



Intellectual Capital for Communities in the Knowledge Economy Nations, Regions, Cities and Emerging Communities



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World Conference on Intellectual Capital for Communities
- Fourth Edition -



Evaluating IC dynamics in firms

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Background

- **IC has become the main driver of competitiveness**
 - **In turbulent environments, the ability to continuously renew knowledge-based assets is the key to sustained competitive advantage**
 - **However, most IC research focuses on identifying the existing knowledge assets**
- => Need for a more "dynamic" approach to IC = innovation, learning and change!!**

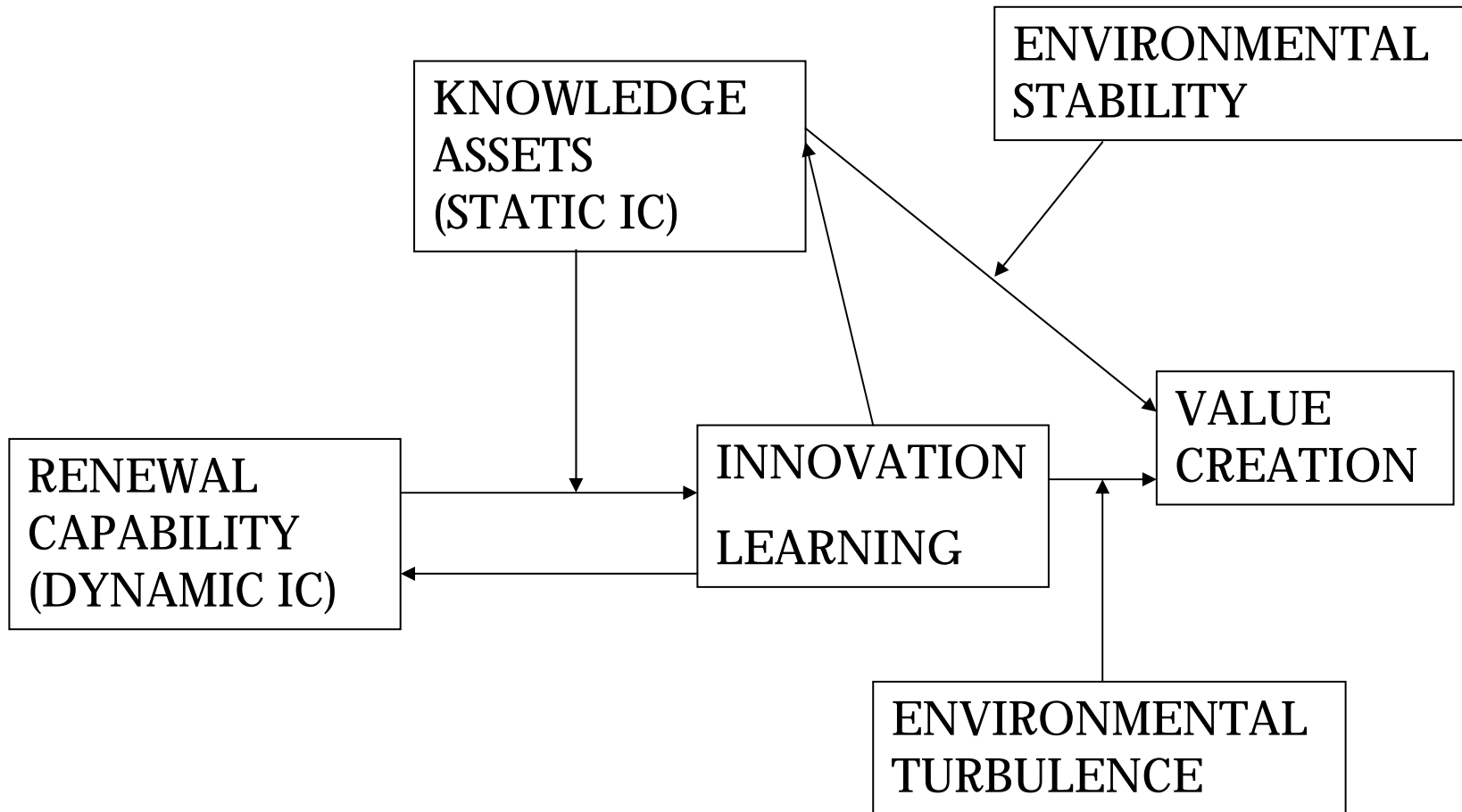
Research gaps

- **How knowledge-based value is created in changing environments?**
- **What is organizational renewal capability?**
- **How should renewal capability be measured?**

