NORDIC ICT FORESIGHT
Views on the ICT applications based on the earlier material

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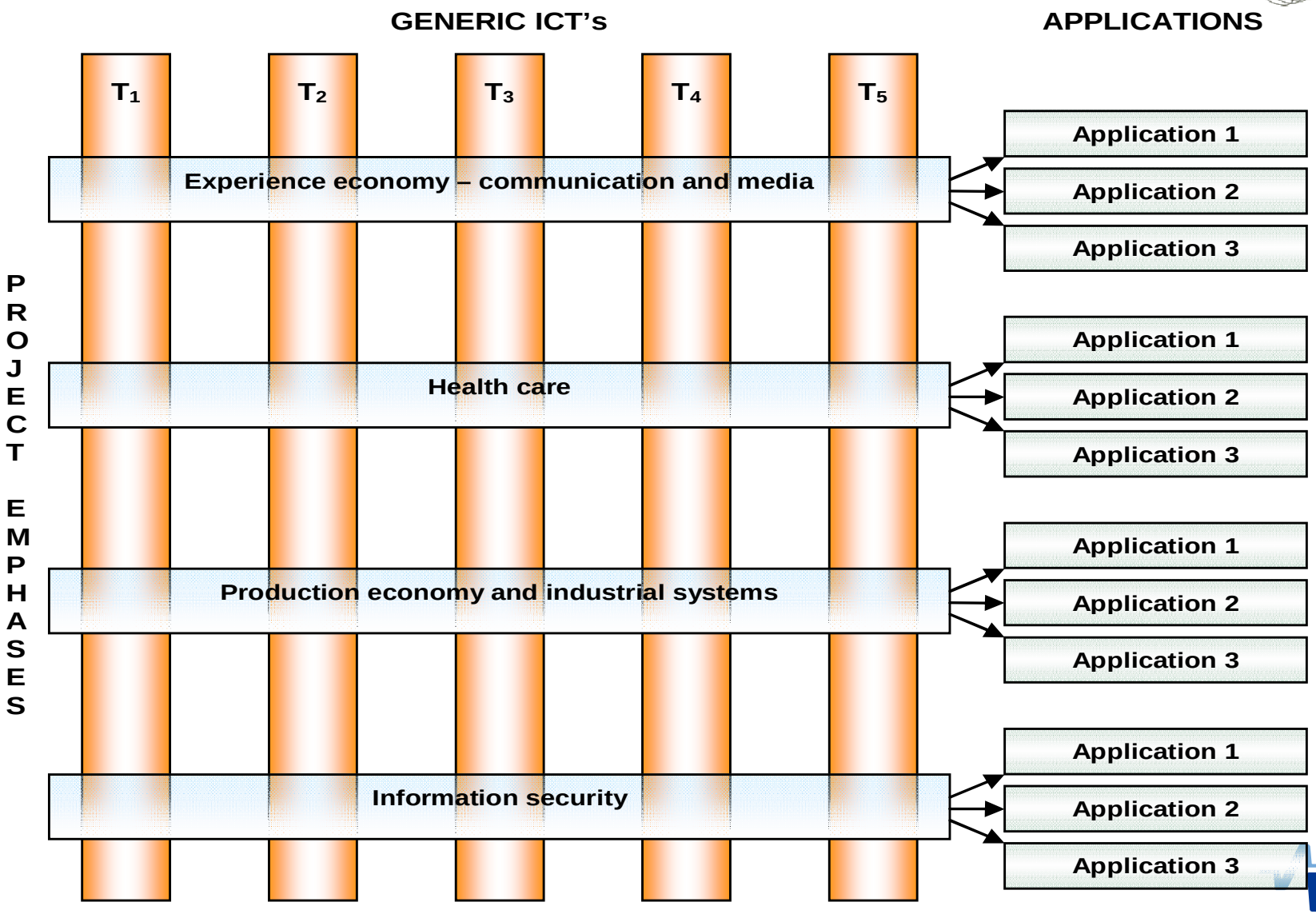
Technological perspective of the project



Experience economy I

Digital identity

Community based information solutions

Tailored service applications

Bi-directional mediaservices: informing, teaching, "users as innovators"

