



Accounting, Analytics and Action

The case of financial due diligence

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UPPSALA
UNIVERSITET

Agenda

Presentation (ca. 30 minutes)

Discussion (ca. 30 minutes)



Objectives

1. Learn about the phenomenon
2. Learn about how I study the IT
3. Learn about my “lessons learned”



Due diligence in mergers and acquisitions (M&A)



Financial due diligence (FDD)



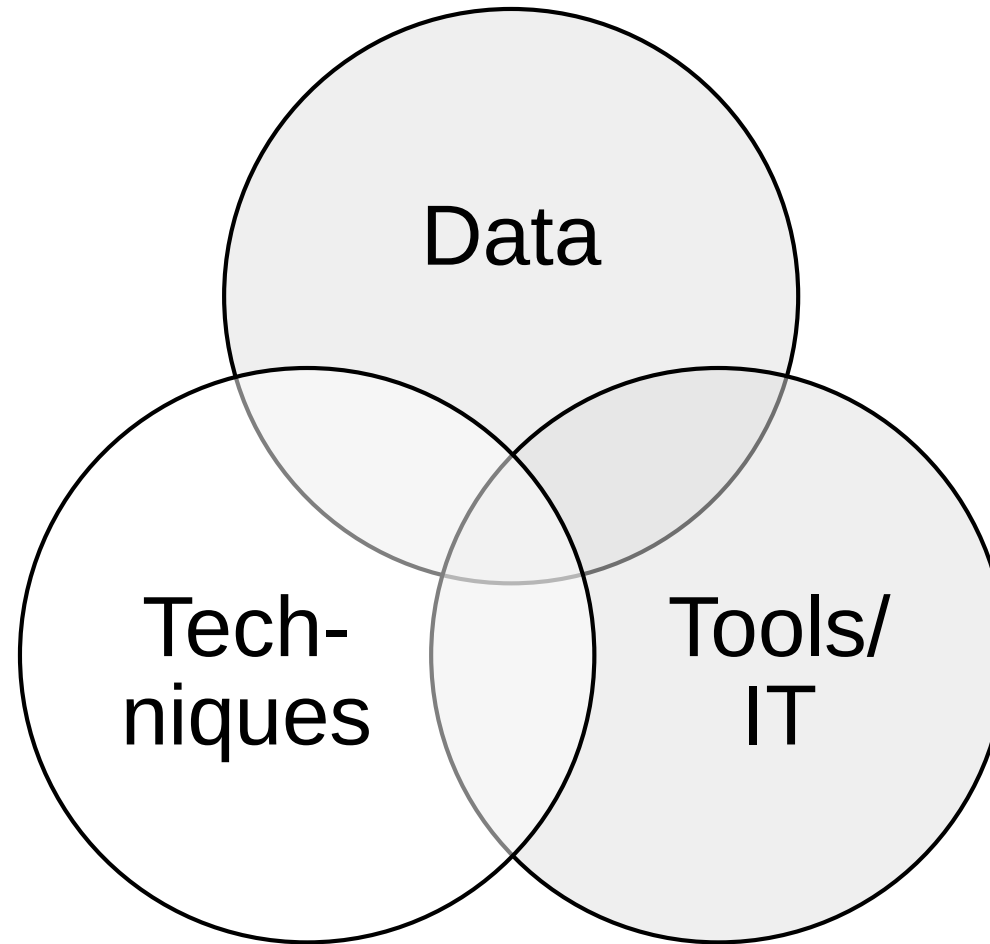
Why analytics?



“The extensive use of data, statistical and quantitative analysis, explanatory and predictive models, and fact-based management to drive decisions and actions”
(Davenport and Harris, 2007, p.7).



Analytics discourse: Three (material) dimensions



Why analytics?





