

Review of: "Proof of Concept typology: a method for classification of PoC activities according to a technology cycle timeframe"

Potential competing interests: No potential competing interests to declare.

This is a fascinating and significant topic for technological innovation academics and practitioners. If the following problems of this article can be rectified or enhanced, then its theoretical impact and practical value will improve.

The abstract should include a sentence on introduction and a problem related to the field, and the originality or findings of the study should also be included (eg. This experience enabled us to validate and evolve initial decisions, based on)

Introduction lacks novelty in the field of technology cycle timeframe and PoC classification activities. The research objectives lack appropriate background information and a logical, comprehensive methodology analysis. As a result, neither the reasons nor the requirement for establishing research objectives in this approach has been emphasized.

In terms of content structure, it is advised that the "Current state of research and design of PoCs" section be placed before the "Methodology and data" section. So, first introduce the basic situation of the study field, and then explain the specific research content of this manuscript.

The research design is not very precise and not very operationalized, and is suggested to include a design methodology and must indicate the various stages involved.

In the "2.2 Data sets" section, "The following variables in the dataset have been used for analysis: project title, a project abstract, fields of science, and project start and end dates." Here, "a project abstract" is utilized as a variable; however, its measurement should be clarified.

"The cases for analysis were selected from the first 300 search results filtered down by the scientific fields of 'engineering and technology/electrical engineering, electronic engineering, information engineering/electronic engineering'". The rationale for establishing domain keywords and duplication/overlap issues must be examined and addressed.

The material in the section titled "3. The current status of research and design of Proof-of-Concepts" is less focused than the concerns examined in this article. Moreover, the linked investigations of Bataglia et al. (2021a); Bataglia et al. (2021b); Munari and Toschi (2021), and Munari and Wessner (2017) are introduced sequentially; nonetheless, their logical linkage is not sufficiently clear. In addition, the term "RTO," that is, "research and technology organizations," should be defined in the phrase "which has also been adopted by major RTOs and..."

"However, for simplicity, this study uses a single indicator: a PoC timeframe." Both the feasibility of doing so and its

effectiveness over existing approaches in the field must be explored and discussed in greater depth. Moreover, the appropriate operational mechanism and specifics must be discussed in depth.

In the "Subject indexing and categorization of PoCs" section, "The PoCs have been categorized according to the following procedure. First, the start dates of the analysed PoC projects have been....." Nevertheless, no additional steps of the technique have been documented subsequently.

In addition, the study's conclusion lacks a quantitative description of categorizing efficiency/effectiveness in the technique verification section, particularly to highlight the advancement of the suggested method. Due to the standards, Table 1 must be referenced and described in the text.