

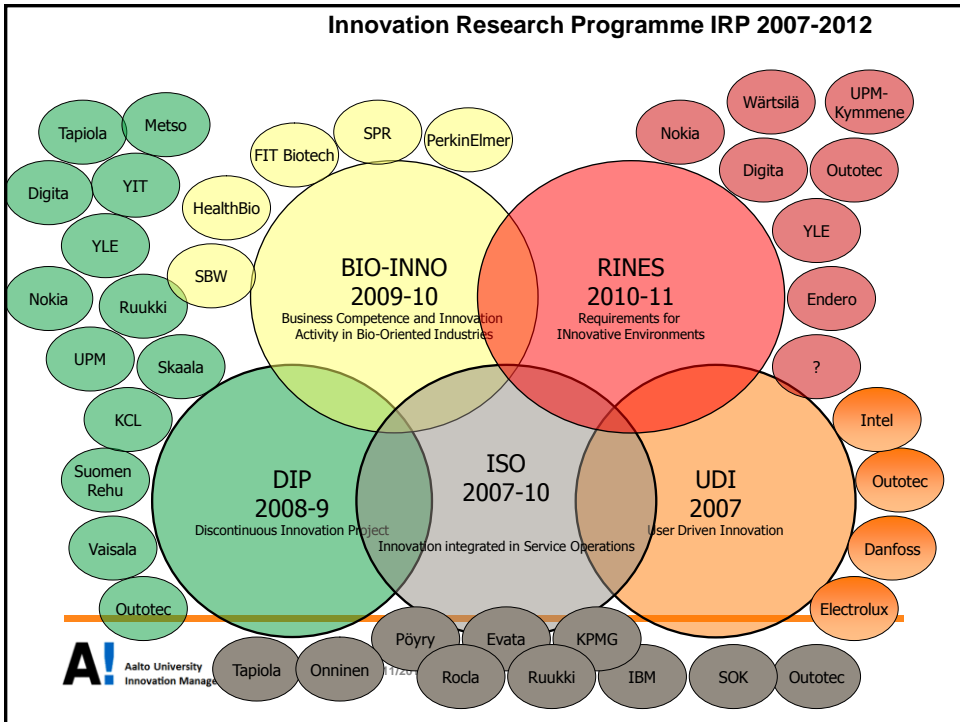
Voiko Innovaatioita Johtaa?

9.11.2011

Dr. Pekka Berg
Innovation Management Institute
Aalto University

Sisältö

1. Yleistä
2. Tarjoama (Offering)
3. Innovaatioprosessi
4. Mahdollistavat tekijät
5. Voiko innovaatioita johtaa?



T&T 5.6.2009

Innovaatio on nyt in

Pelkkä tehokkuus ja kasvu eivät enää riitä yrityksille

12 Raportti

TEKNIKKÄ & TALOUS

Ismejä tulee ja menee

TEKNIKKÄ & TALOUS

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Onko innovaatiotoiminnasta hyötyä (1/2)?

Top 50 Most Innovative Companies

	Sales growth 2001-2006 [%]
1. Apple	29,21
2. Google	./.
3. Toyota Motor	8,3
4. General Electric	5,06
5. Microsoft	11,85
6. Procter & Gamble	11,69
7. 3M	7,35
8. Walt Disney	6,29
9. IBM	1,26
10. Sony	0,6

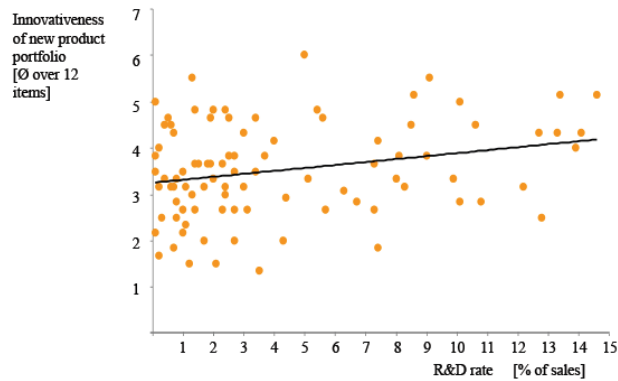
Source: 2.468 executives rated 20 different innovation parameters, Business Week

Tuotekehitys ja suomalaiset yritykset v. 2010

Yhtiö	T&K-summa, milj. euroa
Nokia	5863
Wärtsilä	141
ABB-Yhtiöt	139
Metso	111
Orion	86
Stora Enso	75
Kone	71
Amer Sports	58
Tellabs	55
LM Ericsson	50

Onko innovaatiotoiminnasta hyötyä (2/2)?

No relation between R&D rate and Innovativeness: You can't buy innovation!



Mitä innovaatiotutkimus on?

Innovaatiotutkimus tekee läpinäkyväksi olemassa olevia prosesseja uusien innovaatioiden kehittämiseen liittyen.

Prosessien lisäksi innovaatiotutkimus paneutuu prosessien lopputulosten eli tarjoamien analysoimiseen ja prosesseja tukevien innovaatioympäristöjen selvittämiseen.

Pekka Berg, 15.6.2010, klo.00.33

Mitä innovaatiojohtaminen on?

Johtaminen

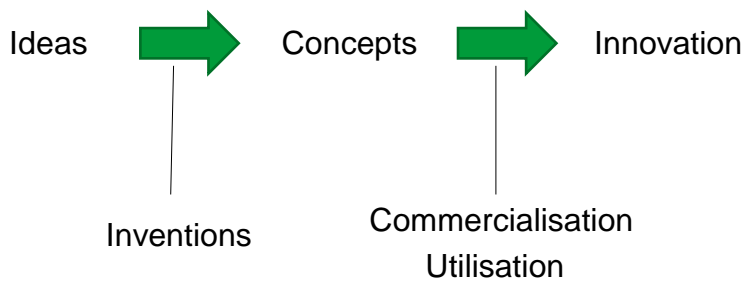
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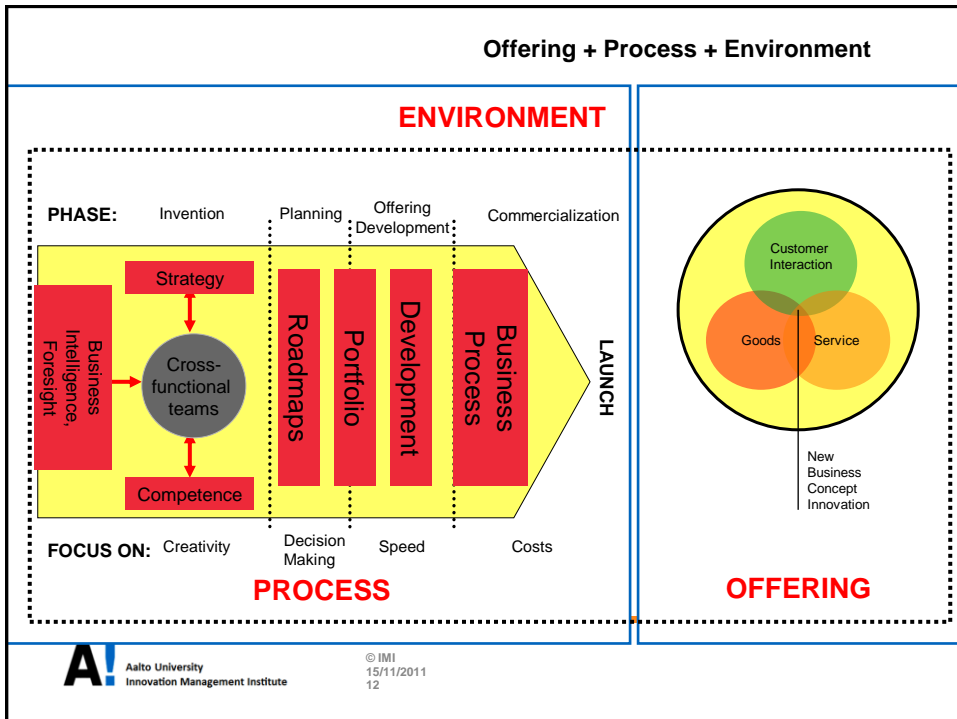
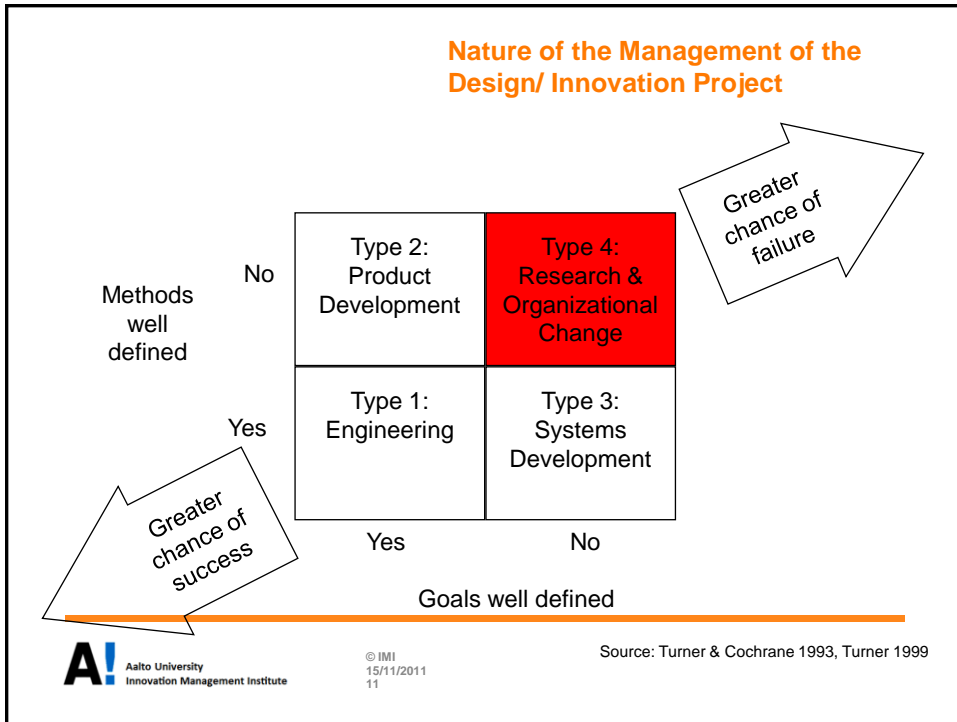
Mittaaminen

