



Stichting NIOC en de NIOC kennisbank

Stichting NIOC (www.nioc.nl) stelt zich conform zijn statuten tot doel: het realiseren van congressen over informatica onderwijs en voorts al hetgeen met een en ander rechtstreeks of zijdelings verband houdt of daartoe bevorderlijk kan zijn, alles in de ruimste zin des woords.

De stichting NIOC neemt de archivering van de resultaten van de congressen voor zijn rekening. De website www.nioc.nl ontsluit onder "Eerdere congressen" de gearchiveerde websites van eerdere congressen. De vele afzonderlijke congresbijdragen zijn opgenomen in een kennisbank die via dezelfde website onder "NIOC kennisbank" ontsloten wordt.

Op dit moment bevat de NIOC kennisbank alle bijdragen, incl. die van het laatste congres (NIOC2025, gehouden op donderdag 27 maart 2025 jl. en georganiseerd door Hogeschool Windesheim). Bij elkaar zo'n 1500 bijdragen!

We roepen je op, na het lezen van het document dat door jou is gedownload, de auteur(s) feedback te geven. Dit kan door je te registreren als gebruiker van de NIOC kennisbank. Na registratie krijg je bericht hoe in te loggen op de NIOC kennisbank.

Het eerstvolgende NIOC vindt plaats in 2027 en wordt dan georganiseerd door HAN University of Applied Sciences. Zodra daarover meer informatie beschikbaar is, is deze hier te vinden.

Wil je op de hoogte blijven van de ontwikkeling rond Stichting NIOC en de NIOC kennisbank, schrijf je dan in op de nieuwsbrief via

www.nioc.nl/nioc-kennisbank/aanmelden-nieuwsbrief

Reacties over de NIOC kennisbank en de inhoud daarvan kun je richten aan de beheerder:

R. Smedinga kennisbank@nioc.nl.

Vermeld bij reacties jouw naam en telefoonnummer voor nader contact.

2020 real-time-enterprise

De payment total services realtime enterprise

Door: Henrik van Bruggen (ING).

Kernwoorden: retail banking, enterprise-architectuur; ontwikkeling ICT-toepassingen.

Tijdens deze presentatie schetste Henrik van Bruggen het ontwerp, de ontwikkeling en de realisatie van een enterprise-architectuur voor ING Retail Benelux. Welk stappen zijn doorlopen, welke tools zijn er gebruikt, wat is geleerd uit de ervaringen? ING maakt de toekomst van retail banking: een total-services-payment realtime enterprise. Innovatief en inspirerend. Zijn er kansen voor ICT-/media-opleidingen?

Enterprise Architecture within ING.

ING delivers financial services for Banking, Investments, Life Insurance and Retirement Services. Henrik van Bruggen is distinguished Chief Architect ING Bank responsible for Application Architecture ING Netherland and Infrastructure Architecture Global ING. Since 1995 he is working for ING in various Roles.

ING is an international worldwide operating Bank. ING Retail is no 2 Bank in Netherlands, no 4 in Belgium and also active in Central Eastern Europe. ING Direct is active in Austria, France, Germany, Spain, Italy, UK and Australia. ING-Commercial Banking has an international network in 40 countries with key positions in Structured Finance and Financial Markets. ING Retail is active in China, India and Thailand. The life of an architect within ING uses daily a vocabulary as in figure 1.



Figuur 1. Vocabulary of an ING Enterprise Architect.

The definition of Architecture is drawn from ISO/IEC 42010:2007:

“The fundamental organisation of a system, embodied in its components, their relationships to each other and the environment, and the principles governing its design and evolution.”

“Architectuur dient om richting te geven aan ontwerp en realisatie van processen, organisatorische inrichting, informatievoorziening en technische infrastructuur van de organisatie. Architectuur is in deze zin dus een instrument dat gebruikt kan worden om verandertrajecten te besturen.”

Having impact with architecture

It takes more than structuring and modeling on paper: create a business framework; constant dialogue with your business; communicate in a language your business understands; create an Architecture Framework (figure 2); manage by architecture roadmaps; governance that supports your roadmaps. Architects inform & inspire by creating simplicity: platform as a service (Tibco, J2EE, .Net); infra as a service (VMware, Lpar-Hosting); DCAAS (Physical Machine-hosting); consumer view analog (Outside in view) infrastructure service equivalents.