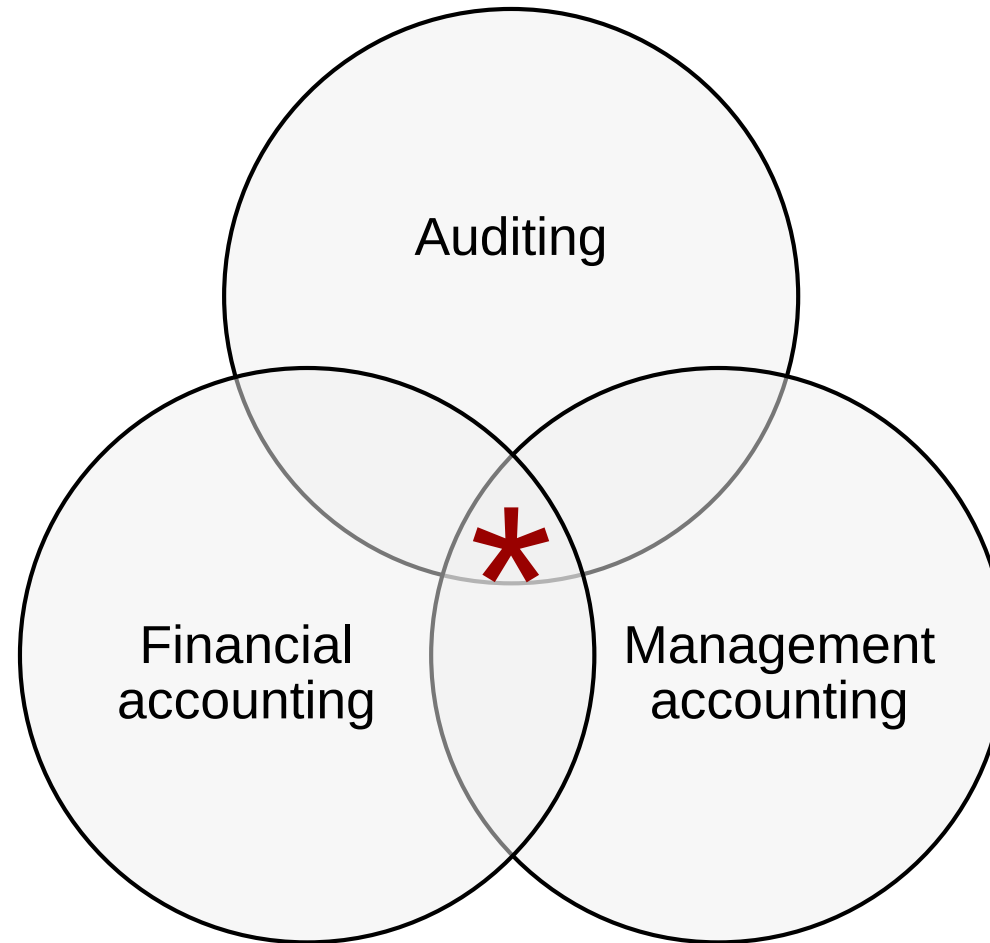
No one (in the academic community) cares about FDD...



