

Wisconsin Interdisciplinary Research Symposium

A Constructivist Grounded Theory Approach to How Project
Managers Facilitate Decision Making to Maximize Benefits

Christopher C. Duncan, DBA
Batterman School of Business: Concordia University - Wisconsin
June 6, 2025

Research Problem

- ▶ Countless organizations use project management to implement both operations and strategic action (Stretton, 2023; Wu et al., 2017).
- ▶ There is a lack of standardization that defines good project decisions (Nijhuis et al., 2018; Svejvig, 2021).
- ▶ There is a need for project management decision guidance (Lalic et al., 2022; Pegulescu, 2021).
- ▶ Scant project decision-making guidance exists to support the project manager.

Literature Review

The literature review explored four main topics:

- ▶ The value generated by projects executed by project-performing organizations (Gonçalves et al., 2023; Mahmoudi et al., 2021; Pegulescu, 2021).
- ▶ The ways expected utility theory (EUT) shapes modern economic thought (Ferrari-Toniolo et al., 2022; Gilboa & Samuelson, 2022; von Neumann & Morgenstern; 1953).
- ▶ Project methodologies represent standardized, repeatable processes (Burga et al., 2020; Bērziša & Grabis, 2009; Carujo et al., 2022).
- ▶ The role project decisions play in the project management environment with a focus on the problems that plague them (Kutsch & Hall, 2010; PMBOK, 2021; Qazi et al., 2021).

Research Questions

- ▶ *Research Question 1:* How do PMs experience rational and irrational group-based decisions during the execution of project decision tasks?
- ▶ *Research Question 2:* How can project governance help PMs improve the impact of economic utility and the maximization of project benefits during decision-making tasks?
- ▶ *Research Question 3:* How can the PM's interpersonal skills be used to combat stakeholder biases and ensure the maximization of project benefits during decision-making tasks?

Constructivist Grounded Theory: Methodology & Methods

- ▶ Recruitment and theoretical sampling (Chun Tie et al., 2019)
- ▶ Data collection (Charmaz, 2014a)
- ▶ 44 Initial codes (Charmaz, 2014b; Fossey et al., 2002)
- ▶ Focused coding led to 12 categories and four themes (Charmaz, 2014a)
- ▶ Theoretical saturation (Creswell & Poth, 2018; Glaser & Strauss, 1967)
- ▶ Theory building (Charmaz, 2014b)

Limitations

- ▶ Data access – limited sample
- ▶ Time constraint – two months
- ▶ Collection Methods
- ▶ Researcher experience – low/novice
- ▶ No generalization of findings

Delimitations

- ▶ Access to data – 13 respondents
- ▶ Duration of study
- ▶ Location – virtual only
- ▶ Selected aspects of PM – decisions, value, biases, experiences
- ▶ Participant criteria - PMs

Data Collection - Systems

- ▶ Extant Literature: 'Decision' and 'Bias' keyword review of PMBOK (2021)
- ▶ Individual interviews: 13 project professionals
 - ▶ Started with three PMs in my network, grew to five
 - ▶ Purposive sampling and snowballing added eight
- ▶ 100% virtual interviews via Microsoft Teams audio only
- ▶ Transcribed interviews via Clipto.com
- ▶ Entered transcriptions into NVivo for coding and recordkeeping
- ▶ Categorization/Themes analyzed by hand (Post-it note shuffle)
- ▶ Journaling

Data Analysis

- ▶ Research Question One: Decision experiences
 - ▶ 15 codes & 4 categories: Skills and Methodology themes
- ▶ Research Question Two: Improving value via methodology and tasks
 - ▶ 12 codes & 2 categories: Value, Skills, Methodology and Pitfalls
- ▶ Research Question Three: The PM skillset to deliver benefits
 - ▶ 17 codes & 6 categories: Skills, Methodology, and Pitfalls themes
- ▶ Total coded statements: 673
 - ▶ RQ1: 336
 - ▶ RQ2: 206
 - ▶ RQ3: 131

