Google ideal beschikbaarheid

Alle Afbeeldingen Shopping Maps Nieuws Meer Instellingen Tools

Ongeveer 473.000 resultaten (0,39 seconden)

iDeal beschikbaarheid pagina
[beschikbaarheid.ideal.nl/](#)
 Er is geen beschrijving beschikbaar voor dit resultaat vanwege de robots.txt van deze site.
 Meer informatie

Beschikbaarheid
 iDEAL is bij uitstek een betaalmiddel waarvoor ...
 Meer resultaten van ideal.nl »

iDEAL | iDEAL-beschikbaarheid
<https://www.ideal.nl/ontvangen/kerncijfers/ideal-beschikbaarheid/> ▼
 iDEAL is bij uitstek een betaalmiddel dat altijd, 24 uur per dag, beschikbaar moet zijn ... Voor de beschikbaarheid van iDEAL zijn daarom door Currence normen ...

iDEAL | Lancering iDEAL-beschikbaarheidspagina
<https://www.ideal.nl/actueel/lancering-ideal-beschikbaarheidspagina/> ▼
 2 apr. 2015 - De pagina toont de actuele en historische beschikbaarheid van iDEAL bij de diverse banken. Consumenten en ondernemers zien dus direct bij ...

iDeal-status.nl
<https://www.ideal-status.nl/> ▼
 iDeal-status.nl twittert automatisch wanneer er een storing is (verlopen) bij een iDeal-bank. Op de hoogte blijven? Volg iDeal-status.nl op Twitter!

Beschikbaarheid - ABN AMRO - iDEAL
<https://www.abnamro.nl/privé/actuele-informatie/.../beschikbaarheid-ideal.html> ▼
 In de grafiek hieronder ziet u het gemiddelde percentage beschikbaarheid van iDEAL in de afgelopen 3 maanden. Er is een onderverdeling gemaakt in de ...

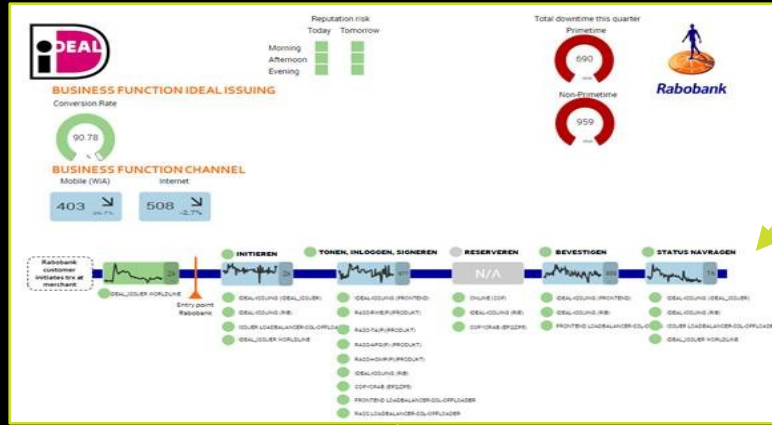
Storing met iDEAL? Check de beschikbaarheidspagina | Dibevo
<https://www.dibevo.nl/nieuws/storing-met-ideal-check-de-beschikbaarheidspagina> ▼
 13 apr. 2015 - Check de beschikbaarheidspagina. Beschikbaarheid iDeal. Betaalvereniging Nederland heeft de iDeal-beschikbaarheidspagina gelanceerd, ...

Banken tonen beschikbaarheid iDEAL - internetkassa nu
<https://www.internetkassa.nu/banken-tonen-beschikbaarheid-online-betaalmethode-id-...> ▼
 2 apr. 2015 - iDEAL storing? Check hier beschikbaarheid iDEAL. Biedt alternatieve online betaalmethoden als creditcard, achteraf betalen en PayPal.

