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SÜDERELBE INNOVATION ECOSYSTEMS MOSAIC CYCLUS DESIGNING OF CULTIVATION PATTERNS

Practical case

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Abstract text:

Süderelbe Innovation Ecosystems
Mosaic cyclus designing of cultivation patterns
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The article uses the example of the Süderelbe Innovation Ecosystem to make the previously neglected ecosystem term fruitful for Innovation Ecosystems. Its usual use, whether in innovation or IT ecosystems, usually indicates an empty metaphor, but at least insufficient definitions. We assume that Innovation Ecosystems can benefit from ecosystem theory for positive development - here cultivation.

In general, everything can be described as Ecosystem - the term has long since moved away from the bioecological roots. (Granstrand, Holgersson 2020) here is still no usable Innovation Ecosystems typing, let alone an assessment of how successful Innovation Ecosystems should be. But they are not simply there (as maybe in the imagination) - they need genesis / succession - the best thing is cultivation. With this contribution, a first approximation takes place in order to successfully manage and cultivate Innovation Ecosystems. This enables the temporal dynamics, in particular "young" regional Innovation Ecosystems, to be explained and used.

Cultivating Innovation Ecosystems enables optimal succession conditions using specific site conditions. The Süderelbe area is developing into an Innovation Ecosystems model region through various ecosystem drivers. Its core, the Harburg district, has developed into a magnet for technology companies in recent years.

The Süderelbe region has a wide-ranging research and training landscape, a strong regional economy shaped by medium-sized companies and a committed and innovative partnership between municipalities and the private sector: this makes it generally future-proof, but the prospects due to the corona crisis are massively questioned and new ones Succession paths necessary and likely. The corona pandemic is seen as a real experiment to check the resilience of the Innovation Ecosystems.

For understanding, several terms from ecosystem theory are introduced as concepts:

Succession: The concept of succession (Odum, E. 1991) is based on the hypothesis that the ecosystem elements change a location and that this change in turn results in a change in the elements, even if all other factors remain the same. Succession can also be described as the evolution of ecosystems. Such succession inevitably goes through InnoÖS. However, to use and promote them requires knowledge of succession conditions.

Mosaic cycle: The mosaic cycle concept (Remmert, H. 1991) is based on a recurring sequence (cycles) of different development stages (succession stages) of ecosystems. Especially in the current Corona faults, we see The Mosaic Cycle Concept as particularly useful for the cultivating Innovation Ecosystems manager.

Ecological niche (Pocheville, A. 2015): sum of all adaptations to the abiotic and biotic factors under which an organism lives (right to believe). Transferred to elements of an Innovation Ecosystems, this becomes fruitful for the special future viability.

Ecosystem services: The term ecosystem service (Brown, T.; Bergstrom J.; Loomis J. 2007) in its most common definition describes the "benefit foundations" or "benefits", the people sourced from ecosystems. Using this approach, we expect scalable statements for the following levels of analysis:

- Ecosystem description,
- Ecosystem control,
- Ecosystem cultivation

By definition, each Innovation Ecosystems consists of different sub-ecosystems, of which 2 are considered as examples for the southern Elbe region:

Aviation industry.

Biotech / LifeScience.

On these two original "clusters" (the conceptual precursor of ecosystems), the function of some active ecosystem elements is analyzed and cultivation strategies are developed as examples.

Both clusters are ecosystem-dependent on the TUHH as an energy center.

TUTech was founded early on as an ecosystem-driving actor. The ambivalent role of an ecosystem element can be determined from it. Started as an innovative transfer facility, TUTech has now degenerated into an administrative resource management center - an example of a cognitive lockin. The HIT Technopark aims to enable innovations in modern working and living environments and support them in growth.

Spatial dimensions of the Innovation Ecosystems:

Living + Working: Successful succession from Innovation Ecosystems requires structures of knowledge-based society. A regional Innovation Ecosystems not only requires innovative structures for research and added value, but also for the living conditions of the actors, as is well known from Silicon Valley. In the Süderelbe innovation ecosystem, it is important to transform residential areas that have so far been shaped by industrial society as attractive ecological niches - to different scales - and to "charge" them positively. The OECD report currently contains information on the need for action.

Since Corona, there has been a rapidly differentiating work landscape from "traditional" offices to coworking spaces and the now hyped home office. Traditional offices will change faster and will be characterized by agility, presence communication and corporate culture - places for the qualitative coming together - see HIT. These working landscapes also form essential elements of the ecosystems. The author proposed a "Harburg 21 Knowledge Park" as an anthropologically ideal ecological niche in 2000 (Pietsch, J. 2000).

Problem communication between the actors: generally there is a lack of informal attractiveness -. Individual actors such as HIT are working on this. For this reason, attractive meeting points and ideas spaces are proposed as cultivating elements of knowledge-based landscapes. Away from plantation management to diverse, flourishing Innovation Ecosystems cultural landscapes.

The Mosaic cyclus designing of cultivation patterns may be a role model for other regions, e.g. open innovation city Bielefeld.

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