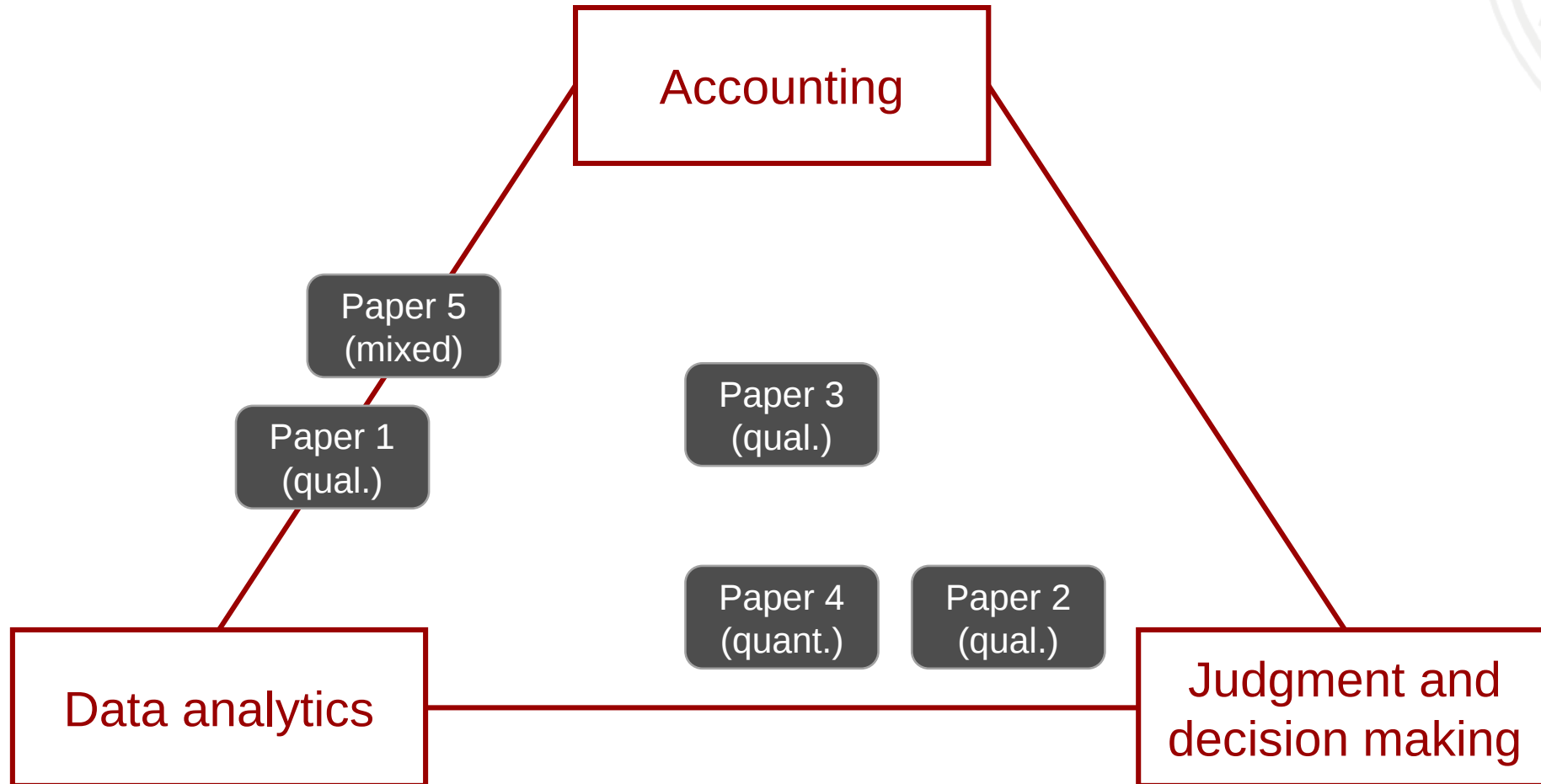
... but many care about the accounting profession and its future!



