## Group 2 Inf5210

Presentation of articles Recap Friday's lecture Project assignments

# Main points from 1. lecture -1 (see full slides)

- What is an Information Infrastructure (II)
  - A substructure or underlying foundation basic installations &facilities to support various ICT applications
  - Includes various type of hardware, basic software, also 'general' information, as standards and classification codes; furthermore people and organisation resources that support the infrastructure

#### • II are different from Information Systems (IS)

- Serves large communities
- Must be available at any time enduring
- The are never build from scratch
- No day of birth or death

# Π

- Open
- Shared
- Evolving
- Standardized
- Heterogeneous
- Installed base



Hanseth (1997,1998 and 2002, 1) illustrates that information infrastructures are characterized by being open in the sense that there is no limit to the number of users, shared within a community of people, evolving in that they reinforce themselves through growth in numbers of users, number of sub-structures etc., standardized through allowing different solutions working on different sub-levels connecting them with gateways (Figure 2) and heterogeneous in the sense that it is a multidimensional through allowing ecologies of infrastructures to interact, being technical or non-technical participants in the underlying foundation or in other words, the installed base.

#### Key terms

- Installed base
- Network externalities
- Universal design
- Path dependency
- Lock-in

#### **Installed base**

- It is the foundation that new aspects and branches of an evolving and growing infrastructure must adhere to.
- It influence all further development and extensions of an II by invoking demands on any changes that is to be made on the II.



#### **Networks externalities**

- Outlaying factors that forces you to make changes to your existing network in one form or another.
- Laws
- Competing tech's

#### Universal design

• The creation of a unified infrastructure where any information can be exchanged between everybody, and there is used nonredundant standards that are consistent and fulfill any demands that can be met

#### Path dependency

- Choices taken at an early point of development influence the reach of where you can go.
- "We can distinguish between two forms of path dependence. Early advantage in terms of numbers of users leads to victory. Early decisions concerning the design of the technology will influence future design decisions" Hanseth

#### Lock-in

- As a consequence of path dependencies lock-ins can occur.
- A lock-in may be caused by any type of factor. It can be the hardware, software, path dependency, information itself or in large networks it can be caused by network externalities and more.

#### Actor Network Theory-ANT

- It's a **set of terminologies** used for describing the interactions between human and non-human participants within the world of information infrastructures.
- It is a set of **terms** derived from science and technology studies and social construction of technology.
- It is an **analytical tool** used to describe technologies influence on human behavior

• Monteiro(1, pg 71) says that ANT: "...provides a language to describe how, where, and to what extent technology influences human behavior. This is valuable when identifying the influence of seemingly grey and anonymous components such as standards or system modules that are already installed. In particular, it allows ANT to zoom in and out of a situation as required".

• actors or actants is used for both human and non-human actors. They both influence each other in this **network**. An actant can be a single person, a group, or a company and it's II

• The actors influence each other trough inscriptions and translations of these inscriptions. Inscriptions are written into artifacts ( this can be a technology, a paperclip, a user manual, a hammer etc.) that is used in a actor-network.

• Alignment is the process of making networks inscriptions your own through reaching an agreement and succeed in the implementation of a standard, and enrolment is the active role of making the translations your own and adjusting toward the unifications between networks