

Managing Technology & Innovation



PDT EUROPE 2009

PLM core system governance

Daisy or sunflower ?

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Scope of contents

This presentation is a synthesis of a survey performed in november 2009 on PLM core system governance by Vinci Consulting

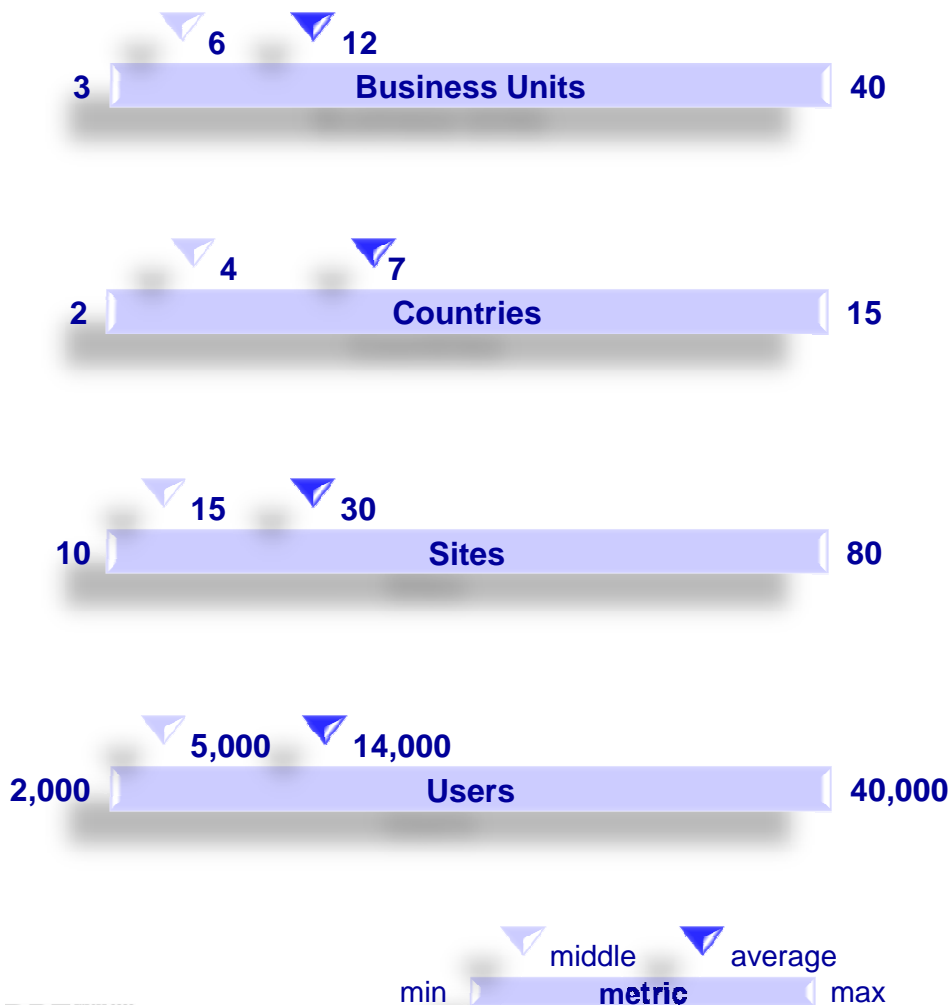
The participants to the survey are international industrial Groups

- 60% of them are multi-industry

In this presentation, we use the generic term 'Business Unit (BU)' to name the organizational entities in direct relation with the Corporate on the PLM program

- can be: Divisions, Business Units, Companies...

Volumes



When a core system program is launched, it covers all BUs except a few exceptions:

- Small-sized BUs
- BUs in the process of leaving the Group
- BUs with atypical business
- BUs excluded for strategic reasons (Joint venture...)
- BUs strongly reluctant to change (just implemented a new PLM...)