+

Päätöksenteko

Invention vs. Innovation





Innovative Environment

What practices create and support the characteristics of social, physical and virtual environments identified as beneficial for innovativeness?

Social environment:

- Trust and safety
- Risk taking
- Freedom
- Clear vision
- Collaboration
- Concrete support

Innovation process

What practices support and inhibit **innovativeness**?
(in relation to the recognised enablers of the three environments)

Offering

Physical environment:

- Workplace
- Artefacts
 - Organisation structures
 - Process descriptions
 - Instructions

Virtual environment:

- Text
- Audio
- Picture & Video
- 3-D

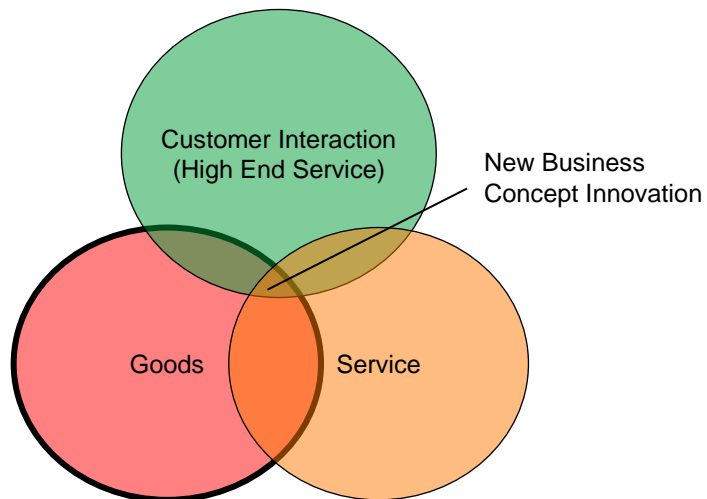
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Process vs. Offering

There is need to start from an offering/context!

Outcome/ Offering/ Product

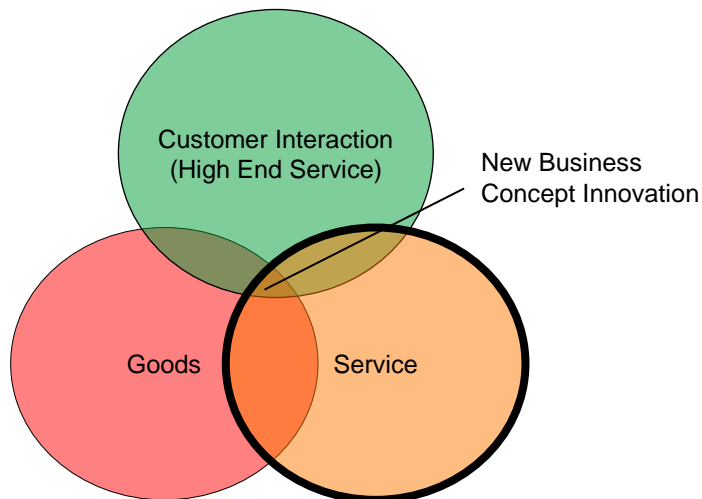


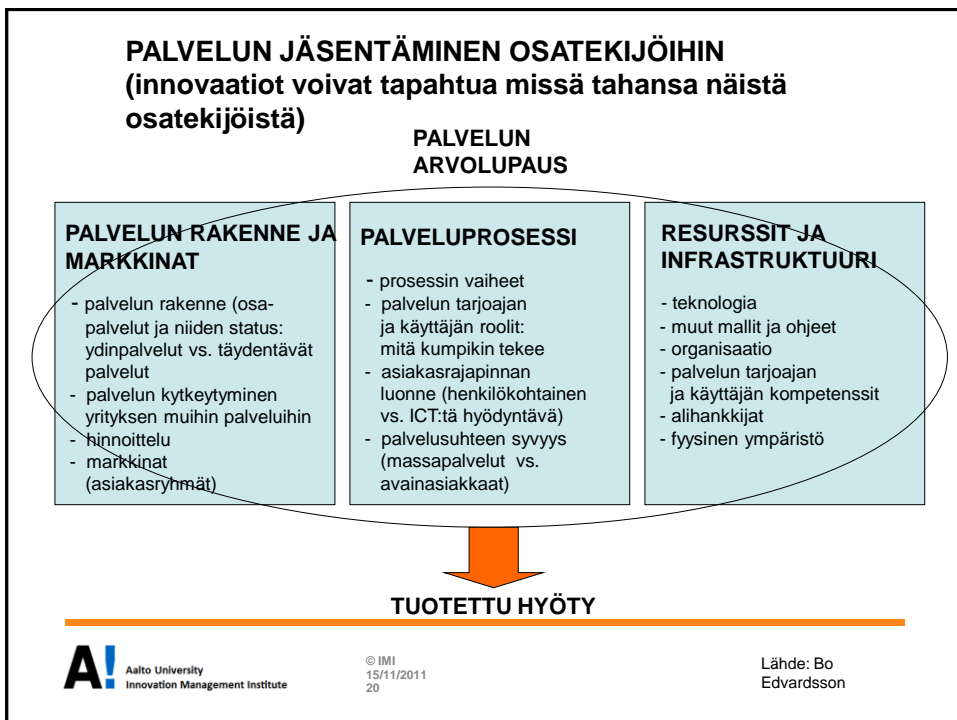
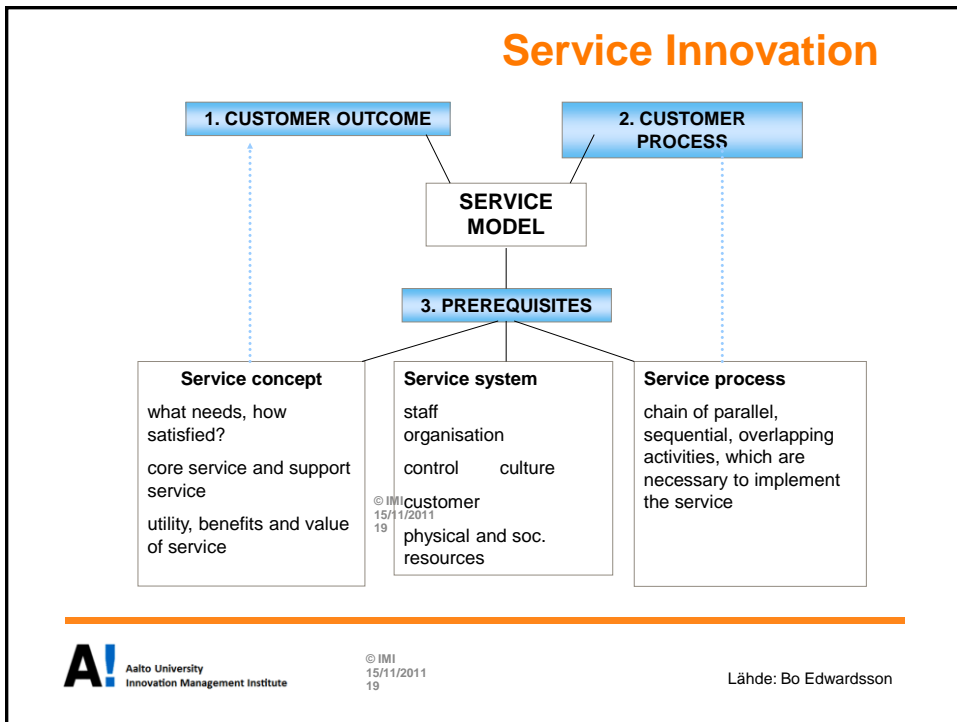
Offering / Goods

