

# **Business Process Management and Enterprise Architecture The Key in Growing your Enterprise Investment?**

**By HW Pretorius  
(Lecturer (BPM) and PhD student at U.P.)  
March 2007**



**UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA**

# Agenda

- Statistics
- Problem Description
- Research Approach & Data Collection
- Research Findings
- Related Research
- Discussions
- Conclusion



# Statistics (Investments)



- In 2001 in the US \$2.3 trillion is spend on projects. It is approximately 25% of yearly US GDP. (Schwalbe, 2006).
- Of the \$40.7 trillion GDP of the word \$10 trillion is spend on projects. (Schwalbe, 2006).
- In 2004 \$752 billion is spend on IT projects with an expected growth of between 4-8%. (Schwalbe, 2006).
- Avg. cost for an IT project in a large company is \$2.3 million, \$1.3 million for a medium size company and \$434 000 for a small company. (Schwalbe, 2006).

# Statistics (Success Rate)



- In 1994 the success rate of IT projects was only 16.2% (Not on time and not in budget). (Schwalbe, 2006).
- 31% of projects cancelled before completion. (Schwalbe, 2006).
- Slightly improved in 2002. Success rate increased to 31%. 15% of projects are cancelled before completion. (Schwalbe, 2006).
- Still many executive argue about the received payoffs of IT investments. (Tallon et al., 2001). It actually has a name: the “productivity paradox”



# Problem Description



- **CONCLUSION:** Vast amounts of money is spend on enterprise projects (it includes enterprise systems, architecture and development) that does not always show a return of business investment.
- **AIM OF THIS PRESENTATION:** How can **BPM** be applied in the enterprise to grow the enterprise investments of business owners (so that less money is wasted)?

# Research Approach and Data Collection



- **INTERPRETIVE RESEARCH:** Ontological position is one of multiple realities that exists as a subjective construction of the mind. IT simply means it is **subjective** research.
- **RESEARCH POPULATION:** A focus group of FlowCentric (A leading BPM company in SA) BPM consultants who have extensive local and international experience in the BPM domain.
- **INTERPRETATION OF RESULTS:** This result of the research is subjective to the perceptions of the findings and experiences of the consultants.
- **RESEARCH FRAMEWORK (Used to make sense of data):** Adapted framework of Fairclough (1992). Look at problems in the immediate context; determined then the "root causes" of the problem; With dualisms try to find possible solutions to the problem.

# Research Findings



- **ENTERPRISES CONTINUOUSLY CHANGE:** Enterprise continue to **adapt** to take advantage of new market opportunities. This causes enterprise architectures, systems and software to change continuously.
- **CHAOTIC WORKING ENVIRONMENTS:** Employees associate the continuous change of their working environments (architectures, systems and software) with chaos. It causes stress and job dissatisfaction which negatively affects the business.
- **CONTINUOUS LEARNING:** Employees need to continuously learn (new enterprise systems, architectures and software) to perform their jobs well. It causes long working hours which influences the job-family balance negatively (especially for women).
- **MULTIPLE EVER CHANGING ENTERPRISE STANDARDS:** Many systems, software and architectures that continue to change which contribute to the factors above.

# Related Research



- **ENTERPRISES APPLICATION INTEGRATION (EAI):** BPM is very strong in Enterprise Application Integration. It allows a BPMS to integrate into the whole enterprise architecture. It is one of the three promises of BPM. (Silver, 2003; 2004; 2005).
- **BUSINESS PROCESS EXECUTION LANGUAGE FOR WEB SERVICES (BPELWS):** Domain of Prof Wil van der Aalst of the Netherlands (University of Technology at Eindhoven). It is a XML type of language used with web services to programmatically perform process functions. It is used with BPMS integration adapters to pull and push information from enterprise systems.
- **GRAPHICAL USE of BPELWS:** Making use of graphical manipulation to build BPELWS. Easier for business owners to use. (van der Aalst & Bisgaard Lassen, 2006).
- **CONCLUSION:** The integration capabilities of BPMS is **extending**. It is also getting **simpler** to use.