Beschikbaarheid van onze diensten - ING - Service & contact
<https://www.ing.nl/particulier/kantenservice/beschikbaarheid/index.html> ▼
 Beschikbaarheid Mijn ING Particulier april 2017: 100%. Einde in- ... De actuele beschikbaarheid van iDEAL bij ING kunt u vinden op [beschikbaarheid.ideal.nl](#).

Banken brengen beschikbaarheid iDEAL in kaart - Nieuws ...
www.retailnews.nl/nieuws/.../banken-brengen-beschikbaarheid-ideal-in-kaart.html ▼
 2 apr. 2015 - Retailers en consumenten hebben voortaan via een speciale webpagina inzicht in de actuele beschikbaarheid van iDEAL.

ITCSS Chain Monitoring



Down-drill screens

Dashboard and alerts

E-mail and / or SMS

E-mail and / or SMS

Above this line: End-user functionality layer

Below this line: Technical business stream monitoring layer

Monitoring tool

Correlation tool

Incident process tool

Monitoring processes

Splunk, Dynatrace, BPM, RUM, etc.

OMI

Service Management

Business stream

Configuration item (CI)*

Event

Incident

Incident workflow

Below this line: Configuration management as a prerequisite

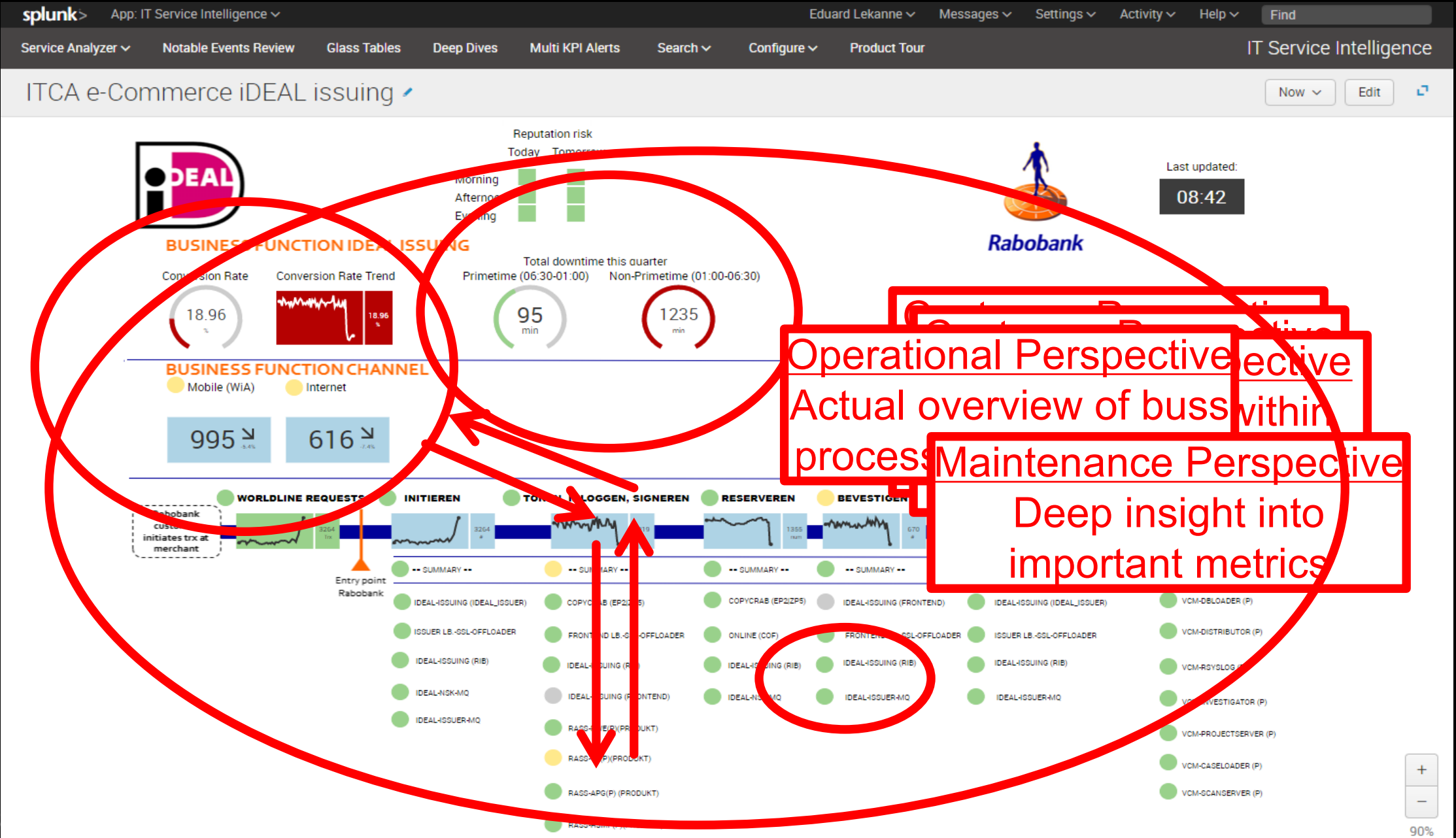
CMDB

CMDB

Configuration management database

Can be any level in LDM, i.e. business stream, channel or application

iDeal Chain Dashboard (Splunk ITSI Glass Table)



