



Innovation processes in enterprise point of view and innovation laboratory concept

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Lecture overview

- Organising innovation processes in enterprise, or more: some aspects to be taken into account
- About strategies, phases, tasks and tools
- Focus on the first one phases in innovation process, not in the last ones
- Discussion: How innovation processes are organised in your case enterprise
- Example: INNO-STU innovation laboratory concept in Ylä-Savo Region, Finland





Savonia Typical innovation process?







Figure 8: Dimen

Personal development, learning

People, workplace

> Management methods, management, leadership

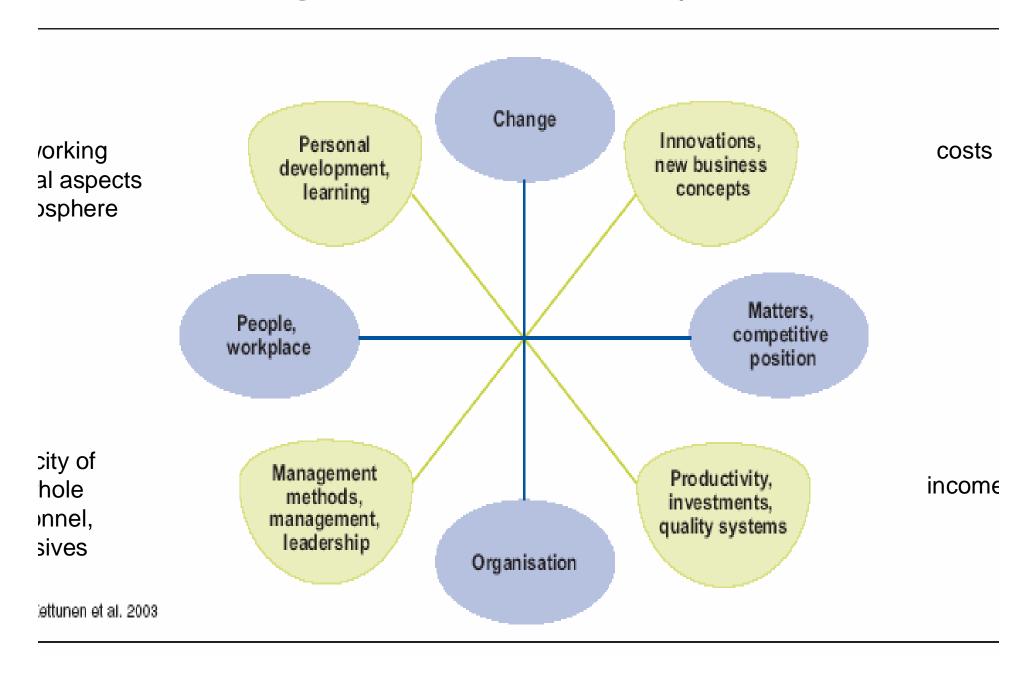
Figure 8: Dimen

Personal relopment, arning

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ettunen et al. 2003

Figure 8: Dimensions of business competences

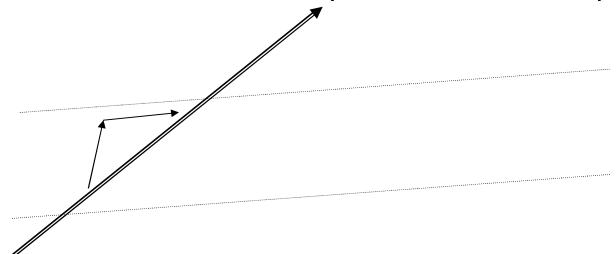






Innovation strategies

1. Sustaining Strategy: Bring a better product/service into an established market (incremental innovation)



Range of performance that customer can utilize

"The innovator's solution – Creating and sustaining successful growth" Cristensen and Raynor 2003

