



eGovRTD2020 Workshop: Future scenarios of Government 2020

WP 2: Building the visions - scenario building / projection workshop

Marijn Janssen



Delft University of Technology

Melanie Bicking

Maria Wimmer



eGovRTD2020 Workshop: Future scenarios of eGovernment2020



9.00-9.10	Introduction and welcome, project and workshop goals (Maria Wimmer)
9.10-9.20	State of play in eGovernment research – results from WP 1 (Maria Wimmer)
9.20-9.30	Introduction to the scenario development methodology (Marijn Janssen)
9.30-10.15	Splitting up into groups (max 6 persons per group) Brainstorming about 2020 scenarios in terms of visions of society and market, technology, government and how these interact in a future environment.
10.15-10.30	Describing the scenarios using a provided template
10.30-11.00	Coffee break
11.00-11.40	Presentations of the scenarios by each group using the template (max 10 minutes per group); Rule: facilitators are not the presenters of the scenario results!
11.40-12.20	Discussion and evaluation –Positive and negative implications of each scenario –Extending the scenarios (what's missing) –Voting by rating the probability of each scenario
12.20-12.30	Conclusions & next steps (by Workshop organisers)



Project facts



- Specific support action under the EC 6th Framework Program of IST
 - Specific objective 2.4.9: ICT research for innovative government
- 9 Partners
 - 7 from five EC member states, 1 from USA, 1 from Australia
- Budget
 - Overall project budget: EUR 643.034,--
 - EC grant to the budget: EUR 523.000,--
- Duration
 - Start: 1st January 2006
 - Duration: 15 months
- Human resources
 - 78,5 Person-months
- URL: <http://www.egovrtd2020.org/>



Project Partners



- University of Koblenz-Landau (coordinator), Germany
- Delft University of Technology, The Netherlands
- Center for Technology and Innovation Management, Germany
- Mykolas Romeris University, Lithuania
- University of Maribor, Slovenia
- EIPA - European Institute of Public Administration, The Netherlands
- Hautes Etudes Commerciales, France
- The Australian National University, Australia
- Center for Technology in Government, University at Albany, USA



Overall objectives



- Identify and characterize key **research challenges**, required constituency, and an implementation model for dynamic governments in 2020
 - Develop **visionary scenarios** of eGovernment for 2020
 - Develop a **detailed research roadmap** for the transformation process
- **Vision**
 - transform the EC Government **landscape into a coherent community**
 - contributing to the development of the EC to a **leading knowledge society**



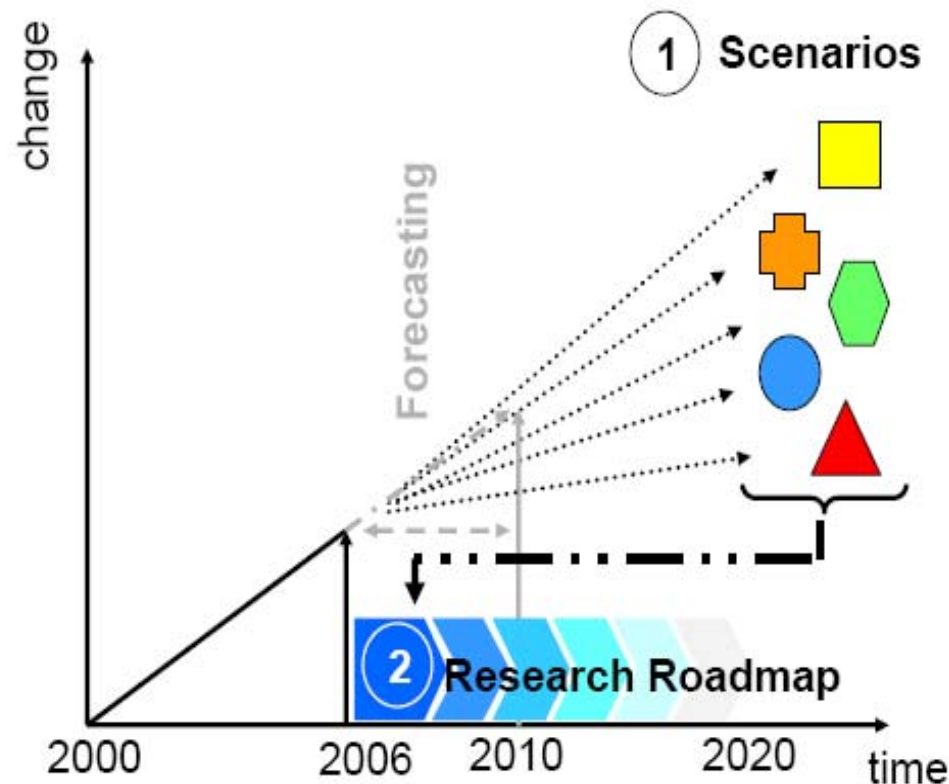
Detailed aims of the project



- Identify key research challenges for governments in 2020 and beyond
 - Establishing a clear baseline and wide consensus on concepts and terminology for eGovernment research in the next 15 years and beyond
 - Integrating multidisciplinary views into a holistic vision for eGovernment 2020
 - Building scenarios of what eGovernment should look like in about 15 years and what research questions need to be addressed to get there
 - Defining an eGovernment research roadmap 2020, thereby dealing with the gaps and needs for research in the next years to come in order to pave the way to realizing the visions of eGovernment in 2020.
 - Strengthening the eGovernment community to implement the research roadmap for eGovernment 2020.



