

Journey in Making Platform-as-a-Service Concept for Siebel and Analytics at Nokia

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Company Background

NOKIA

- World's #1 manufacturer of mobile devices, 40% market share
- Mobile device volumes 437 million units
- Net sales EUR 51.1 billion, Operating profit EUR 8.0 billion
- 112 262 employees at year end (including Nokia Siemens Networks)
- HQ in Finland, R&D in 10 countries, Sales in more than 150 countries
- World's 5th most valued brand (Interbrand, 2007)
- <http://www.nokia.com/aboutnokia>



Siebel at Nokia

- Nokia has been Siebel user since 1999, mainly using Siebel Industry Applications Consumer Goods vertical
- 13 production systems, versions 7.5, 7.8, 8.0
 - Mainly due to business need for agility
- 7 major business programs on-going currently
- 14,000 users, half of them use mobile devices
- Functionalities include
 - consumer goods vertical, sales, partner relationship management, service, contact center, and customer data master, analytics

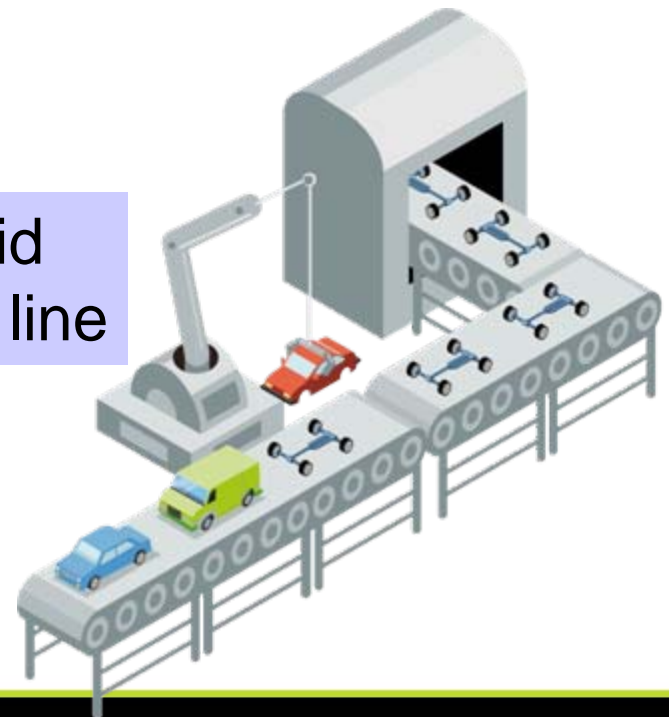
What is a platform?

It is a base of technologies on which processes and configurations are enabled.

It enables reuse of standard IT components and competencies.

