

Collaborative Innovation in the Age of Generative AI: Empowering the Public Sector through Competence Development

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Abstract

The public sector faces complex challenges, including the climate crisis, political extremism and demographic changes, that necessitate innovative solutions. Collaborative innovation, defined as a process of creative problem-solving across organisational boundaries, is essential for addressing these challenges. This poster presents findings from my dissertation, which explores the competences necessary for collaborative innovation in the public sector and how these competences can be developed and implemented through formal and informal competence development.

Keywords

Collaborative innovation, competences, public sector, collaborative competences, genAI

1. Introduction & Research Design

Collaborative Innovation is focused on finding solutions to wicked problems by creatively working together across organisational boundaries [1] and thus emphasises the role of public sector employees and teams. Extant literature, however, shows little consideration for the requirements they need to fulfill for successful collaborative innovation projects, overlooking the competences necessary for this type of innovation.

To address the resulting gap, my dissertation focuses on the competences public servants need for the successful integration of collaborative innovation in the public sector. I conducted a comprehensive scoping review of the literature, a case study, and developed a formalised competence framework to showcase the development and implementation of competences through both formal and informal learning environments, highlighting the evolving nature of competences while the public sector faces new challenges and disruption through generative AI.

2. Identifying & Developing Competences for Collaborative Innovation

Collaborative innovation requires a diverse set of competences, including digital skills, creativity, critical thinking, collaboration [3], [4], [5] and others. These competences are essential for public sector employees to effectively engage in innovative processes and address complex societal challenges. The competence framework developed in this research understands competences as covering three dimensions: skills, attitudes, and knowledge [6].

Especially attitudes are hard to develop in regular formats of formal competence development. Informal learning environments thus play a crucial role in developing competences for collaborative innovation. Innovation fellowships, for example, provide public servants with opportunities to work closely with external experts on various projects, facilitating the acquisition of new skills.

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Innovation fellowships, for example, provide public servants with opportunities to work closely with external experts on various projects, facilitating the acquisition of new skills. By working together with experts from outside the public sector all participants in such a fellowship may benefit from learning user-centric approaches, agile methods, and the use of collaborative tools. But even after the acquisition and application of these methods public sector employees may not be able to see that they acquired a new competence. [7]

Thus, informal activities to strengthen skills, attitudes, and knowledge should be supported by formal competence development. As new technologies, such as generative AI, emerge, competences may need to be (re)defined and new formats to develop them need to be taken into consideration. The development of a competence framework that takes these developments into consideration is essential for this formalization.

3. First Conclusions

The findings of my research highlight the importance of competences for collaborative innovation in the public sector. Continuous learning and adaptation to new technologies are crucial for public sector employees. The research underscores the need for a structured approach to competence development, including formal training programs and learning through practical application.

Future research should focus on the long-term impact of competence development and explore new methods for competence assessment and development. Additionally, further studies could investigate the role of informal learning environments and the integration of new technologies, such as generative AI, in fostering collaborative innovation.

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Declaration on Generative AI

During the preparation of this work, the author used Copilot for grammar and spelling checks.

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