Overall methodology



WP 1: State of play

1 WP 2: Scenarios development

WP 3: Gap analysis

2 WP 4: Roadmap development

WP 5: Dissemination & Book eGovRTD2020

eGovRTD2020 Workshop: Future scenarios of eGovernment2020



9.00-9.10	Introduction and welcome, project and workshop goals (Maria Wimmer)
9.10-9.20	State of play in eGovernment research – results from WP 1 (Maria Wimmer)
9.20-9.30	Introduction to the scenario development methodology (Marijn Janssen)
9.30-10.15	Splitting up into groups (max 6 persons per group) Brainstorming about 2020 scenarios in terms of visions of society and market, technology, government and how these interact in a future environment.
10.15-10.30	Describing the scenarios using a provided template
10.30-11.00	Coffee break
11.00-11.40	Presentations of the scenarios by each group using the template (max 10 minutes per group); Rule: facilitators are not the presenters of the scenario results!
11.40-12.20	Discussion and evaluation –Positive and negative implications of each scenario –Extending the scenarios (what's missing) –Voting by rating the probability of each scenario
12.20-12.30	Conclusions & next steps (by Workshop organisers)



EC related strategic documents: Lisbon agenda and i2010



- Vision: Europe as the most dynamic and competitive, knowledge-based economy by 2010

- Realization by:
 - improving citizens' quality of life,
 - supporting single markets, and
 - bureaucratic rigidity

- Europe's Information Society policy pillars:
 - Single European Information Space
 - Innovation and Investment
 - Inclusive European Information Society



Current ICT related research



- Integration and Interoperability
 - Interoperability by large
 - Semantic web technologies in eGovernment
 - Shared services centers, Service-oriented architectures, networked governments
 - Long-term storage
 - Grids & Knowledge Management
- Ambient intelligence
- Security and trust
 - Authentication
 - Identity Management



Current government modernisation research



- Single access point for users
 - Integration of front office, back office and processes
 - cross-organisational workflow
 - Interoperability within a socio-economic context
- Understanding user needs
- (Document) Identity Management
- eProcurement
- Knowledge Management
 - Semantic web
 - Ontology development



Investigating society evolution



- Accessibility
 - Broadband availability (wire and wireless)
 - Multi-channel access
 - Multi-media and rich content stored in multi-media databases
- Citizen empowerment
 - eLearning
 - High-quality IT education at all education levels
- eHealth
 - Understand social characteristics of health domain
 - Tele-assistance systems
 - Mobile pervasive systems
 - Grid systems
- eParticipation
 - eVoting

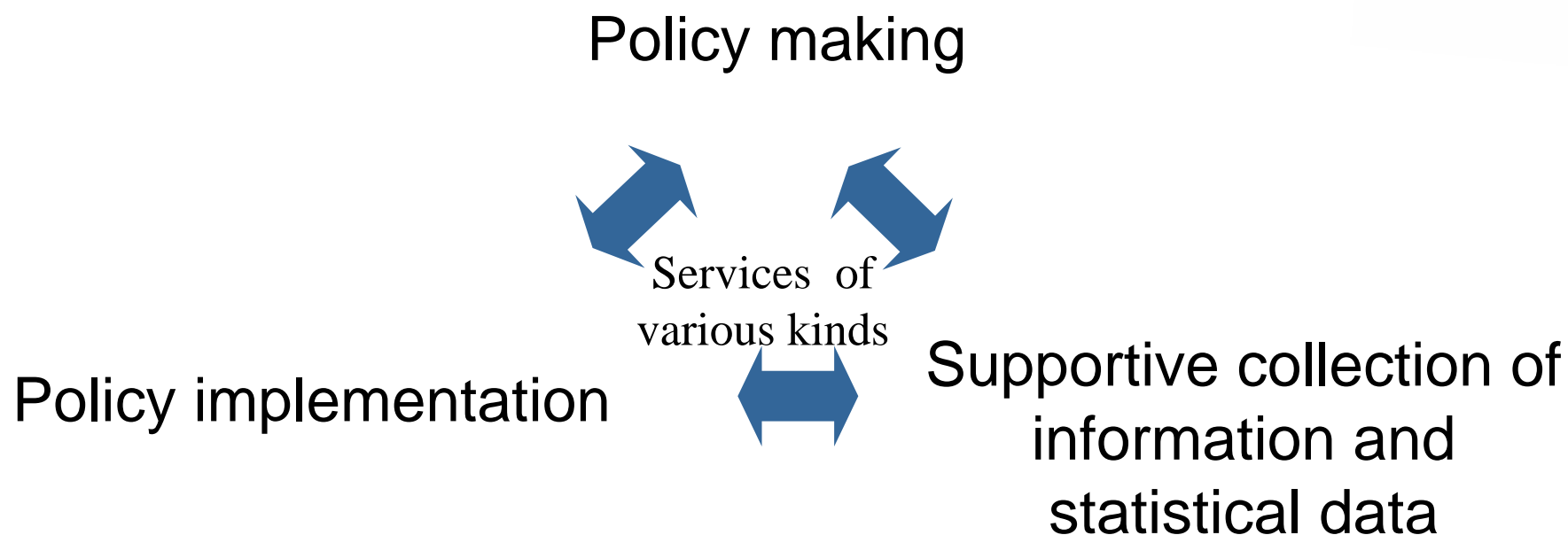




**But is this research sufficient
to help reach a visionary
Government 2020 ?**

What does Government
research cover?

