Regional Economic Development
- Focus on Innovation -

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Agenda

- Theoretical background of regional economic development
- (Regional) Innovation Theory and Regional Innovation Systems
- Innovation in Regional Development
  - The New Regional Policy in CH
- Regional Innovation / Development Strategies
  - Formulation Processes
  - Policy Measures
- Introduction to the Group Work
The theoretical basis of regional development

Theories of Spatial Growth and Development

- Theories of Spatial Mobility
- Theories of Locational Structure
- Theories of Locational Choice

structure interaction dynamics / process

business level (macro-)economic perspective

The Evolution of the Theoretical Concepts

A threefold paradigmatic change
- from a factor-oriented perspective to a perspective oriented towards actors and interactions;
- from an exogenous to a more endogenous based perspective;
- combined with an emphasis on export-oriented activities;
- from a static perspective to a perspective on development;
- focus on knowledge, innovation, and growth;

➔ There is no single theory of regional development today – we have to deal with different approaches at the same time
Contemporary Theorists

- Michael E. Porter (1945 - )
- Paul Krugman (1953 - )
- Richard Florida (1955 - )

(Regional) Innovation Theory

- **Theoretical Basis:**
  - „Cluster Theory“: Porter
  - „Learning Region“: Florida 1990
  - „New Economic Geography“: Krugman (1991)

- **Basic Ideas:**
  - Knowledge and Innovation as main driving forces for growth;
  - Importance of innovation-motors for growth: "strengthening the strengths" instead of cohesion-approach ("strengthening the weaks") with a strong focus on the connections (between strong and weak);
  - Importance of networks and learning processes for development;

- **Main assumption:**
  - Innovation as a complex, non-linear, interactive, and systemic process;
"Paradoxically, the enduring competitive advantages in a global economy lie increasingly in local things - knowledge, relationships, and motivation that distant rivals cannot match."

*(Michael E. Porter, US economist)*

"Learning regions function as collectors and repositories of knowledge and ideas, and provide the underlying environment or infrastructure which facilitates the flow of knowledge, ideas and learning."

*(Richard Florida, US economist)*

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### Regional Innovation Systems (RIS)

![Regional Innovation Systems Diagram](Image)

**Source:** Tödtling/ Trippel 2005
Regarding their policy implication, the concepts allow the following conclusions about success factors of regional innovation promotion. These are related to:

- An innovation-oriented local or regional institutional system with flexible policy networks, a regional capital market and a governance system with appropriate financial authority.
- An institutional structure that is rich in learning, knowledge transfer, and qualification aligned.
- Intensive local and regional networking, enhanced by national and international cooperative linkages between regional actors, which facilitates mutual knowledge exchange and enables collective learning processes.
- A creative and entrepreneurial-oriented human capital that contributes to a continuous renewal of the regional enterprise stock.

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### Innovation in Regional Development (EU)

**Making Europe and its regions more attractive places to invest and work:**

- Expand and improve transport infrastructures
- To strengthen the synergies between environmental protection and growth
- Address Europe’s intensive use of traditional energy sources

**More and better jobs:**

- Attract and retain more people in employment and modernise social protection systems
- Improve adaptability of workers and enterprises and the flexibility of the labour market
- Increase investment in human capital through better education and skills
- Administrative Capacity
- Help maintain a healthy labour force

**Improving knowledge and innovation for growth:**

- Strengthening regional capacities for research and technological development,
- Fostering innovation and entrepreneurship
- Strengthening financial engineering notably for companies involved in knowledge-based economy

The New Regional Policy (NRP) in Switzerland (since 2008)

Direct promotion to strengthen innovation, value added and competitiveness:
- direct subsidies to initiatives, projects and programmes and infrastructure (main activity)

Knowledge system and qualification for regional development and management:
- knowledge management
- (Further) education
- controlling, reporting, evaluation

Cooperation and synergies between regional policy and sectoral policies:
- especially the policies on innovations, education, agriculture, environment, tourism, SME as well as the promotion of locations

Research Center for Nano-Medicine in Landquart
Mission

platinne supports start-ups and small and medium-sized enterprises (SMEs) in their business innovation projects. It contributes, accordingly, to their capacity to innovate and to their competitiveness.

Services are provided by a network of accredited coaches. If necessary, they will bring in partners that specialize in areas like intellectual property, finance, technical questions, law, and others.

platinne mainly supports the following innovation vectors:

- product and service innovation;
- organizational innovation;
- the development of distribution systems and
- research into new markets.

In order to assure that the firm enjoys a lasting positive impact, platinne helps develop resources critical to businesses, establishing partnerships and collaborative relationships.

