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Finland Futures Academy

The Role of Environmental Scanning In Developing Regional Innovation System

Juha Kaskinen

Environmental Scanning

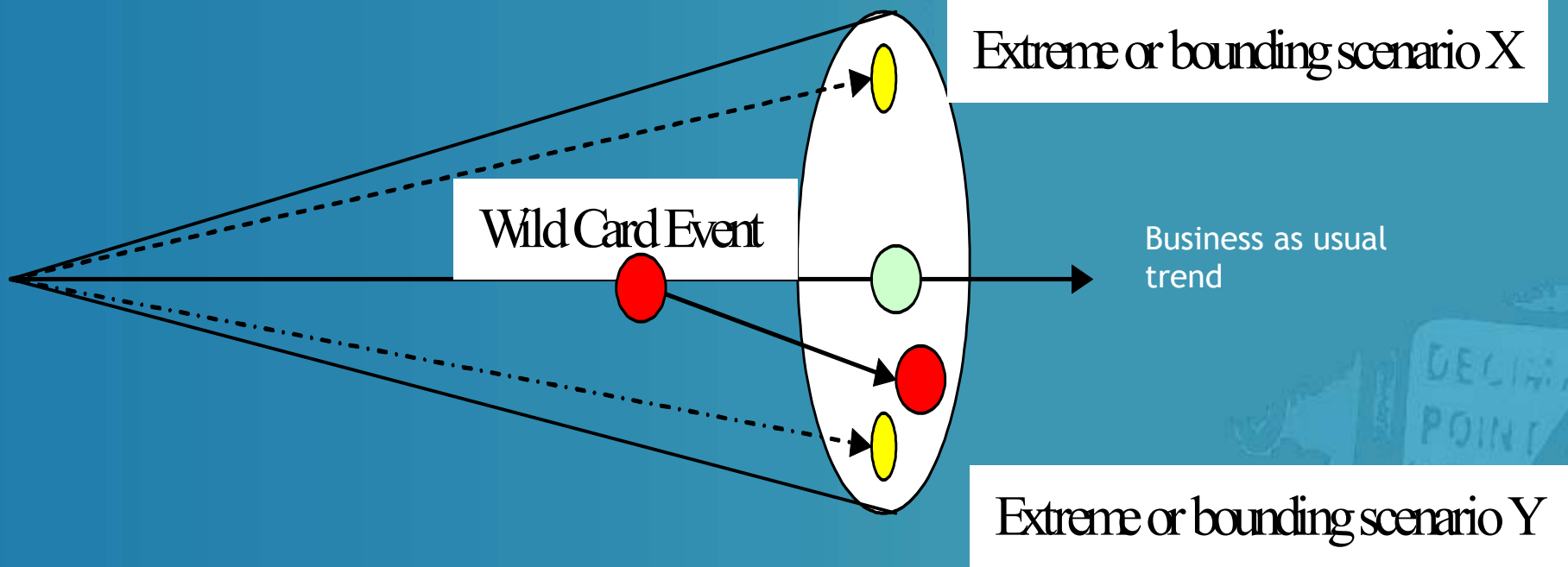
Is an essential part of methods applied in futures research projects and R & D -projects

- Environmental scanning is the acquisition and use of information about events, trends and relationships in an organizations's external environment, the knowledge of which would assist management in planning the organization's future course of action. (Choo 2001)
- E.G. in
 - Scenario building
 - Strategic planning of organizations
 - Visionary management
 - Foresight
 - Technology foresight
 - Regional foresight

