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Design and management of innovation laboratories: Toward a performance assessment tool

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There is a strong emergence of new spaces to foster innovation all over the world (Fablabs, Living Labs and Design Factories, among others). Past experiences have shown these types of projects involving "innovation laboratories" are at risk of not succeeding in their goals. Although several studies have tackled the problem of design, development and sustainability of innovation laboratories, there is still a gap in understanding how the capabilities and performance of these environments are affected by the strategic intentions at the early stages of design and functioning. Throughout this work, eight frameworks from the literature that analyze innovation laboratories are identified and compared. Then, based on both literature and the authors' experience, an updated framework is proposed as the basis for a guidance tool for researchers and practitioners aiming to assess or to adapt an existing project. As part of the operationalization process of the framework, a maturity grid-based assessment tool is proposed to evaluate the maturity degree of an innovation laboratory. Afterwards, to evaluate the viability and to integrate the perception of innovation laboratory managers, an exploratory study with answers from fifteen laboratories from five different countries is performed. Insights and implications for emerging and already existent projects of innovation laboratories are then discussed.

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Qualitative sustainability assessment of road verge management in France: An approach from causal diagrams to seize the importance of impact pathways

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ABSTRACT

A road verge, also known as a roadside, is a strip of grass or vegetation, sometimes shrubs and trees, that forms a space on the public property located along a road or highway. They require regular maintenance, one of the most relevant reasons being the safety of road users, which implies for territory planners making decisions about the period of maintenance, frequency, the mowing height, or whether or not remove cut biomass from the roadside among others. As highlighted in previous studies, the maintenance strategy decided on has a range of positive and negative impacts on the ecosystem services provided by road verges. Today, however, there is a lack of a formal and holistic view of how these maintenance practices affect the ecosystem services (ES) provided by the roadside. In order to improve the sustainability management of these areas, this paper proposes to use the concept of causal diagrams from the systems theory and literature analysis. This concept helps to structure and represent the impact of road verge maintenance decisions on ES and their interrelationships through causal networks. Nine interrelated causal diagrams were then developed. These diagrams are the first attempt at a qualitative assessment of the impact of roadside management on ES. This work is the first step towards a formal holistic model to assess the sustainability impacts of road verges and the development of decision-making tools.



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Creativity support systems: A systematic mapping study



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ABSTRACT

As part of the innovation process, creativity has become a critical dimension for organizations that wish to maintain their competitiveness. In order to foster the creativity potential within organizations, processes and systems need to be designed and integrated so that all stakeholders can participate in a coordinated and timely fashion, and despite the various dispersion levels that may separate them. Although many tools are already available on the market or being tested, a significant gap still exists between those products and the creativity process that they are supposed to support. To truly respond to the need for creativity in a distributed environment, it is suggested that the entire process be re-examined and understood so that future Creativity Support Systems can fulfil real needs. This paper is a systematic mapping study of the literature on existing digital tools dedicated to creativity. A thorough examination of over 49 digital tools is carried out, providing the action channel for emerging Creativity Support Systems that would better support collaboration diversity throughout the creative process.

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The Ratatouille paradox. An inductive study of creativity in haute cuisine

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ABSTRACT

Organization literature has extensively explored the crucial role of creativity in enabling organizations to survive in fast-paced environments. However, there are still substantial misunderstandings about the way in which creative processes unfold. In most studies, creativity has been analyzed using a compositional sequential model. Building on interpretive inductive research, conducted in the empirical field of Italian haute cuisine, this study develops a framework for the following creative processes, emerging within the field: improvisation, experimentation, trial-and-error, and imagination. The main difference between these processes is the relationship between four aggregate dimensions: process triggers, planning, the unfolding of creative phases, and trialing. This new framework offers a more comprehensive understanding of creativity as it is enacted, shedding light on its real potential in contemporary organizations.

- C: In every dish, Chef Gusteau always has something unexpected. I will show you. I memorized all his recipes.
- L: Always do something unexpected.
- C: No. Follow the recipe.
- L: But you just said that...
- C: No, no, no. It was his job to be unexpected. It is our job to... Follow the recipe. ("Ratatouille," min. 43, Pixar, 2007)
- C: What are you doing? You are supposed to be preparing the Gusteau recipe.
- L: This is the recipe.
- C: The recipe does not call for white truffle oil! What else have you...? You are improvising? This is no time to experiment. The customers are waiting! ("Ratatouille," min. 48, Pixar, 2007)