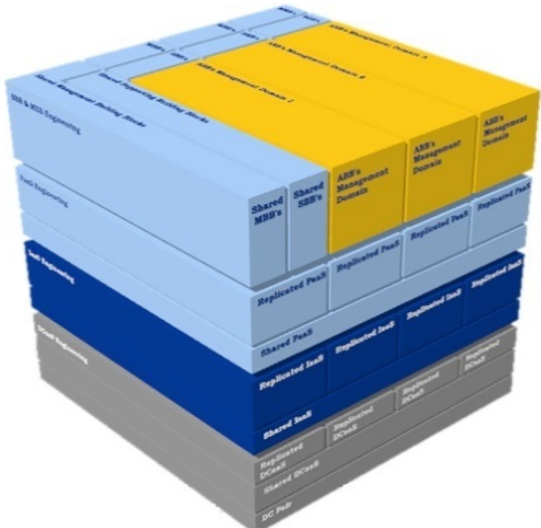


Figure 2. ING Architecture Framework.

... Based on a clear driver: our business strategy: who do we want to be; our history (legacy) what made us today ...; capabilities of IT that we can realize....

Strategy: Challenges for banks

I bank anywhere, anytime, anyhow. I expect a smooth personalized experience. I trust my bank. I expect value for money. I tell others how great ING is. "Oranje is ING."

We need other channels to build up trust... putting focus on our real-time customer view (figure 3).



Figure 3. New channels for real-time customer view.

Our history (legacy) is what made us today: apply Evolution as a driver (figure 4).

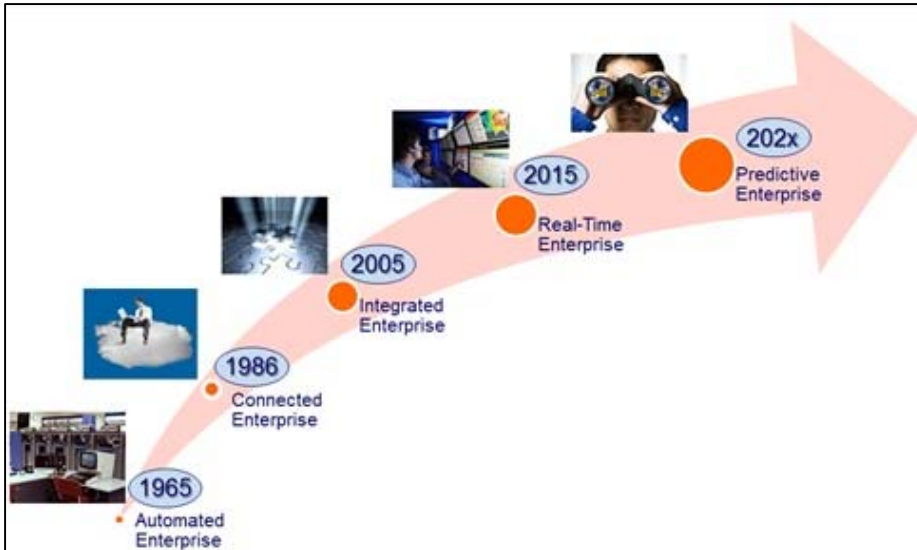


Figure 4. Enterprise Evolution: Automated, Connected, Integrated, Real-time, Predictive.

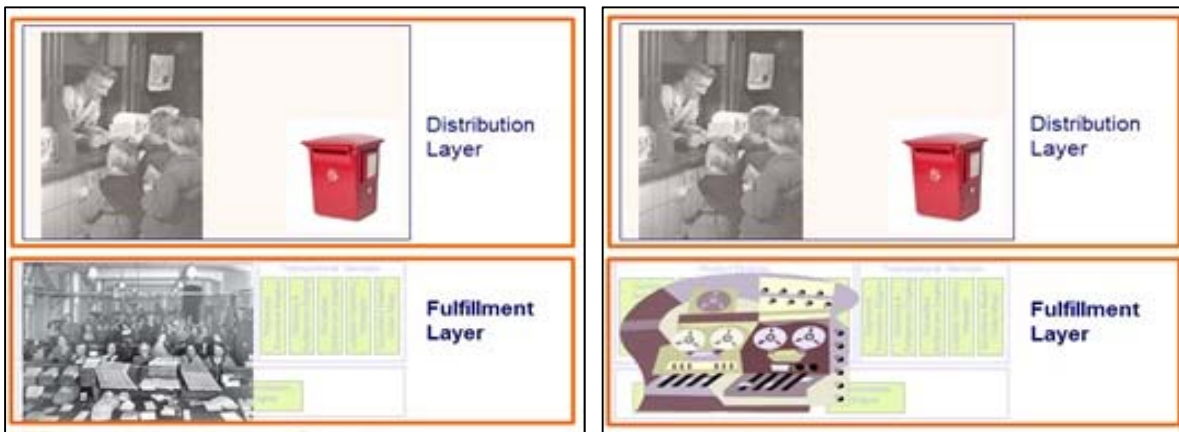


Figure 5. Manual Enterprise and Automated Enterprise (1965).