These skills and services tailored to the needs of SMEs are easily accessible to western Swiss firms thanks to the financial support of the six French-speaking cantons and in the region.

For the comprehension of the term «Innovation» by platinne:

Compréhension de term «innovation» (pdf)

Implementation of the NRP by Cantons and Regions

- Multiannual program at the federal level (8 years)
- Evaluation after 8 years
  - Interim evaluation after 4 years
- Implementation programs of the cantons (regions) (2 x 4 years)
- Program convention (2 x 4 years)
  - Federal level with the cantons
The Regions in the New Regional Policy in CH

Formulation of Regional (Innovation) Strategies

1. Building-up organisational structures
2. Identification of stakeholders and target groups
3. Definition of target
4. Integration of regional interests
5. Work plan

- SWOT analysis
  - Regional competence profile
  - Needs and supply profile/transfer, networking
  - Regional benchmarking
  - Foresight / Roadmaps / Visions
  - Basic concept / single measures
  - Implementation / Evaluation

Source: IDT 2010
Regional Competence Profiles - Unique Selling Points or Commonness

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<th>Region</th>
<th>Biotechnology</th>
<th>Life Science</th>
<th>Information- and Communications-technologies</th>
<th>environmental technologies</th>
<th>food-technologies (agricultural science)</th>
<th>new materials, nano-technologies, production process</th>
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Innovation Policy Measures

1. Improve innovation governance and strategic intelligence for policy making
   - Target groups: policy makers, international stakeholders
   - Policy Measures: Strategic vision, Innovation studies and evaluations, Innovation strategies, Transnational co-operation, Policy Learning

2. Foster an innovation friendly environment
   - Target groups: enterprises, universities and (public) research institutes, public sector and administrative representatives, innovation agencies employees
   - Policy Measures: Administrative simplification, Regulatory environment, State aid for innovative firms, Information exchange via e-portals, Boosting technology adoption;

3. Higher Education / Human Capital Development / Gender Issues
   - Target groups: higher education institutions
   - Policy Measures: development of infrastructure for education and training, support life-long learning initiatives, gender specific support programs
Innovation Policy Measures

4. Development of Research Infrastructure

- **Target groups:** higher education institutions, public research institutions
- **Policy Measures:** funding of public research institutes, funding of research facilities in higher education institutes, purpose/technology bound funding for public and private research, support for the recruitment of top level researchers from abroad/outside the region, investment in interdisciplinary research, financial incentives for research (competitive project based approach)

5. Strengthen innovation including the protection and commercialization of intellectual property (IP), Strengthen entrepreneurial innovation in the SME sector, Industrial policy and strategic technology policy

- **Target groups:** enterprises, SME, public sector, banking/financial sector
- **Policy Measures:** Direct Innovation Support, Innovation skills, Non-technological innovation, Intellectual property protection, Research Commercialization, Tax incentives, Innovation management, Financing of R&D and innovation

6. Encourage technology and knowledge transfer to enterprises and development of innovation poles and clusters

- **Target groups:** enterprises, public research institutes, universities, policy makers (on regional level)
- **Policy Measures:** Recruiting innovators, Technology transfer, Innovation intermediaries, Innovation infrastructure, Co-operation and Networking, Cluster management

7. Promote and sustain the creation and growth of innovative enterprises

- **Target groups:** students, general public, banks/financial sector, universities and public research
- **Policy Measures:** Funding innovative start-ups, Entrepreneurship support infrastructure, Leveraging private innovation finance, Optimising financial regulations
Components of Regional Innovation Strategies

1. **SWOT-analysis**
   - strengths of the regional innovation system (sectoral focus, institutional focus etc.)
   - weaknesses of the regional innovation system
   - opportunities of the regional innovation system
   - threats of the regional innovation system

2. **Vision, objectives and targets**

3. **Measures and set of applied instruments**

4. **Governance system**
   - horizontal and vertical co-operation, coordination or at least participation
   - Public-Private-Partnerships
   - Strategic Policy Intelligence (Foresight Studies, Evaluations, Monitoring Systems etc.)
Group work

"Development of a regional innovation strategy (for Northern Jiangsu)"

- What kind of strengths, weaknesses, opportunities, and threats (SWOT) is the current innovation system in Northern Jiangsu facing?

- What is your vision for the region of Northern Jiangsu with regard to its innovation potential? Which objectives and targets for a regional innovation strategy do you see?

- What kind of measures and instruments seem essential to reach these objectives and to find an answer to the current challenges?

- How should a corresponding governance system look like, in which the regional innovation strategy should be embedded?