Operational Perspective

Actual overview of buss within process

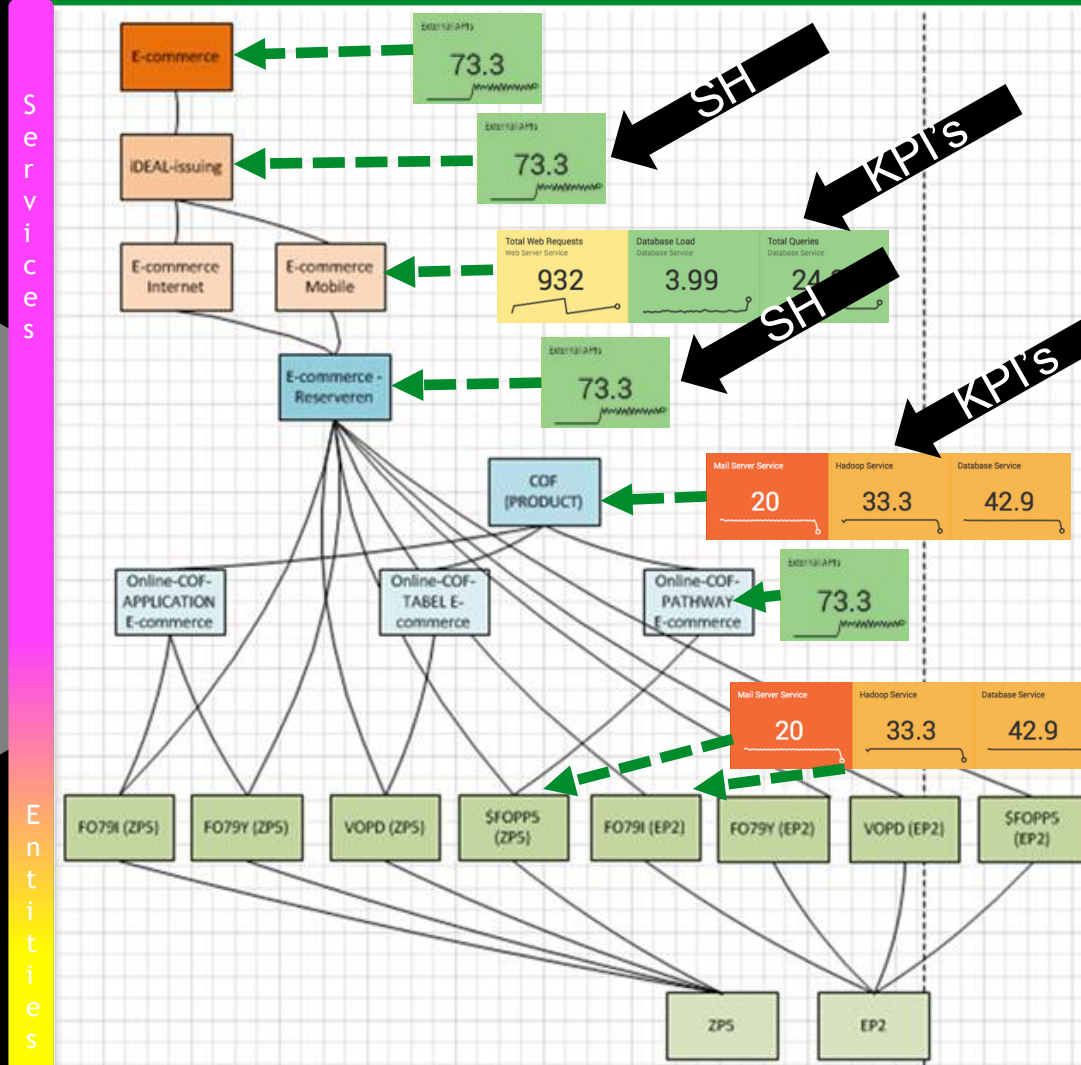
Maintenance Perspective

Deep insight into important metrics