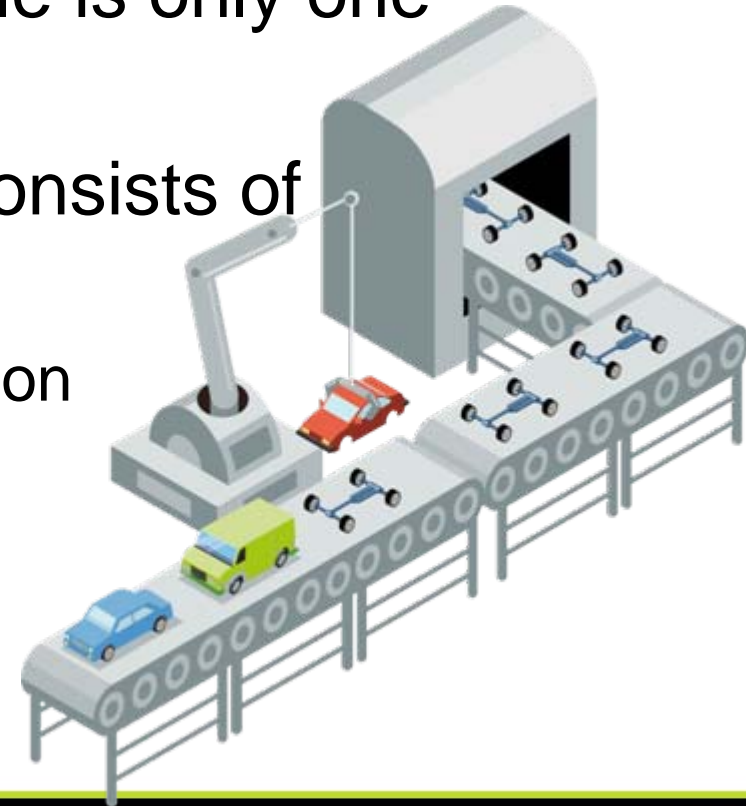


Like a power grid
or an assembly line



Platform-as-a-service concept

- Nokia is creating platform concepts around different technologies. Oracle is only one among others.
- Our platform-as-a-service consists of
 - Organization
 - Technology and implementation
 - Service offering



Step 1 - Technology Management

- Starting in 2005 to create a central ownership of Oracle Siebel, Business Intelligence and related 3rd party technologies and licenses.
- Maintaining a technology roadmap and continuous dialogue with Oracle
- License pool and contract management
- Vendor management processes
- Facilitating training sessions
- Sharing technology knowledge

Step 2 - Platform Management

- Platform management team was formed in 2006 owning the platform, technologies and the service offering. Later 2006 Nokia IT organization was renewed to support platform management.
- Technology management is done together with Oracle. Implementation and support is mainly outsourced.
- Platform governance is through a global architecture and technology body.
- Business applications act as customers for the platform service.

Step 3 - Platform service offering

- Starting to evaluate options in 2006
 - One shared CRM application platform
 - A few shared CRM application platforms
 - A virtualized infrastructure platform
- Virtualized infrastructure option was chosen to be implemented first. A few shared application platforms would be the next step.
- The service offering includes also technology and licence management, support, training, and consulting

Step 4 - Implementing Foundation

- Implementation started late 2006
 - Creating a campus cluster over 2 sites
 - Virtualization on Sun Solaris 10 and containers
 - Mirrored SAN and mirrored backups across the sites

Step 5 - Virtualization Pattern

- Every component is having an own virtual server
 - Every installation standardized
 - Firewall configuration always the same
 - Independent management of the components and their capacity limits
 - Option to clone or move the components
- Issue: Oracle doesn't officially support this
 - Creating a reference installation with Oracle

Step 6 - High Availability Pattern

- Every installation follows the same high-availability pattern
 - clustered Siebel Server and clustered Gateway
 - 2 loadbalanced Siebel Servers
 - 2 loadbalanced web servers
 - Clustered database Oracle 10i
 - Redundant Oracle BI Web and Application servers
 - Single Informatica and ETL control (DAC)
 - Option to add loadbalanced or clustered nodes
 - Every installation using campus sites in active-active mode – with automatic failover

Step 7 - Capacity Management Pattern

- Keep always extra capacity
 - On the existing servers
 - Reserved computing capacity to be taken in use
- Keep option to scale-up cluster with new hw capacity. No changes to applications needed.
- Keep option add more load balanced nodes. Clone or move virtual servers.
- Issue: Oracle sizing review doesn't work for virtualized environment
 - Sizing rules for a virtualized environment made together with Oracle Expert Service

Step 8 - Support

- This should not have been the last step!
- Deep application technology support Siebel, Oracle BI, ETL/Informatica by system integrator and Oracle
- Advanced computing support by internal computing team and HW provider
- ITIL based support model and outsourcing
- Production manager as the owner of the environments and the service delivery

The Results

- The virtualized infrastructure platform goes live in mid 2007.
- After 7 months of use in early 2008
 - 100% availability, only planned maintenance breaks, no critical incidents, no need to restart Siebel applications
 - Cost of virtualized installation 60% less than an independent installation

Next Steps

- Service management improvements for full and outsourced ITIL based support approach
- Extending the concept to operate a shared CRM and/or Analytics application platform
- Deployment of the platform concept further

Conclusion

- Virtualized infrastructure platform concept has been a success at Nokia
- Platform-as-a service requires organization, technology management, and service offering
- Build on a proven technology and ensure availability of competencies
- Remember the service approach

Thank You!