Static vs. dynamic IC

- **Knowledge as a static asset, stock**
- **Can be managed**
- **What the organization owns**
- **Identification and valuation of existing intangible assets**
- **Knowledge as socially constructed emergent process**
- **Can be enabled**
- **What the organization does**
- **Capabilities for using, developing and modifying assets**

Knowledge assets + renewal capability = sustained competitive advantage



Organizational renewal capability

- **Ability of the organization to develop and change its resources and capabilities through continuous learning and innovation**
- **Demonstrated as f. ex. new products and processes, operational and strategic flexibility, adaptive service processes**
 - **Incremental and radical change**
 - **Top-down and bottom-up change**
 - **Planned and emergent change**
 - **Organization-wide process**
 - **Continuous**
 - **Cannot be completely controlled => creating an enabling and supportive organizational context**

Complexity of organizational renewal

Some related concepts:

- **Organizational change**
- **Innovation, innovativeness**
- **Organizational learning**
- **Knowledge creation**
- **Dynamic capability**
- **Strategic flexibility**
- **Organizational agility**
- **Organizational flexibility**
- **Continuous improvement**
- **Business process redesign**
- **Self-organization**
- **Autopoiesis**
- **Mindfulness**

Perspectives:

- **Cognitive**
- **Strategic**
- **Relational**
- **Cultural**
- **Economic**
- **Performative**
- **Systemic**
- **Communicative**
- **Processual**
- **Political**

The 6-factor model of organizational capability for renewal



(Pöyhönen, 2005b; 2006a; 2006b;
Kianto, 2008a; 2008b)

1. Strategic competence

- **Clear, shared, comprehended and valued strategies and goals**
- **Comparing to the best**
- **Strong identity and culture**
- **Innovativeness, risk taking, future orientation**
- **Pro-activeness, courage to make quick decisions**
- **Customer focus**
- **Market and competitor awareness**
- **Emergence, semi-coherence**
- **Strategic innovations**

2. Exploiting time

- **Seizing the moment**
- **Co-timing operations**
- **Resourcing time**
- **Understanding bifurcation points in creative process**
- **Balancing different time dimensions**
- **Internal rhythm of changes**

3. Learning orientation

- **Employees as the key resource**
- **Appreciating learning**
- **Openness to alternative viewpoints**
- **Feedback**
- **Constructive critique**
- **Learning from failures**
- **Support for development activities**
- **Experiments, prototypes**
- **Learning to learn**

4. Connectivity

- **Knowledge processes are fundamentally social**
- **Collaboration**
- **Group relationships**
- **Intra-organizational interaction**
- **Inter-organizational relationships**
- **Know-who**
- **Team and organizational climate**
- **Passion, inspiration**

5. Managing knowledge

- **Awareness of strategically significant knowledge**
- **Knowledge strategy**
- **Management and protection of explicit knowledge**
- **ICT systems**
- **Tacit knowledge**
- **Routines and activities**
- **Acquiring and accomodating knowledge from extra-organizational sources**
- **Knowledge creation**

