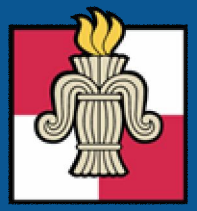

UNIVERSITY of VAASA

Non-hierrchical Collaboration in Dynamic Business Communities

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PRESENTATION OUTLINE

- Introduction
- Research methodology
- Business scenarios in SMEs
- Business partner and non-hierarchical collaborations
- Empirical study: business cases
- Results and discussion

Introduction

- In order to achieve competitive advantage, non-hierarchical collaboration among firms has nowadays become very important, especially for SMEs.
- This type of collaboration is considered as a key issue to cope with markets demands and stay competitive in the market segment through sharing competencies and resources among SMEs [1].
- In such business environment, firms are increasingly restructuring their internal operations, information systems, production processes and collaboration strategies with other firms in complex value chains, business ecosystems, which extend globally [2].
- Business collaboration can be both hierarchical and non-hierarchical based on the objectives, requirements and the controlling power of the participating partners.

Introduction

- In hierarchical collaboration, firms are generally connected following a vertical type of information exchange, where the collaborations are considered as rigid and much controlling on each other.
- Whereas, in non-hierarchical collaboration, firms are connected with each other in a horizontal power sharing where firms enjoy similar level of controlling on each other. This non-hierarchical collaboration is more flexible and operates in a more agile way than hierarchical ones.
- Mostly, SMEs collaborates hierarchically with big firms, whereas they collaborates each others with non-hierarchically.
- In general, SMEs specialize in narrow business areas or market niches, while large firms use their supply networks as resource pools to be benefited.


Germany
28 designs
Canada
1 design
USA
6 designs
UK
3 designs
Sweden
1 design
Belarus
1 designs
Russian Fed.
1 design
France
2 designs
Romania
2 designs
Austria
2 designs
Spain
3 designs
Italy
5 designs
Turkey
2 designs
Hong Kong
1 design
Thailand
1 design
Puerto Rico
1 design
Israel
4 designs
Bosnia
1 design

Research methodology

- A case study approach was taken, where six case companies were visited and the required data was collected for analytical purposes.
- This study was done with a view to sort out the potentials and barriers for non-hierarchical networking among them.
- Among six case companies,
  - two were involved in the business of textile and apparel,
  - two were in footwear industry and
  - the other two were in machine tools arena.

Business information of the six case companies

Company	Country	Business field	Number of employees	Turnover
Case A	Portugal	Textile and apparel	800	50M€
Case B	Portugal	Textile and apparel	23	5M€
Case C	Italy	Footwear	10	0.5M€
Case D	Italy	Footwear	35	8.5M€
Case E	Spain	Machine tool	6	1.8M€
Case F	Spain	Machine tool	150	23 M€

Research methodology

Research methodology

- Three specific steps were adopted to conduct this study such as:
  - Definition (creation of templates to be used on interviews and questionnaires),
  - Activities (activities and tasks performed to achieve the desired findings) and
  - Deliverables (documents produced by researcher and business partners.)

- The definition stage includes the creation of templates and definition of workflows, or a complete data acquisition. The templates of the business case interview questionnaires are followed some guidelines for each case company that can be presented as follows:
  - Background information
    - o Business objectives;
    - o Market targets;
    - o Products;

- The activities stage includes the interviews, workshop and research within the case companies with the view as follows:
  - To collect initial results of the case companies
  - To present the business cases
  - To research on business case definition, future scenarios and business case integration

- The deliverables stage includes to achieve the followings:
  - To prepare interview report
  - Business cases description
  - Business scenarios
  - Business case specifications

