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Digital Innovation Management

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In this study, we highlighted the digitalization of innovation processes. Particularly, we focus on the influencing factors on the adoption of a specific class of software tools called Innovation Management Software (IMS) to support innovation management methods and activities. The empirical research so far largely ignored to investigate the influence of specific functionality or types of the IT support in the innovation process but instead studied context factors of the process and project aspects (e.g., Barczak et al. 2007; Mauerhoefer et al. 2017) while treating the technical aspects like a black box. However, such studies might be of limited benefit for innovation managers or developers of IT tools because of their overly generic approach and results (Huesig and Endres 2019). As Durmuşoğlu and Barczak (2011) indicate, due to the proliferation of IT tools available, managers need to know which IT tools provide value and not that IT tools do so in general.

In detail, we looked at (a) which specific functionality drive the adoption of IMS tools, and (b) which services are valuable to support the adoption of IMS by organizing the digitalization of their innovation processes. To do so, we used an online questionnaire and gathered data from 190 innovation managers of German industrial firms. While the overall IMS adoption is considered to affect the NPD efficiency positively, our results indicate that especially idea management functionalities and services for updates and upgrades improve the IMS adoption. Interestingly, offering complementary consulting services together with IMS offerings to support the digitalization of innovation processes reduce the likelihood of IMS adoption. These findings are essential for managers, consultants, and developers to know in order to choose and leverage the right options for improving the adoption of IT tools in the NPD process and therefore increase NPD performance, sales, and digitalization metrics.

Key References

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