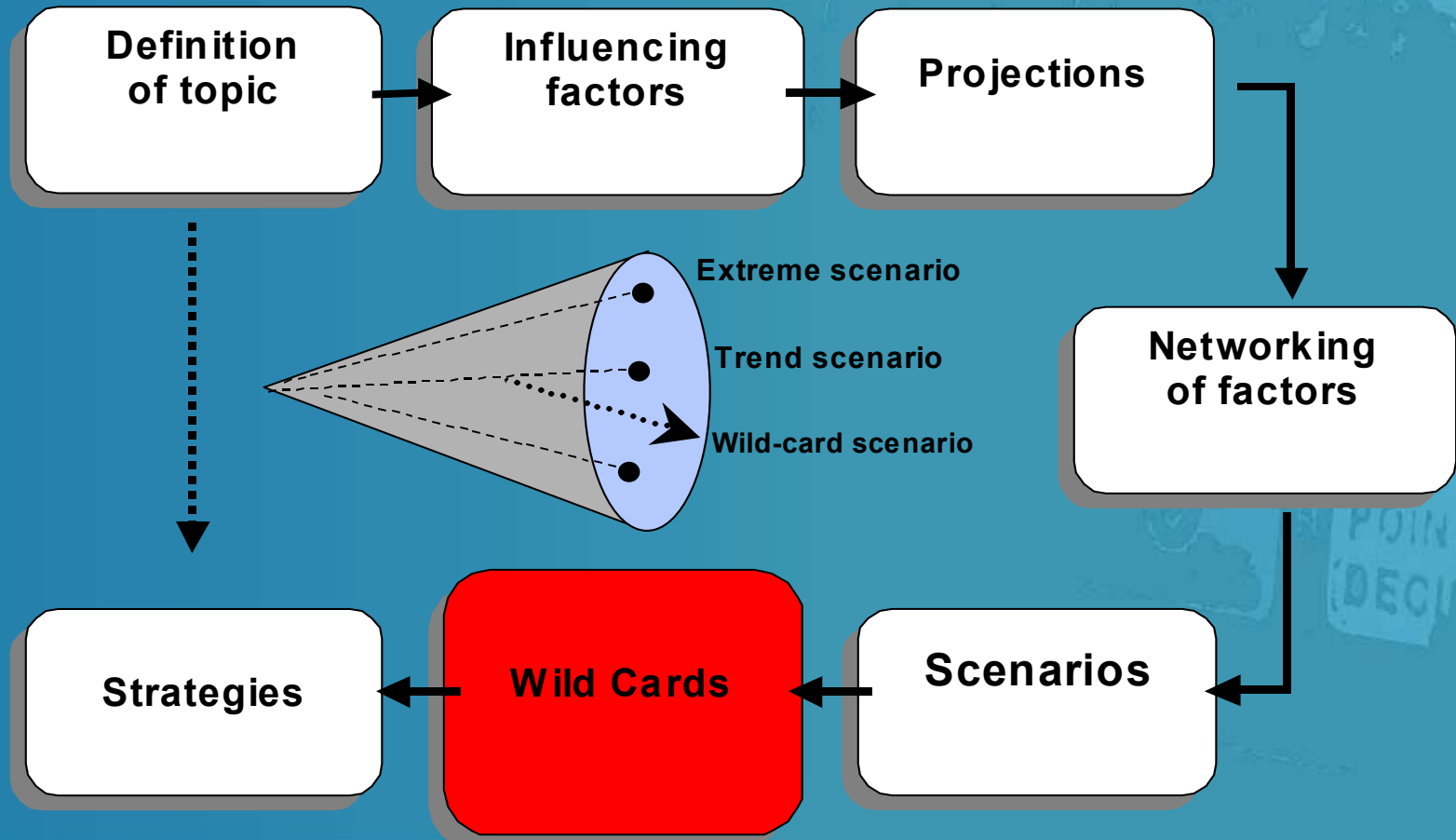
Environmental Scanning

- WHAT ARE THE TRENDS ON THE BASIS OF ENVIRONMENTAL SCANNING?
- WHAT KINDS OF SCENARIOS YOU CAN OUTLINE ON THE BASIS OF ENVIRONMENTAL SCANNING?
- WHAT KINDS OF WEAK SIGNALS YOU OBSERVE ON THE BASIS OF ENVIRONMENTAL SCANNING?

