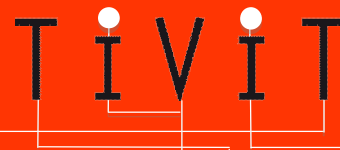




EnviTori - Environmental information
market place

Result seminar
13 Oct 2010



Ville Kotovirta
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Agenda

- 9:30 Tervetuloa (IL)
- 9:35 EnviTori-projektin taustat (VTT)
- 9:45 Ympäristötiedon merkitys ihmisille - käyttäjätutkimus (Gemic Oy)
- 10:00 Ympäristötietoa kuluttajille - siitepölyvaroituspalvelu (Medixine Oy)
- 10:15 Ympäristötietoa liiketoiminnalle - hiilijalanjäljen laskenta (Natural Interest Oy)
- 10:30 Tietolähteiden avautuminen uusille palveluille (Green Net Finland ry)
- 10:45 Mitä opittiin ja mihin jatketaan? (VTT)
- 11:00 Tauko + sämpylät
- 11:30 EnviObserver - ihmiset sensoreina (VTT)
- 11:45 Markkinapaikan arkkitehtuuri (Elisa)
- 12:00 Metadata (Syke)
- 12:15 Mittaustiedon luotettavuus (Mikes)
- 12:30 Ilmanlaadun mallintaminen (IL)
- 12:45 Loppukeskustelu
- 13:00 Tilaisuus päättyy

flexible services

Introduction

- Demand for environmental monitoring is growing
 - Global climate change
 - Sustainable development
 - Security (Civil, Military)
 - Health and well-being
 - New sensing technologies
 - ICT technology as an enabler (more data, faster, easier and mobile)
- Opening of data sources will accelerate development of new applications and services
- The cooperation between ICT and environmental technology experts is seen as a possibility for new business.