Three main functions of the public sector



a variety of activities and application fields for ICT



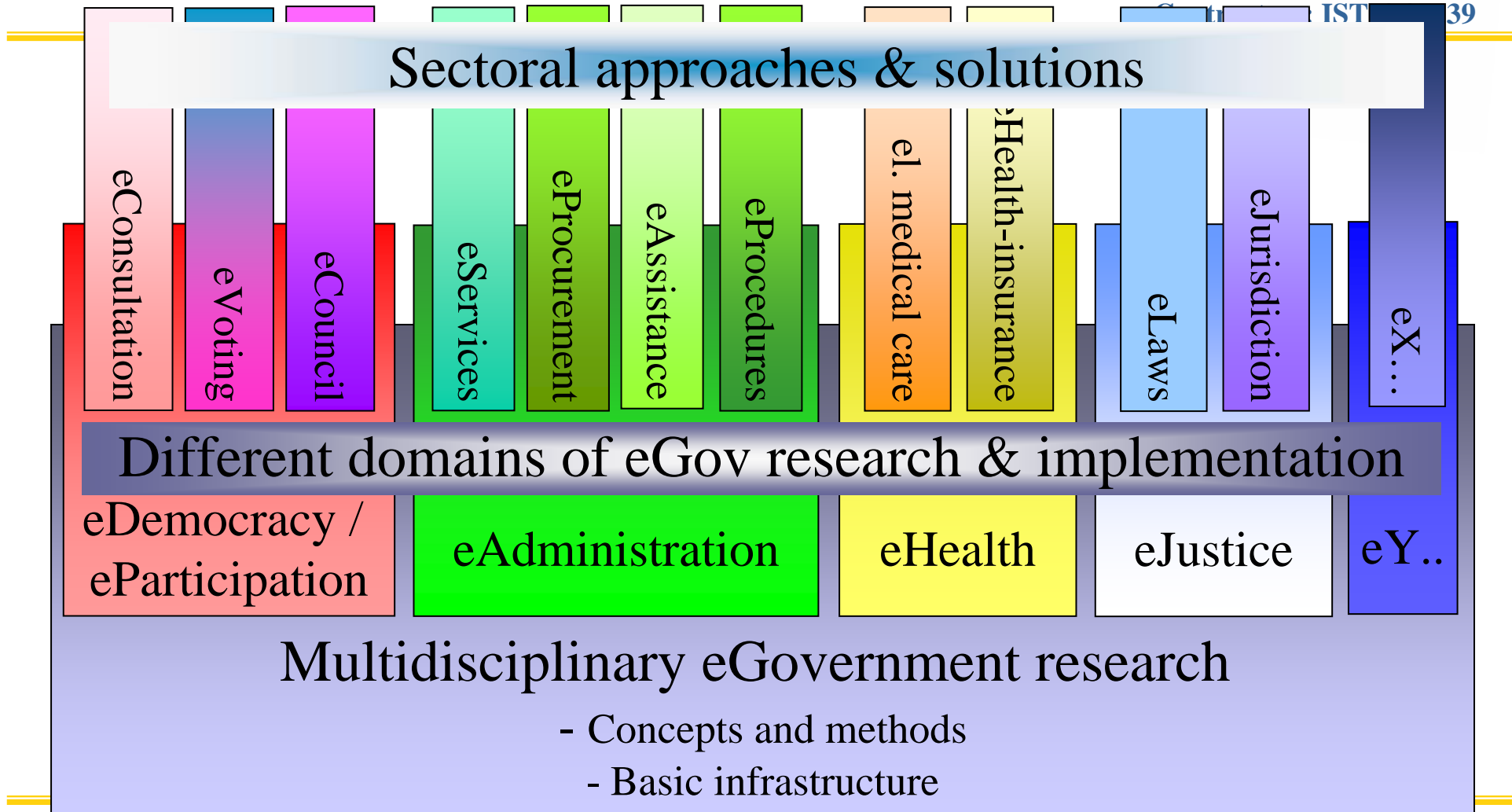
eGovernment: many fields of research and application



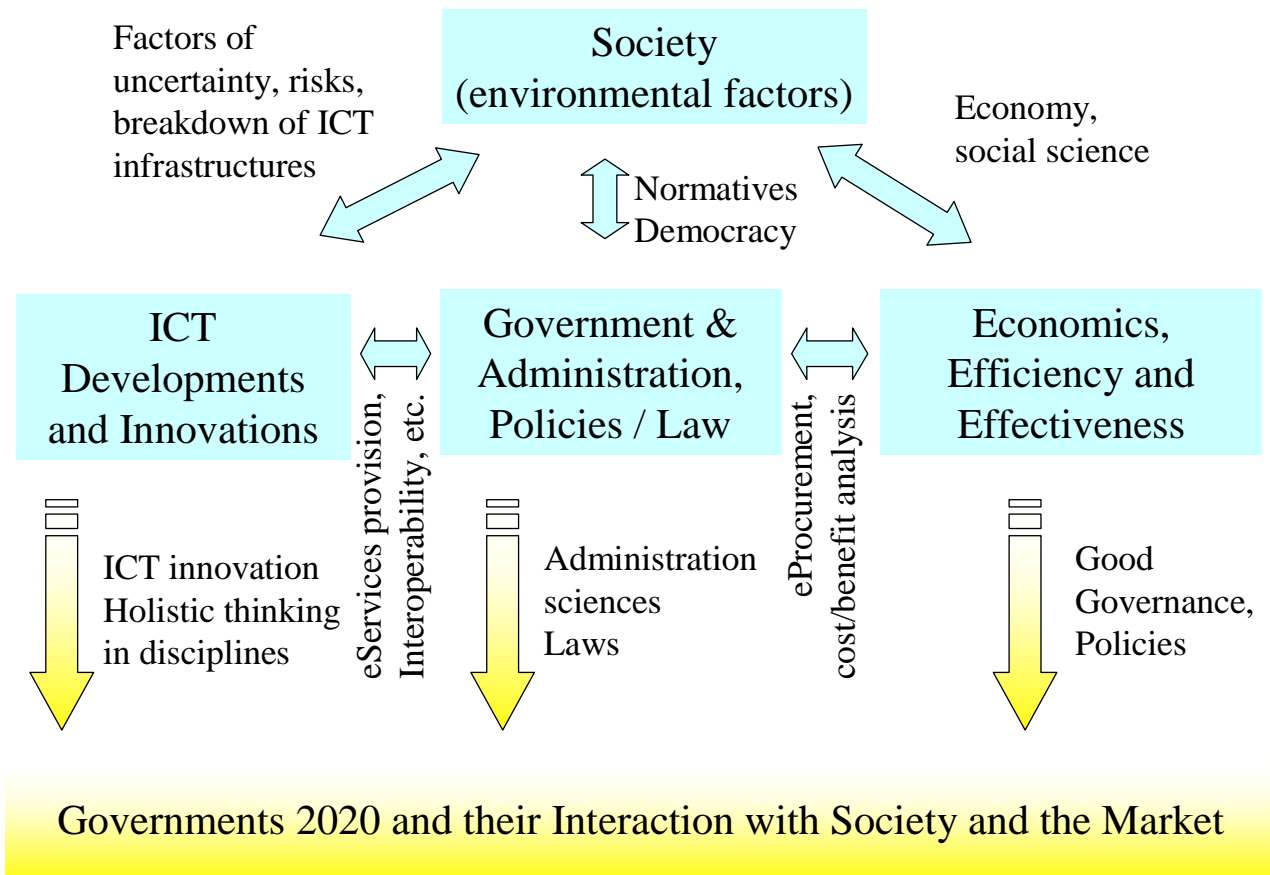
- eGovernment in a narrow sense (eAdministration)
 - Public services in the sense of policy implementation
 - Public sector internal ICT-diffusion and usage
 - eAssistance
- eDemocracy
 - Democracy services in the sense of policy making
 - eParticipation
 - eCouncil / virtual townhall
 - Five application areas
 - ❖ eConsultations, ePetitions, eVoting, Web castings, Information
- eGovernance / ePolicy
 - Management of State and Administration
- eLaws
 - Legislative process
- eJustice
 - Implementing/applying the laws
 - Jurisdiction
- eHealth
 - Medical care
- eEducation
 - Schools
 - Distance learning
- ...



