

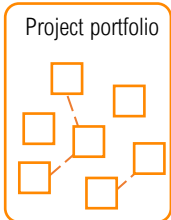
MODELING THE PROJECT PORTFOLIO RISK CONSIDERING INTERACTIONS AMONG RISK FACTORS AND THEIR IMPACTS ON PROJECT PORTFOLIO SUCCESS DIMENSIONS

Objective

To develop a project portfolio risk assessment (PPRA) model considering interactions among risk factors and their impacts on the project portfolio success dimensions



Background



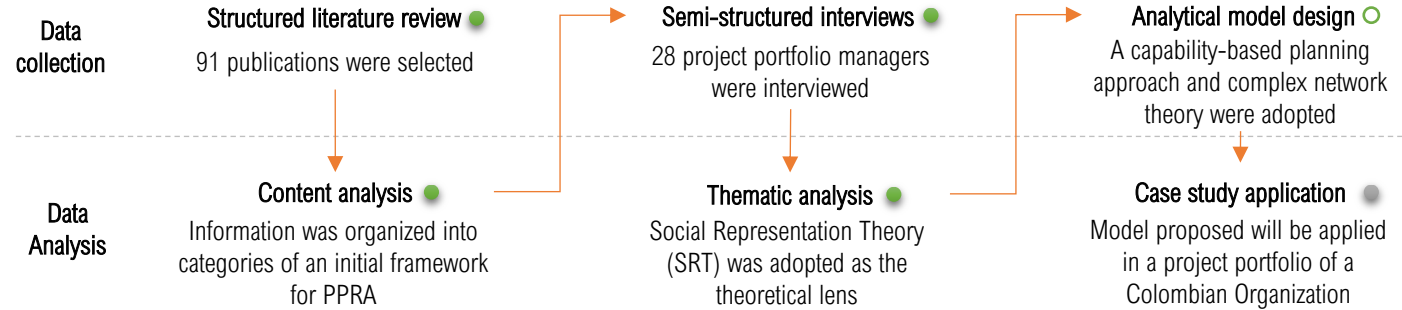
Project Portfolio establishes a relationship between projects and the organization's strategy [1,2]

The results may not be as expected due to **risk factors** [2,3]

- Risk measures derived from projects (individual or aggregate) have been generally used to **assess** the project portfolio risk [2,4]
- Indirect effects generated by **risk factors interactions** must be considered [4,5]
- Traditional risk assessment does not consider some **project portfolio attributes** either its **environment** [4,5,6]
- Risk management applied at portfolio level **has evidenced a positive influence on project portfolio success** [1]

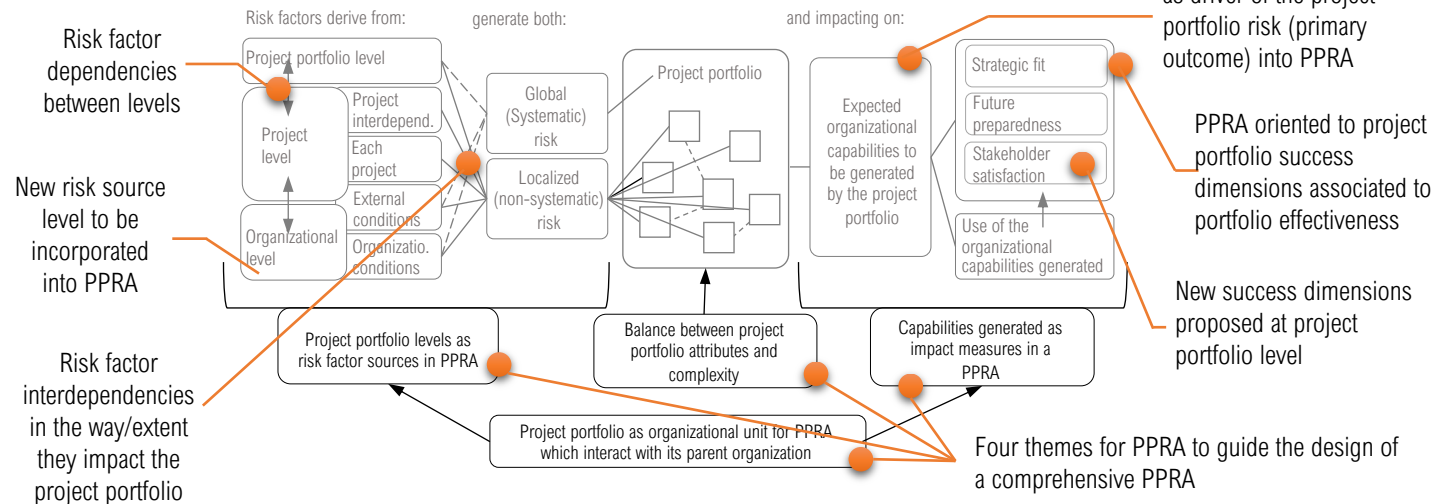
Methodology

● finished, ○ in process, ● not started



Main result: Proposed framework for a comprehensive PPRA

● New insights/issues



References

- [1] Teller, J., & Kock, A. (2013). An empirical investigation on how portfolio risk management influences project portfolio success. *International Journal of Project Management*, 31(6), 817–829
- [2] Sanchez, H., & Robert, B. (2010). A matrix for monitoring the strategic performance of project portfolios. *International Journal of Project Organisation and Management*, 2(2), 135
- [3] Hofman, M., Spalek, S., & Grell, G. (2017). Shedding New Light on Project Portfolio Risk Management. *Sustainability*, 9(10), 1798
- [4] Ghasemi, F., Sari, M., Yousefi, V., Falsafi, R., & Tamosaitienė, J. (2018). Project Portfolio Risk Identification and Analysis, Considering Project Risk Interactions and Using Bayesian Networks. *Sustainability*, 10(5), 1609
- [5] Ahmadi-Javid, A., Fatemina, S. H., & Gemünden, H. G. (2020). A Method for Risk Response Planning in Project Portfolio Management. *Project Management Journal*, 51(1), 77–95
- [6] Hofman, M., & Grell, G. (2018). Project portfolio risk categorisation – Factor analysis results. *International Journal of Information Systems and Project Management*, 6(4), 39–58