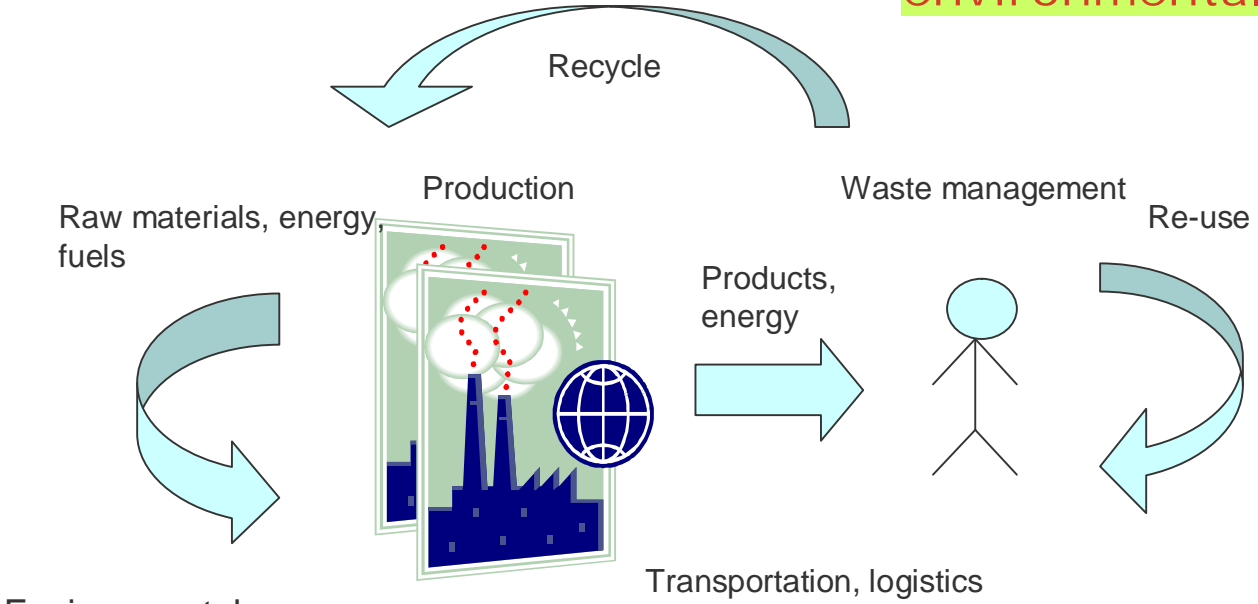


flexible services

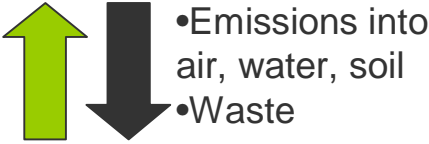
EnviTori - project

- Developing environmental information market place and new services for environmental information management and sharing
- Part of Flexible Services research programme in Tivit SHOK
- Volume: 1,1 M€
- Partners: VTT, Medixine Oy, Elisa Oyj, Gemic Oy, Green Net Finland ry, HiQ Finland, E.ON Kainuu Oy, Natural Interest Oy, Sokos Hotelli Vuokatti / Osuuskauppa Maakunta, IL, Itä-Suomen yliopisto, Mittatekniikan keskus (Mikes), Suomen ympäristökeskus (SYKE)

Processes must be optimized for environmental efficiency

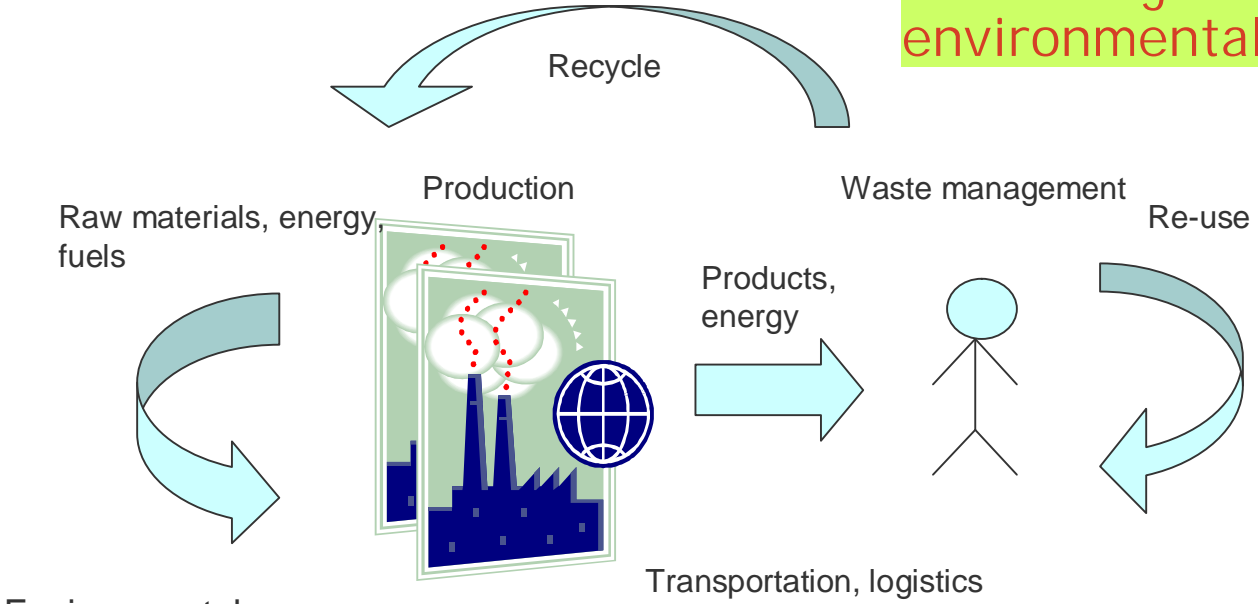


Environmental conditions

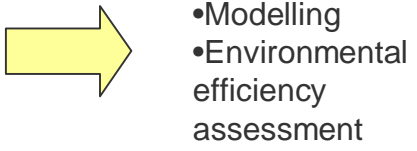
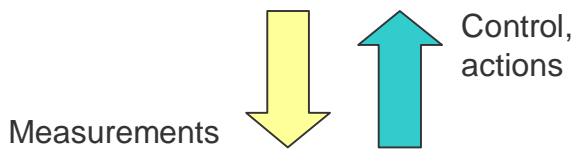
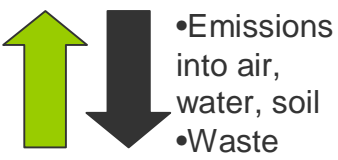