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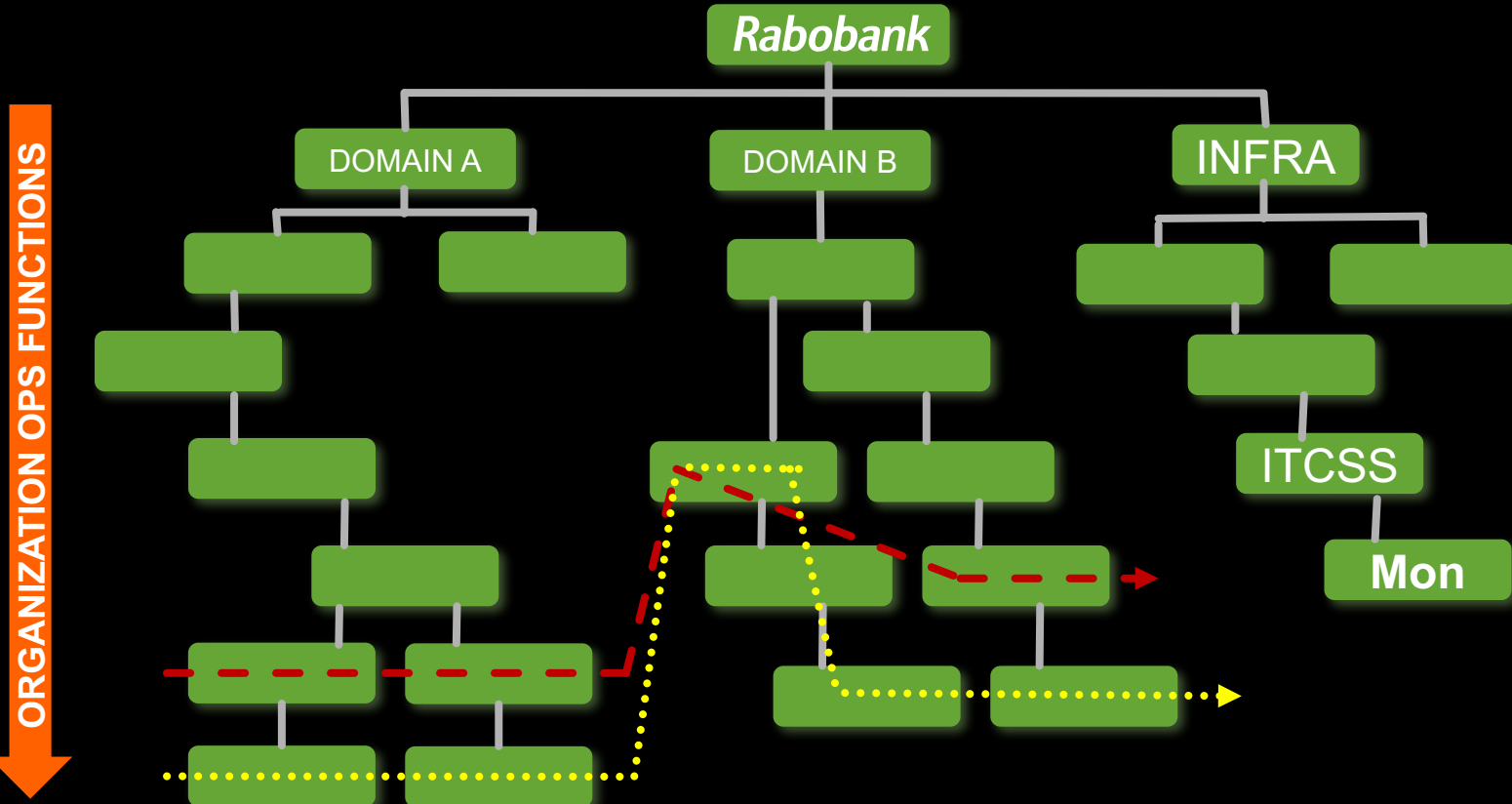
Step 1: CMDB Data Model to Splunk ITSI