From sectoral investigations to the overall discipline ...



Identification of research areas and competencies



eGovRTD2020 Workshop: Future scenarios of eGovernment2020



9.00-9.10	Introduction and welcome, project and workshop goals (Maria Wimmer)
9.10-9.20	State of play in eGovernment research – results from WP 1 (Maria Wimmer)
9.20-9.30	Introduction to the scenario development methodology (Marijn Janssen)
9.30-10.15	Splitting up into groups (max 6 persons per group) Brainstorming about 2020 scenarios in terms of visions of society and market, technology, government and how these interact in a future environment.
10.15-10.30	Describing the scenarios using a provided template
10.30-11.00	Coffee break
11.00-11.40	Presentations of the scenarios by each group using the template (max 10 minutes per group); Rule: facilitators are not the presenters of the scenario results!
11.40-12.20	Discussion and evaluation –Positive and negative implications of each scenario –Extending the scenarios (what's missing) –Voting by rating the probability of each scenario
12.20-12.30	Conclusions & next steps (by Workshop organisers)



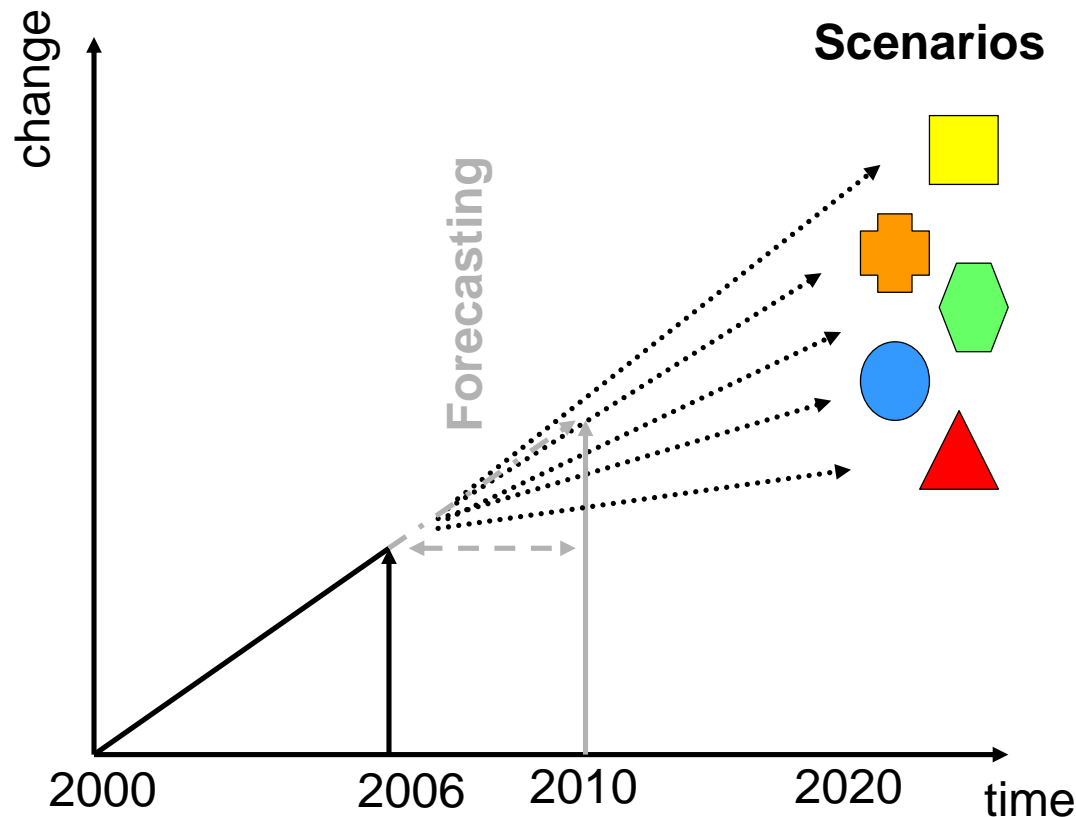
Predicting the future is difficult



- "Stocks have reached what looks like a permanently high plateau" - Irving Fisher, Professor of Economics, Yale University (1929)
- "There is no reason anyone would want a computer in their home." - Ken Olson, president, chairman and founder of Digital Equipment Corporation (1977)
- "640 kB/s ought to be enough for everybody" - Bill Gates (1985)
- "Internet is just a hype" - Bill Gates (1995)
- "Revenues from the past do not offer security for the future" - warning text at a Dutch radio commercial