flexible services

Monitoring and modeling enable environmentally efficient control

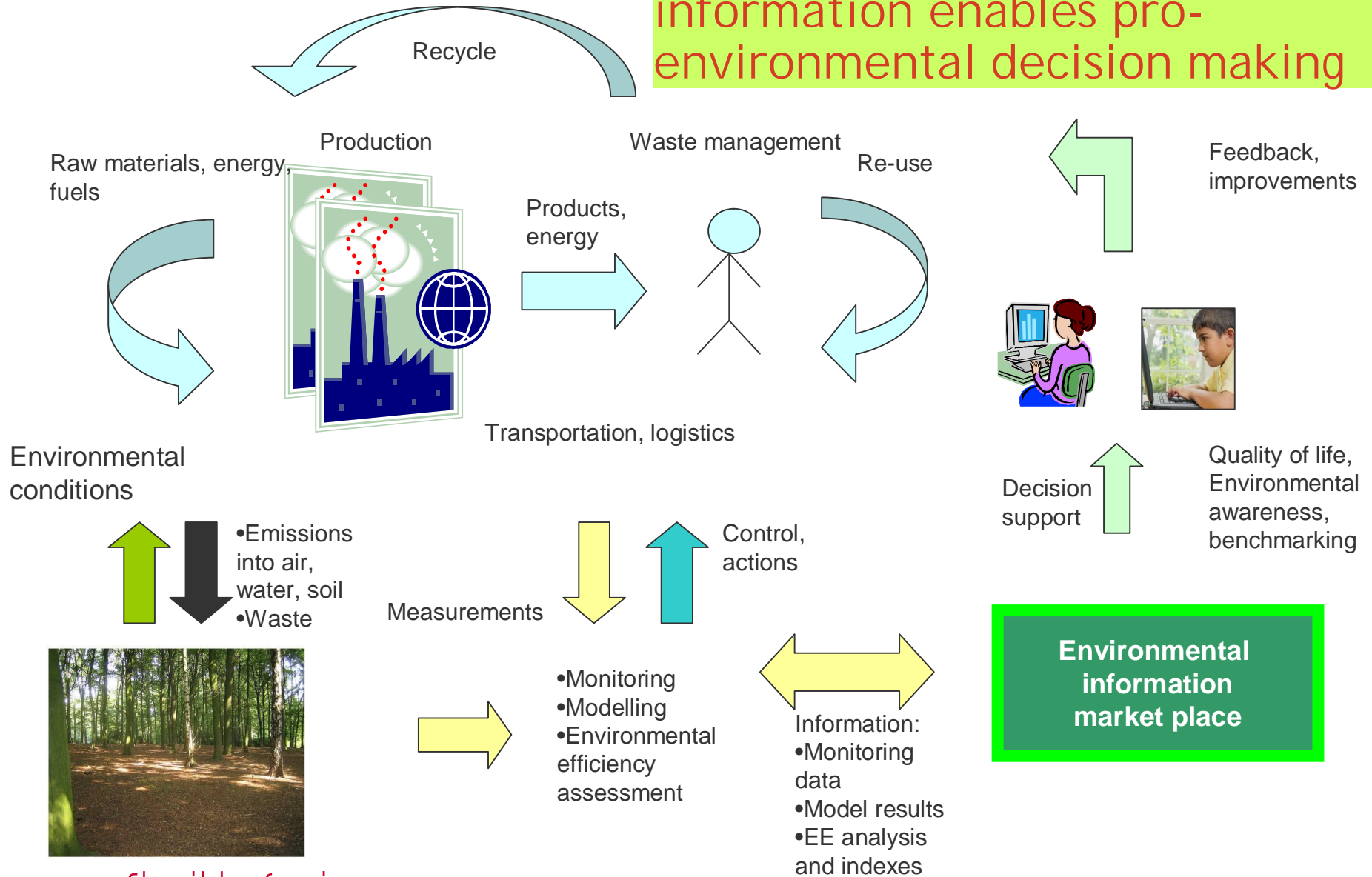


Environmental conditions

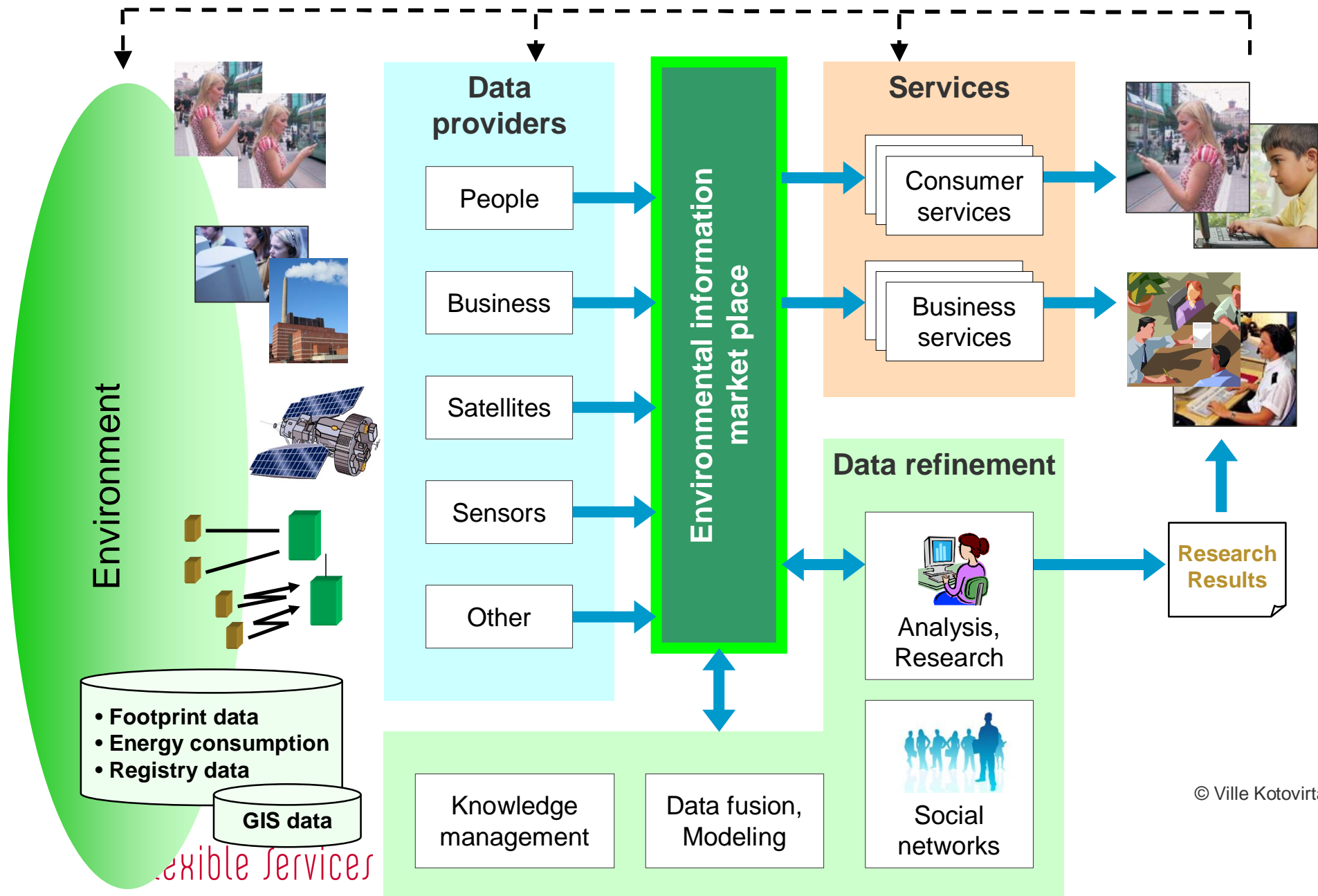


Flexible Services

Sharing of environmental information enables pro-environmental decision making

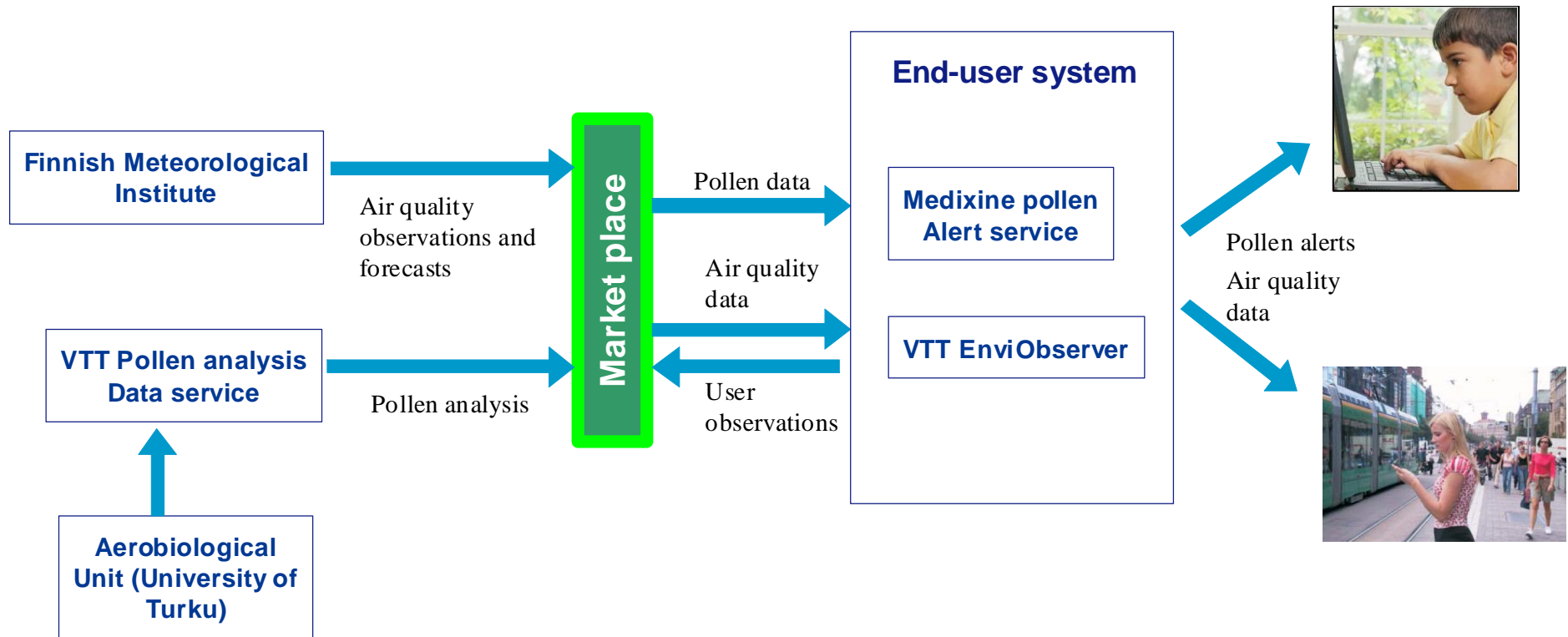


Flexible Services



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Pilot example - air quality service



Flexible Services

Envitori - key research questions

Public sector
•What kind of data are available?



Environmental information market place
•What is the service architecture?



Consumers
• What are the meaningful environmental information services for users?



Private companies
• How can enterprises exploit environmental information in business?



Flexible Services

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flexible services

EnviTori: what we learnt?

- There are many environmental data sources available that are not fully utilized currently -> technical solutions required to enable easy access to data
- A market place that enables one-point access to various data sources would help in developing new services -> market place operator required
- There is a potential for new environmental services concerning natural environment, indoor and built environment, health, energy consumption and environmental footprint -> new end-user services required

Next steps

- The market place development continues in the MMEA (Measurement, Monitoring and Environmental Assessment) research programme in the CLEEN SHOK
- Technical challenge: How sensors, data sources, data processing, data models are defined as interoperable monitoring network
- Commercial challenge: Who is the market place operator? What new end-user services there are?

