Investment, innovation and beyond: the development of human capital

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Why innovation

• Innovation is
  – adaptation to growing scarcity
  – competition
  – higher productivity

• Innovation is necessary given
  – public interest
  – societal agenda:
    demographic developments,
    climate and energy,
    education
    e-governement
Why ICT enabled innovation

- efficiency
- cost reduction
- risk reduction
- Drives open innovation

Electronic communications shapes innovation, production and distribution of data, goods and services worldwide.
Innovation takes place within networks of firms, institutions, public and private parties rather than within a single firm. By joint Ventures, strategic alliances, opening up patent portfolio’s and sharing research results.
Philips: from “Internal” to Open Innovation

from 1970 to 2004

Source: Philips
Human factor: sources of innovation

(Percent of respondents)

- Employees
- Business partners
- Customers
- Consultants
- Competitors
- Associations, trade shows, conference boards
- Internal sales and service units
- Internal R&D
- Academia
Innovation policy

Continue subsidizing innovation,
  – with attention for SME’s and new entrants
  – setting innovation agenda in accordance with the main societal challenges for the next decade:
    energy / climate / demographics / security

AND

• invest in people and networks
• stimulate social innovation
• promote cocreation and
• lead by example
Policy: regional clusters

**North Wing:**
- Logistics (Schiphol)
- Life Sciences
- Creative industry
- Tourism
- Congresses

**South West:**
- Processing industry
- Logistics
- Coastal tourism

**South Wing:**
- Mainport Rotterdam
- Agro (glasshouse) industry
- Int. Services
- The Hague

**North:**
- Water
- Energy
- Sensortechnology

**East:**
- Food & Nutrition
- Health/technology

**South East:**
- High tech systems & materials
- Medical technology & Life Sciences

**South West:**
- Processing industry
- Logistics
- Coastal tourism
Policy Innovation needs

Open networks:
- high speed/ low price

High trust economy
and
- low transition costs

Social innovation:
- from closed to open and networked organizations
- flexible arrangements, allowing temporary forms of cooperation
The human factor

- mass corporation
- prosumers
- cocreation
- user generated content...

REQUIRE

- people that communicate and translate between different knowledge fields, industry sectors, cultures and languages
- people that are ICT/empowered
The economic downturn...

... Makes money scarce and taking risk more expensive

... May cause switch from long term dynamic efficiency to short term static efficiency -> loss of innovation

... May mean less investment in innovative technology to solve societal problems

**In short: it may threaten innovation when we most need it.**

Public Investment should be aimed at innovation and not conservation
Economic downturn

- Rescuing jobs won’t rescue the economy
- Supporting companies might harm innovation

ON THE OTHER HAND....
- Keeping jobs on could create room for empowerment / employability and organisational innovation

PUBLIC WORKS
- infrastructure and markets that enable innovation: ICT / electronic communication`s.
- societal innovation agenda