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Towards an optimal investment strategy considering fashionable IT innovations - a dynamic optimization model

by

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Towards an optimal investment strategy considering fashionable IT innovations – a dynamic optimization model

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Companies regularly face the challenge of deciding whether, when and to which extent they should invest in IT innovations with different maturity. The IT innovation strategy thereby should consider mature as well as fashionable IT innovations as investment alternatives. As previous research's focus is rather qualitative, we develop a dynamic optimization model that determines the optimal strategic allocation of an IT innovation budget to mature and fashionable IT innovations. By using a simulation-based approach, we analyze the essential causal relationships between the theoretical optimum and the factors of major influence. We find that companies should invest in fashionable IT innovations even if their own level of innovativeness is rather low and the technology's success probability has not reached a high threshold yet. Our findings provide a basis for further research on mindful investment decisions in fashionable IT innovations.