The Automated Enterprise has two layers: one for distribution and one for fulfillment. The business process for administration and booking of payments without ICT is manual. Drivers are growth and efficiency. Processes in the fulfillment layer get automated.

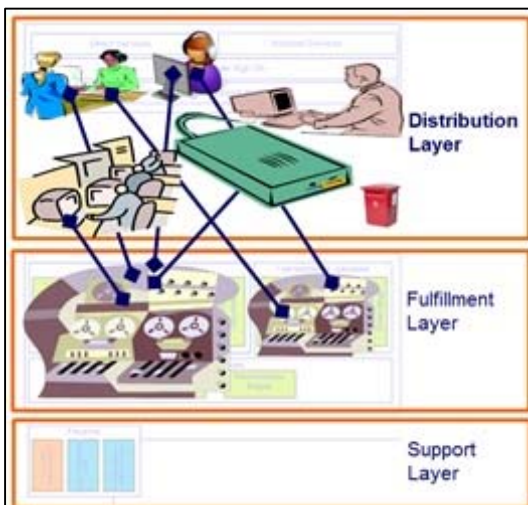


Figure 6. Connected Enterprise (1986).

The connected Enterprise (figure 6) has three layers a support layer is added and the distribution layer is connected to the customer and the automated fulfillment layer (figure 6). Introduction of Girotel, payments; direct Channel to the back office systems; back office became visible to customers (or not). Drivers are speed and convenience.

The Integrated Enterprise (figure 7) has to deal with: Multichannel (7x24); Near Real Time by Portals; Complex customer view; High integration costs; No STP.

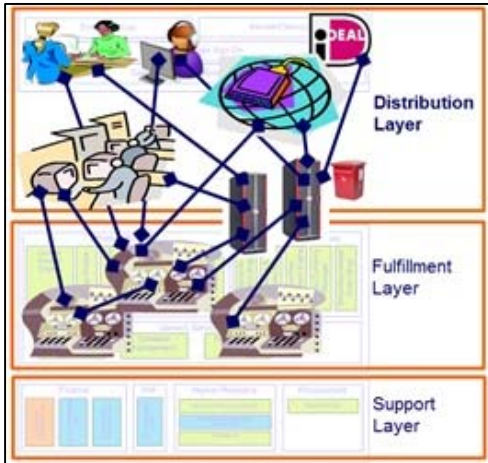


Figure 7. Integrated Enterprise (2005).

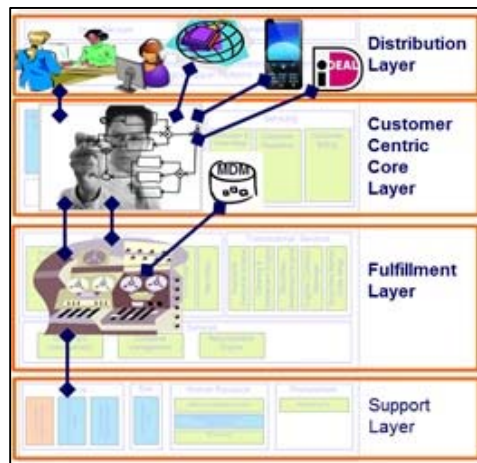


Figure 8. Real Time Enterprise (2015).

In the real time Enterprise (figure 8) a new layer is introduced to support the customer to the maximum specific convenience. Mobile Channel is introduced; MultiChannel Experience (7x24) enhanced; both Real Time & STP processes; Flexibility by BPM technology; Central Customer View; Core Bank Package; Agility in development; Lower integration costs.

All these innovations are required to be able to take the next step.

In the predictive Enterprise (figure 9, 10, 11) you find: Multi channel experience (7x24); Mobile Channel (GEO); Instant interaction; Social Mining; Use the information you have from your customer; Active fraud prevention.