Forecasting vs. scenarios



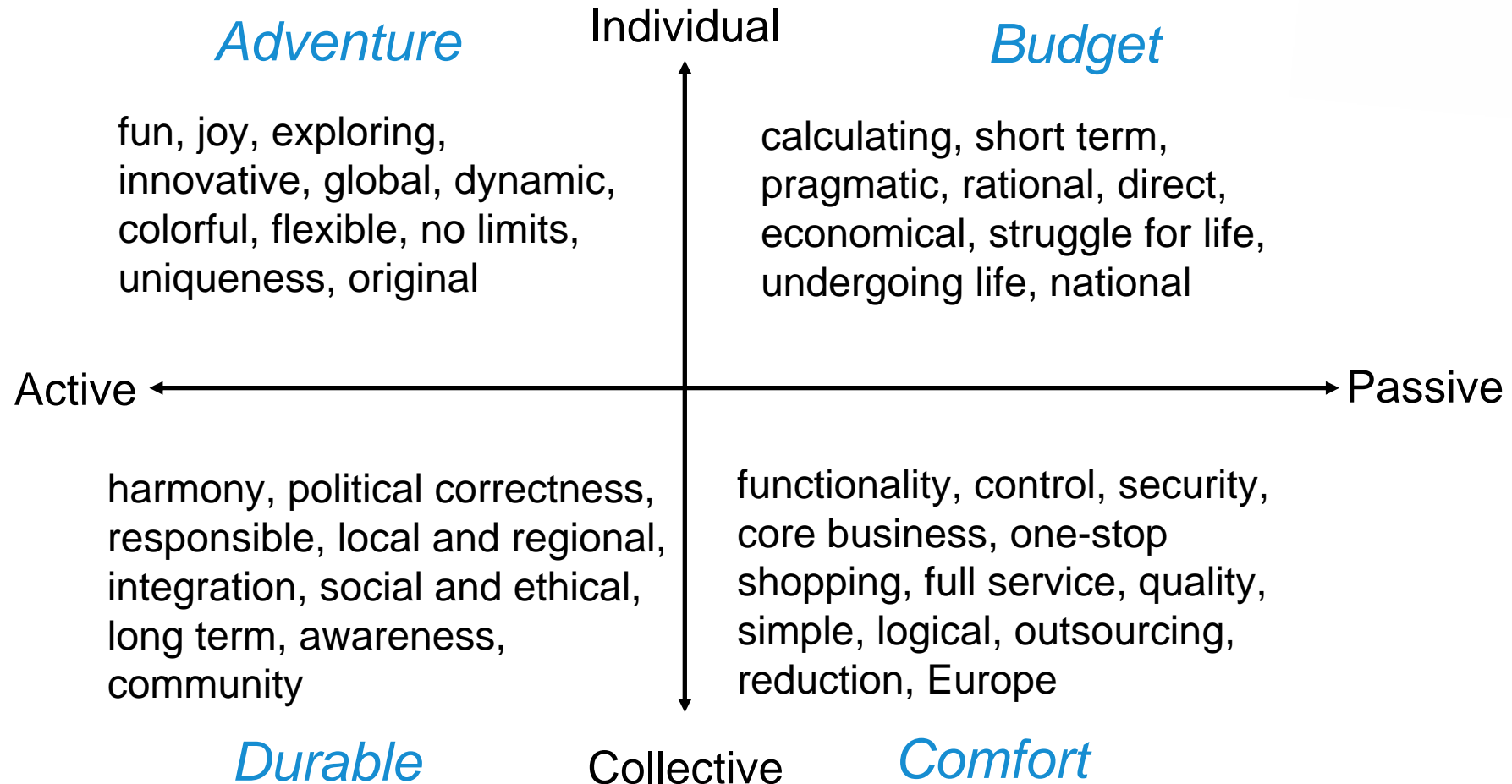
- Thinking the unthinkable
- Popper “if you know it now, it is no future”
- Trying to find new aspects of the future rather than extrapolation
- Trying to capture possible future (crazy) ideas and using them to derive scenarios

What are scenarios?

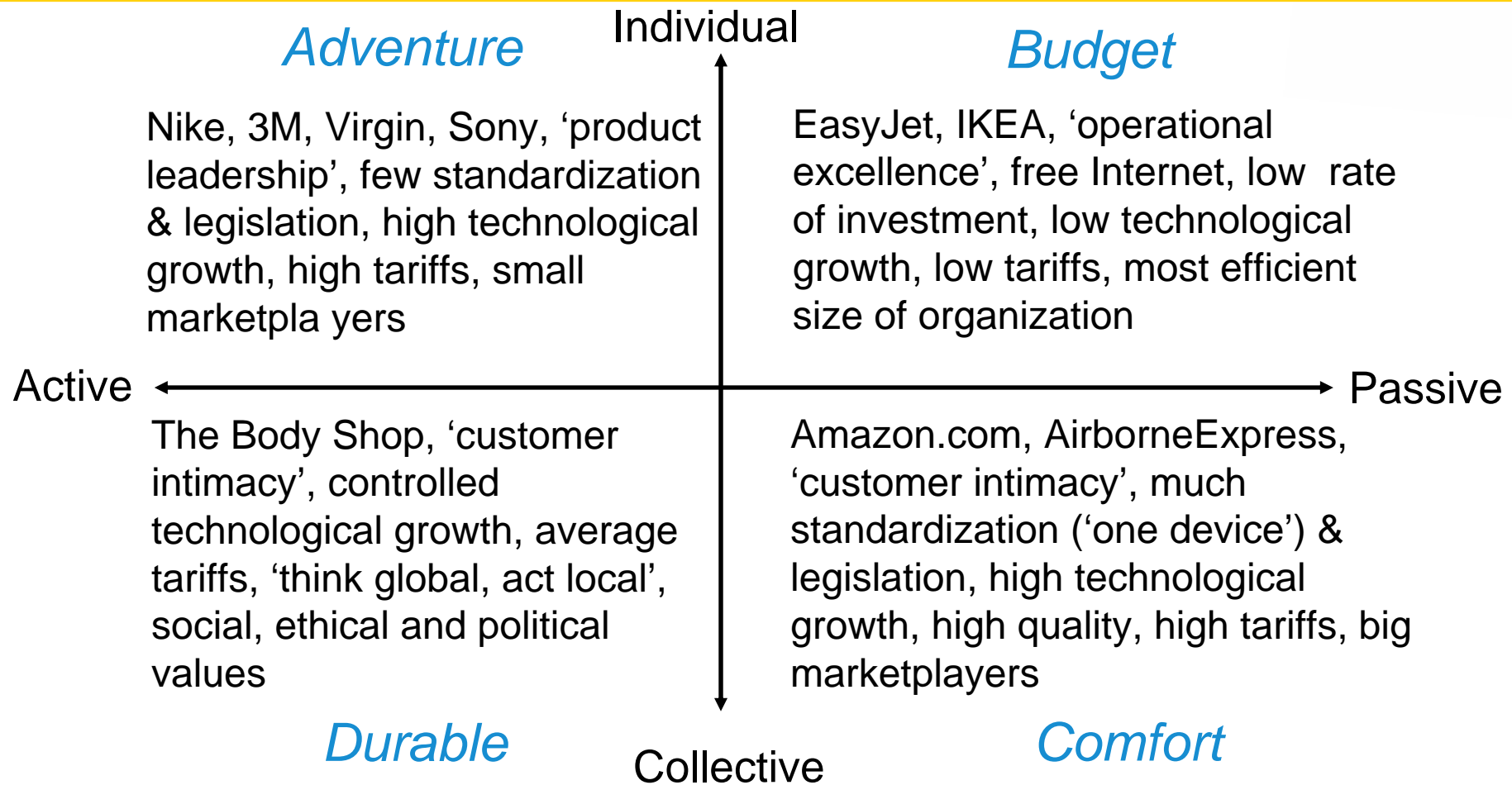
- Scenarios are not:
 - Predictions
 - Extrapolations
 - Good and/or bad futures
 - Strategy

