

Navigating Complexity: A Mixed-Methods Study of Tourism Managers' Decision-Making Using Mental Maps and Theories-in-Use

Jacky Wi Chung Tseng, University of St.Gallen

Address of corresponding author:

First and last name:	Jacky Wi Chung Tseng
Institution line 1:	University of St.Gallen
Institution line 2:	Institute for Systemic Management and Public Governance
Address line:	Bohl 1
ZIP, place, country:	9000, St.Gallen, Switzerland
E-Mail:	Jacky.tseng@unisg.ch
Phone:	+41 79 303 91 14
Fax:	-

1. Introduction and Context

Decision-making processes within the tourism sector are inherently complex and heterogeneous, particularly when confronted by dynamic and uncertain environments. While the importance of cognitive agility and flexible mental models is acknowledged (Hodgkinson & Healey, 2020; Felin et al., 2022), there is a notable absence of research systematically investigating how managers in this sector actually make decisions. This research project addresses this critical gap by integrating two powerful conceptual frameworks: mental maps, which depict how managers perceive and structure their environment (Eden, 1992), and the theory-in-use [TiU] approach (Argyris & Schön, 1978), which distinguishes between espoused rationales and implicit, action-guiding beliefs (TiU). The innovation lies in applying this combined perspective to illuminate management decision-making in the unique context of tourism. The study's relevance stems from its potential to uncover discrepancies between stated intentions and actual behaviour, providing practically significant insights for enhancing decision quality under uncertainty – a paramount concern for both managers and organizations.

2. Research Objective and Research Questions

The overarching research objective of this study is to develop a deep understanding of the complex management decision-making processes employed by managers in the tourism sector, with particular consideration of their cognitive structures (Mental Maps) and action-guiding beliefs (TiU). This objective is pursued through the following key research questions:

- **Mental Maps:** How do tourism managers structure and utilize mental maps in their decision-making processes?

- **Espoused vs. implicit beliefs:** To what extent, and in which patterns, do espoused decision rationales differ from actual action-guiding beliefs (TiU) as reflected in managers' mental maps and narratives?
- **Consequences:** What are the potential consequences of discrepancies between espoused theories and theories-in-use for the perceived effectiveness of management decisions in the tourism sector?

3. Research Design and Methodology

To comprehensively address the research questions, a sequential exploratory mixed-methods design is employed (Creswell, 2014, pp. 225–226; Mariani & Baggio, 2020, p. 1655). This design leverages the complementary strengths of qualitative and quantitative methods to offset their individual limitations (Kelle, 2014, p. 158).

The study follows a multi-stage approach, beginning with an in-depth qualitative phase to explore managers' cognitive decision-making processes and theories-in-use, and subsequently extending into quantitative phases to test and validate emerging insights.

Phase 1 (Qualitative): Semi-structured interviews are conducted with 30 tourism executives. Participants are recruited through targeted outreach and snowball sampling to ensure diversity in roles and company sizes. Interviews explore decision-making behaviors, mental models, and applied theories-in-use (Argyris & Schön, 1997; Zeithaml et al., 2020). The data are analyzed using the Gioia methodology (Gioia, Corley, & Hamilton, 2013), enabling inductive theory building through systematic coding and aggregation.

Phase 2 and Phase 3 (Quantitative, planned): Insights derived from the qualitative phase inform the development of hypotheses and the design of quantitative instruments. The subsequent phases will quantitatively test the identified relationships, ensuring empirical validation.

The integration of qualitative exploration and quantitative testing ensures methodological triangulation, strengthening the validity, depth, and practical relevance of the study's findings.

4. Current Stage of Research

The project is currently in an advanced conceptualization phase. The qualitative data collection (30 interviews) is successfully completed, establishing a foundational knowledge base. A systematic literature review is concurrently underway to solidify the theoretical underpinnings and inform the design of the subsequent quantitative phases.

Three key questions/challenges for discussion:

1. How can mental maps and the TiU they contain be captured in a methodologically reliable and valid way, especially when managers themselves are unaware of them?
2. Which strategies are most promising for gaining access to a diverse sample of tourism managers across different hierarchical levels and for encouraging their willingness to openly reflect on their decision-making processes?
3. How can the connection between the identified mental maps (and discrepancies between espoused theory and TiU) and the actual effectiveness or outcomes of management decisions be empirically examined beyond the managers' self-perceptions?

References:

- Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Addison-Wesley.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Eden, C. (1992). Strategy development as a social process. *Journal of Management Studies*, 29(6), 799–811.
- Felin, T., Foss, N. J., & Ployhart, R. E. (2022). The microfoundations movement in strategy and organization theory. *Academy of Management Annals*, 16(1), 450–487.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31.
- Hodgkinson, G. P., & Healey, M. P. (2020). Cognition in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 7, 157–181.
- Kelle, U. (2014). Mixed Methods. In N. Baur & J. Blasius (Eds.), *Handbuch Methoden der empirischen Sozialforschung* (pp. 152-166). Wiesbaden: Springer.
- Mariani, M. M., & Baggio, R. (2020). The relevance of mixed methods for network analysis in tourism. *International Journal of Contemporary Hospitality Management*, 32(4), 1643–1673.