- Market-pull products (sporting goods,...)
- Technology push products (Gore-Tex rainwear,...)
- Platform products (consumer electronics,...)
- Process-intensive products (snack foods, chemicals,...)
- Customized products (motors, batteries,...)
- High-risk products (pharmaceuticals, space systems,...)
- Quick-build products (software,...)
- Complex systems (airplanes,...)

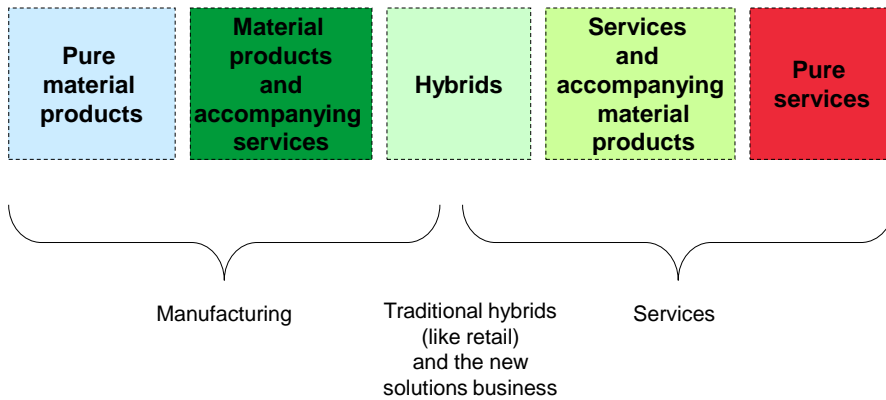
Ulrich and Eppinger (2003)

Outcome/ Offering/ Product

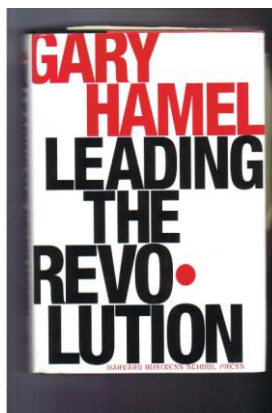




Blurring boundaries between goods and services

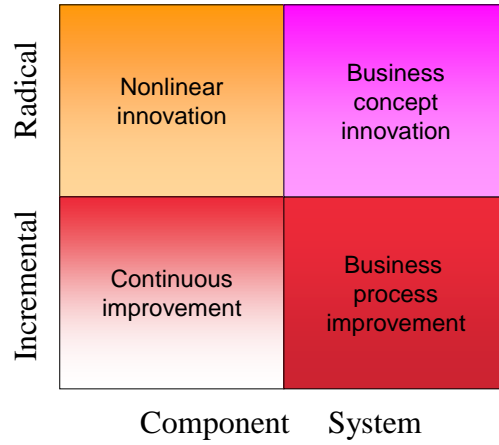


Modified from Kotler 2003

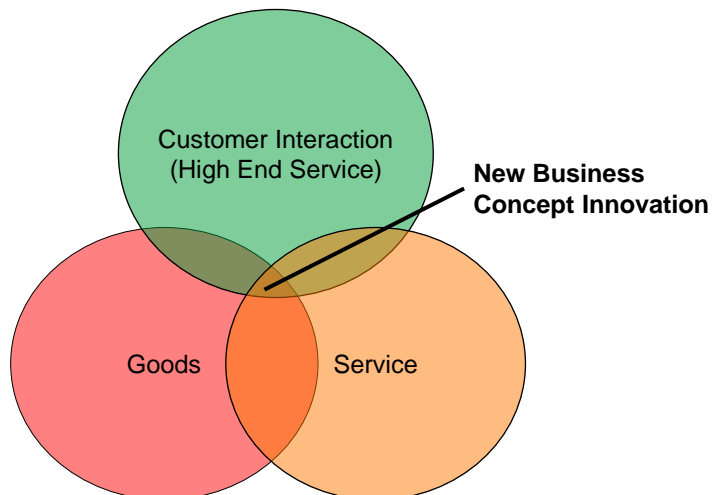


Product development according to Hamel

Product development according to Hamel



Outcome/ Offering/ Product



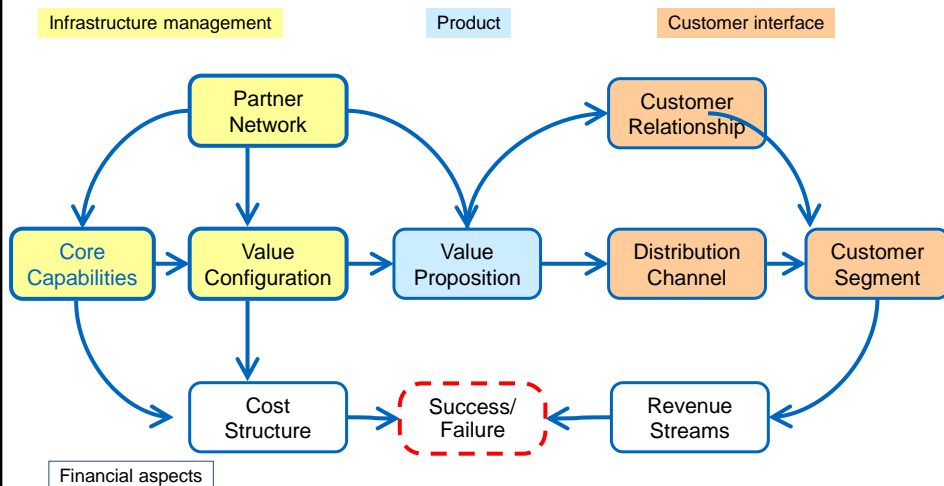
What Is Innovation?

Invention,
new idea or
novelty **+** Business
model **=** Innovation

Value of an innovation depends on the
business model

Business model innovation can be a
significant source of value

Components of Business Model (Osterwalder)