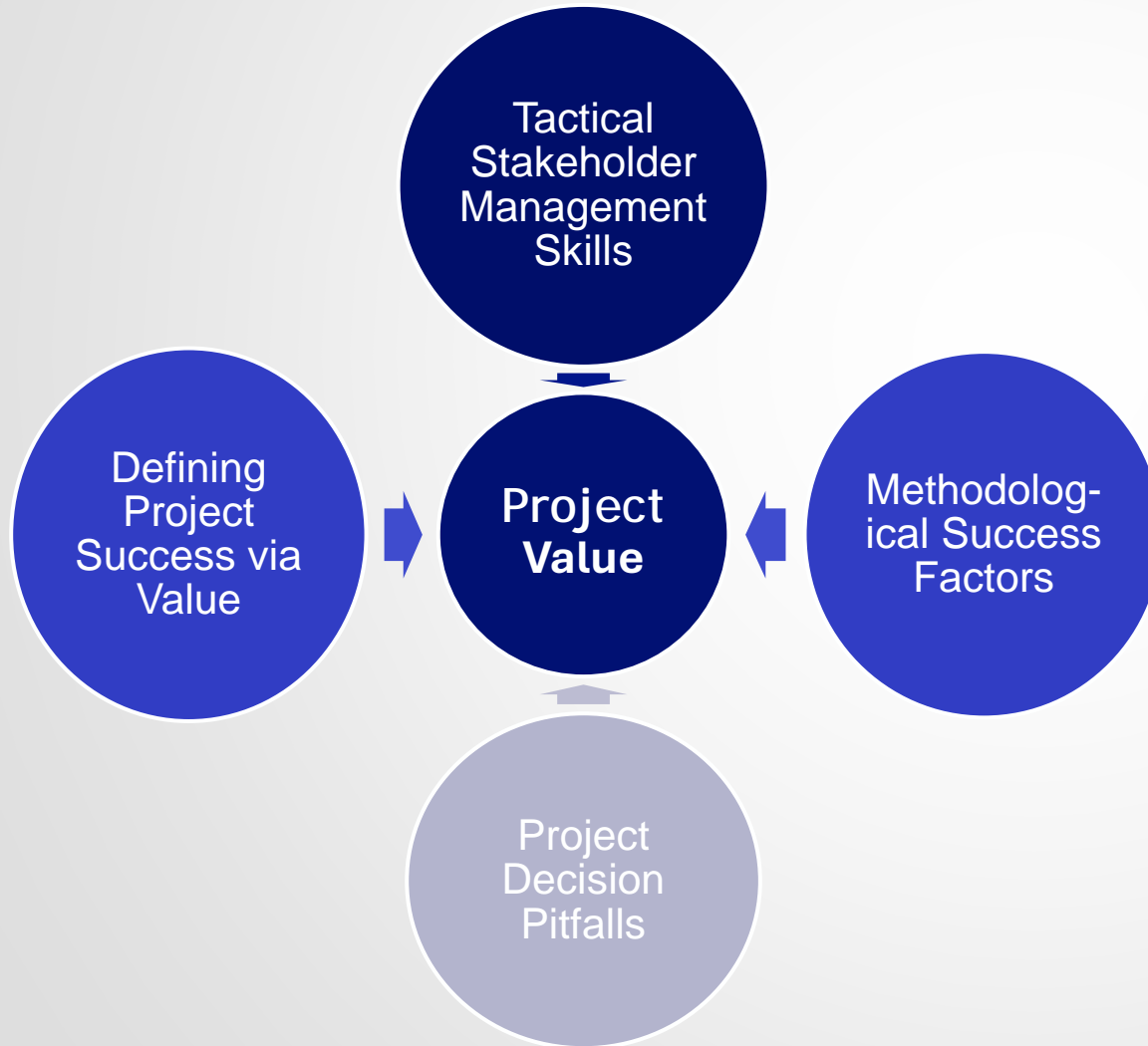
Initial Categories	Source	References
Decision-Making Experiences	RQ1	336
As Tasks		93
Authority and Autonomy		18
PM Skillset		76
Stakeholder Considerations		48
Technical Expertise		43
Utility via Governance	RQ2	206
Measurements		54
Methodologies		104
Skills vs. Biases	RQ3	131
Groupthink		18
Optimism Bias		12
Overconfidence Bias		18
Planning Fallacy		19
Uniqueness Bias		12