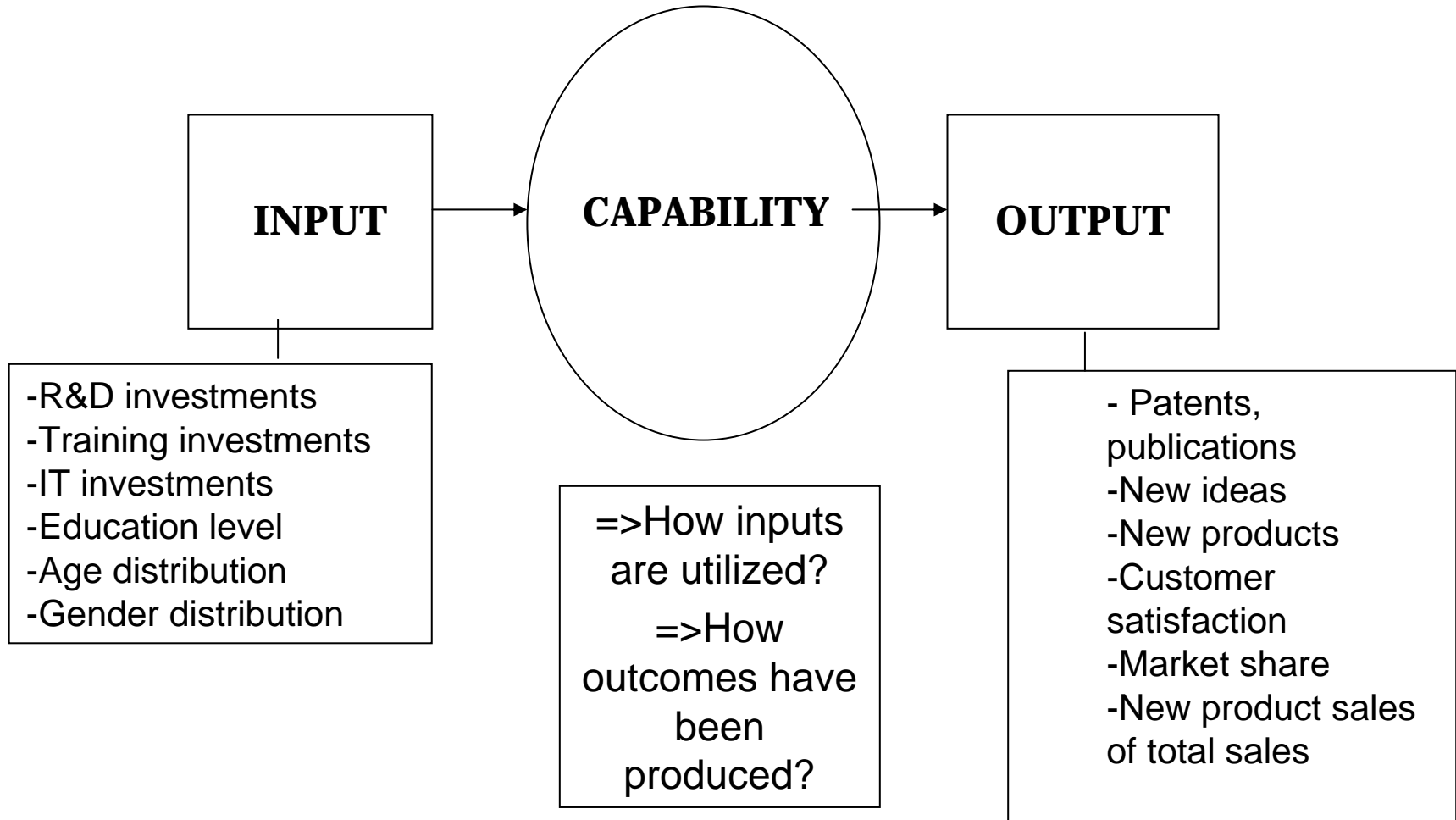
6. Leadership

- **Low hierarchy**
- **Empowering, democratic leadership style**
- **Managers committed to listen and learn**
- **Participation in decision making**
- **Clear goals, operative autonomy**
- **Ability for holistic innovation management:**
 - **Structured innovation processes and project management**
 - **Inspirational leadership**

Why to measure renewal capability?

- **Measuring organizational capability to operate in changing environments**
- **Predicting organization's future potential**
- **Identifying the main challenges in continuous innovation and learning**
- **Enabling effective and focused management and development of renewal processes**
- **Enabling monitoring and comparison of renewal capability**

How has RC been measured?



Criteria for assessing renewal capability

- **Activities vs. inputs**
 - From identifying financial resources and technological tools to whether and how they are actually used in practice
- **Processes vs. outcomes**
 - From mapping existing intangibles to studying the capabilities for changing them
- **Knowledge system vs. individual knowledge**
 - From measuring individual competencies to looking at the innovating social unit as a whole

ORCI (1)

- **Organizational Renewal Capability Inventory**
- **Measures organizational capability for continuous development, learning and innovation**
- **Produces clear and comprehensive diagnosis of organizational renewal capability**
- **Provides in-depth analysis of the components of renewal capability**
- **Can be tailored to various analytical levels (e.g. project, department, SBU, firm level)**
- **Enables comparison between different groups within the firm**
- **Enables external benchmarking**
- **Main indices: strategic competence, exploiting time, learning orientation, connectivity, managing knowledge and leadership**

ORCI (2)