Johtamisnäkökulma 1

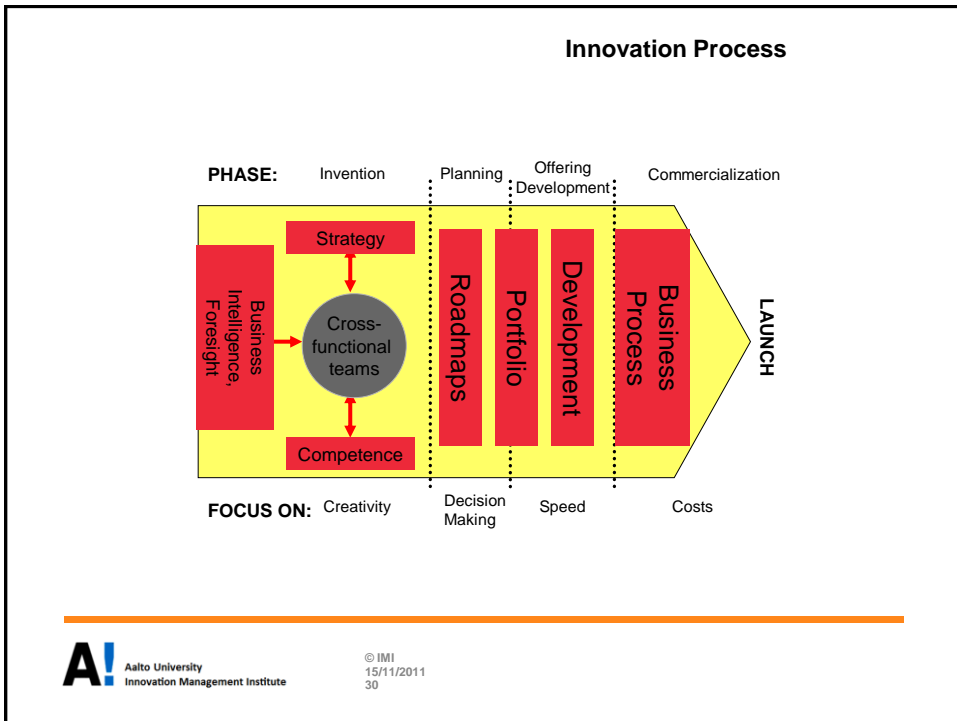
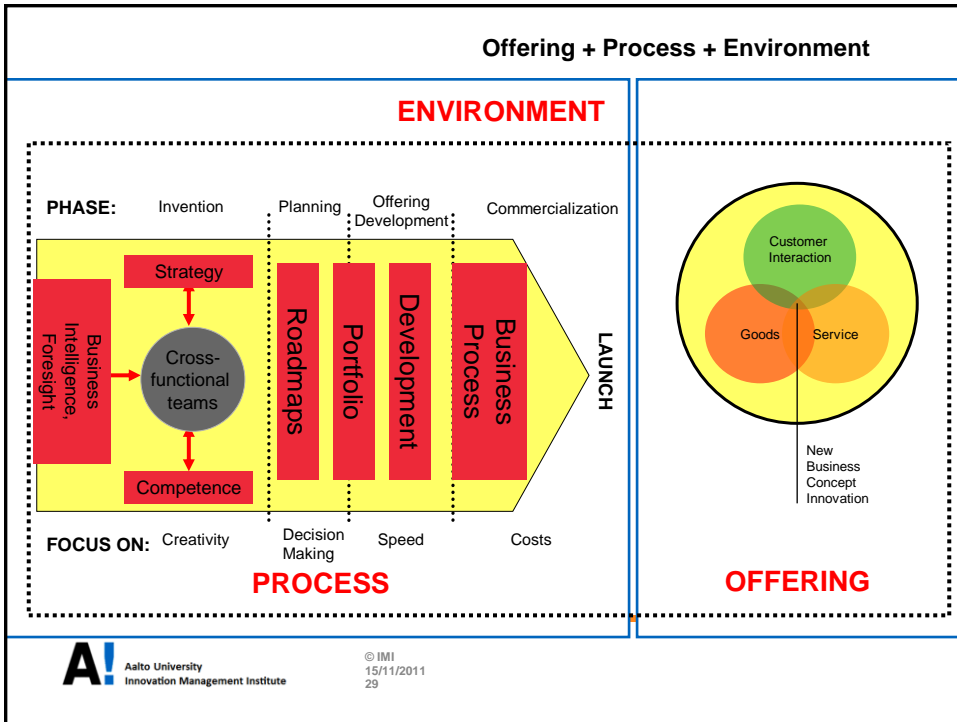
Johda organisaatiosi tarjoaman rakennetta suhteessa seuraaviin:

- Tavara
- Palvelu
- Asiakasvuorovaikutus
- Liiketoimintamalli

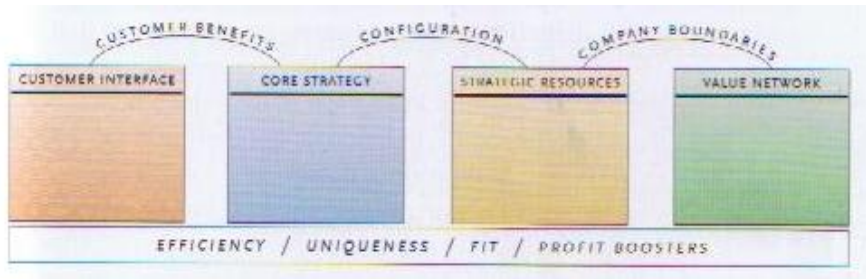
- Huomioi myös aikajänne:
 - Lyhyt (1 vuosi)
 - Keskipitkä (4 vuotta)
 - Pitkä (8 vuotta)

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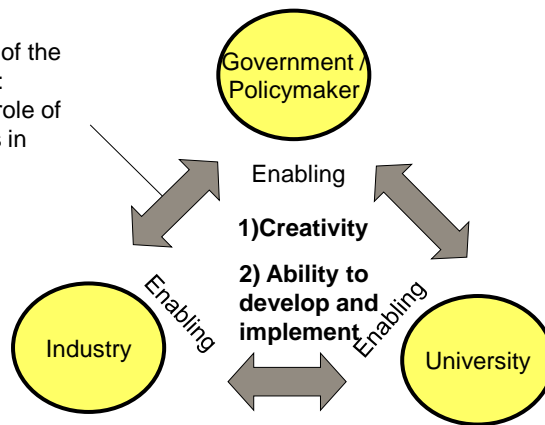


Strategia osana yrityksen toimintaa



Triple Helix Approach

Dynamics of the triple helix:
particular role of the parties in innovation



Nature of the Innovation Project

"We conclude that there is no "best practice" NPD process."

"Two thirds of the projects in the sample, 90 projects, do not correspond to the "best practice" approach."