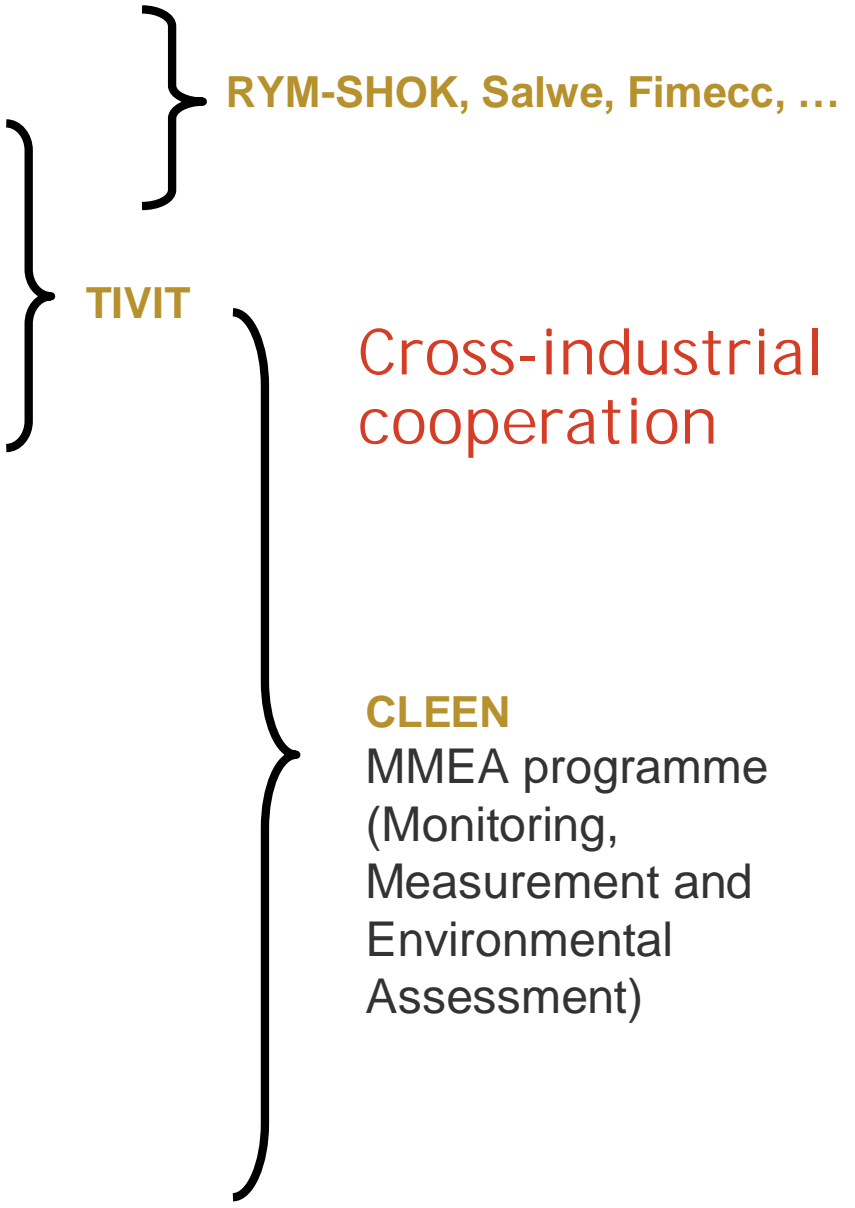
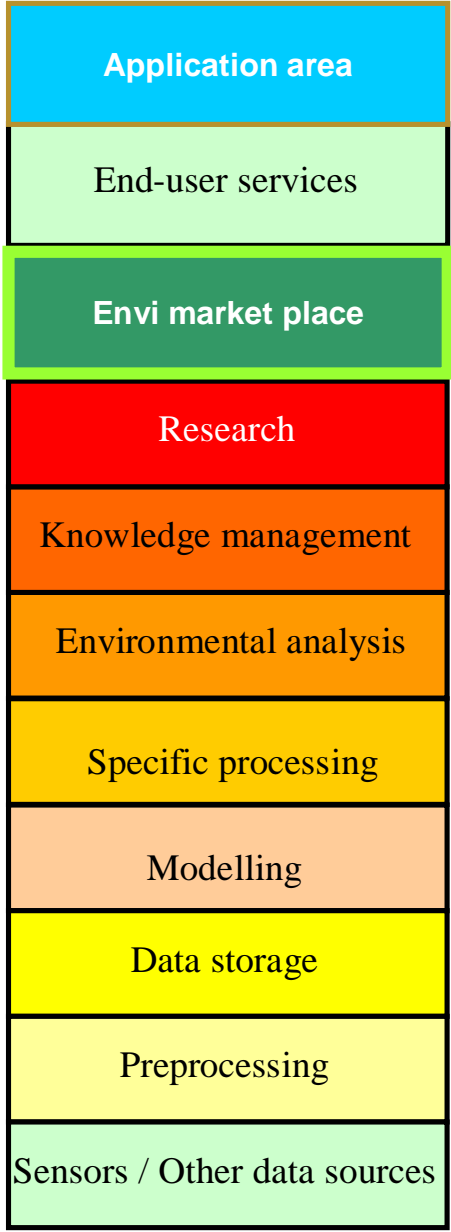
Flexible Services

Application area experts

ICT experts

Environmental experts

Measurement experts



Flexible Services

In the future we have many applications for sustainable decision making ...