Personal media production: personal value chain, real time production

Ambient Design: multiple senses, marketing

Ubiquitous technologies

Ubi-intelligence: techniques of virtual presence

Compatibility of networks

Intelligent information search and organization techniques: e.g. based on neural networks

Network applications

Content delivery through networks: peer to peer

Applications of language technologies

Voice and language oriented applications

Multilingual solutions (traveling, informing, speech recognition)

Experience economy II

Group phone calls

Global media network: you can see your favourite show anywhere

Communication services

Free services with different devices

Digital me

Expression and performance of civil rights via networks: voting, taxes

Mobile ID-TV

Intelligent paper and intelligent package

"Talking paper": sound + still image

Tailored news: printed either to communication device or local printing service (communal printing)

Hybrid media

Combinations of printed and electronic media: e.g. 2D code that is readable via camera mobile phone which connects the mobile phone to database

Home robots

Technical solutions

Printable electronics

RFID tags

Silent computer and digital technology: without background noise or humming

Voice and language oriented applications

Simultaneous translation services

Games

Entertainment

"Edutainment"

Games based on mobile positioning

Enhanced reality

Home virtual environments

Virtual environments

Multisensory environments and virtual learning platforms

VTT

Health I

General ICT applications in health: pattern recognition, ubicomputing, mobility, hybrid media, dosing...

ICT based diet and nutrition systems

Diagnostic and treatment applications

Chip laboratories

Virtual diagnostics, distance diagnostics

Nano / picosensors

Gathering and analysis of information: diaries, training calendar, prevention

Systems that monitor and assist elderly people living in homes: controlling the changes in health, monitoring day-to-day activities

Personal healthcare, “home medicine”

Technology assisted training: modular technologies

Vital sign data capture / collection

National health databases

Medical information processing

eHealth & ePrevention: knowledge based, data warehouses, data mining / drilling

Health II

Adaptive, intelligent home: conditions adapt to inhabitants' health conditions

Systems that monitor patient's condition in real time: especially in the case of emergency (elderly people etc.), real time diagnostics

"Home medicine"

"Every home" service robots

ICT home treatment: free self service systems, health centre and pharmacy systems, additional services, "mobile service and competition" automata

Basic technology, tailored interfaces

Assisting and socially activating applications

Intelligent user centred services for the senior housing: technologies that activate everyday social contacts

Brain interface: for the seriously disabled

Documentation applications

Documentation in the doctor's reception: records of the doctor's instructions in the net, crisp instructions in the net and as a print

Self treatment

Applications for the control of allergies

Diagnosis

Prevention

Production economy I

Mobile and automatic maintenance and repair

Quality control

Control of the logistic chain

Gathering and analyzing the process data in real time

Fully automatic factories

Applications of RFID (radio frequency identification)

Learning devices: self-monitoring of machines

Industrial production applications

Sensor technologies

IP- based (Internet Protocol) systems

Minimization of production related environmental hazards

General information gathering: technology, markets, financing...

Industrial information processing

Information and data transfer in production systems: man2 man, man2machine, machine2man

Production economy II

Convergence of all of the life cycle systems

Convergence of information systems

Convergence of information: the performing, controlling and packing of information is combined via sensors, then combined information moves to be compared with planned information

Combination of 3D visualization and simulation

Simulation applications

Simulation of micro level phenomena in different fields : electronics, nanotechnology, fabrication of medicines, material technologies

Multi-sensory process control and robotics: input / output

Applications enabling telework and mobile work

Mobile maintenance systems

New interfaces: tangible, wearable, embedded

Automatic reasoning systems: error seeking, production optimization

Industrial production applications

Environmental measuring systems and services: security, “emission trading” and emission control

Mass tailored production lines: on demand systems, no storages

(Information) Security I

Invisible information security: ad hoc, availability, PMAC + PMF, mobility...