Source: Loch 2000

Nature of the Innovation Management Project

TAILORING PRODUCT DEVELOPMENT TO STRATEGY

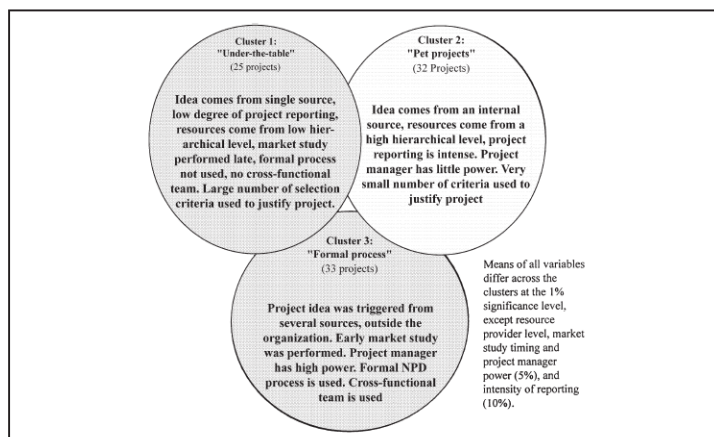
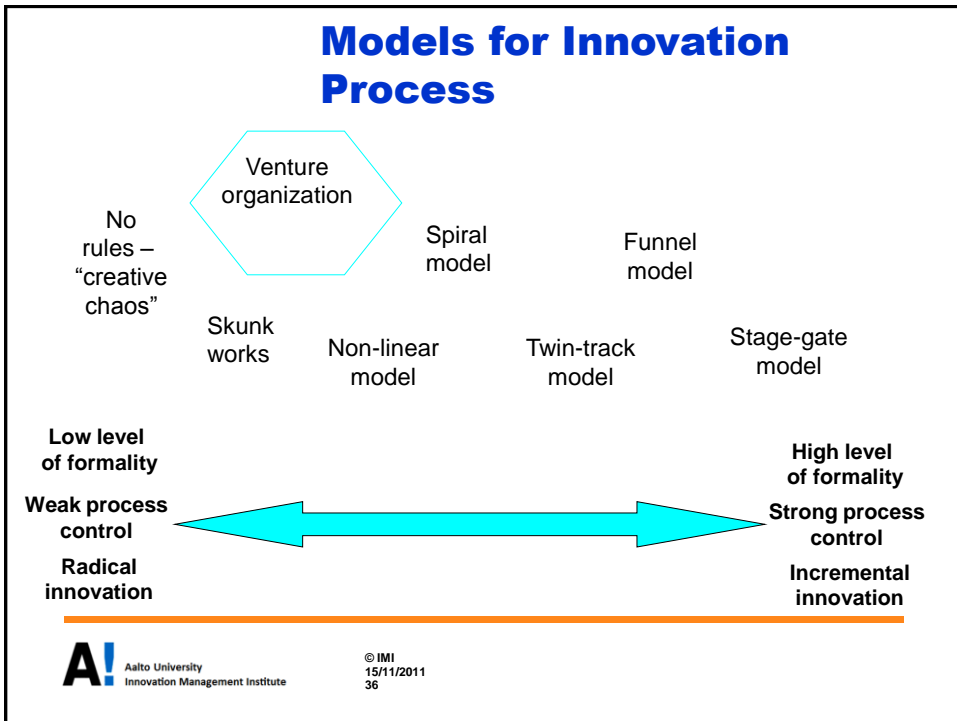
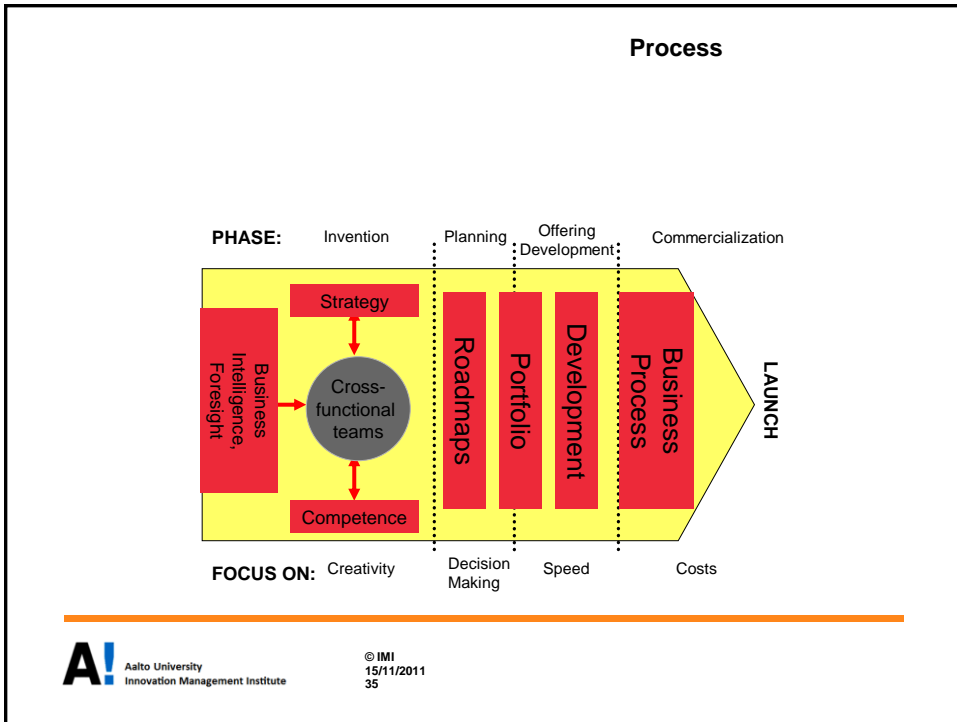
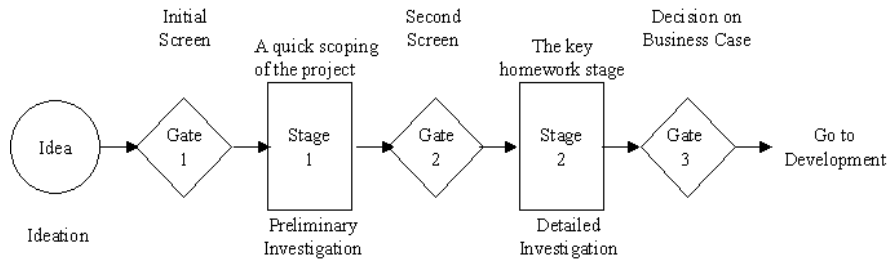


Figure 5 NPD Process Clusters

Source: Loch 2000

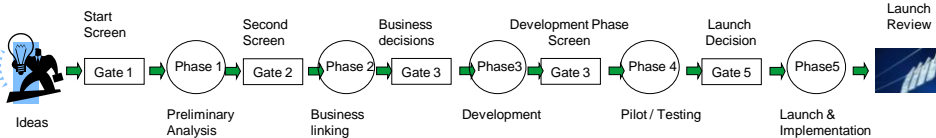


Stage-gate model for front-end

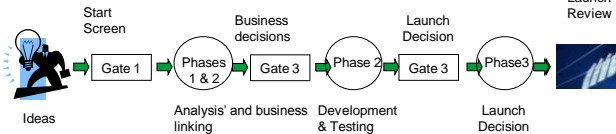


Project execution, follow-up and steering processes

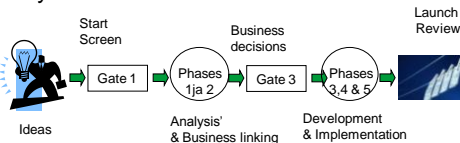
Full 5 Phase Process (large, high risk projects)