Data Analysis: Categories

Research Results

- ▶ The decision-making experience for the project professional is influenced by four main themes: **value, skills, methodology and pitfalls.**
- ▶ This research shared a close connection to Rational Choice Theory since it was well aligned with the description of actors' behaviors, consisting of constraints, beliefs, and preferences (Vredenburg, 2020).
- ▶ Value and utility are elusive, poorly defined, and poorly understood by PMs and project-performing organizations.

The VSMP Project Decision Perspective



Value
Skills
Methodology
Pitfalls

Theory: The VSMP Project Decision Perspective

- ▶ Defined: Project managers leverage decision making to deliver project value by defining project success via value, implementing tactical stakeholder management skills, executing methodological success factors, and mitigating project decision pitfalls.
- ▶ The VSMP Project Decision Perspective is the first theory to describe how the project manager endeavors to incorporate value into project decision making.

Practicality and Applicability of Theory

For the Firm

- ▶ Value: A tool to assess how their projects are measured, especially when it comes to value and utility
- ▶ Methodology: Evaluate project methodology tasks, ensuring they incorporate and deliver value

For the PM

- ▶ Skills: Illuminate value concepts, stakeholder management skills, and tactical elements of project management
- ▶ Pitfalls: Understand stakeholder biases to better understand how they inhibit project performance

Recommendation for Future Research

- ▶ Investigate why the following question stumps PMs: “How does your organization define project value?”
- ▶ Step 2a. A quantitative inquiry via multiple logistic regression that asks both project professionals and stakeholders to define business value (dependent variable), via utility, project value, outcomes, resources, and methodological value (as independent variables).
- ▶ Step 2b. A quantitative inquiry via association analysis by Apriori algorithm to examine influences of the variables above on business/project value.
- ▶ Build on the works of Jaafari (2023) and Maassen (2023) with further research into utility as a component of methodological value.

Thank you. Really, thank you!

What are your questions?

Practicality of Theory

- ▶ Firms can apply the data compiled by this research as a tool to assess how their projects are measured, especially when it comes to value and utility.
- ▶ This research can influence professional development and training development by teaching value concepts, stakeholder management skills, and tactical elements of project management like resource allocation, scoping, and budget skills.
- ▶ Organizations can use this study to inspect their project methodology tasks, ensuring they add value and define value.
- ▶ Organizations can utilize this theory and assess the common internal and external biases they face to achieve a better understanding of how these biases inhibit project performance and detract from project value.

References

Burga, R., Leblanc, J., & Rezanian, D. (2020). Exploring student perceptions of their readiness for project work: Utilizing social cognitive career theory. *Project Management Journal*, 51(2), 154–164. <https://doi.org/10.1177/8756972819896697>

Charmaz, K. (2014a). *Constructing grounded theory* (2nd ed.). SAGE Publications, Inc.

Bērziša, S., & Grabis, J. (2010). An approach for implementation of project management information systems. *Information Systems Development: Towards a Service Provision Society* (pp. 423–431). https://doi.org/10.1007/b137171_44

Carujo, S., Anunciação, P. F., & Santos, J. R. (2022). The project management approach. A critical success factor in digital transformation initiatives. *Economics & Culture*, 19(1), 64–74. <https://doi.org/10.2478/jec-2022-0006>

Charmaz, K. (2014a). *Constructing grounded theory* (2nd ed.). SAGE Publications, Inc.

Charmaz, K. (2014b). Grounded theory in global perspective: Reviews by international researchers. *Qualitative Inquiry*, 20(9), 1074–1084. <https://doi.org/10.1177/1077800414545235>

Creswell, J. & Poth, C. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE Publications, Inc.