Security in environments and networks

Automatic control in open spaces: e.g. figure identification for cameras

Biometric tags

Biometrics

Security of biometric information: prevention of malpractices

Dynamic privilege management

Long term preservation

Integrity

Confidentiality in general

Identity management

Non-reproducing technologies

(Information) Security II

Biometrics

Bioidentifiers: reliable electronic system, bioidentity

Security in environments and networks

Distributed networks: important information is directed to different network

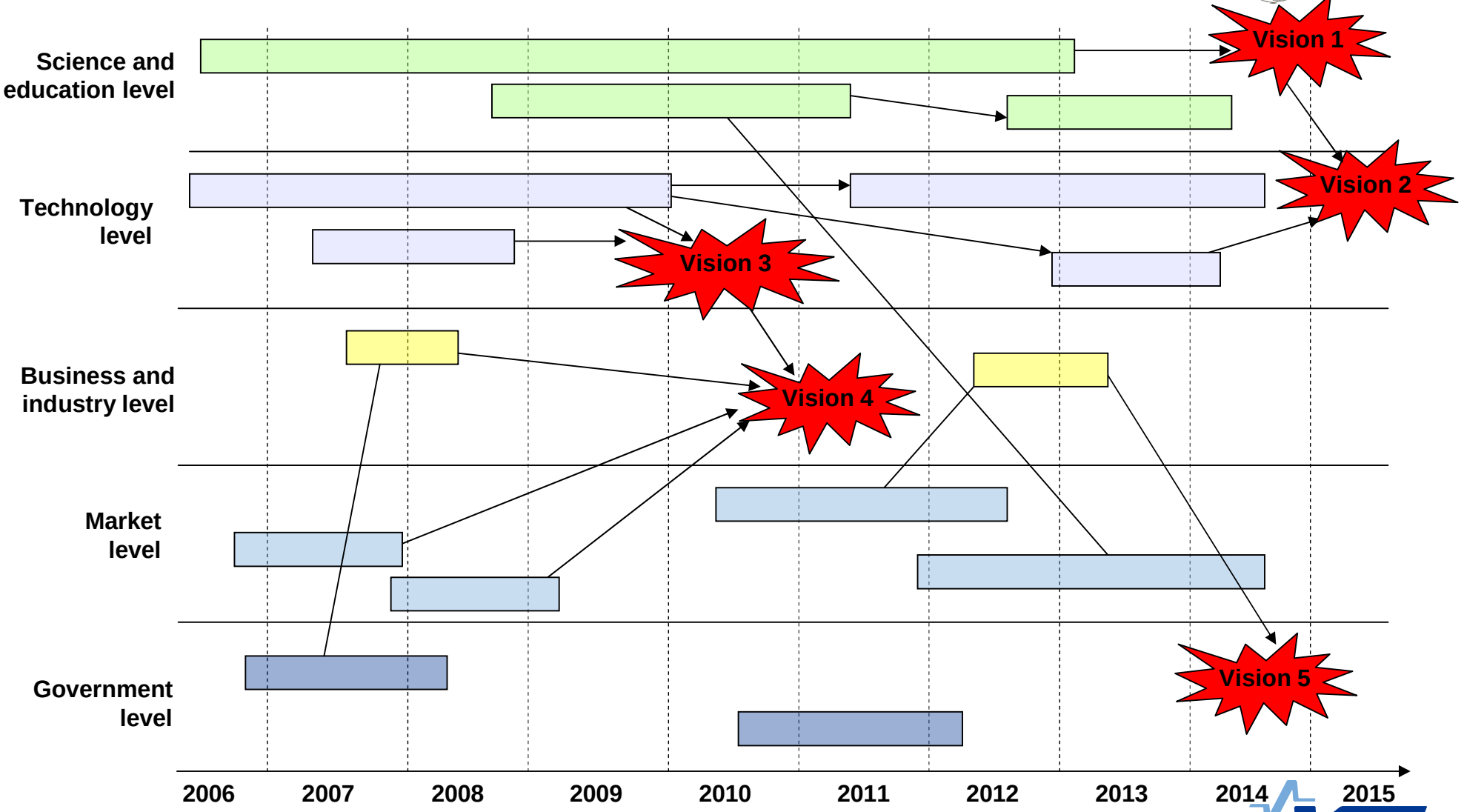
Animated agents that endorse the trust of the users

Confidentiality in general

IPR in the industrial information processes: rights to use, billing, software licences like in the entertainment (2)

Virus-free "internet"

Draft roadmaps



THANK YOU!

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