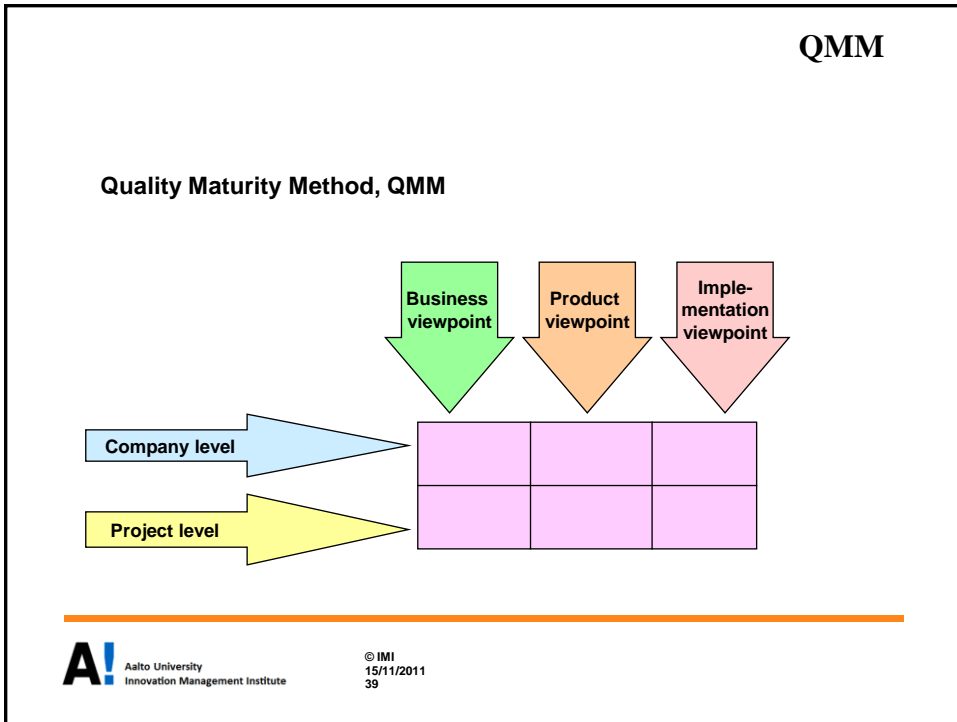


Quick Execution Process



Key Customer Process





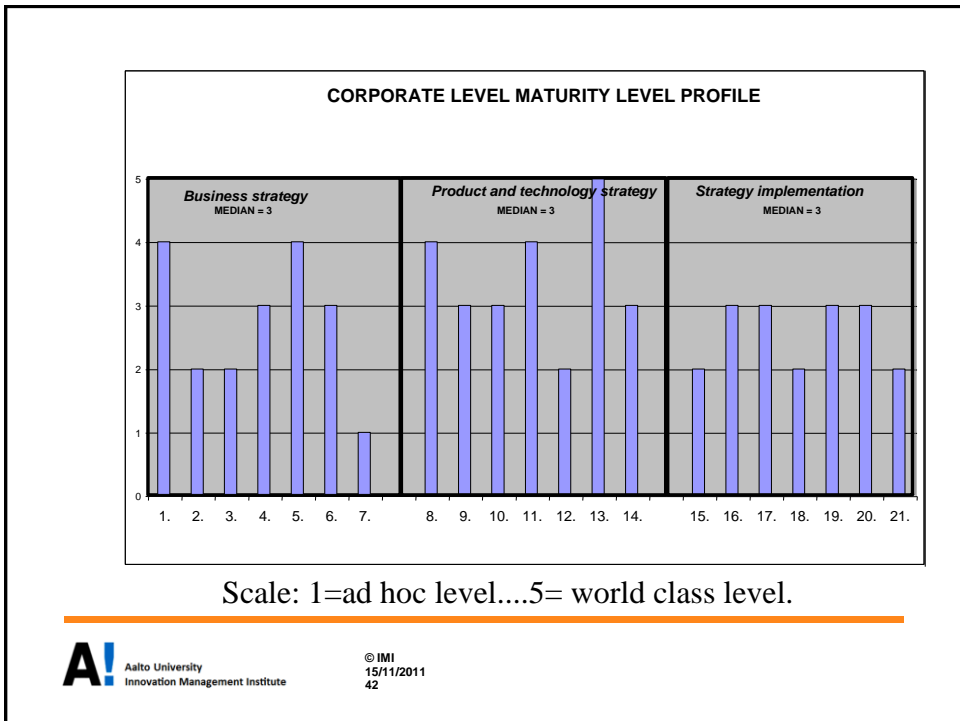
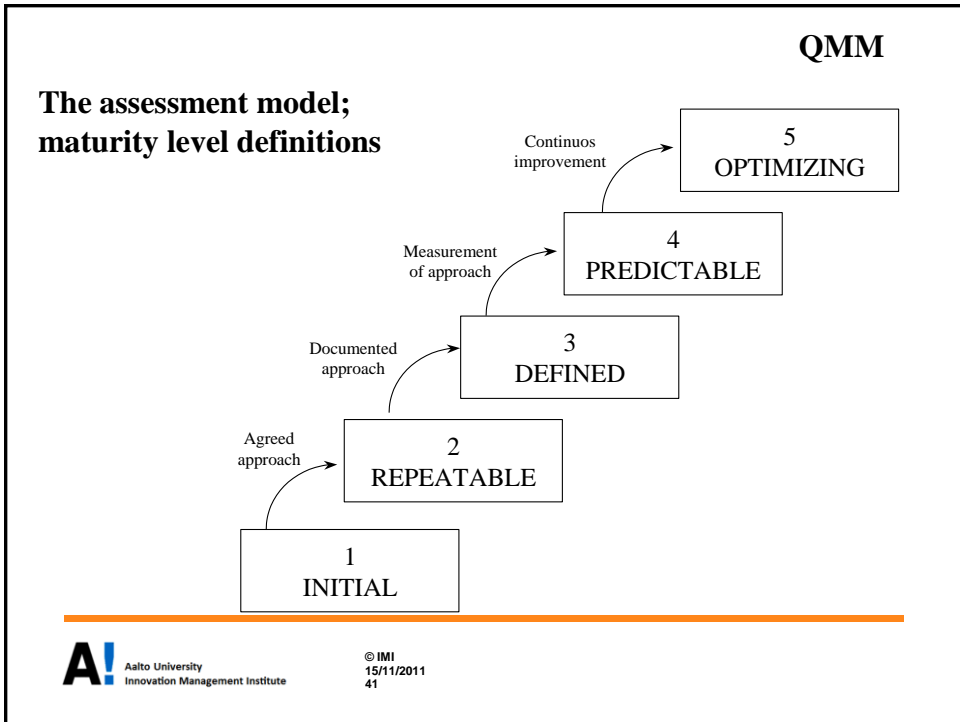
QMM

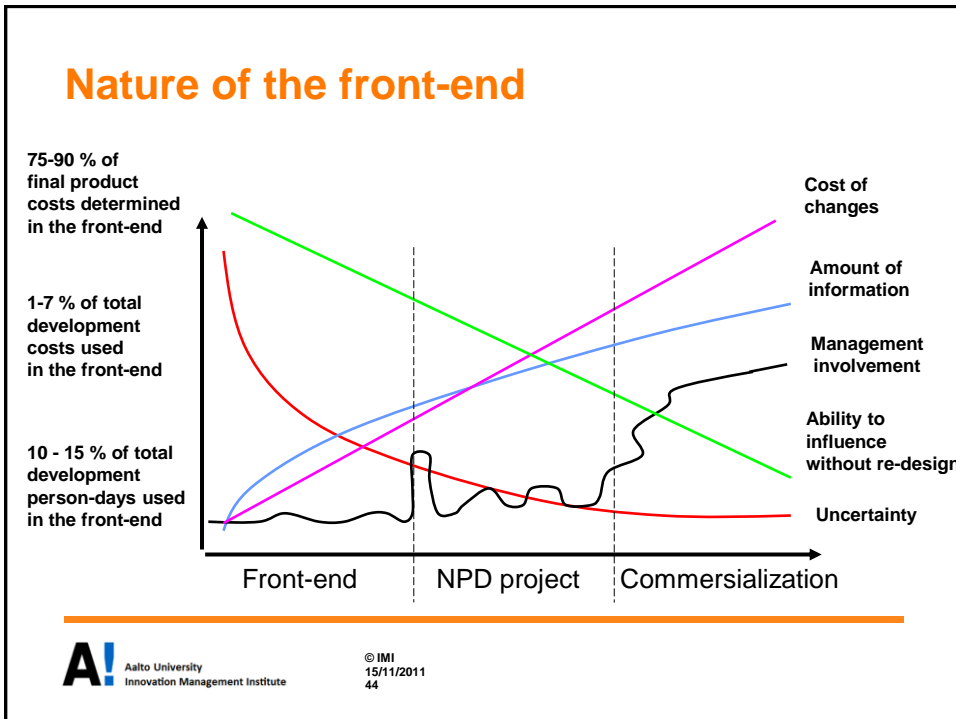
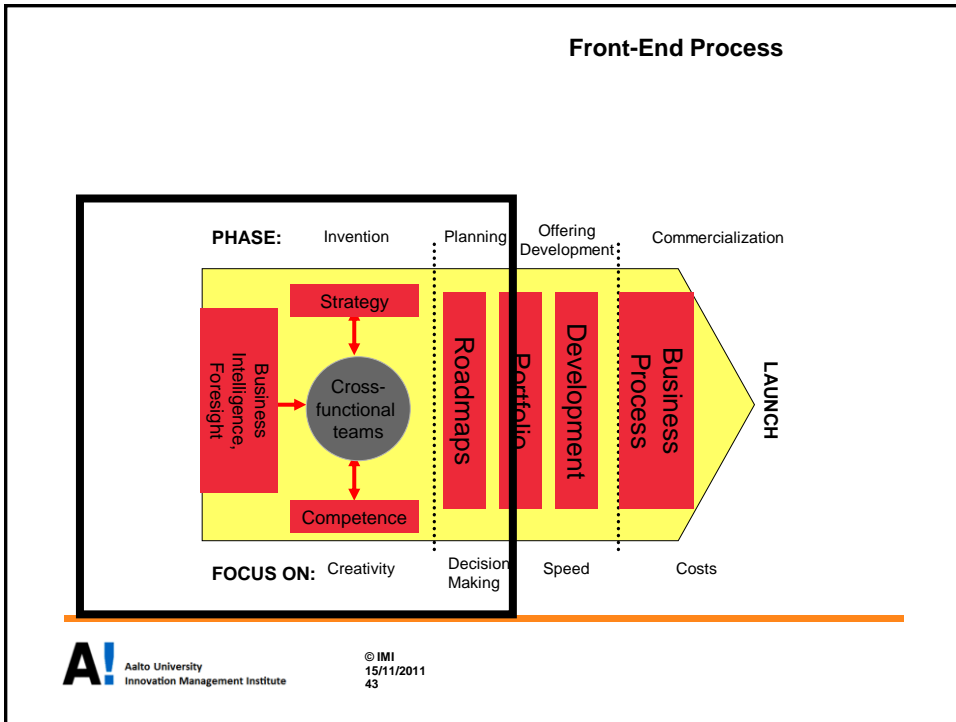
Assessment model and background factors

NATURE OF PRODUCT DEVELOPMENT ENVIRONMENT			
	BUSINESS VIEWPOINT Why?	PRODUCT VIEWPOINT What?	IMPLEMENTATION VIEWPOINT How?
COMPANY LEVEL	Business strategy	Product and technology strategy	Strategic action plans
PROJECT LEVEL	Business objectives	Product and technology objectives	Project implementation