TREND, EXTREME SCENARIOS AND WILD CARD EVENTS



AN EXAMPLE OF FORESIGHT PROCESS: THE BASIC SCENARIO PROCESS PLUS A WILD CARD ELEMENT

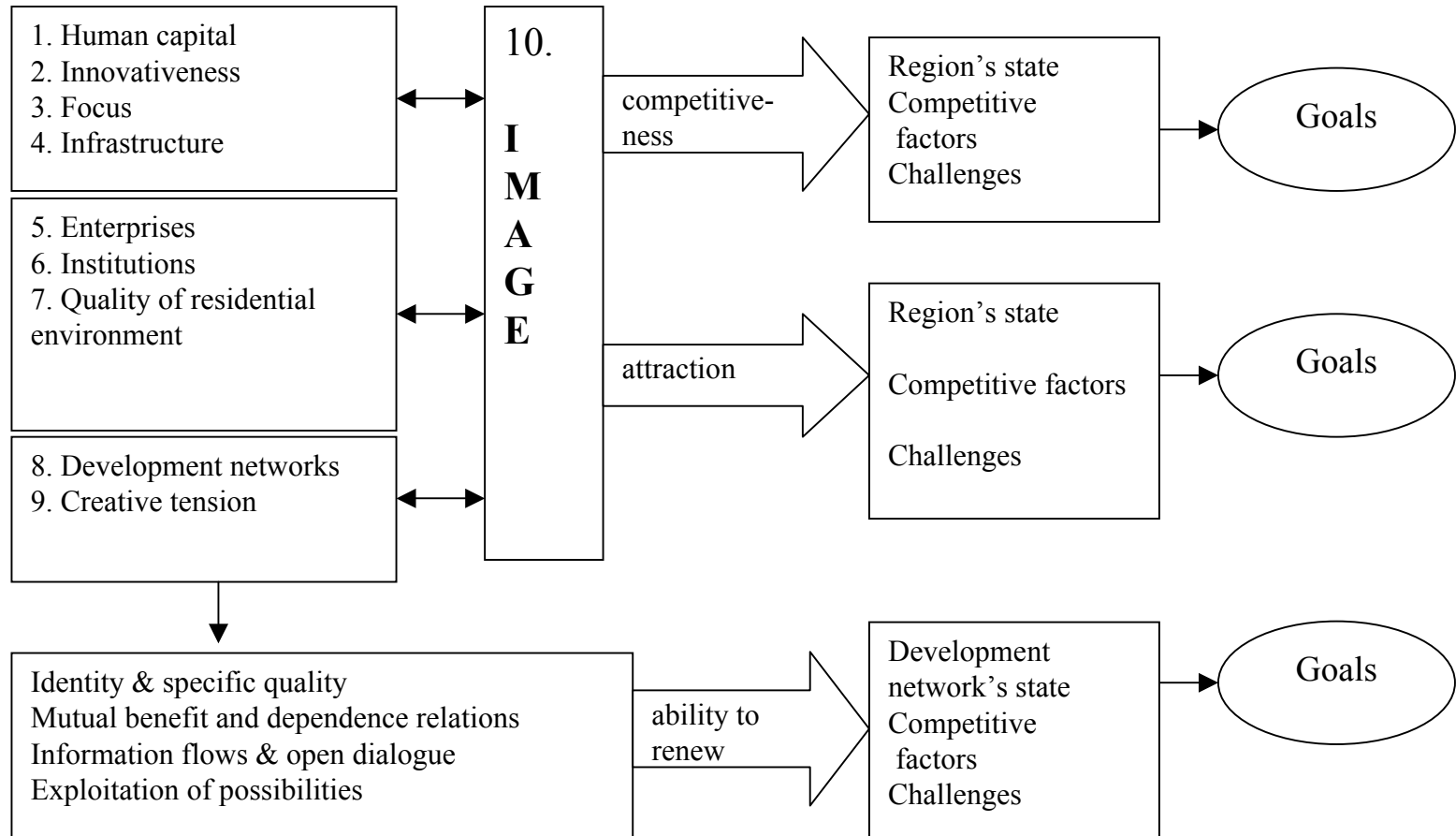


The model of the evaluation of regions competitiveness

- Developed by professors Markku Sotarauta and Pirjo Ståhle for the Committee for the Future of Finnish Parliament (2002-2003)
- Combines quantitative and qualitative data with regional discussion groups work
- Aims for new innovations, new forms of cooperation

Evaluation model

EVALUATION OF THE REGION'S COMPETITIVENESS



Components of regional analyses

- Human capital
- Innovativeness
- Concentration
- Infrastructure
- Firms and companies
- Institutions
- The quality of environment (nature, social and cultural env.)
- Networks of developers
- Creative tension
- Image

Indicators and information

- Human capital
 - Labour force
 - Labour force rate
 - Number of students
 - Number of technical students
 - Number of tertiary education examinations
- Innovativeness
 - Research and development costs
 - Patents
 - Innovative agencies
 - Share of top and high technology in gross value added

