

**UDC 60.608**

**THE NEED BEHIND SERENDIPITY ENGINEERING FOR INNOVATIVE BUSINESS**

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**Introduction.** In the expansive realm of innovation, the nuanced influence of serendipity stands as a defining force, intricately interwoven with the tapestry of creative processes. Serendipity, characterized by unforeseen and fortunate events that lead to positive outcomes, assumes a pivotal role in shaping the trajectory of innovation. Amidst the structured methodologies and meticulous planning that often characterize innovative pursuits, serendipity introduces a dynamic and spontaneous element, fundamentally contributing to the generation of inventive ideas and transformative breakthroughs. This thesis posits that serendipity is not a mere happenstance but a deliberate capability intricately tied to innovative business.

**Body.** In order to master serendipity as a tool for creating breakthrough innovations, we need to aggregate all the essential lessons gained in this domain:

1. Serendipity must be redefined.

This re-definition shifts the focus from randomness to human agency in the context of innovation processes by emphasizing serendipity as a capability rather than an event [1]. It highlights the importance of human efforts and interventions in identifying meaningful combinations of events that can be put to practical or strategic use [1]. The new definition underscores the role of human creativity, observation, and application in bringing about serendipitous discoveries [1]. Furthermore, the re-definition emphasizes that serendipity is not entirely dependent on randomness, but rather involves recognizing matching pairs of events that are meaningful, but not necessarily causally related [1].

2. Serendipity plays a critical role in innovation. In turn, the innovation process includes these steps that activate serendipity [3]:

1. Maintaining: to emphasize the importance of preserving scientific discoveries through patenting and computational analyses.
2. Activating: to focus on the timely activation of discoveries, especially those with real options value, using relational narratives.
3. Contextualizing: to highlight the role of narratives in contextualizing discoveries for generating new functionalities.

By structuring these arrangements based on narrative properties (relationality, temporality, and performativity), organizations can harness the potential for unexpected functionalities and innovations [3].

3. There are already some industrial practices that we can draw inspiration from:

- Creating conditions for serendipity through open office layouts, promoting fortuitous encounters, and fostering a safe environment are all intentional efforts to enhance the likelihood of serendipitous discoveries.
- The process of bisociation [2]: the combination of previously unrelated skills or information. It involves connecting different domains of knowledge or expertise to generate new insights and ideas. This concept is what Einstein called the ‘combinatorial play’.
- The concept of Homo Creativus [4]. It introduces a human-centric philosophy that prioritizes creativity, open innovation, and serendipity management. The deliberate efforts involved in attracting curious talent, managing trust, and creating diverse environments reflect an intentional approach to cultivate serendipity.

**Conclusion.** A review of existing theories on serendipity engineering and various industrial practices to foster it were conducted. The unique significance of this phenomenon for innovation development was identified as well as the need for further dialogue with the scientific community to develop effective methodologies was highlighted.

## Reference List

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