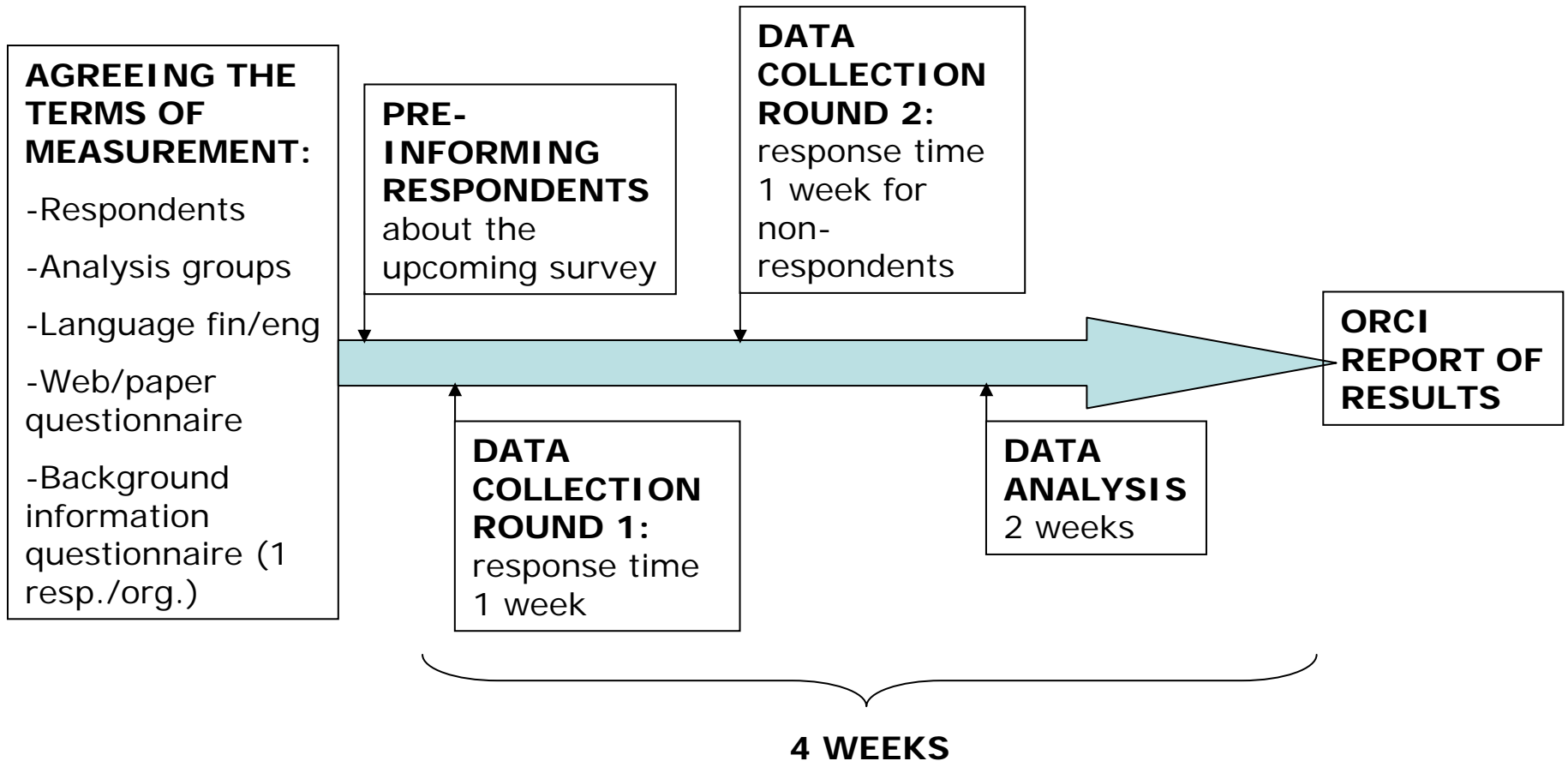
- **Developed in LUT based on the 6-factor model of renewal capability**
- **167 items 6 components, 34 subcomponents**
- **1-7 Likert scale (1-5)**
- **Minimizing measurement error through composites**
- **Minimizing response-set bias through reversed items**
- **Response time 15 mins**
- **Web or paper questionnaire**
- **Finnish and English versions (German, Spanish, Hebrew)**
- **Data from a representative sample of organizational members**
- **Background information questionnaire (1 person /organization)**

Validating the ORCI

- **Pilot data, 4 organizations, N = 258**
- **Content validity: adequate coverage of the theoretical domain**
 - **Eextensive theoretical grounding**
 - **Items from earlier studies**
 - **Expert Q-sort**
- **Construct validity: measuring the right concept**
 - **Exploratory FA**
 - **Discriminant validity: ANOVA**
- **Predictive validity: relation with hypothesized external variables**
 - **Correlation**
 - **Regression analysis**
- **Reliability: consistency**
 - **Cronbach's alpha**

(Kianto, 2008a)

Typical measurement process



Future development of the ORCI

- **Currently data from >70 organizations**
- **Case studies in various Finnish organizations**
- **Survey**
 - **SEM / LISREL**
 - **Construct validity of the 6-factor model**
 - **predictive validity**
 - **further development of report of results**
- **International data (Switzerland, Israel, Russia, Spain, Netherlands, Italy?)**
 - **cross-cultural analyses**

Contributions

- **Clarifying connections between the static and dynamic dimensions of IC**
- **Providing a multi-faceted theoretical model of organizational renewal capability**
- **Introducing a method for measuring renewal capability**