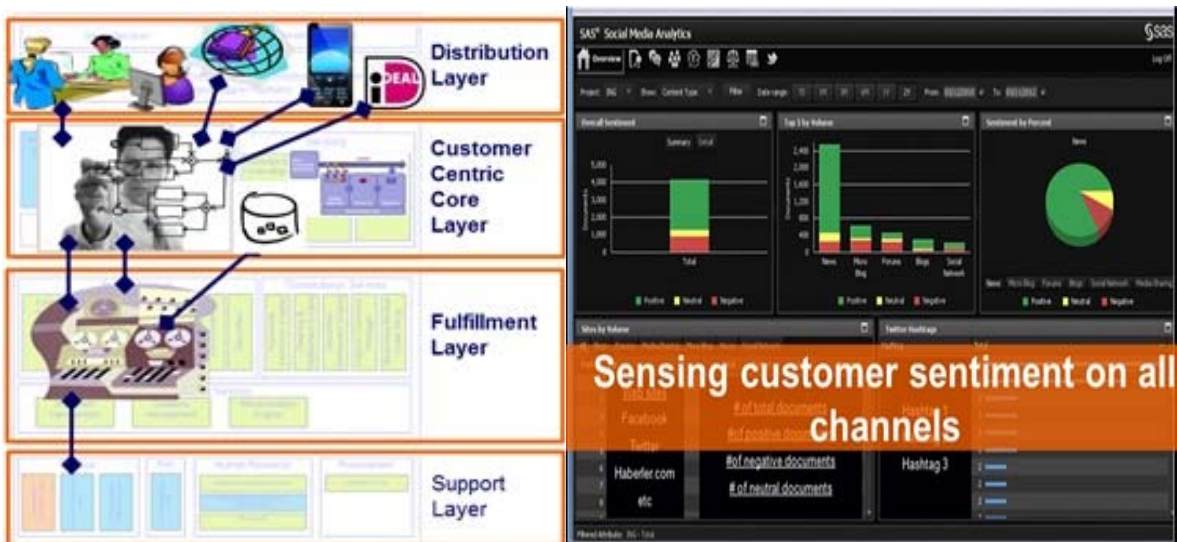


Figure 9. Predictive Enterprise (202X).

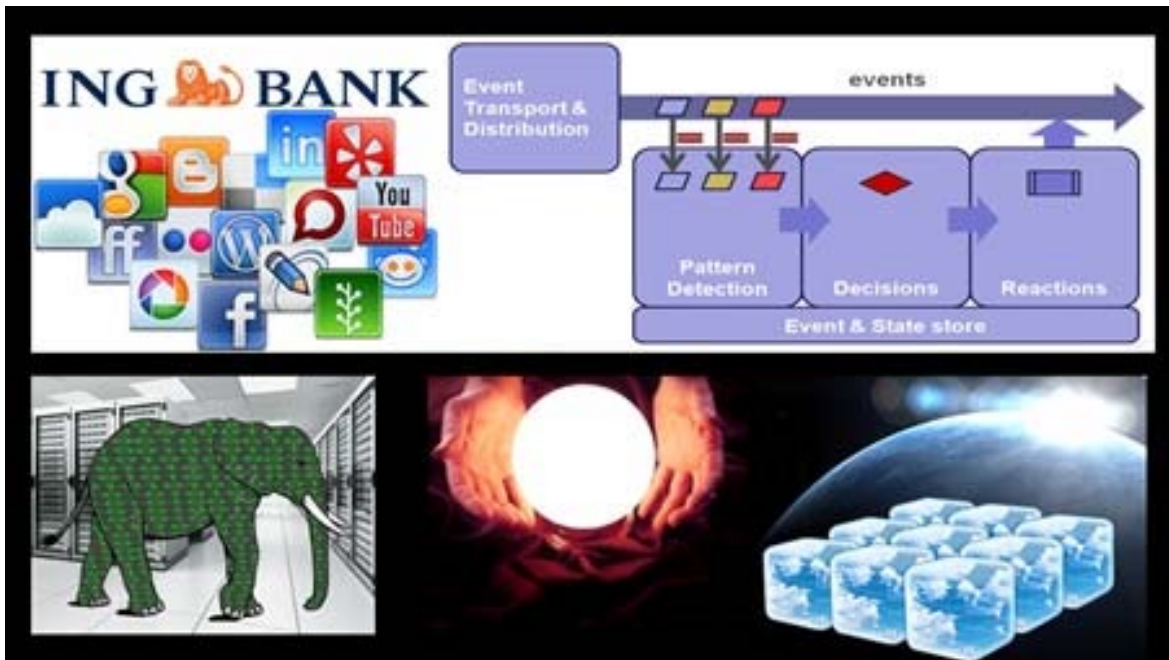


Figure 10. Predictive Enterprise (202X): front channels and back office services.



Figure 11. Predictive Enterprise: services beyond apps and intelligence for security.

Other elements that will accelerate your business: sandbox as soon as possible together with your business; align Business, Application and Infrastructure; be closely aligned with the Scrum Teams and always prepare for the next step....“This makes architecture DRIVE your business.”

The target state for 2012-2017 realizes hybrid infrastructure services:

In Application-, in Supporting- and in Management Building Blocks (ABB's, SBB's and MBB's).

Wilt u reageren op deze presentatie? Neem dan contact op met:

Henrik van Bruggen; Chief Architect Retail Benelux; ING Retail Banking Benelux.

Desiree.ter.Brugge@ing.nl