Business scenarios in SMEs

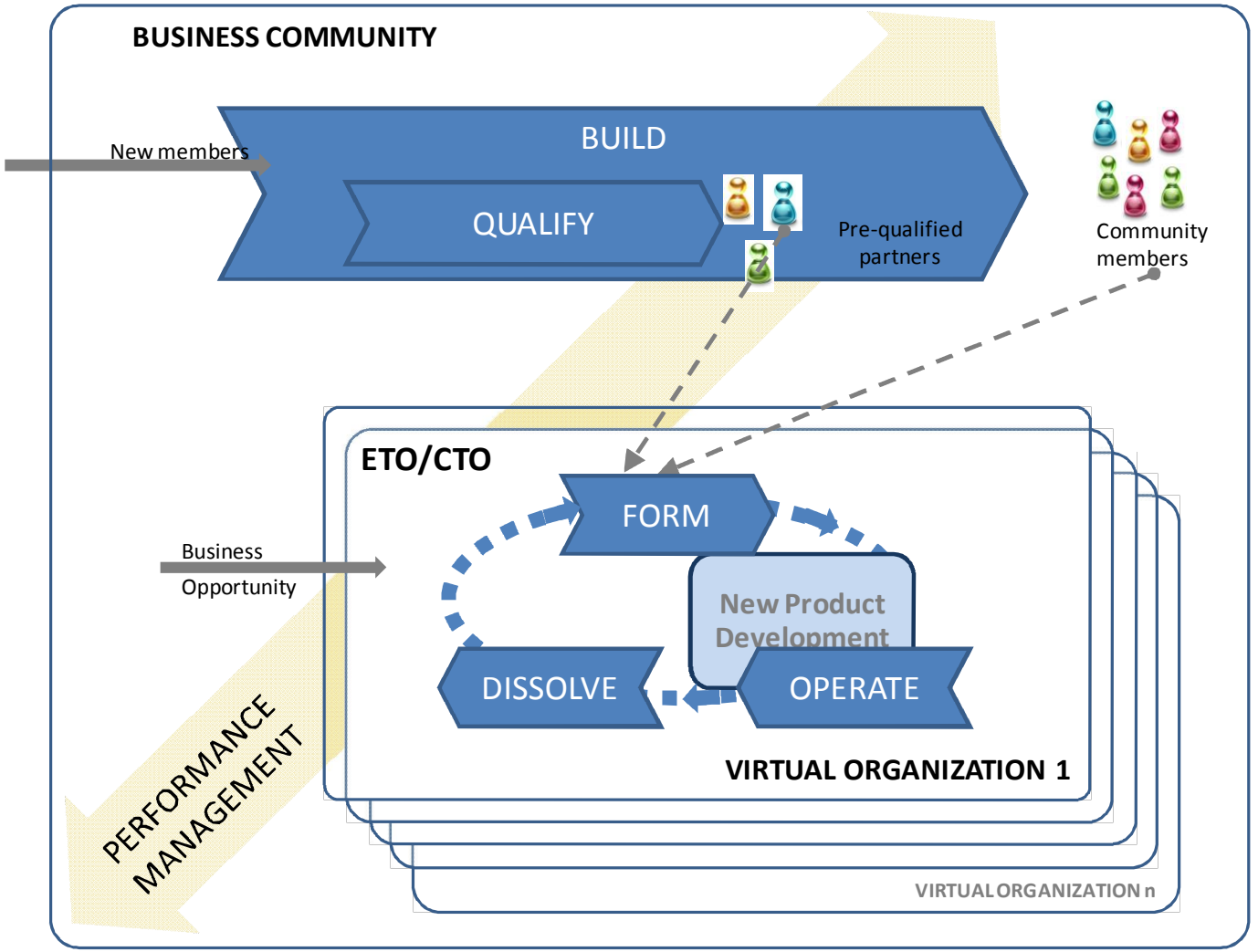
- In non-hierarchical networks, it is needed to offer high value products and services through direct involvement of partners, both up- and downstream in the value chain, including customers, suppliers, distributors, etc.
- Each process, from the design, to production, to distribution nowadays requires decisions taken with the involvement of many different actors.
- To ensure such flexibility and commitment, SMEs are required for exchanging detailed and reliable information, improving planning and control processes about the complete product development and production processes.

