



J-Fall

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# Empowering Full Scale STP with BPM

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## Agenda

- SNS Bank STP strategy
- Realization with FOSS
- SNS Bank STP solutions
- **BPM** - zoom on process
  - Reference project
    - architecture limitations
    - results
- Applying the lessons



## Who?

- 1996 - present
  - school : VU 2001
  - work : IBM, diverse SW / research, RUN
- Teaching
  - freelance : Linux courses (Linux on ZSeries)
  - RE / ICT Architecture (RUN)



## SNS STP strategy

- 5 clicks to purchase new products (2010)
- Customer experience central
- Transparent, quick and simple
- Effective and efficient, eliminating handwork
- Paperless



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## Realization with FOSS

### Tools of our trade

- JBoss stack (web services)
- jBPM for processes
- Guerrilla architecture (Linux, SVN)





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## STP savings products

- 4 savings products
  - Jaarsparen (tot 5%)
  - Internetsparen (2,6%)
  - Maxisparen (4,75%)
  - Spaarmix (3,5%)





# Savings product online

SNS Bank – Sparen – SNS Jaarsparen – Aanvraagformulier Jaarsparen

SNS Bank N.V. (NL) <https://www.snsbank.nl/particulier/sparen/jaarsparen/aanvraagformulier-jaarsparen.l> Google

Meebo Start Page Webmaster Tools GReader Note in Reader Linux STPAanvragen Sharepoints Work jBPM Architecture Java Teaching Kennis Use Cases

meebo.com Gmail – Backup latest versions – esc... Google Docs – All items STPBPM\_JFall2008 – Google Docs SNS Bank – Sparen – SNS Jaarspar...

Inloggen Klantenservice **Particulier** Zakelijk

**SNS Bank**

Stel hier je vraag in minimaal twee woorden Zoeken

Home Hypotheken **Sparen** Beleggen Betalen Lenen Verzekeren

Home Sparen Jaarsparen **Aanvraagformulier Jaarsparen** Printen Voorlezen

**Aanvraagformulier Jaarsparen**

1 Invullen spaargegevens  
2 Invullen persoonsgegevens  
3 Controleren & verzenden

**Ben je al klant van SNS Bank?**

Ben je al klant bij SNS Bank? Dan hoef je minder gegevens in te vullen.

☐ Ja  
☐ Nee

**Volgende stap →**

**Contact**

**Vragen over sparen?**

Zelfservicelijn: 0900 - 18 80 (€ 0,20 p/m)  
Sparen: 0900 - 18 10 (lokaal tarief)

E-mail

**Overige vragen**

Contactoverzicht

thuiswinkel waarborg

Done www.snsbank.nl 0 eschabell@gmail.com Fair, 7°C 13°C 7°C 11°C 13°C



## STP 'deposito' products

- 5 'deposito' products (Nov 2008)
  - Depositosparen (jaarrente / maandrente)
  - Klimrente
  - Varivast
  - Rendementsparen

***“In de nieuwe opzet worden niet alleen afsluitprocessen, zoals het afsluiten van een rekening, via een webdienst aangeboden.”***

*-- Alexander Baas, Computable, Aug 2008*



## STP future at SNS Bank

- soon payment products (including packaging of products)
- hundreds of service processes

***“Ook serviceprocessen die voorheen via een bankmedewerker op een filiaal verliepen, zoals de verhoging van een opnamelimiet, eenmalige opname van een bijzonder hoog bedrag en klachtenbehandeling, worden gedigitaliseerd. SNS Bank maakt gebruik van een backoffice die realtime via het web beschikbaar is.”***