Sometimes exclusions are tactical (deployment unofficially postponed)

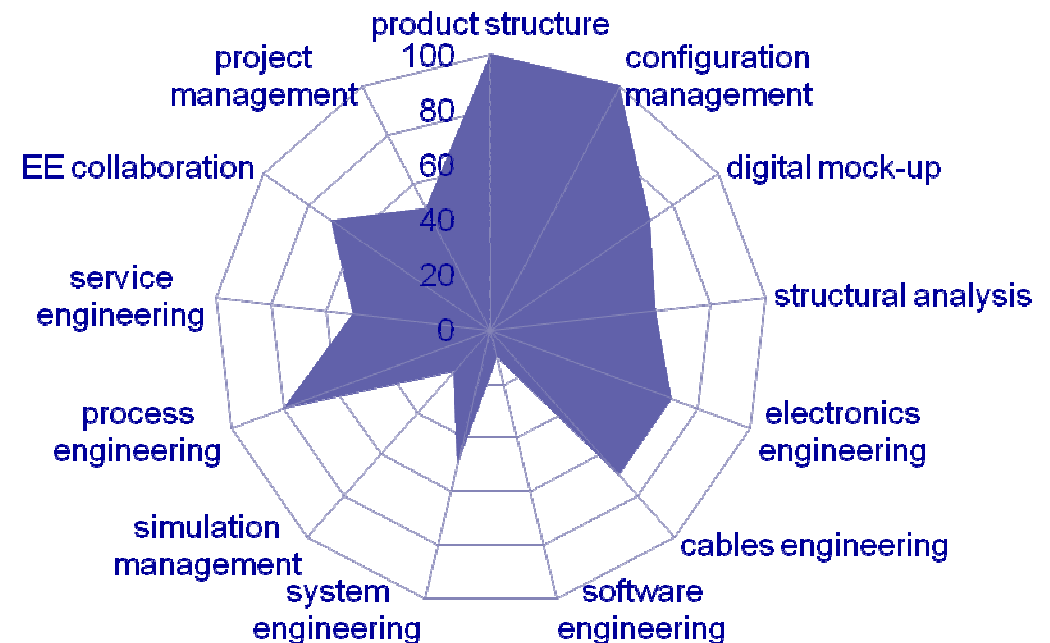
PLM core systems systematically cover referential functionalities: product structure, configuration and change management, manufacturing BOM

Authoring and analysis functions (disciplinary engineering) are covered or integrated according to the technology used by the business – except software which stands alone and simulation which is not covered

Project management is generally kept out of the scope – but interfaced

System and service engineering coverage remains poor

Functional coverage ratio (%)



Sensibility to the issue (%)



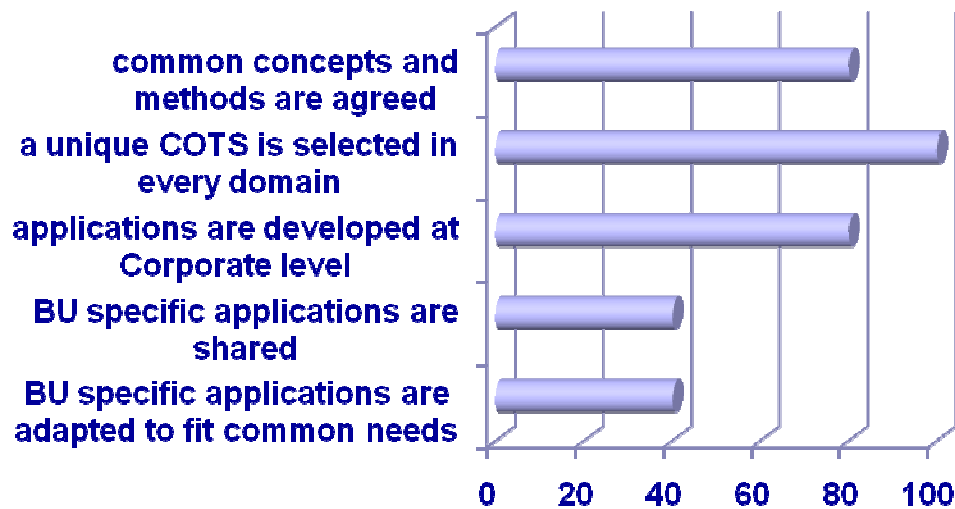
The first motivation for launching a PLM core system initiative is always to control the risks associated to wrong product data

A second strong motivation is to support organizational changes, e.g.:

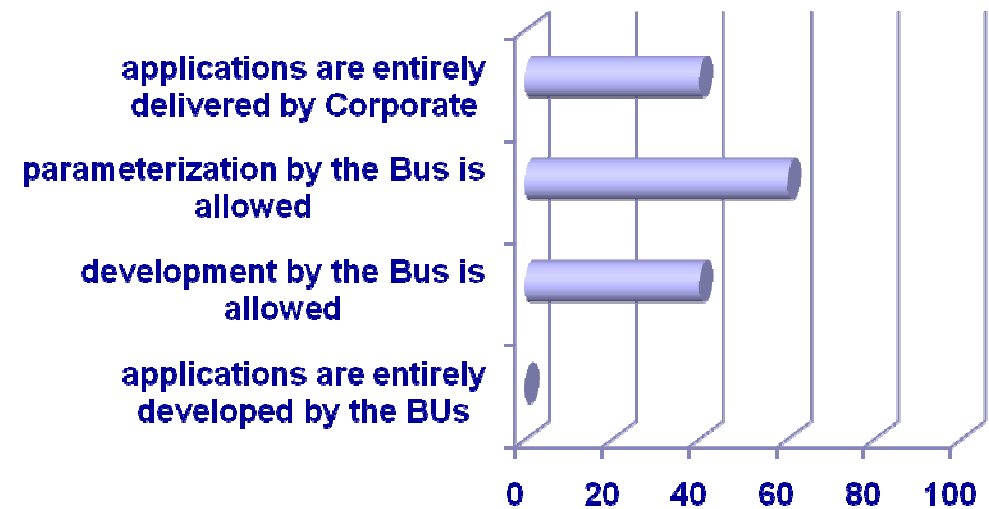
- Allow collaborations between BUs to factorize engineering resources
- Rationalize product data delivered to manufacturing sites
- Create a Group identity

Improving collaboration within the extended enterprise does not show to be a strong trigger

Construction principle adopted (%)



Adaptation principle adopted (%)



A preliminary construction step is to agree on common policies and requirements

- **except when the PLM program aims at industrializing legacy applications**

Then two different construction approaches are observed:

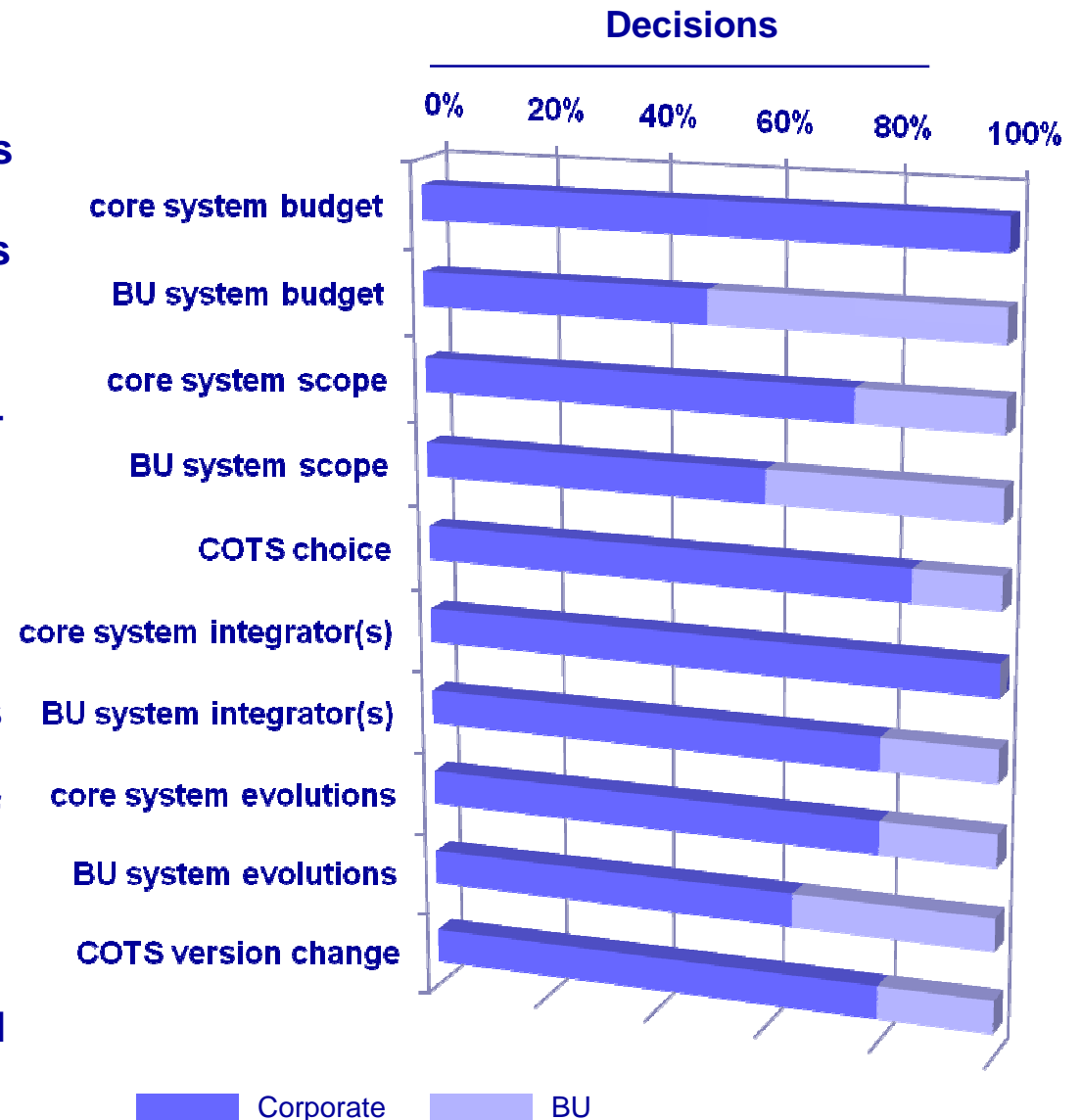
- **Top-down: the core system is developed at Corporate level and parameterized (sometimes further developed, e.g. BU specific interfaces) by the BUs**
 - The usual trend is to centralize: *'we don't give them any source code any more'*
- **Bottom-up: the BUs develop the applications which are qualified and transformed into generic at Corporate level – observed in multi-industry Groups**