## Listing 1

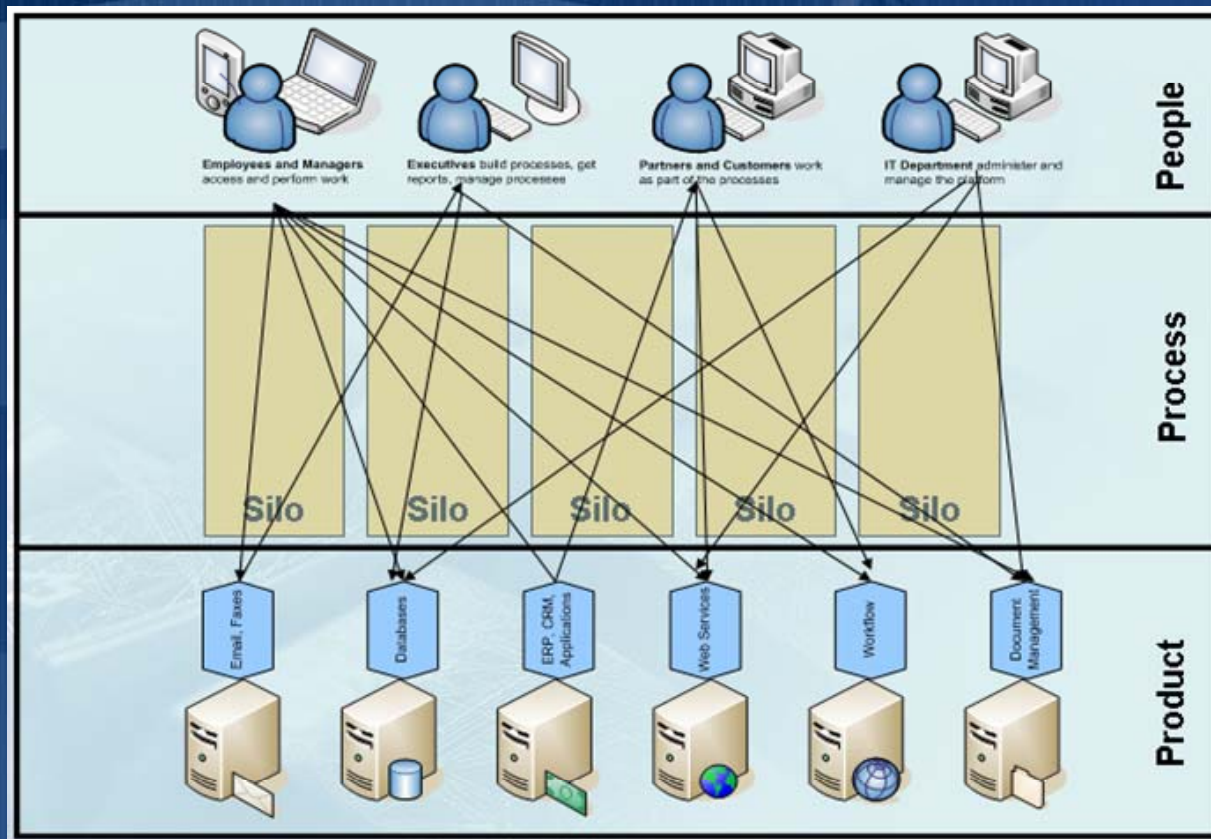
```
1 <sequence>
2   activityA
3   activityB
4 </sequence>
```

## Listing 2

```
1 <flow>
2   <links>
3     <link name="L"/>
4   </links>
5   activityA
6     <source linkName="L"/> ...
7   activityB
8     <target linkName="L"/> ...
9 </flow>
```