*-- Alexander Baas, Computable, Aug 2008*



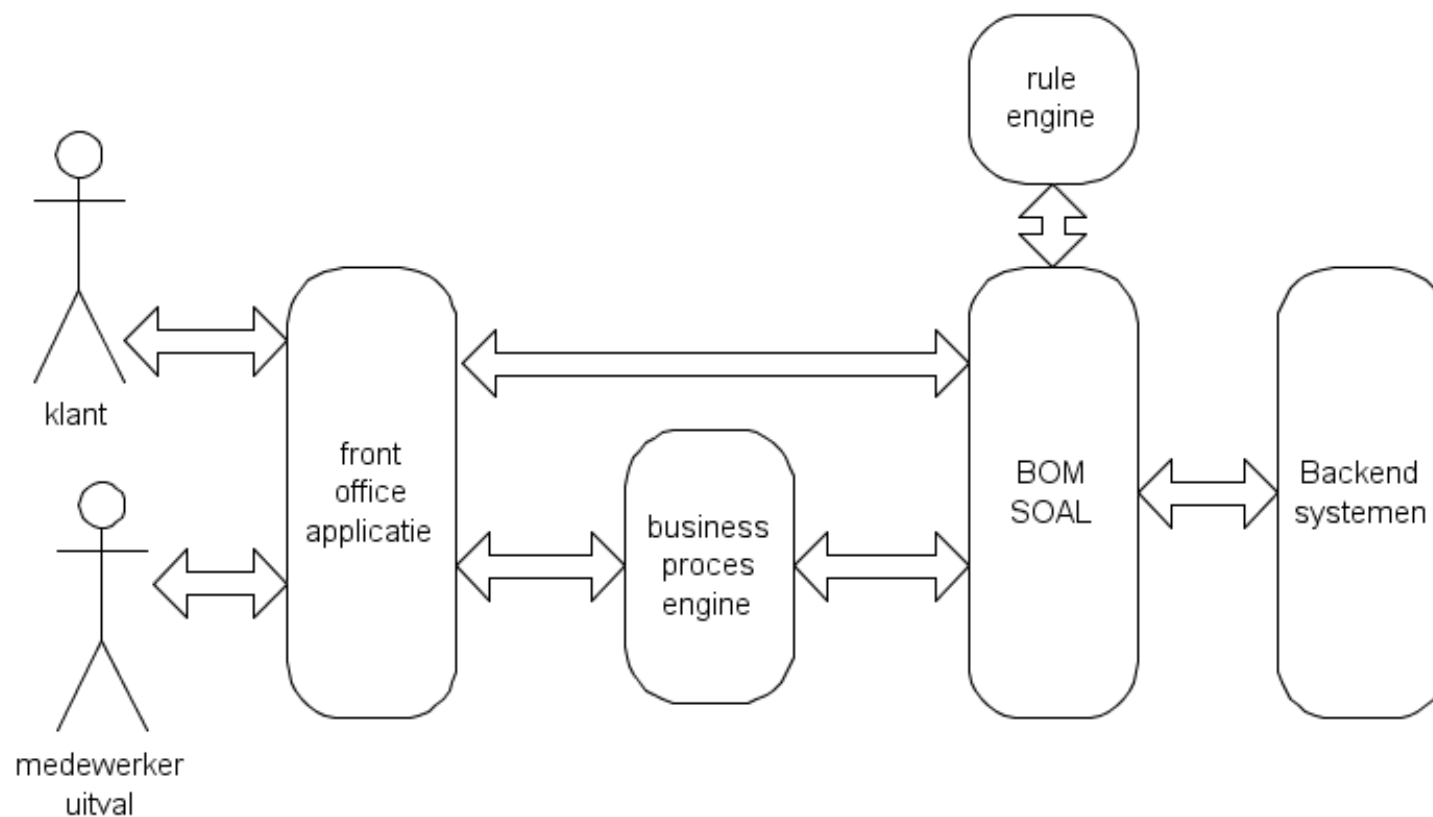
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# Architecture