- In this research, the most important categories of network lifecycle have been defined as:
  - Building (which includes scenarios for companies which come together to a common ICT platform for sharing information and getting known to each other),
  - Qualify (including scenarios for qualification of partners in the community),
  - Form (including scenarios during which specific aggregations are created for a business opportunity),
  - Operate (which include scenarios for design /production implementation),
  - Dissolve (end of the network after achieving business goals).

Business scenarios within the case companies

Scenario number	Description of the scenario	Networking Phase
1	A company wants to participate in a business community	Build
2	A community member invites a company to participate in the business community	Build
3	Selection of potential partners for a new business line	Build
4	Knowledge sharing within the network	Build
5	Qualification of potential partners for a new business line	Qualify
6	Select partners for a specific market opportunity	Qualify
7	Design a new collection (catalogue)	Form
8	Developing market research	Form
9	Standardize communication with customers	Form
10	Technical workshops between Research centres and SMEs	Form
11	All processes of the company are concentrated in one and only very simple ICT tool	Form
12	Improve operations plan for an order	Operate
13	Monitoring operations	Operate
14	Reaction to an unexpected event	Operate
15	Evaluating the network performance	Operate
16	Adjusting production capacity to meet expected demand	Operate
17	Creating a global production schedule for an order	Operate
18	Subcontracting	Operate
19	Network dissolution	Dissolve

Generic collaboration network



Business partner and non-hierarchical collaborations

Potentials for business partners

- In order to establish non-hierarchical business networks, SMEs require the methodological support and ICT- solution for guiding the network formation and establish the criteria for qualifying potential partners.
- SMEs need specific support to find the right partners (according with several criteria) as well as their qualification as future business partners.
- Partnership is driven by a clear understanding of mutual objectives and co-operative decision-making by multiple SMEs in order to continuous improve their performance [13].

Looking for a business partner!

Business partner and non-hierarchical collaborations

Critical success factors of partnerships

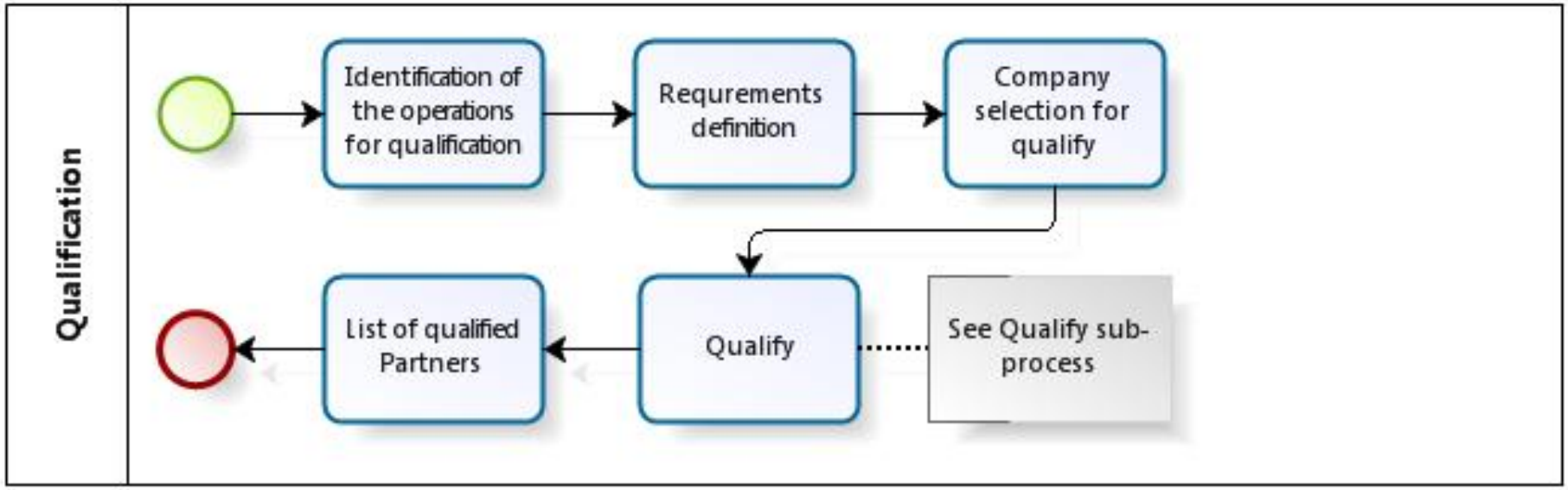
- Strategic partnerships are increasingly gaining favour over go-it-alone strategies for firms to achieve fast and economical growth.
- It is becoming an increasingly common way for firms to the formation of partnerships to find and maintain competitive advantage.
- Business collaboration is the most innovative development in delivering a project efficiently.
- It provides a sound basis for achieving a win-win situation among partners.
- The fundamental principles of partnering, namely trust, commitment, communication, respect, and equality.