Ferrari-Toniolo, S., Seak, L. C. U., & Schultz, W. (2022). Risky choice: Probability weighting explains independence axiom violations in monkeys. *Journal of Risk and Uncertainty*, 65(3), 319–351. <https://doi.org/10.1007/s11166-022-09388-7>

Fossey, E., Harvey, C., Mcdermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian & New Zealand Journal of Psychiatry*, 36(6), 717–732. <https://doi.org/10.1046/j.1440-1614.2002.01100.x>

Gilboa, I., & Samuelson, L. (2022). What were you thinking? Decision theory as coherence test. *Theoretical Economics*, 17(2), 507–519. <https://doi.org/10.3982/TE4707>

Glaser, B.G. & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine de Gruyter

Gonçalves, M. L. A., Penha, R., Silva, L. F., Martens, C. D. P., & Silva, V. F. (2023). The relationship between project management and digital transformation: Systematic literature review: A relação entre gerenciamento de projetos e transformação digital: Revisão sistemática da literatura. *RAM. Mackenzie Management Review / RAM. Revista de Administração Mackenzie*, 24(4), 1–32. <https://doi.org/10.1590/1678-6971/eramr230075.en>

Jaafari, A. (2023). It is time to shift to integrated business and project management. *PM World Journal*, 12(4), 1–13.

References

- Kutsch, E., & Hall, M. (2010). Deliberate ignorance in project risk management. *International Journal of Project Management*, 28(3), 245–255. <https://doi.org/10.1016/j.ijproman.2009.05.003>
- Lalic, D. C., Lalic, B., DeliĆ, M., Gracanin, D., Stefanovic, D. (2022). How project management approach impact project success? From traditional to Agile. *International Journal of Managing Projects in Business*, 15(3), 494–521. <https://doi.org/10.1108/IJMPB-04-2021-0108>
- Maassen, M. A. (2023). Project management in the wind energy field. Case study: Evaluation of wind energy projects through the net present value. *Proceedings of the International Conference on Business Excellence*, 17(1), 80–88. <https://doi.org/10.2478/picbe-2023-0010>
- Mahmoudi, A., Deng, X., Javed, S. A., & Zhang, N. (2021). Sustainable supplier selection in megaprojects: Grey ordinal priority approach. *Business Strategy & the Environment (John Wiley & Sons, Inc)*, 30(1), 318–339. <https://doi.org/10.1002/bse.2623>
- Nijhuis, S., Vrijhoef, R., & Kessels, J. (2018). Tackling project management competence research. *Project Management Journal*, 49(3), 62–81. <https://doi.org/10.1177/8756972818770591>
- Pegulescu, I. A. (2021). Theoretical approaches in project management. *Young Economists Journal / Revista Tinerilor Economisti*, 18(37), 64–75.
- Project Management Institute. (2021). *A guide to the project management body of knowledge (PMBOK Guide) – And the standard for project management*. (7th ed.) Project Management Institute, Inc.
- Qazi, A., Daghfous, A., & Khan, M. S. (2021). Impact of risk attitude on risk, opportunity, and performance assessment of construction projects. *Project Management Journal*, 52(2), 192–209. <https://doi.org/10.1177/8756972820985673>
- Stretton, A. (2023). A short history of modern project management. *PM World Journal*, 12(7), 11–18.
- Svejvig, P. (2021). A Meta-theoretical framework for theory building in project management. *International Journal of Project Management*, 39(8), 849–872. <https://doi.org/10.1016/j.ijproman.2021.09.006>
- von Neuman, J. & Morgenstern, O. (1953). *Theory of games and economic behavior* (3rd ed.). Princeton University Press.
- Vredenburg, K. (2020). A unificationist defence of revealed preferences. *Economics and Philosophy*, 36(1), 149–169. <https://doi.org/10.1017/S0266267118000524>
- Wu, W.-Y., Rivas, A. A. A., & Liao, Y.-K. (2017). Influential factors for team reflexivity and new product development. *Project Management Journal*, 48(3), 20–40. <https://doi.org/10.1177/875697281704800302>