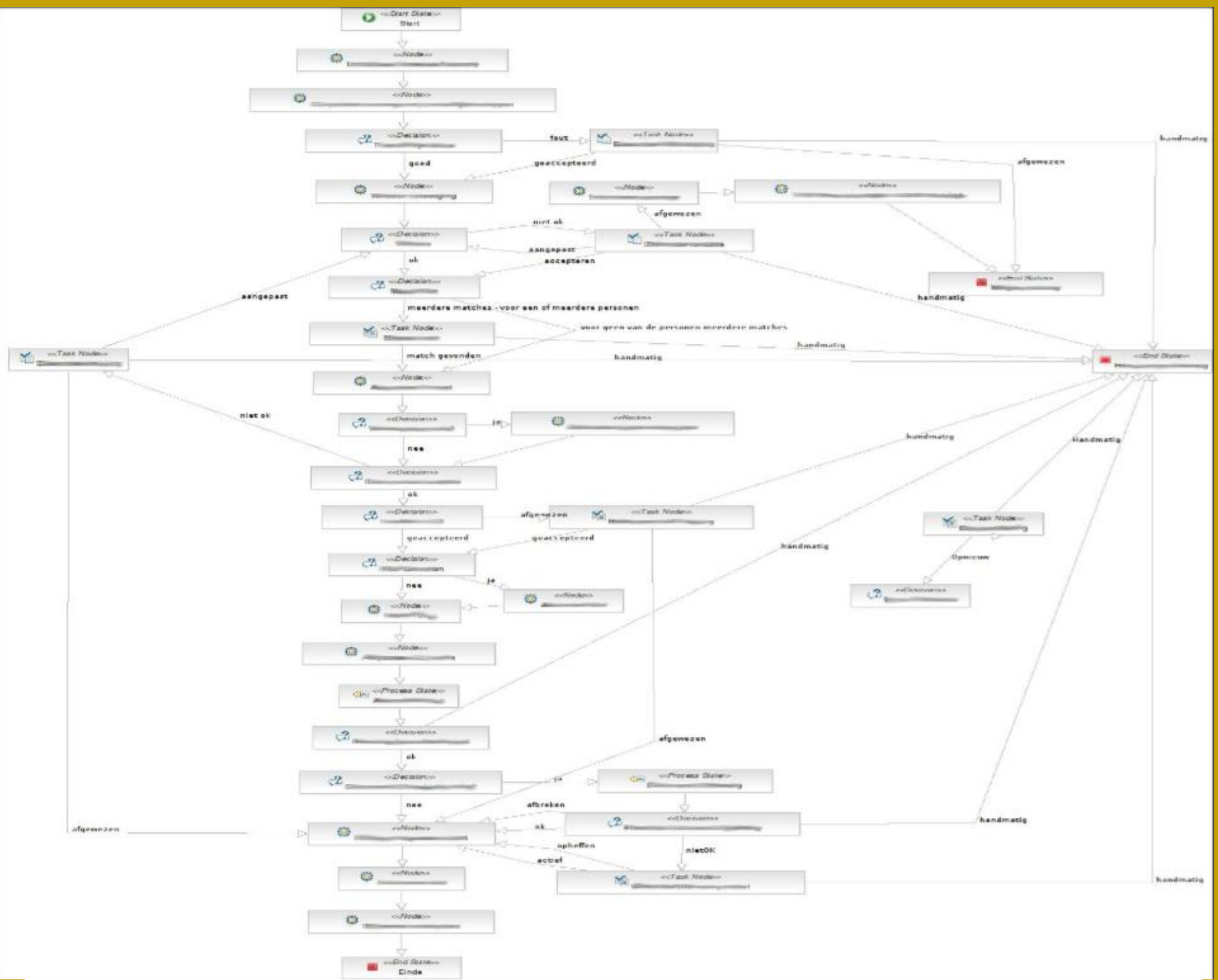
Simple view:





## Some limitations

- no ESB
- no transactions / asynchronous backends
- no jBPM upgrades (fixes)
- no integrated rules engine (Drools)
- young SOA (basic services only)
- single jBPM process engine





## First project issues (I)

- basic services not enough
- business logic in process layer
  - nodes full of Java (logic)
- no real state nodes (wait states)
  - polling instead





## First project issues (II)

- unreliable backend systems
  - offline batchs (mainframe)
- asynchronous backend systems
  - no reporting on actions
- support of service versions
- multiple process flows on single jBPM engine



A different view?



Katsushika Hokusai



## Reference project results (I)

- business services in service layer
  - multiple basic services
- categorization in DARWIN
  - KlantEnAfspraak
  - Rekeningbeheer
- business logic out of node handlers



## Reference project results (II)

- state-proxy facilitation for wait-states
  - service windows
  - specific generic exception handling
  - plug-in
- need for jBPM class loader (maven style)
  - support multiple projects
- adjustment to api generation (supporting versions)



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## STP upgrade plans

- migration process flow to reference style
- unit / integration testing per node
- expanding SOA with CBS
- state-proxy implementation
- jBPM class loader per project (maven style)
- api generation supporting service versions
- multi-process solution (concurrency issues)