Critical success factors of non-hierarchical collaboration can be defined as those factors that determine the success or failure of a firm. These factors are measured by comparing the value of several predefined variables (noticed or unnoticed) in successful and unsuccessful partnerships.

General measures of success in partnerships (satisfaction and sales volume in the relationship) can be stated as:

- communication quality and participation,
- conflict resolution techniques,
- coordination and trust and a partnership attributes of commitment [18].
- careful strategic planning and good collaborative attitudes are essential for its success,

Qualification process for a partner



Qualification process for a partner

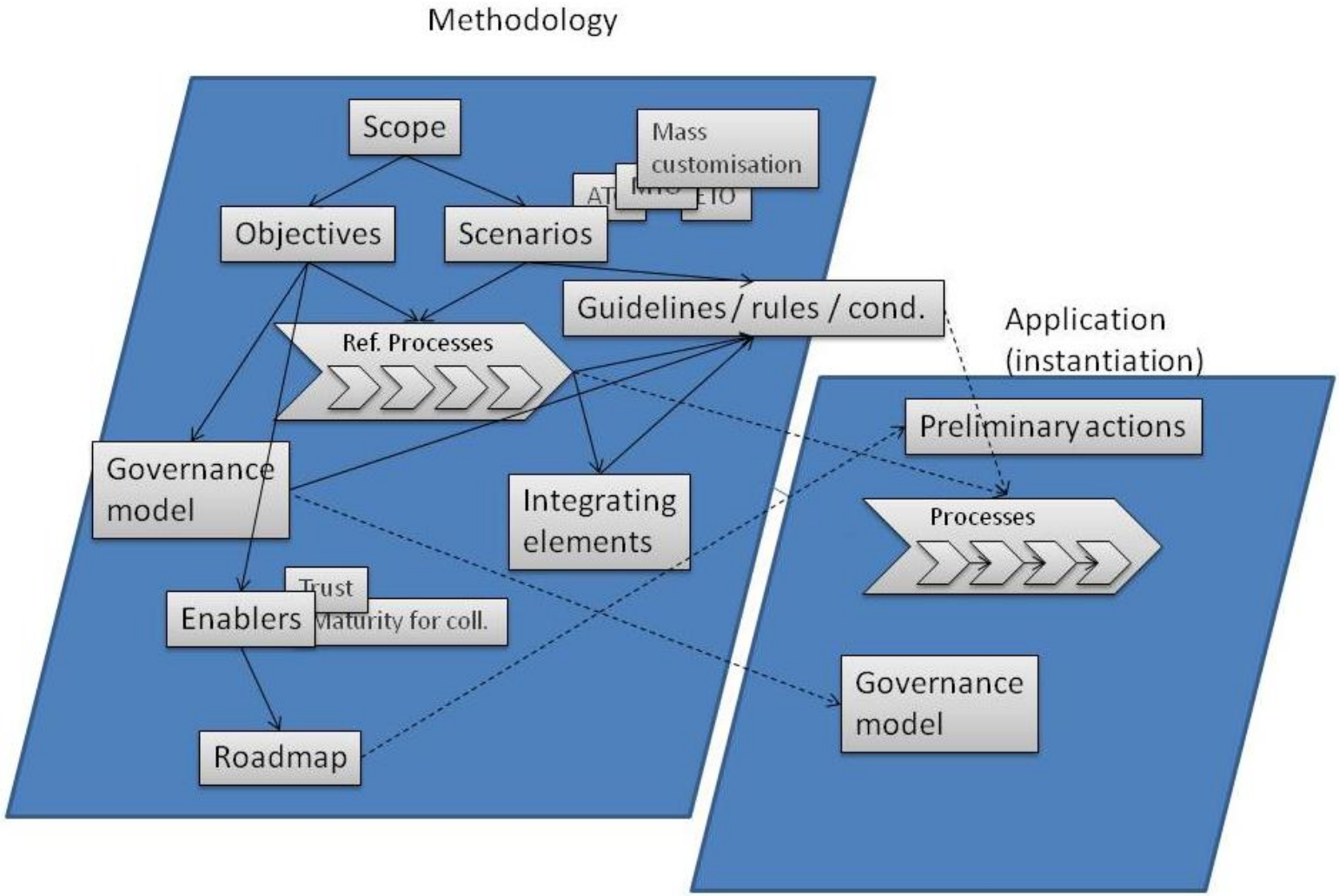
- The Net-Challenge Methodology proposes an innovative and collaborative approach to the qualification of business partners, whose main goal is to significantly reduce the associated costs.
- The approach includes the collaborative definition and agreement on the qualification criteria and evaluation methods for specific operations, allowing that each qualified organization will be assessed only once per year, instead of being assessed by all its clients.
- This collaborative qualification system is designed to work in Business Communities where the entrance of new members is controlled and trust between its members is promoted.