Organization

- A Corporate project is conducted by a small Corporate team (Process Methods & Tools when the entity exists) and staffed with BU experts and consultants
- In 60% of the cases, the system development, deployment and support is contracted to an integrator / vendor – in the remaining cases IT supply is provided internally

Governance

- In 60% of the cases, a voting process is used in which every BU (and the Corporate) has a vote, independently of its size – and chargeback
- Key decisions (core system budget, investments in BU legacy systems...) are arbitrated at Corporate highest level



Did you achieve expected results ?

No



Yes

How was it ?

Easy



(censored)

Here, we reach the limits of quantitative analysis

CEO sponsorship (it is a pre-requisite)

- *'The project has been launched to support a vision of the Group'*
- *'Corporate is always the bad guy for the BUs'*
- *'You just cannot set-up such a project if it is not a CEO decision'*

Corporate team competencies and legitimacy

- *'PLM is complex' ; 'nebulous'*
- *'Project management must be somewhere between PMO and guru'*
- *'The project must not be ROI driven' ; 'Project management must keep its way even if stakeholders do not see' ; 'Do not follow the wind'*
- *'We could not do it now since we do not have a Corporate PMT department any more'*

Involvement of BU experts

- *'It is difficult for a central team to know the users needs'*
- *'You must demonstrate the value on actual cases if you want to get the users buy-in'*
- *'We have a multi-functional team (more than 100 people) on a plateau' ; 'we facilitate workshops with dedicated means (Acceleration Zone)'*
- *'Every BU has a vote, nobody must stay by the side of the road'*
- *'The experts are now pulling the project, they are happy to see their expertise recognized'*

Customer oriented mindset

- *'PLM is not an IT project, it is more about people and process'*
- *'KISS : keep it simple and stupid. It is useless to innovate too much if you loose your users along the road' ; 'If you listen to vendors, everything is easy'*
- *'We have end to end accountability on the system' ; 'synergy between construction, deployment and support of the system is key'*
- *'We manage change via a PLM network in the BUs connected to users'*
- *'We have dedicated a team to communication'*
- *'External communication brings visibility to the project and forces consideration from the managers'*

Focus on architecture and integration

- *'We have failed in the past at integrating the bits and pieces of the overall system ; the bits and pieces were good'*
- *'We focus on architecture: CAD and simulation tools evolve quicker than the PLM system itself'*
- *'We will use ISO STEP data standards to manage integration between PLM components and with enterprise information systems'*
- *'The selected COTS must be able to support subsidiarity'*

Believe it is simple

- *'Bottom-up won't work'*
- *'Top-down won't work'*

Believe it is fast

- *'It takes 5 years to deploy such a system'*
- *'It is through the evolutions of the system that you know if you succeed in maintaining its overall consistency'*

3 players game : Corporate, BU, integrator

- *'The integrator's interest is to develop specifics'*
- *'We ask the integrator to be close to the BU. We then have difficulties to control what they are doing'*

Daisy syndrome

- *'It costs a lot of energy to build a core system which is not limited to the smallest common denominator'*

'Now we have done it, we will have to struggle to change it'