Collaborative Business Initiative (cBusiness)

or

The new business strategy: Collaborative Lifecycle Management

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http://www.c-business.org/
Center for Evolving IT in Networked Organisations (INO)

- Cooperation between Business School and Engineering School
- Synergy between economics, business informatics and computer science
Agenda

- Industrial background
- cBusiness Vision
- Why now?
- Industry future watch
- Industry status
- Solutions overview
- Threats
- Challenges driving Innovation
<table>
<thead>
<tr>
<th>Business areas</th>
<th>Main product groups</th>
<th>Customers</th>
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<tbody>
<tr>
<td>Gears</td>
<td>● Automatic gearshift systems</td>
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<td>● Volvo Car</td>
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<td>Seat Comfort</td>
<td>● Heated seats</td>
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<td>● Ventilated seats</td>
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**Business areas**

We supply quality to the automotive industry. World-wide.
Today’s situation: To develop a new product or service usually requires various competences including traditional service and engineering fields (electrical, mechanical, computer, material, etc.) and contributions from financial and service sectors. Even multi-national enterprises often do not have all these competences in-house.

cBusiness is the vision of radically improved business environment by rigorous reuse of knowledge and extreme flexibility in collaboration.

cBusiness aims at integration of all stakeholders into a flexible and dynamic organisation covering the complete lifecycle of products or services and of the associated business services.
Why now?

- The industry demands reduced lead time for
  - product & service development
  - product & service maintenance
- The capacity of new products & services has no limit, it is only a question of imagination
- Europe feels a threat from other regions
  - Crises knowledge is the mother of development
- Basic infrastructure possibility is coming
  - ESA / SOA etc.
  - Other projects results (like MAPPER, Athena)
- Fear of sharing
- Knowledge of other projects – gives respect!
  - Esperanto
  - OEM “VPN solutions”
Industry status

- Tries with own stand alone solution
  - Move suppliers into their own network (VPN)
  - Merge with important companies
- Worries about Intellectual Properties ownership
  - “We will never let anyone see our complete CAD models”
  - We can’t let our specifications be read by anyone else
  - Our production information is our secret, our product contribution
- Focus on OEM and 1 tier solutions
  - 1 tier shall provide with their specific solutions to more than one OEM, by using best practice between different OEM demands, without destroying the uniqueness of the product to different OEMs.
cBusiness Solution Elements

- Sharing ideas – “bank of ideas”
  - Reuse
  - Google for Product & Services
- Sharing models
- Sharing descriptions (80% MS Office, 20% CAD)
  - Standards
  - Verifications
  - Test results
- Sharing administration
  - Common project management
  - Task list
  - Protocol
  - Time plan
- Similar process for change management
• Shared product description
  – Models
  – Specification
  – Follow up results (test and deviations)
• Shared production description (shop floor)
  – Line layout
  – Tooling and machine description
  – Monitoring
Use of resources nearby
- Does anyone need the recourses
  - Ad hoc free
  - “Planned” free capacity
  - “Obsolete” material / products
- Resource cluster
  - Use of “return transport”
  - New re-cycling opportunity

Google for product and service opportunities
- Like today possibility of searching for cheap flights, consumer products etc.
Challenges driving Innovation

Just a small selection:

• reduction of set-up time when forming collaboration, including organizational, technical and social elements.
• Share knowledge with partners and at the same time protect intellectual property rights
• Integration of product/service lifecycle with enterprise development and individual competence development
• New business models accommodating collaboration and competition
• New technologies and approaches for collaborative design, development and planning
• Demand and purpose-oriented supply of knowledge and information
Summary of goal

- Reduced time to market
  - New product will come faster to market
    - Future product with today unknown functions
    - Environment savers?
    - Energy “solutions”? 
    - Healthcare “solutions”? 

- Reduced resource use
  - Re-use
  - Re-cycling
  - Usage of the capacity into Europe

- Enable small intelligent cells
  - OEM => 1 Tier => 2 Tier
  - Deep integration with independent companies
Questions?

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http://www.c-business.org/
• And some reserve slides
Solution overview

• **Common processes**
  – Agreement on a basic way of describing the business process
    • Normally this is quite common – but often want different companies to describe themselves uniquely…

• **Intellectual properties (IP)**
  – The solution of sharing IP is very often to hide parts of the information
  – Respect for different companies and protections into laws that give quick response of IP theft need to be established

• **Communication protocol**
  – ESA – Enterprise Service Architecture
  – SOA – Service Oriented Architecture
  – Portal (web) enabled workplace
    • User shall not recognize “where” they work – they shall “just” work
Logistics chain

• Transport management
  – Optimize transport (environment friendly)

• Warehouse management
  – Common view of complete safety stock

• Volume control
  – Shared planning of capacity, short and long term
• Shared production monitoring
  – Follow up disturbances into equipments
  – Follow up cycle quantities
• Shared SPC (statistic production control)
  – Reaction on deviation
  – Shared knowledge of trends
• Shared detailed production planning
  – Planning of recourses for maintenance
  – Reuse of recourses nearby
- Use of resources nearby
  - Does anyone need the resources
    - Ad hoc free
    - “Planned” free capacity
    - “Obsolete” material / products
  - Resource cluster
    - Use of “return transport”
    - New re-cycling opportunity
- Google for product and service opportunities
  - Like today possibility of searching for cheap flights, consumer products etc.
Goal descriptions

• To create the welfare of tomorrow, the local (countries) and regional (EU) government need to focus resources on faster development than other regions.
• To ensure a substantial growth, new way need to be established and this is a focus for all different areas, from industrial over health care and public sector processes.
• The information society need to continue further on and change into the integrated society – this is a new era
• The c-business process needs to be established together with “IT solution”, c-business is the symbiosis!