Business partner and non-hierarchical collaborations

According to the results of the business process analysis hold on during this research, the key success factors for non-hierarchical collaborative business networks can be summarized as follows:

- Development of trust between participants in the business community
- Development of change management programs to reduce the natural reaction to change from internal personnel, at different levels of the organization
- Formalized and standard collaboration process
- Availability of shared knowledge, competencies and experiences with partner companies
- Enough financial resources for the defined strategic objectives
- The ICT support tools to be made availability to use by the companies at different levels involved

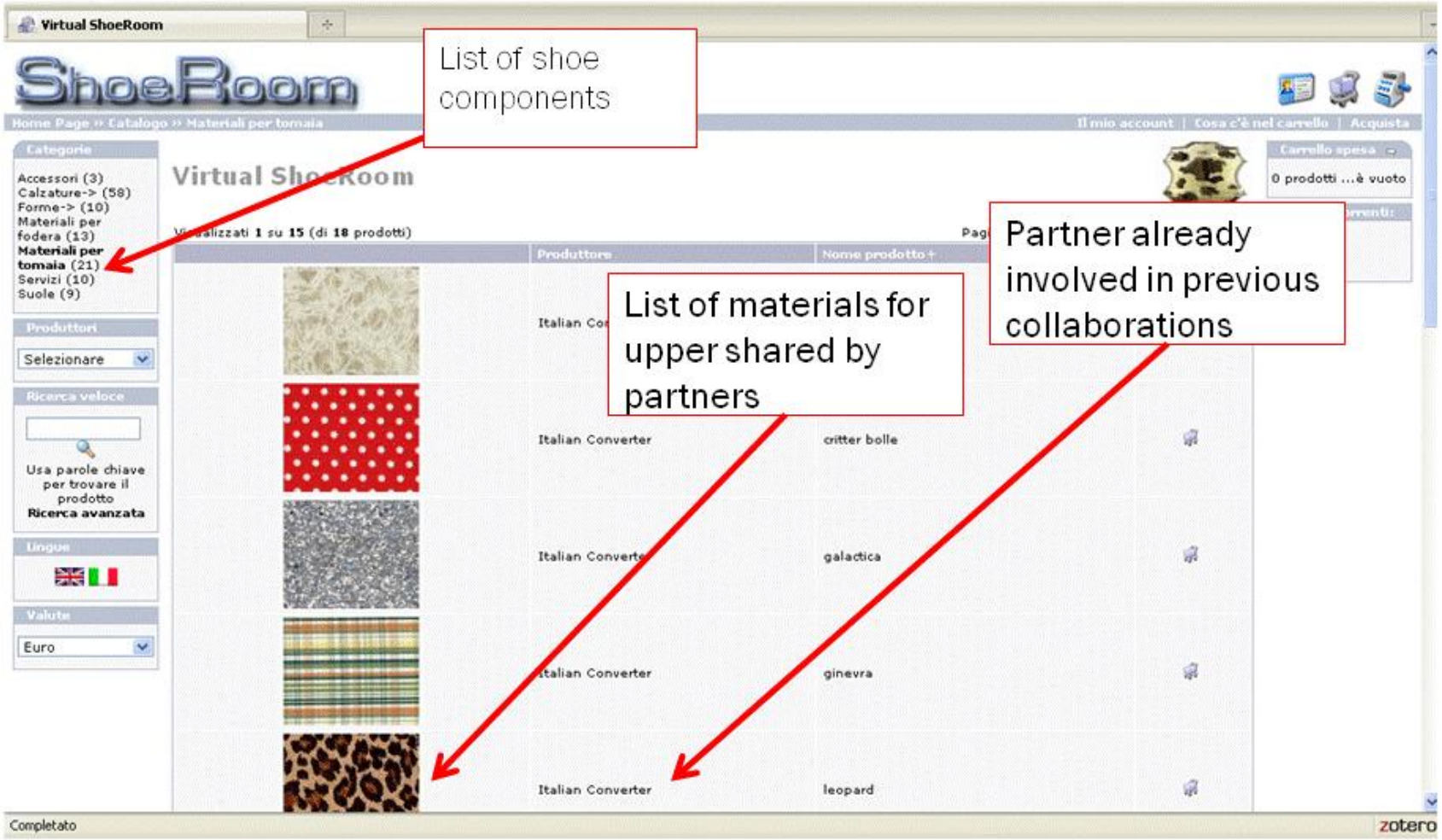
Integration of methodology and processes



Empirical study: business cases

- After analyzing potential data from the six case companies, it is observed that there are laggings of proper tools or methodologies to select, establish and communicate among potential partners in their business community.
- Building trust among potential partners seems the highest level of concern for this collaboration.
- There are also fears of confidentiality of information flow among partners and type of collaboration they are looking for.
- It is observed from the case studies that all the companies are producing complex products, with lower volumes and higher product varieties in their production processes.