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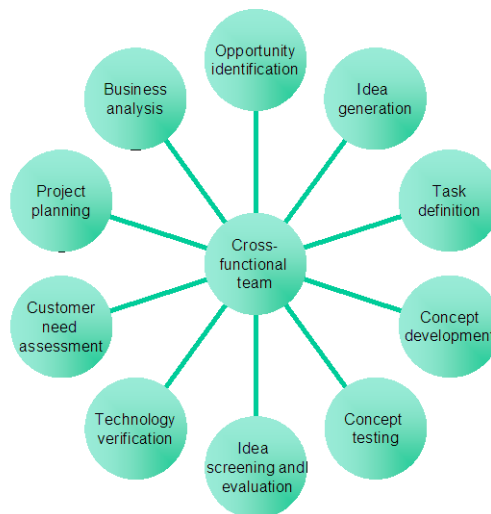




Front-end process models in Finnish companies

Level of detailness of front-end process model definition	Number of companies	Percent of non-missing
Not defined at all	15	11.5 %
Defined superficially	65	49.6 %
Defined quite detailly	44	33.1 %
Defined very detailly	7	5.3 %
Total	131	100.0 %

Operative level front-end activities



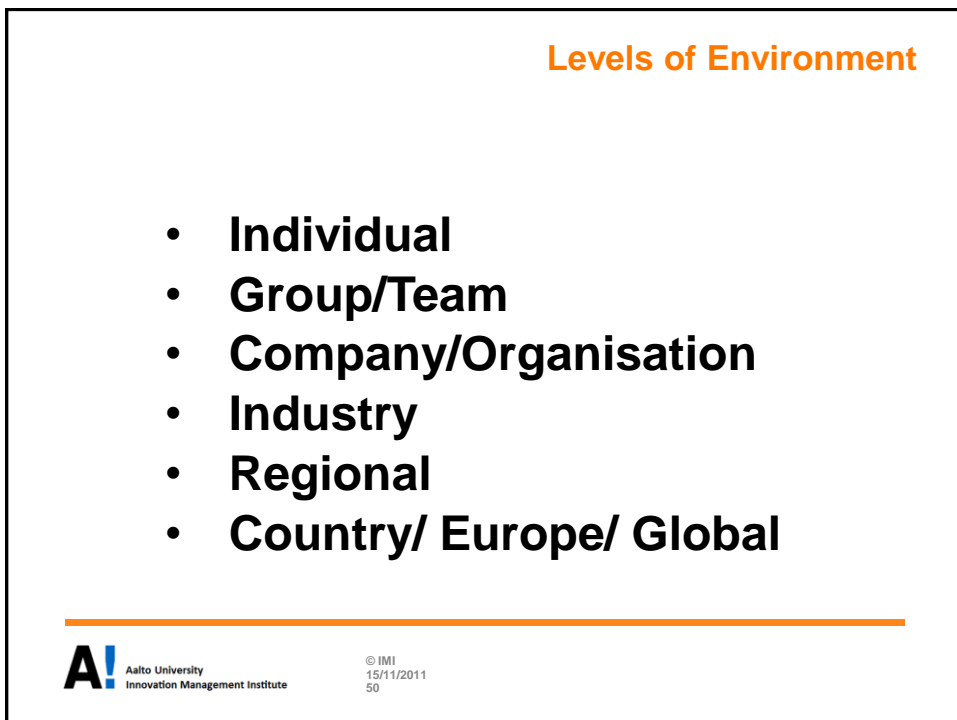
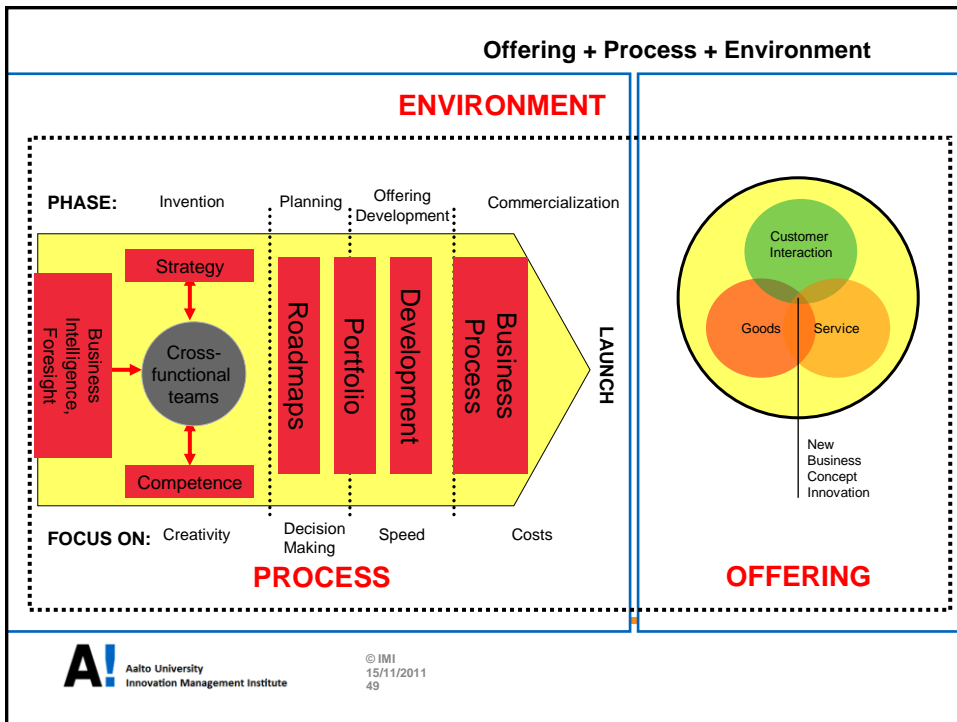
Johtamisnäkökulma 2

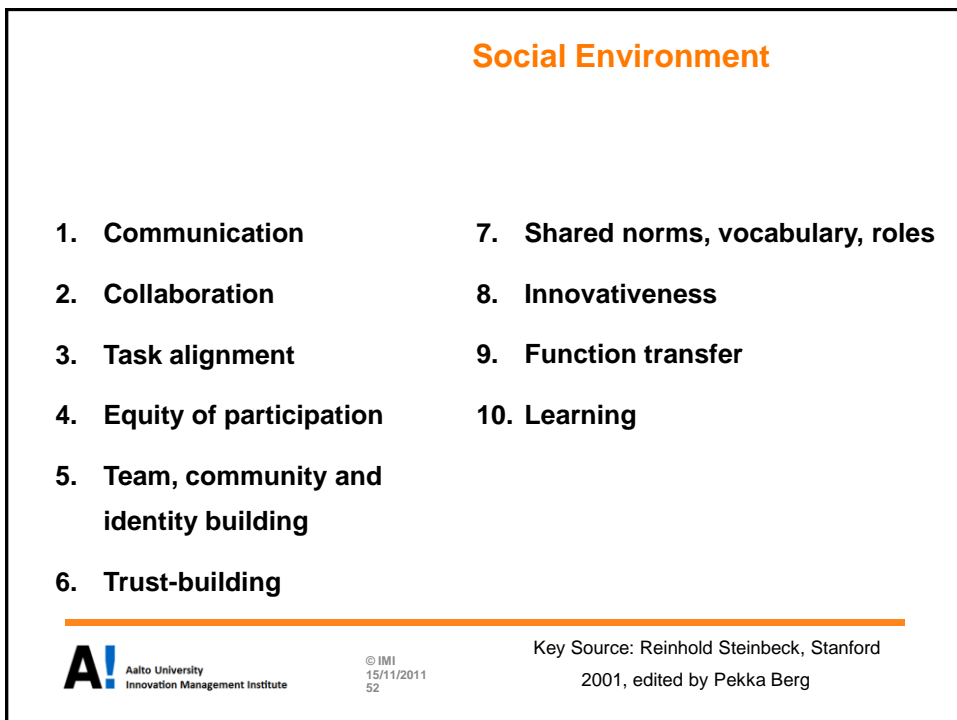
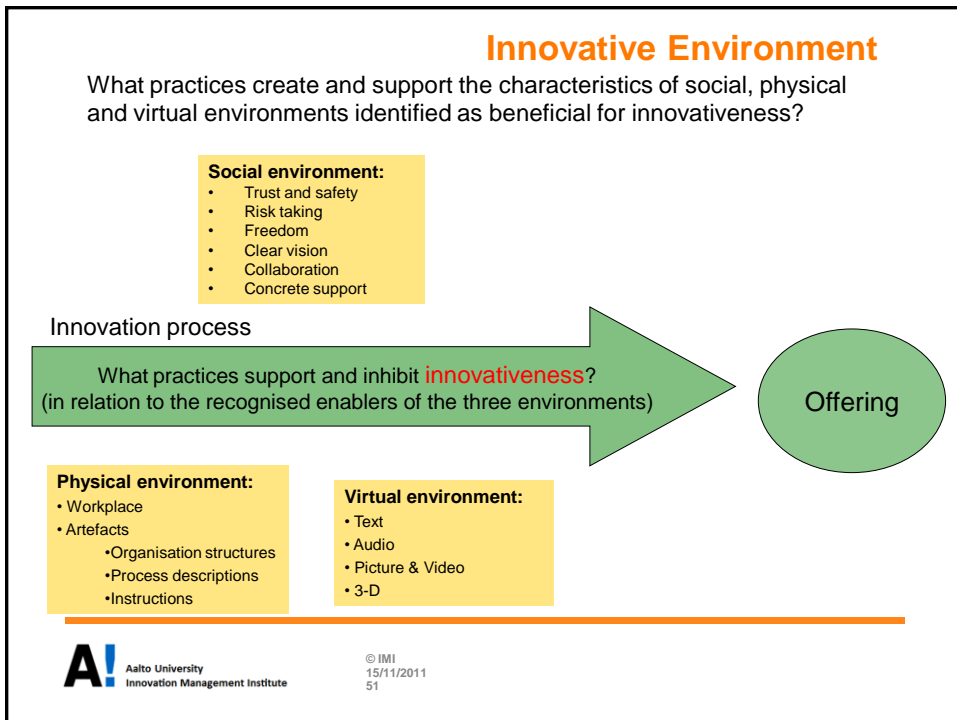
Johda organisaatiosi innovaatioprosessia seuraavasti:

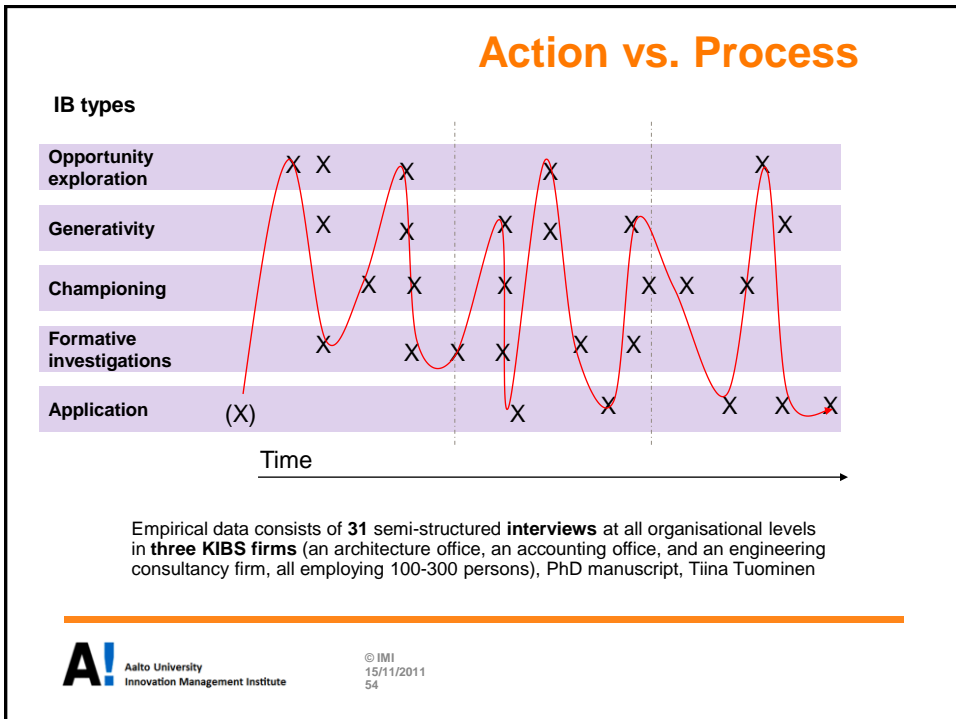
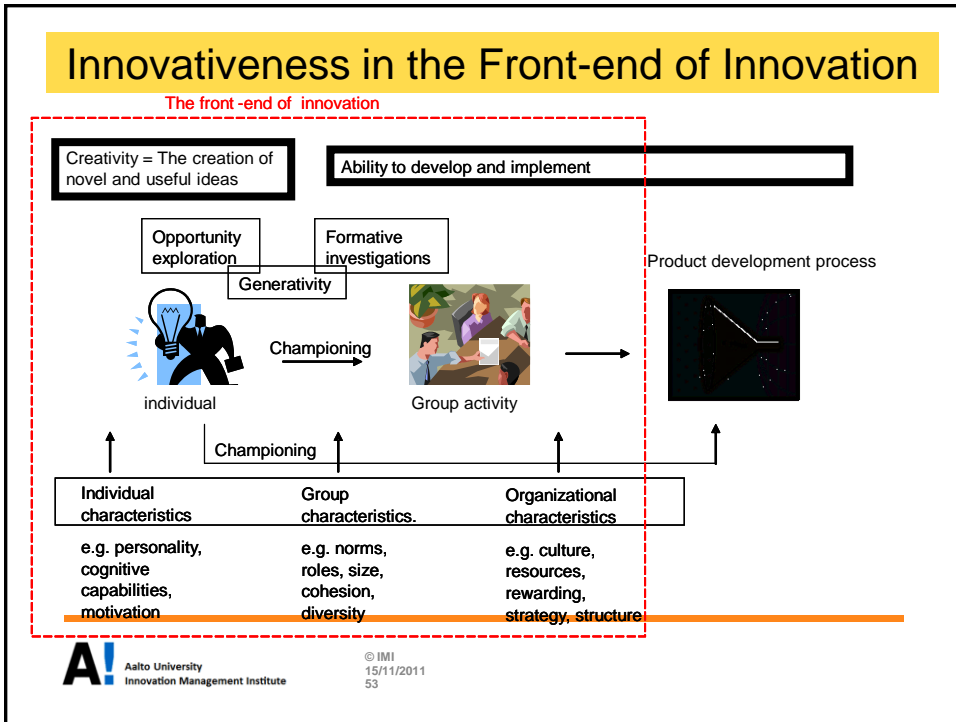
1. Ratkaise innovaatioprosessin pullonkaulat
2. Älä unohda innovaatioprosessin sumeaa alkupäätä – myös sitä voi johtaa
3. Ymmärrä syklisen ja lineaarisen toimintamallin ero

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Johtamisnäkökulma 3

Johda innovatiivisuuden molempia osa-alueita:

- **Luovuutta ja**
- **Toimeenpanokykyä**
 - **Rakenna tukitoimintoja (Innomanagerit, Innovaatiovalmentajat, Tacit Owners,....**

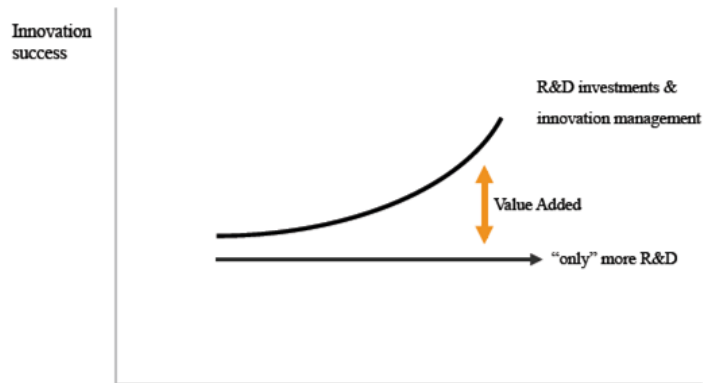
Tämän lisäksi mieti mitä ihan oikeasti tapahtuu – mitkä ovat käytännöt?

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Innovaatiotoimintaa voi johtaa

Innovation management matters!



Innovaatiotoiminnan johtamiseen tarvitaan kolmenlaista mittaamista:

1. Tarjoama (Input - Output)
2. Innovaatioprosessi
3. Mahdollistavat tekijät

Kiitos !

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