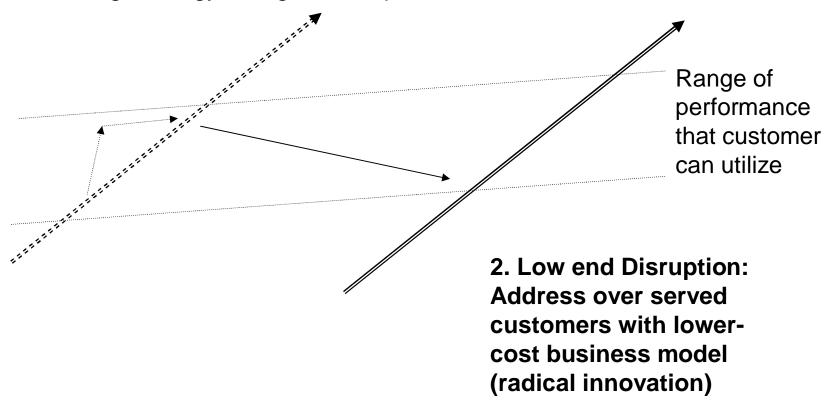






Innovation strategies

1. Sustaining Strategy: Bring a better product into an established market

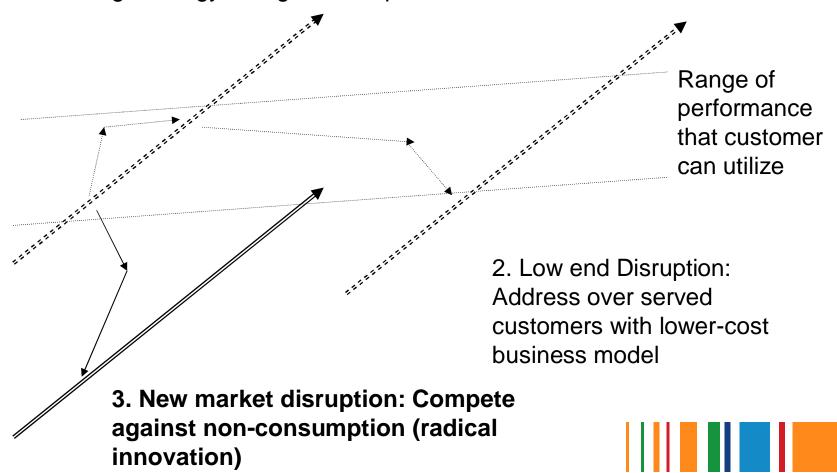






Innovation strategies

1. Sustaining Strategy: Bring a better product into an established market







Lessons learnt 1

- Usually, in enterprises the main emphasize in sustaining innovations
 - Necessary to sustain the competitiveness and the market position of an enterprise
 - However, sustaining innovations usually don't create new growth!
 - Very difficult to compete against market leaders, new comers usually fail! Market leaders are having customers, resources, they are able to "kill" newcomers. This is the reason of most of the innovation failures







Lessons learnt 2

- Disruptive innovations
 - Create new growth when successful
 - -Very difficult to achieve for enterprises focusing on sustaining innovations! The whole organisation fixed to sustaining existing customers, and this tend to "kill" disruptive innovation ideas.







Three tests

- Is there potential for new market innovation?
 - Is there a large population of people who historically have not had the money, equipment or skill to do this thing for themselves?
- Is there potential for low end disruption?
 - Are there customers at the low end of the market who would be happy to purchase a product with less (but good enough) performance if they could get it at a lower price?
 - Can we create a profitable business model for that?
- Is the innovation disruptive to all of the significant incumbent firms in the industry?







Phases in a typical innovation process

- Decision to start knowledge acquisition
- Impulse (market need, new technology, ...) => go/no go decision
- I dea generation => go/no go decision
- Concept investigation => go/no go decision
- Prototype => go/no go decision
- Pilot production, commercialisation => go/no go decision
- Manufacturing ramp up







Two different processes

Interprepative process

- Decision to start knowledge acquisition
- Impulse (market need, new technology, ...)
 => go/no go decision
- Idea generation => go/no go decision

Analytical problem solving process

- Concept investigation => go/no go decision
- Prototype => go/no go decision
- Pilot production, commercialisation => go/no go decision
- Manufacturing ramp up







Ability to generate a stream of new product, to improve upon old ones, and to produce existing product in an increasingly efficient way, depends on two fundamental processes =>