Empirical study: business cases



Empirical study: business cases

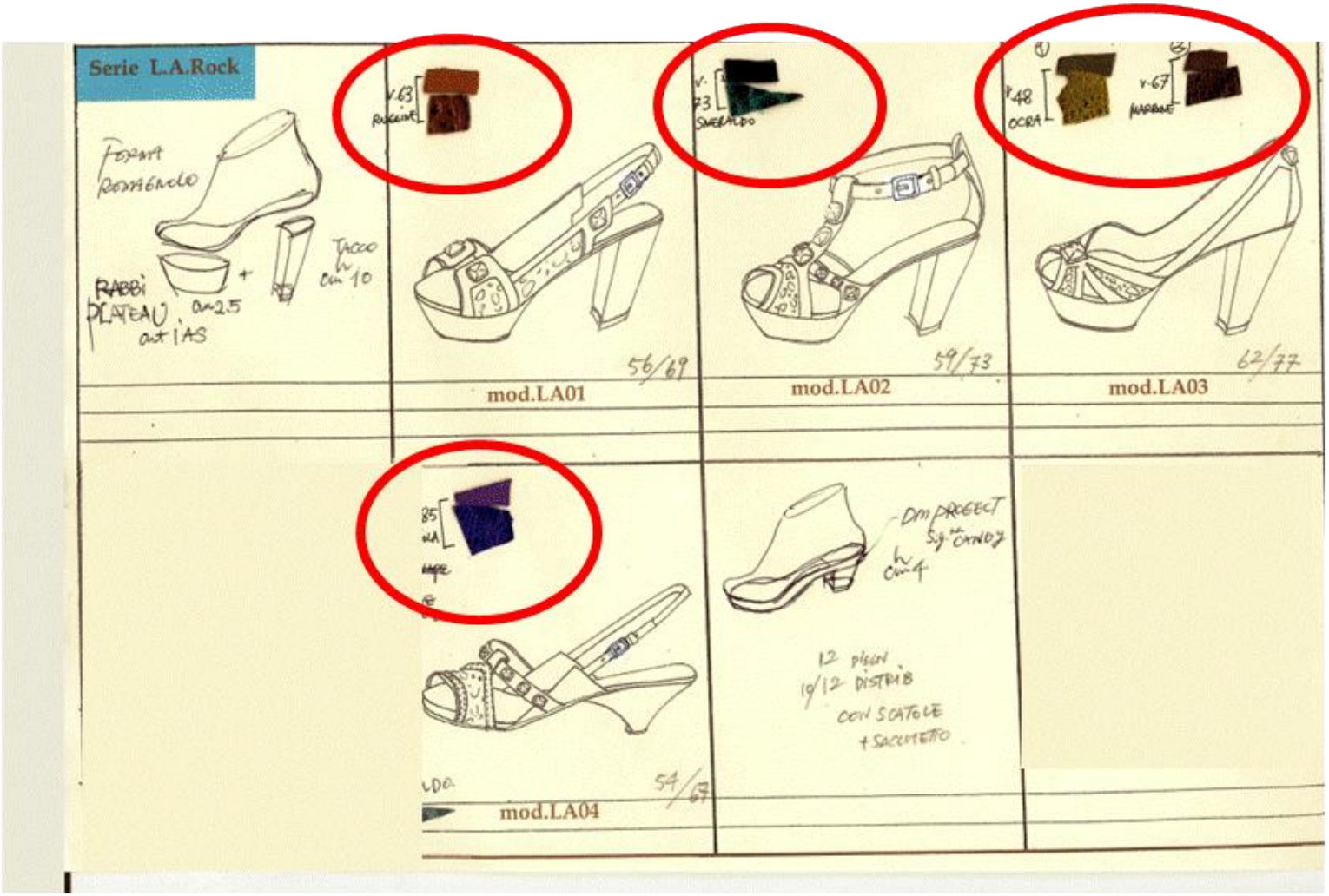
- Most common way to communicate with their partners is done by using phone calls, faxes or emails. Phone discussions are used for non-formal tacit knowledge exchange. Written emails are more formal to finalize the discussion started in phone.

- The partners could share a common template and the information filled to template could follow the pre-defined process to be easily shared inside the company and even between the partners.

- Companies should share capacity information and create a common pool of capacity, not to compete but to collaborate instead.

- The capacity pool should be available for all of the partners so while making quotations they could simulate the capacity usage and reserve capacity from their partners.

Case product: an example



Results and discussion

- It is a large concern in current business trend where SMEs in EU countries are facing fierce competition from larger companies and also from low-cost countries in terms of costs of manufacturing of the same goods.
- To be competitive in such dilemma, SMEs in the EU countries are encouraged to be collaborative and establish non-hierarchical networks, with high flexibility, agility and business potentials.
- The research presented in this research provides specific support to find the right partners as well as their qualification as future business partnerships.
- The ICT tools to be developed in the project research for partner selection through collaboration processes are expected to become an easy interface to share new business opportunities for SMEs.
- In this research, we have presented various business scenarios which might be useful guidelines for SMEs in a non-hierarchical collaboration.

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