- Scenarios are:
 - Archetypal images / pictures of the future
 - Interpretations of the current reality
 - Internally consistent stories about a path from now into the future
 - Plausible, mutually different stories about possible futures

An example: 'Destination 2005' (from KPN Research, 2000) (1)



An example: 'Destination 2005' (from KPN Research, 2000) (2)



Scenario description template



- **Background**
- **Scenario title**
- **Summary**
- **1. Contextual environment**
 - Society
 - Political system and climate
 - Economical climate
- **2. Governments and their stakeholders**
 - Government, administration, polices and law
 - Kinds of services Governments will be providing and customers will be consuming
 - Mode of participation of stakeholders in the democratic processes
 - Government Environment
- **3. Technology developments**
 - ICT available (which kind of technology will we be using in 2020?)
 - Interaction modes via ICT (how will stakeholders be interacting with this technology in order to provide/consume public services and to participate in political processes?)
 - For which services and/or intentions of participation will the stakeholders use these technologies for interaction with governments in 2020?



Groups and group facilitators



■ Rules

- No consensus is necessary
- Extreme opposing ideas and development determine scenario axis!
- Do not criticize each other (Europe include a Mars colony is acceptable)
- *Your* unique visions and ideas determines success
- Listen carefully to each other ideas
- Voting only after the scenario building process

■ Facilitators

- Melanie Bicking
- Marijn Janssen
- Rimantas Petrauskas, supported by Alexander Kramer
- Roland Traunmüller, supported by Lisa Diedrich
- Maria Wimmer



eGovRTD2020 Workshop: Future scenarios of eGovernment2020



9.00-9.10	Introduction and welcome, project and workshop goals (Maria Wimmer)
9.10-9.20	State of play in eGovernment research – results from WP 1 (Maria Wimmer)
9.20-9.30	Introduction to the scenario development methodology (Marijn Janssen)
9.30-10.15	Splitting up into groups (max 6 persons per group) Brainstorming about 2020 scenarios in terms of visions of society and market, technology, government and how these interact in a future environment.
10.15-10.30	Describing the scenarios using a provided template
10.30-11.00	Coffee break
11.00-11.40	Presentations of the scenarios by each group using the template (max 10 minutes per group); Rule: facilitators are not the presenters of the scenario results!
11.40-12.20	Discussion and evaluation –Positive and negative implications of each scenario –Extending the scenarios (what's missing) –Voting by rating the probability of each scenario
12.20-12.30	Conclusions & next steps (by Workshop organisers)



Groups and group facilitators



- Giampaolo Amadori
- Melanie Bicking
- Marijn Janssen
- Rimantas Petrauskas, supported by Alexander Kramer
- Roland Traunmüller, supported by Lisa Diedrich
- Maria Wimmer



eGovRTD2020 Workshop: Future scenarios of eGovernment2020



9.00-9.10	Introduction and welcome, project and workshop goals (Maria Wimmer)
9.10-9.20	State of play in eGovernment research – results from WP 1 (Maria Wimmer)
9.20-9.30	Introduction to the scenario development methodology (Marijn Janssen)
9.30-10.15	Splitting up into groups (max 6 persons per group) Brainstorming about 2020 scenarios in terms of visions of society and market, technology, government and how these interact in a future environment.
10.15-10.30	Describing the scenarios using a provided template
10.30-11.00	Coffee break
11.00-11.40	Presentations of the scenarios by each group using the template (max 10 minutes per group); Rule: facilitators are not the presenters of the scenario results!
11.40-12.20	Discussion and evaluation –Positive and negative implications of each scenario –Extending the scenarios (what's missing) –Voting by rating the probability of each scenario
12.20-12.30	Conclusions & next steps (by Workshop organisers)





Presentation of the scenarios

eGovRTD2020 Workshop: Future scenarios of eGovernment2020



9.00-9.10	Introduction and welcome, project and workshop goals (Maria Wimmer)
9.10-9.20	State of play in eGovernment research – results from WP 1 (Maria Wimmer)
9.20-9.30	Introduction to the scenario development methodology (Marijn Janssen)
9.30-10.15	Splitting up into groups (max 6 persons per group) Brainstorming about 2020 scenarios in terms of visions of society and market, technology, government and how these interact in a future environment.
10.15-10.30	Describing the scenarios using a provided template
10.30-11.00	Coffee break
11.00-11.40	Presentations of the scenarios by each group using the template (max 10 minutes per group); Rule: facilitators are not the presenters of the scenario results!
11.40-12.20	Discussion and evaluation –Positive and negative implications of each scenario –Extending the scenarios (what's missing) –Voting by rating the probability of each scenario
12.20-12.30	Conclusions & next steps (by Workshop organisers)