- Business Keten**
Verzameling van Business Functies die samen een bepaalde klantpropositie realiseren.
Voorbeelden: Cards, Europayments, Sparen
- Business Functie**
Het proces of de combinatie van processen waarmee een bepaald eindresultaat voor de Klant wordt gerealiseerd.
Voorbeelden: Ophogen paslijmet, Aanvragen Spaarrekening.
- Business Functie Kanaal**
Business Functie samen met kanaalfunctionaliteit voor een specifiek kanaal. Hét niveau voor end-to-end ketensturing.
Voorbeeld: Ophogen Paslijmet via Internet.
- Applicatie Service**
Functionele decompositie van een Applicatie, waarmee fijnmaziger op changes en incidenten in die Applicatie kan worden gestuurd.
Voorbeelden: COF Spoedbetaling, CRM Geef Klant. Optioneel te groeperen in samengestelde Applicatieservices.
- (Hoofd/Business) Applicatie**
Containerbegrip, met uiteenlopende vormen van samenhang (functioneel, eigendom, kosten, beheer, e.a.)
Voorbeelden: COF, CRM, ATLAS.
- Sub Applicatie (Applicatie Component)**
Fysieke decompositie van een Applicatie. Koppevlak naar de Infrastructuur laag.
Voorbeelden: COF Database, PMX Frontend.
- Infra Cluster**
Groepering van redundante Infra CI's.
Voorbeelden: Linux Cluster X, Oracle RAC Cluster Y.
- Running Software**
(Zoveel mogelijk) automatisch ontdekte software CI's (instances).
Voorbeeld: Apache / Database / Queue Manager
- Infra CI's**
(Zoveel mogelijk) automatisch ontdekte infrastructuur CI's
Voorbeeld: Servers, Storage, Netwerk



- ▶ Which layer and which relation types has to go to ITSI?
- ▶ Which CI's are ITSI Entities and which are ITSI Services?
- ▶ Where to put the KPI's?
- ▶ We started with the top-down CI's that are close to business and customers: this creates buy-in.