# Discussion (BPM & EA)



The nature of business processes in the enterprise

Factors:  
Continuous change, chaos, continuous learning and multiple standards

# Discussion (BPM & EA)



## Business Challenges

Users have to be super users  
on all systems



Control & Consistency  
Problems



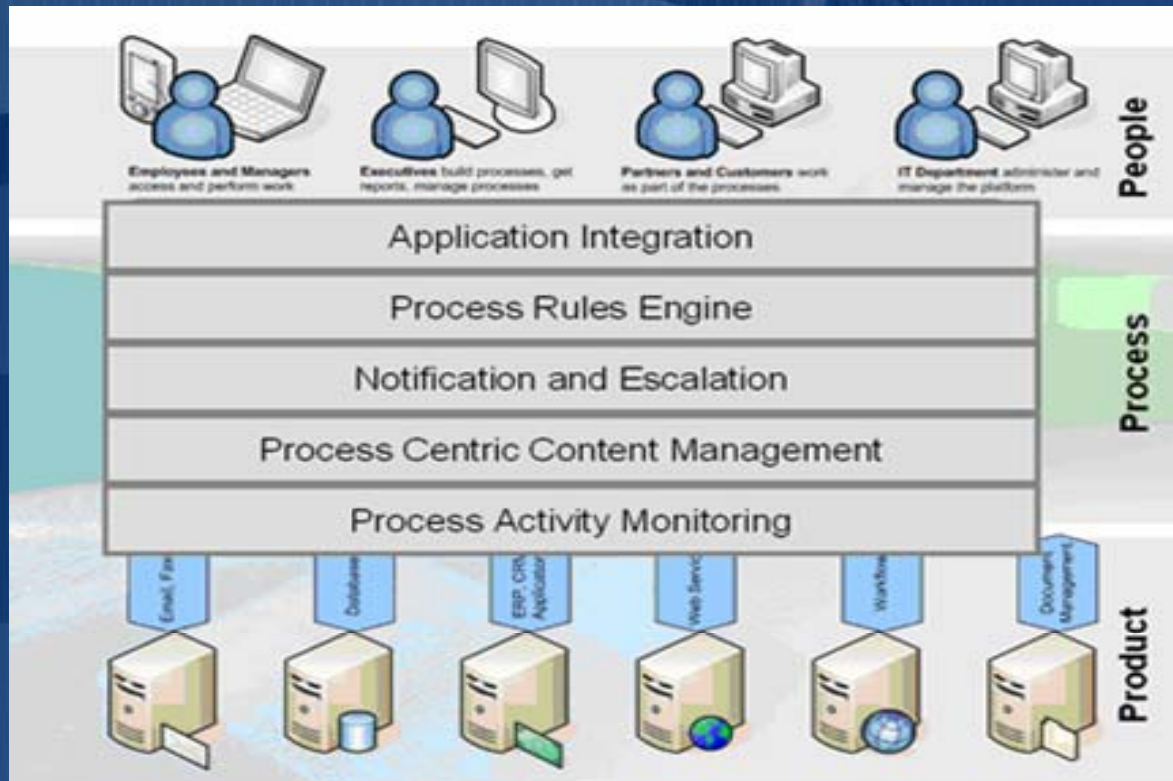
Disparate Systems



Some challenges

Factors:  
Continuous  
change, chaos,  
continuous  
learning and  
multiple standards

# BPM and EA – The solution?



The “process-layer”

Factors:  
Continuous change, chaos, continuous learning and multiple standards



# Conclusion



- **BPM & EA:** These two IS areas compliment each other to benefit the enterprise. Business Owners can improve their core business processes in the “process-layer” with the EAI capabilities of a BPMS. Unwanted enterprise systems & architectures, not part of these core business processes can be eliminated.
- **ORDERED WORKING ENVIRNEMNT :** Employees associate the continuous change of their working environments (architectures, systems and software) with chaos. By using one BPMS (in the “process-layer”), that exactly dictate how work and processes should be performed will create a much more orderly environment, with less stress. It might contribute to job satisfaction that will benefit the organisation.
- **CONTROLLED LEARNING:** Employees who uses one BPMS interface (in the “process-layer”) have much less learning to perform. It will create a controlled learning environment. The work-family balance will also be influenced positively.
- **ONE ENTERPRISE STANDARD:** Many systems, software and architectures that continue to change which contribute to many standards. By working though the process layer the many standards will reduced, contributing to better job satisfaction.