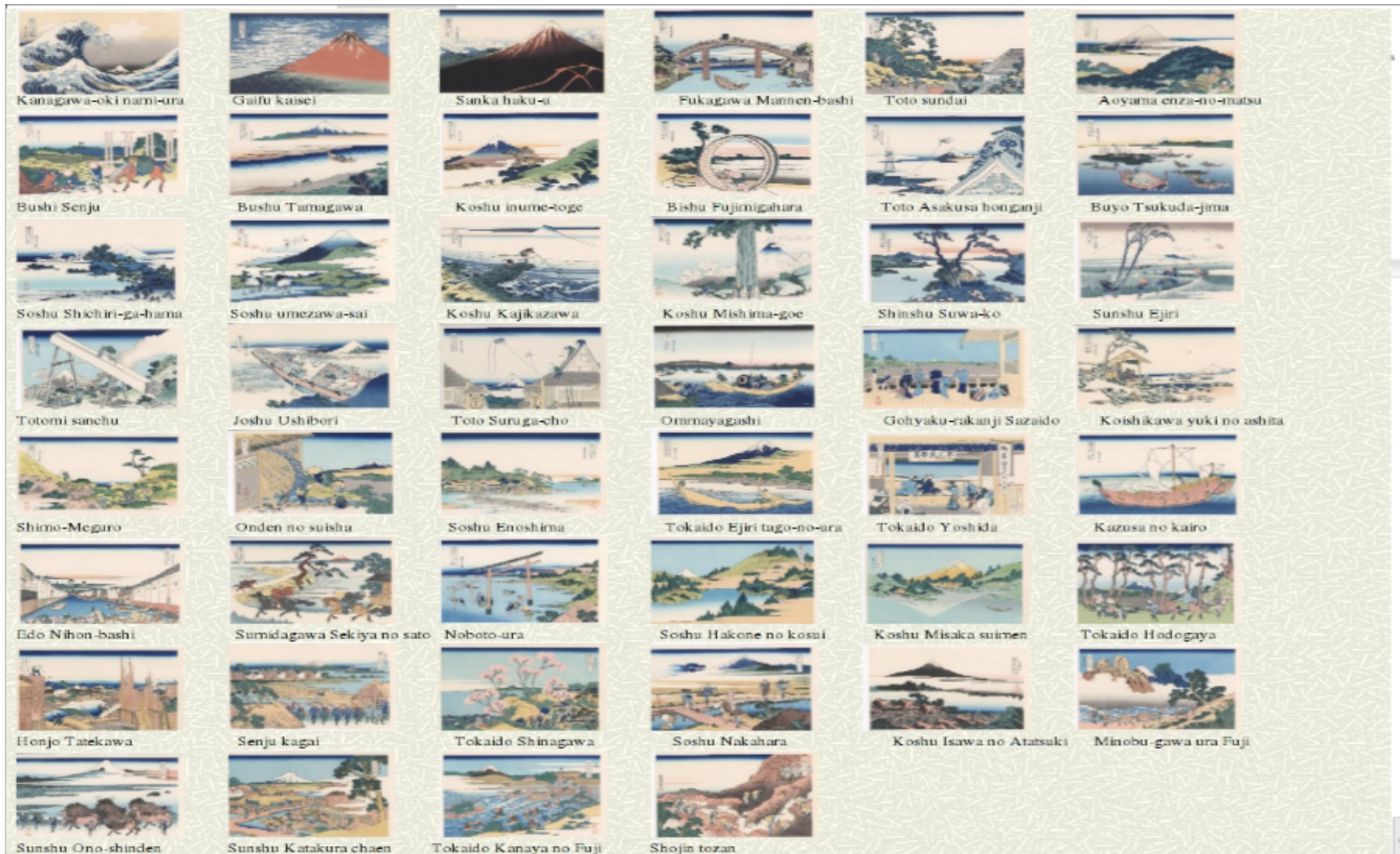
## Into the future...

- dealing with (small) external business process flows
- black-boxing main STP process flow
- improving wait-states (no polling)
- implementing multi-process (parallel)
- integration IDE tooling JBoss / jBPM
  - swimlanes for task nodes?
  - jBPM console for fall-out application?





# Is perfection the target?







## Worthwhile reading...



**“The Process Virtual Machine”, T. Baeyens, M. Valdes Faura, 2008.**

<http://docs.jboss.com/jbpm/pvm/article/>

**“7 Forms of Business Process Management with JBoss jBPM”, T. Baeyens, 2008.** <http://java.dzone.com/articles/seven-forms-business-process-m>

**“Empowering Full Scale Straight Through Processing with BPM”, E. Schabell, S. Hoppenbrouwers, 2008.**

<http://www.schabell.org/2008/09/draft-empowering-full-scale-straight.html>



Finally...

# Questions?

<http://www.snsbank.nl>