Indicators and information

- Concentration
 - Concentration of population
 - Employment share of concentrating industries
 - Employment share of business services
 - Employment share of biggest industry
- Infrastructure
 - Connections to foreign countries by industries
 - Connections traffic and transport by modes of transport
 - Communication connections
 - Decisions of local and regional plans, building sites and buildings
 - Energy supply
 - Supply of natural resources and raw materials
 - Fares of electricity and water

Indicators and information

- Firms and companies
 - Structure and size of line of business
 - Export orientation
 - Know-how intensiveness
 - Proximity of subcontractors and other cooperative companies
 - Competition situation of lines of businesses, structure of markets
 - New, rising lines of business
- Institutions
 - Universities
 - Polytechnics
 - Research units and centres
 - Technology centres
 - Governmental development centres

Indicators and information

- The quality of the environment (nature, social and cultural environments)
 - Nature and build environment
 - Organisational environment and services (health care, day care, all around education, entertainment and cultural services, sport possibilities)
 - Economic environment (living costs, service fares, local taxes etc.)
 - Social environment (relationships between people and daily social networks)
- Networks of developers
 - Regional development networks
 - Can one build functional networks in which competency, strategies and tasks of different organisations are aiming to same direction?

Indicators and information

Creative tension

Tension refers to...

1. a state that is characterized by excitement and fascination along with anticipation of the future bringing along something new and different, and/or
2. a state of anticipation characterized by insecurity as to the consequences of future events and action.

Tension is born...

1. of opposite or sufficiently diverse forces existing simultaneously and calling into question the prevalent modes of thinking and/or operation and the status quo
2. between two or more phenomena. In the development of regions, the said phenomena may include, for example, relations between organizations or the difference between present and future development with regard to a tangible matter.

Creativeness entails...

1. producing unprecedented and original products, processes, ideas and modes of operation
2. utilizing information in a manner that creates new and diverse ways of observing and interpreting familiar issues and phenomena.

Indicators and information

- Image
 - Image consists of the whole which is formed of regional physical environment, companies and firms, educational and research units, social and cultural environment, history of the region, and/or other aspects which have effected on the regional public image. Image can deliberately be affected via media or actions.

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SPIDER

Increasing regional
competitiveness through
futures research methods



Funding

- EU Commission **"Regions of Knowledge" (KnowREG) Pilot Action** (50 %)
- National funding (50 %)
- Total budget 360 000 €
- Duration: Two years (officially 1.2. 2004 - 31.1. 2006)

Organization

- Coordinator FFA (Finland Futures Research Centre, Turku School of Economics and Business Administration)
- Partners
 - 1) Germany Z_punkt GmbH Büro für Zukunftsgestaltung (Agency for Shaping the Future) and
 - 2) Belgium The Destree Institute

All are node-organizations of Millennium Project

Goals

- The aim of the SPIDER project is to create connections between regional actors and reinforce their role as actors and creators of regional knowledge-based innovation systems.
- Development of foresight methodologies on the basis of good practices coming from the national foresight exercises and e.g. the methodological proceedings the Millennium Project.
- Implement futures studies methods as an central part of regional innovation systems

Actions

- The main phases of the project are:
- 1) Designing the detailed networking strategy and the inter-regional/ regional work plans
- 2) Composing local actor groups with recommendations given by the SG and in accordance to the local work plans
- 3) Carrying out the pilot project and applying the regional competitiveness model in the selected regions (regional analyses & comparison)
- 4) Designing regional visions by using Delphi method (with the electric tool of Professional Delphi Scan, questionnaire & interviews)
- 5) Modifying region- and European -based policy implications
- 6) Reinforcing connections / cohesions between European regions and actors

LCA - sectors

- Bio- /nanotechnology and ICT
- Tourism
- Environment (nature and social environment)
- Culture (production)
- Welfare services (public and private)
- Agriculture and food industry
- Local and regional administration
- Regional special features

Current status

- Website <http://www.spider-project.net>
- Networking and local action groups (LCA)
 - First meetings in October 2004
- Regional analyses
 - Data gathering during summer 2004
 - First version in each region in September 2004
 - Will be the data basis for LCA-brainstorming and vision building sessions

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