Ranking developments WP1

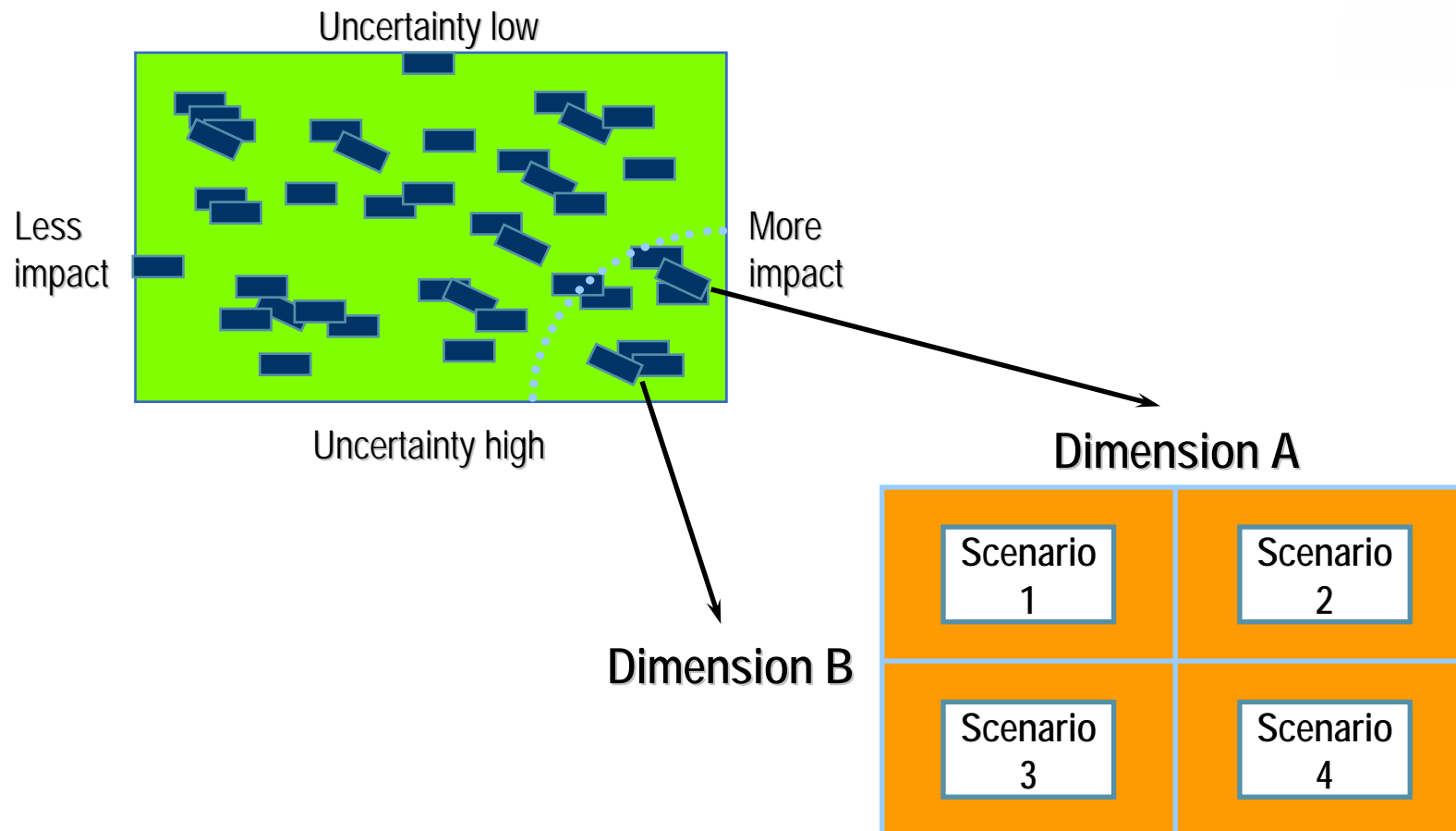


Contract no: IST-4-27139

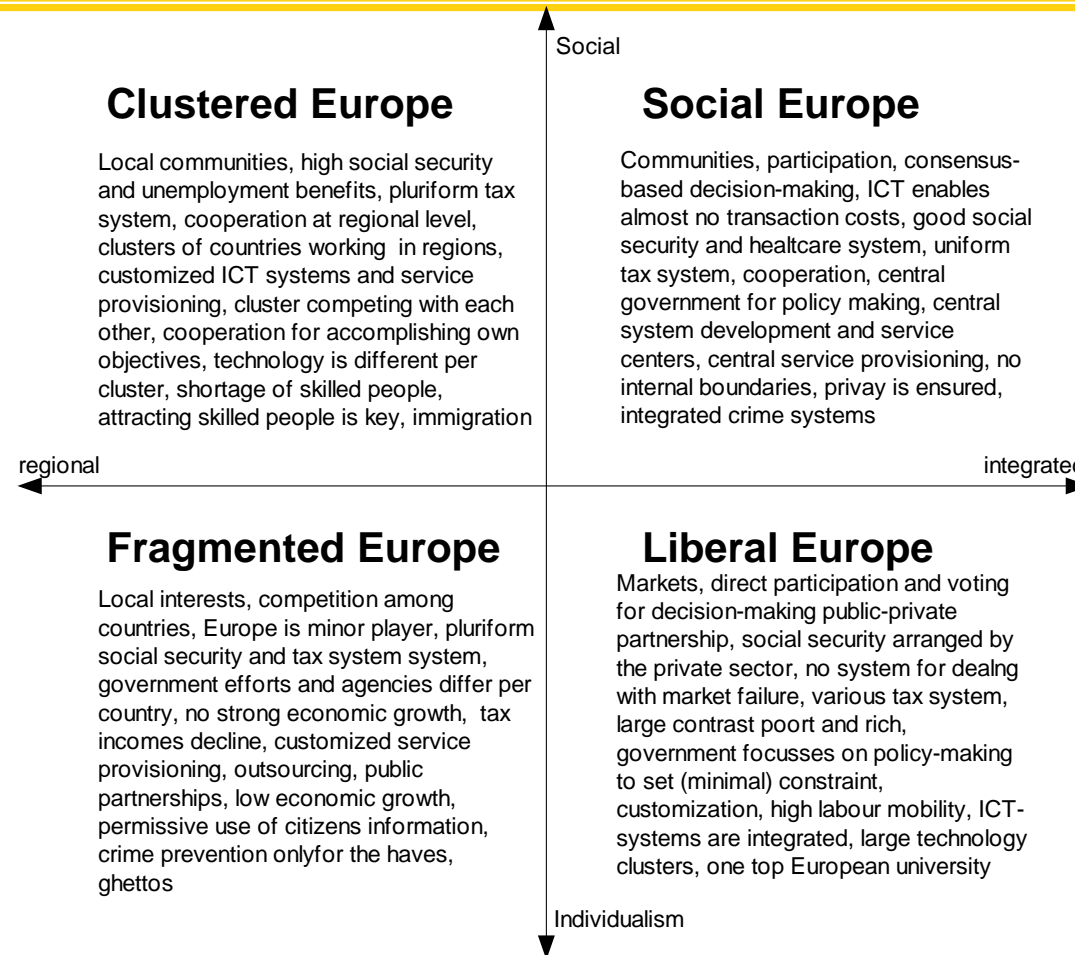
	Low	uncertainty	high
Impact	Low	<ul style="list-style-type: none"> Understand of user needs and developing a user centric eGovernment approach Semantic interoperability of systems One-stop shop Broadband adoption Integration data, voice and video An inclusive information society by e-learning, lifelong learning and integration of work and learning Ambient intelligence Infrastructure containing all kinds of services including security, privacy, authorization and payment Availability of standards, data and process models Proactive service delivery 	<ul style="list-style-type: none"> Use of private parties and public-private partnerships for service provisioning Use of private parties as channel for service provision Governmental agencies and private companies work together for ICT dissemination Centralized citizens, health and criminal records All government communication will be dealt with using the Internet IT expenditure is increasing Policy Participation tiredness Government as director of IT efforts
	High	<ul style="list-style-type: none"> Ageing of workforce and society Importing skilled people Centralizing agencies and sharing services Web 2.0; Weblogs, Wikipedia and so on Natural language processing and translation Sensor technology and Use of only open source software Use of simulation, animation and gaming in policy making Integration of ICT-health sector Distance therapy and medicare and selling of drugs Use of cameras and so on to ensure security Constant and sustainable monitoring and surveillance for law enforcement and crime mapping Communication between relief workers Use of Geographical information Information accessibility for those who need massive amounts of archival and real-time information Development of separate network to deal with low Internet reliability, security and governance problems Use of legal systems for automatic jurisdiction 	<ul style="list-style-type: none"> Individualising of the society One citizen superfile, privacy and information availability for prevention of crime and terrorism Convergence of nanotechnology, cognitive sciences and ICT Privatization of social systems and health care Integral approach towards IT governmental projects Globally regions grow more and more together with will lead to new governmental structures and cooperation across borders and wide landscape Slow adoption of legislation to facilitate newest e-government opportunities Software developments coordinated at central level <ul style="list-style-type: none"> Government functions and roles performed by private sector (security, health, insurance) Customization and standardization of service provisioning Cooperation among member states Harmonization of policies and rules and standardization of security and tax systems Industry activity will decrease in certain geographical regions Use of knowledge and divide in high and low skilled and rich and poor Social exclusion of skilled, non-skilled; rich and poor; and disabled people