- Analysis
- Interpretation

"Innovation — The missing dimension", Lester and Piore 2004





1. Analysis, rational problem solving

- In designing a new product, the product development manager first seeks to define a clear objective, usually based on research into customer needs
- Then identifies the resources -human, financial, and technical-that are available to meet that goal, as well as constraints on those resources.
- He then organizes a project to accomplish the goal. The key is to divide the problem into a series of discrete and separable components and assign each one to a knowledgeable specialist.
- The solution is obtained by bringing the components together in some optimum combination as quickly and efficiently as possible.
- Managers role leading problem solver or negotiator resolving conflicts





2. Interpretation

- is not directly towards the solution of welldefined problems
- This process don't have a clear end-point, it's ongoing in time
- Activity, out of which something innovative emerges – a new insight about the customer, a new idea of a product, a new approach producing or delivering it
- The role of manager has less to do with problem solving or negotiation between interests, rather the role is in initiating and guiding conversations among individuals and groups
- The interpretative view is not widely understood or even recognized!







- Analysis
- Interpretation

Both are needed, in economic organization analytic decision must be done; however, the imperative process determines the range of alternatives from which business choices are made!







Small group work:

- What innovation strategy in your case enterprise is followed: 1) sustaining, 2) low-end-disruption, 3) new market disruption?
- How innovation funnel is organised in your case enterprise? Who are involved? Who make the decisions?







My background:

Research and Innovation Manager in Ylä-Savo Region

- Ylä-Savo Regional Centre Programme
- Savonia Polytechnic, Kuopio University and Oulu University
- Mission:
 - Transfer Research Knowledge to SMEs
 - Start R&D projects with SMEs
 - Enhance the Regional Innovation System











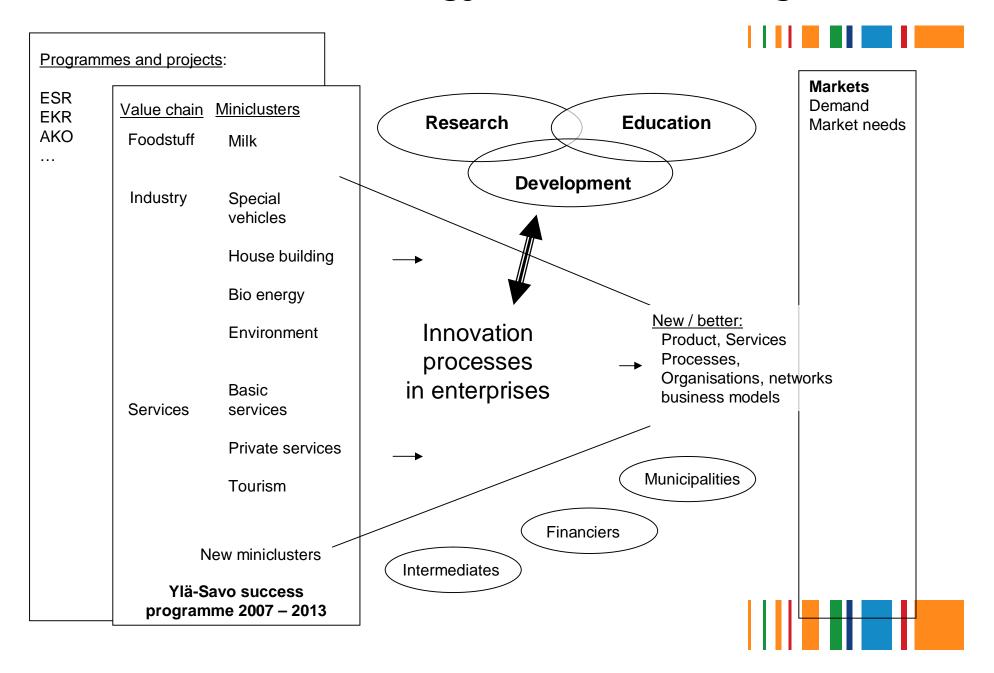


Ylä-Savo Region around I isalmi town

- Northern part of Pohjois-Savo region
- Ylä-Savo region, town of lisalmi and the surrounding rural districts.
- 60,000 inhabitants, about 3,000 enterprises
- Services and food, wood and metal industry.
- Region's background in dairy production and forestry.
- The biggest socio-economic problems are the high unemployment rate and depopulation.



Innovation strategy in Ylä-Savo Region





INNO-STU innovation laboratory