Step 3: How to do Monitoring (1 of 2)

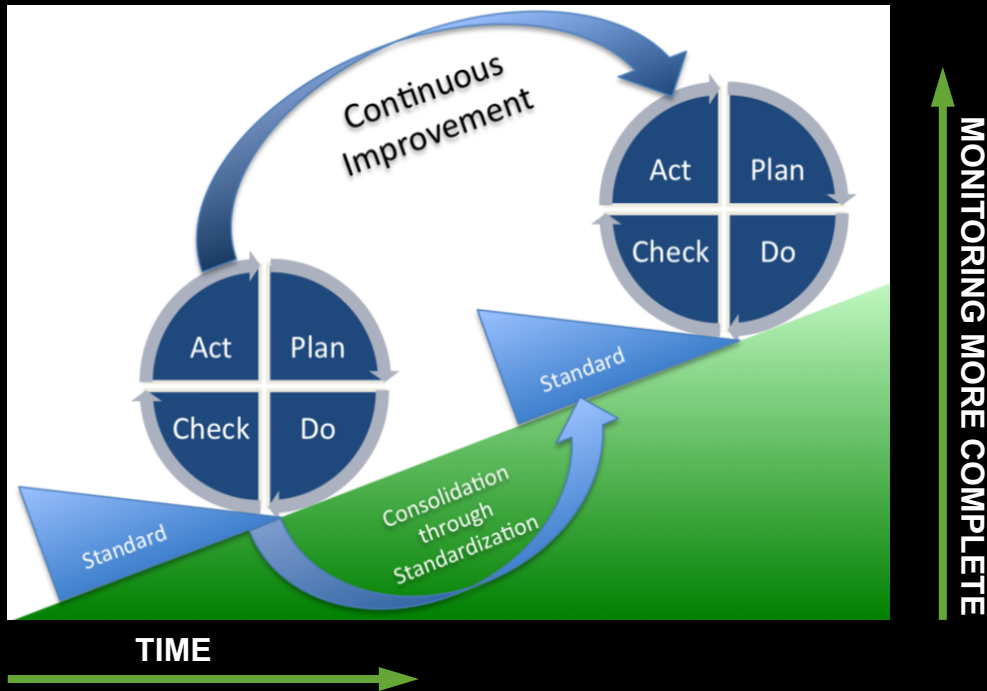


- ▶ Be the chain monitoring specialist that understands the business priorities and perspectives but also understands the technical side of it.
- ▶ Work close with the SME's on every level of the organization that is needed for getting the chain monitoring done.

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Step 3: Short Cyclic “Glass Table Sessions” (2 of 2)



- ✓ We learned from Splunk sales methodology
- ✓ Every session demonstrates the results from previous session
- ✓ New topics will be addressed and build/executed before next session
- ✓ We build the process chain monitoring iterative, top-down and short cyclic with eye for result and deposit in the process chain
- ✓ All activities in Jira and documentation digital on Confluence
- ✓ Deliver each 2 to 3 days results
- ✓ Work close with the Business and SME's.

Step 5: ITSI Maintenance

From a data and functional perspective



► Data management:

- The timeliness of the data used is very important (time lag on KPI level)
- The completeness of the data used is also very important (change management)

► Functional management:

- (bi-)weekly meetings with the business operational teams to discuss disturbances
- Have glass-tables for the application teams so they feel the “pain” if not complete or not working
- If started with transaction/flow/process monitoring one is less dependent of fast changing infrastructure.

SUCCESS!

Rabobank got a seat



- ▶ Rabobank ITCSS got a permanent seat at the bi-weekly Operational Meeting for the particular business process.
- ▶ Business is impressed that they now have visibility into their process and transactions
- ▶ Business is internally doing marketing against peers that they are now in control
- ▶ They continuously watch the iDeal dashboard
- ▶ They want more!

Key Take Aways

- ▶ Think outside in: measure what matters to your customers
- ▶ Think also from a business perspective: measure what matters to the business
- ▶ Do start with transaction/process monitoring
- ▶ Use your CMDB: Often there is real valuable CI data in there
- ▶ Deliver in short cycles of say 2-3 days, start with a glass table session to get into the flow of possibilities
- ▶ Organize the ITSI Dashboard/KPI maintenance
- ▶ Start small, end big



Thank You

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