Throughput: ranking trends



Scenarios from WP1



Scenarios sketches WP1



Contract no: IST-4-27139

- **Social Europe:** In a social Europe harmonization has succeeded, national sovereignty is limited and we have one integrated public administration taking responsibility for its citizens. There is a well-developed social welfare, security and healthcare and this is ensured by governments, the good big brother. Transaction costs are close to zero. There is one large superfile for each citizen and used for crime and terrorism prevention. Solidarity with the most vulnerable groups is maintained. System development and public service provisioning is centralized in large data centers and interoperability and standardization has succeeded. Local governments focus primarily on participation and customization to the local situation.
- **Liberal Europe:** The public sector retreats and leaves it up to the market to provide security services, unemployment benefits healthcare and so on. European governments concentrate on their core tasks, provide only pure public services and setting policies for privacy, insurance and so on. There are large technology clusters and European top universities are created focused on for example nanotechnology. Citizens are not inclined to participate in policy-making and take care of their own welfare. Democracy is synonymous with voting. The negative side is that it fails to adequately deal with market failures, especially disabled can hardly participate in society.
- **Clustered Europe:** This scenario combines public responsibility with little cooperation among regions. Autonomous countries cooperate in clusters having similar objectives. There cooperation among public administrations to gain efficiency benefits. Cooperation is primarily for accomplishing their own objectives, innovation is fragmented and investment in ICT have a local nature. The labyrinth of policies, organization and information systems are able to communicate with each other to ensure public safety. There is a shortage of skilled people and a large divide between the skilled and non-skilled and rich and poor. Each cluster focused on different technology development.
- **Fragmented Europe:** Local interest dominates harmonization and integration and there is a pluriformity of social, security and health systems. Countries compete with each other, and have a limited degree of cooperation. Taxes decline under tax competition. Most countries are unsuccessful in modernizing their public administration. There is only a light degree of government intervention and permissive use of citizens personal data. Crime prevention is only for the rich and we have ghettos of the haves and have not. Europe is a minor player in the world and economic growth is limited.



Ranking of the main trends

→ uncertainty

↓
impact

	Low	High
Low		
high		