ERICSSON

UNIVERSITY OF LEEDS
Leeds University Business School

The Categorization of an Emergent Digital Technology: The Internet of Things

Festival Theme: Technology & Innovation

Submission By:
David Larkin, 2nd Year PGR, Management Division & C-TIE

Doctoral Supervisors:
Professor Krsto Pandza & Professor Tyrone Pitsis

Abstract:

Innovations in digital technologies are presenting both unexpected and unprecedented applications contributing to the potential formation and modification of market categories. Using the empirical context of Internet of Things (IoT), this research responds to calls from category scholars for greater attention to the social dimensions of category emergence. The guiding research question is *how are actors in the emergent field of the IoT using narratives to shape the construction of related market categories*? The intention is to deepen the understanding of category formation, particularly in contexts where there are no exemplars or dominant accounts to guide understandings, expectations and valuations.

Introduction:

"It's a market [IoT] that hardly exists. It's a market that needs to be created…"
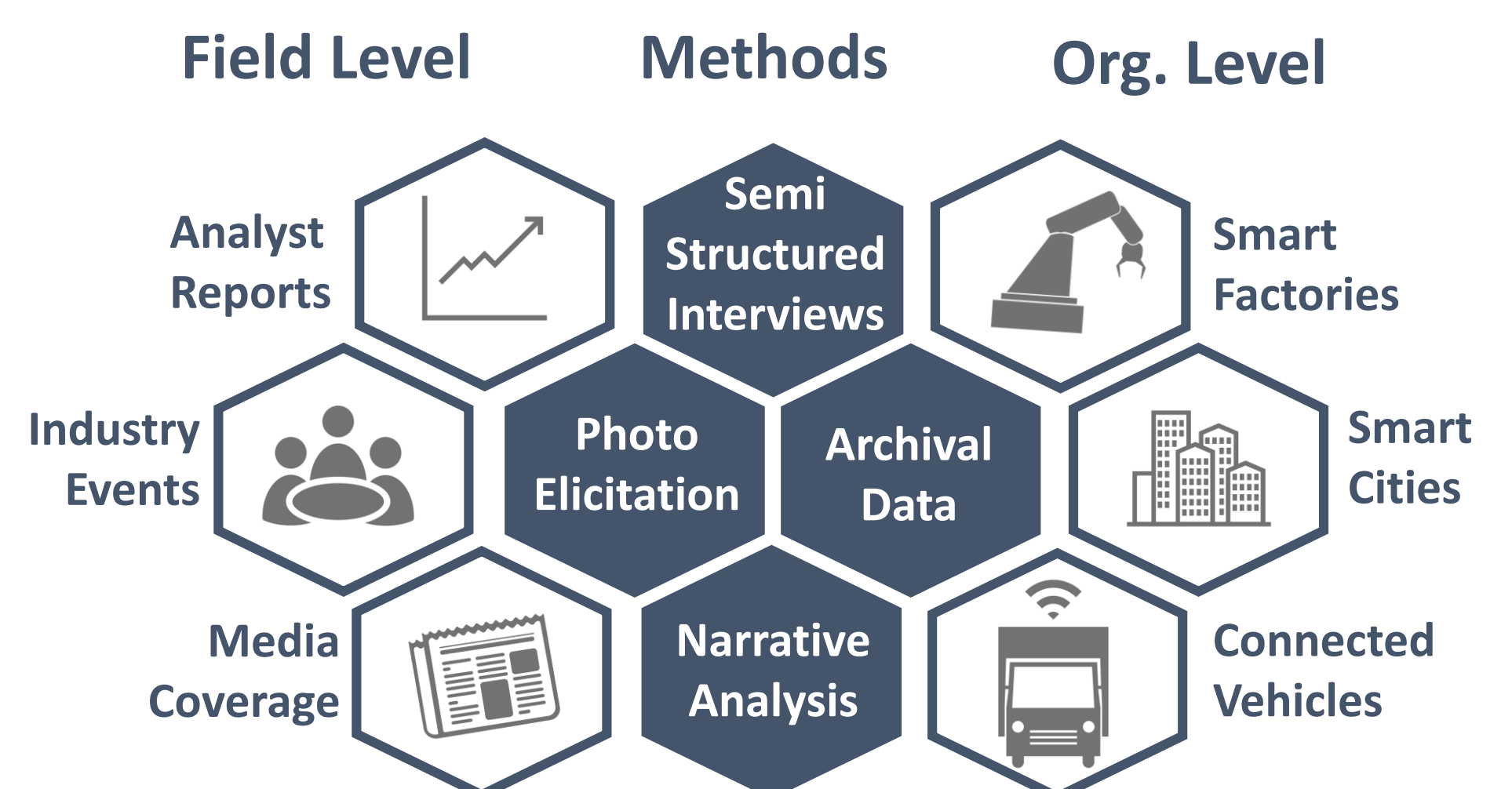
- Ericsson Employee, IoT Ecosystem Unit

The transformative potential of novel technologies can be manifested in the emergence, evolution and decline of categories (e.g., products, industries and markets). Categories shape expectations, behaviour, and valuations that structure the social world. A dominant focus in the literature has been on the 'illegitimacy discount' i.e. the penalties of deviating from established prototypes or standards of a category (Durand et al., 2017). Emphasis on the disciplining function of categories has typically neglected questions of what a new phenomenon means or why it is consequential (Grodal & Kahl, 2017). Thus, the formation of new categories remains under examined, particularly the social processes of categorization, and the abstract dimensions of new categories.

Research Design:

To explore the emergence and construction of the IoT and related market categories, two case studies will be generated: 1) Field Level – focusing on the narratives shaping the perceptions and understandings of the nascent category; 2) Organizational Level - Ericsson's IoT Group focusing on the narratives of the three emerging proto-categories.

Field Level | **Methods** | **Org. Level**

Analyst Reports — Semi Structured Interviews — Smart Factories

Industry Events — Photo Elicitation — Archival Data — Smart Cities

Media Coverage — Narrative Analysis — Connected Vehicles

Contribution to Theory:

Responding to calls from categories scholars, this research makes the following contributions to the literature.

- **Abstract Dimensions of Categories** — Bajpai & Weber (2017)
- **Category Emergence** — Kennedy & Fiss (2013)
- **Social Processes of Categorization** — Durand et al. (2017)
- **Discursive Construction of Categories** — Grodal & Kahl (2017)

References:

Bajpai, K. and Weber, K. 2017. Privacy in Public: Translating the Category of Privacy to the Digital Age *In*: "From Categories to Categorization: Studies in Sociology, Organizations and Strategy at the Crossroads".

Durand, R., Granqvist, N. and Tyllstrom, A. 2017. From Categories to Categorization: A Social Perspective on Market Categorization *In*: "From Categories to Categorization: Studies in Sociology, Organizations and Strategy at the Crossroads".

Grodal, S. and Kahl, S.J. 2017. The Discursive Perspective of Market Categorization: Interaction, Power and Context *In*: "From Categories to Categorization: Studies in Sociology, Organizations and Strategy at the Crossroads".

Kennedy, M.T. and Fiss, P.C. 2013. An ontological turn in categories research: From standards of legitimacy to evidence of actuality. J. Management Studies. 50(6).