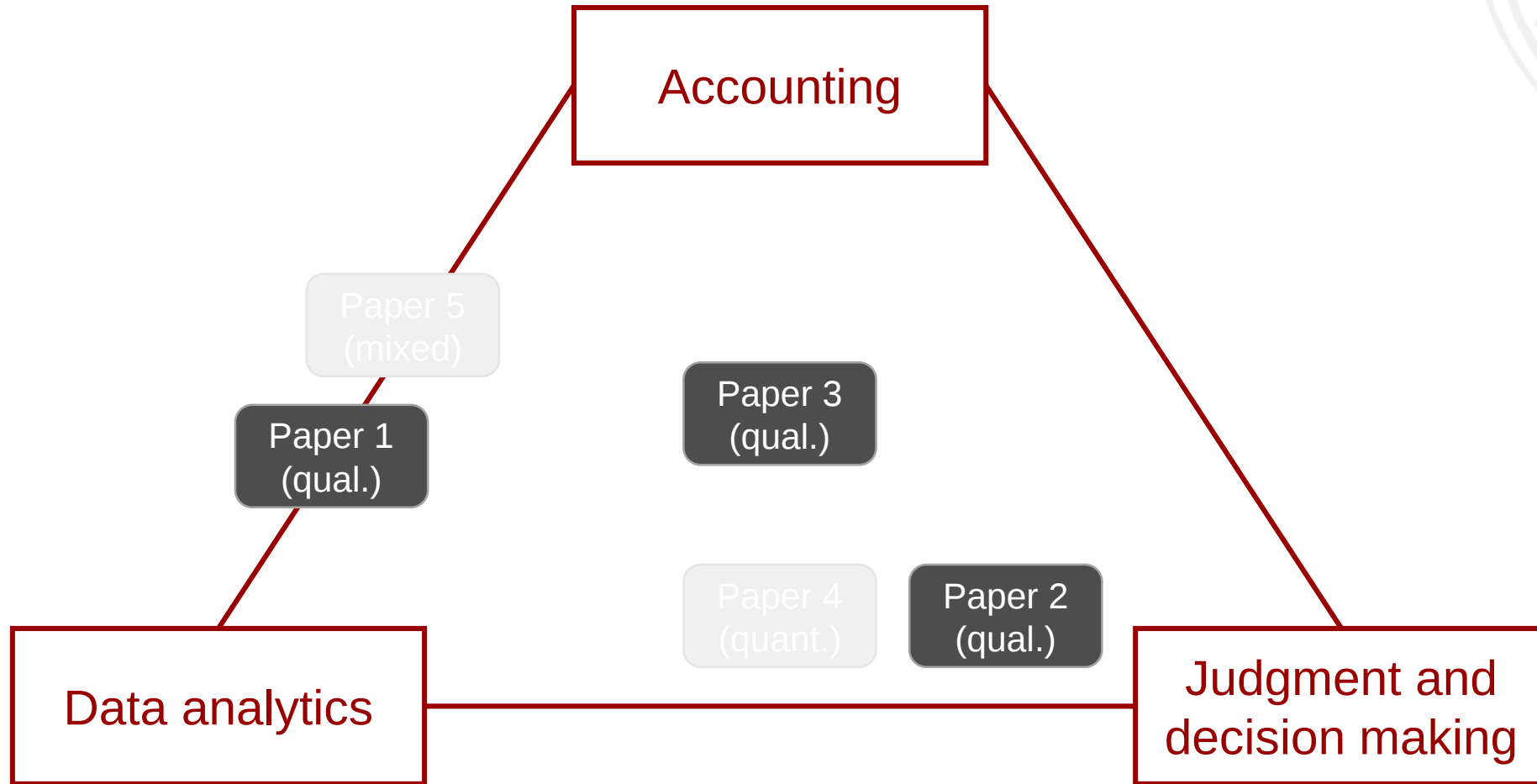
FDD* as a special case of accounting



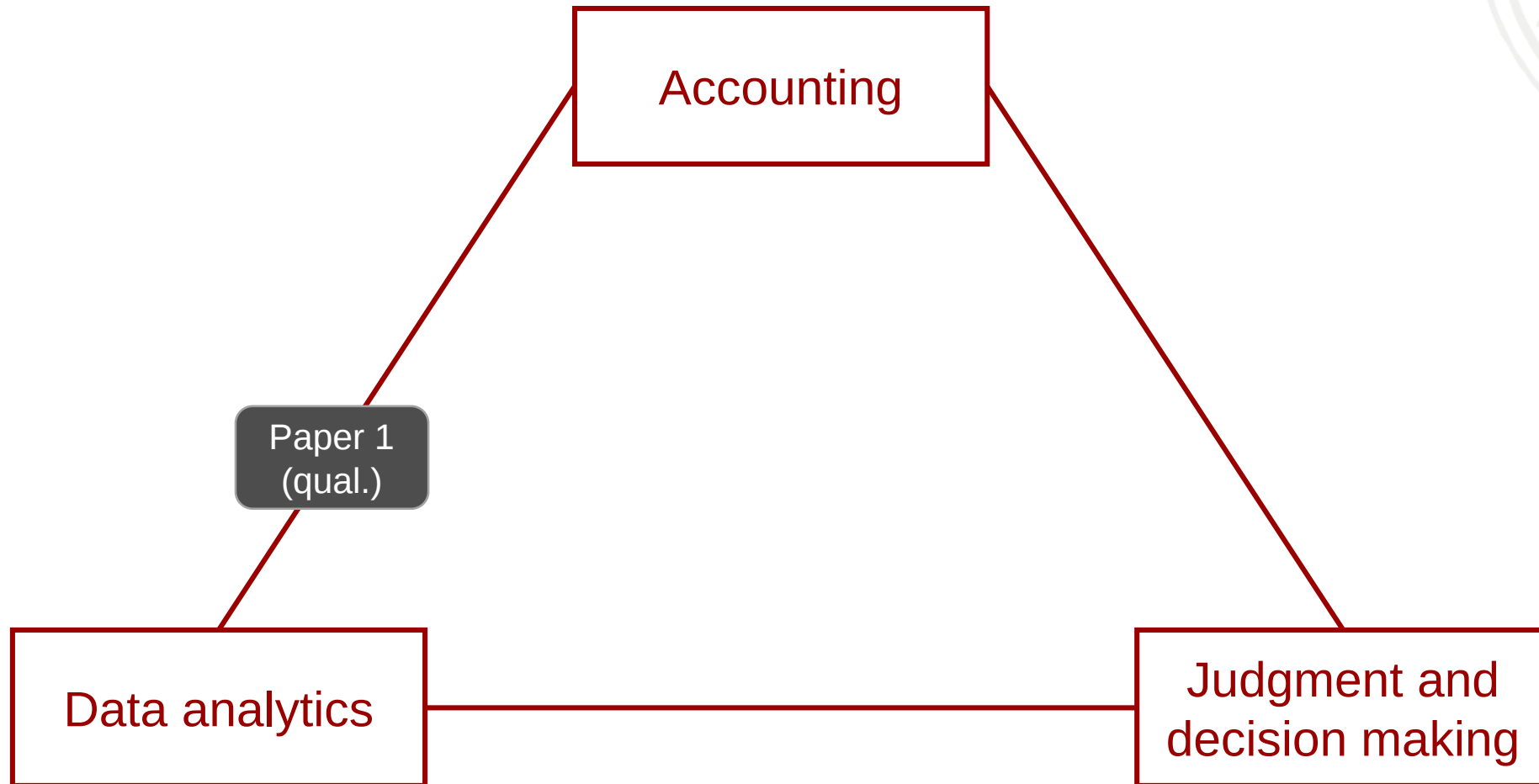
The thesis and its parts



Today's focus



Paper 1



Research question

- How does calculative culture, i.e., the practices and norms of data and model use in an organizational setting, shape the use of DA tools in the financial due diligence (FDD)?

Theory

- Calculative cultures (Power, 2005; Mikes, 2009)
- Heavyweight and lightweight IT (Bygstad, 2017)

Method

- Research design: Qualitative case study
- Primary data: Interviews, observations, other meetings
- Secondary data: Whitepapers, videos, website posts, ...
- Data analysis: Abductive thematic analysis

Key Findings

- Hybrid calc. culture: **Bounded quantitative enthusiasm**
 - Innate enthusiasm for numbers
 - Bounded by interrelated norms (e.g., auditability & explainability) and practices (e.g., reconciliations)
- In many cases, the (non-) use of DA tools can be traced back to the different elements of this calculative culture

Conclusions

- For DA to take over accounting (and FDD), it will take more than greater processing power and fancier visualizations
- It will take better alignment between the properties of the DA tools and the calculative culture of their users

Findings

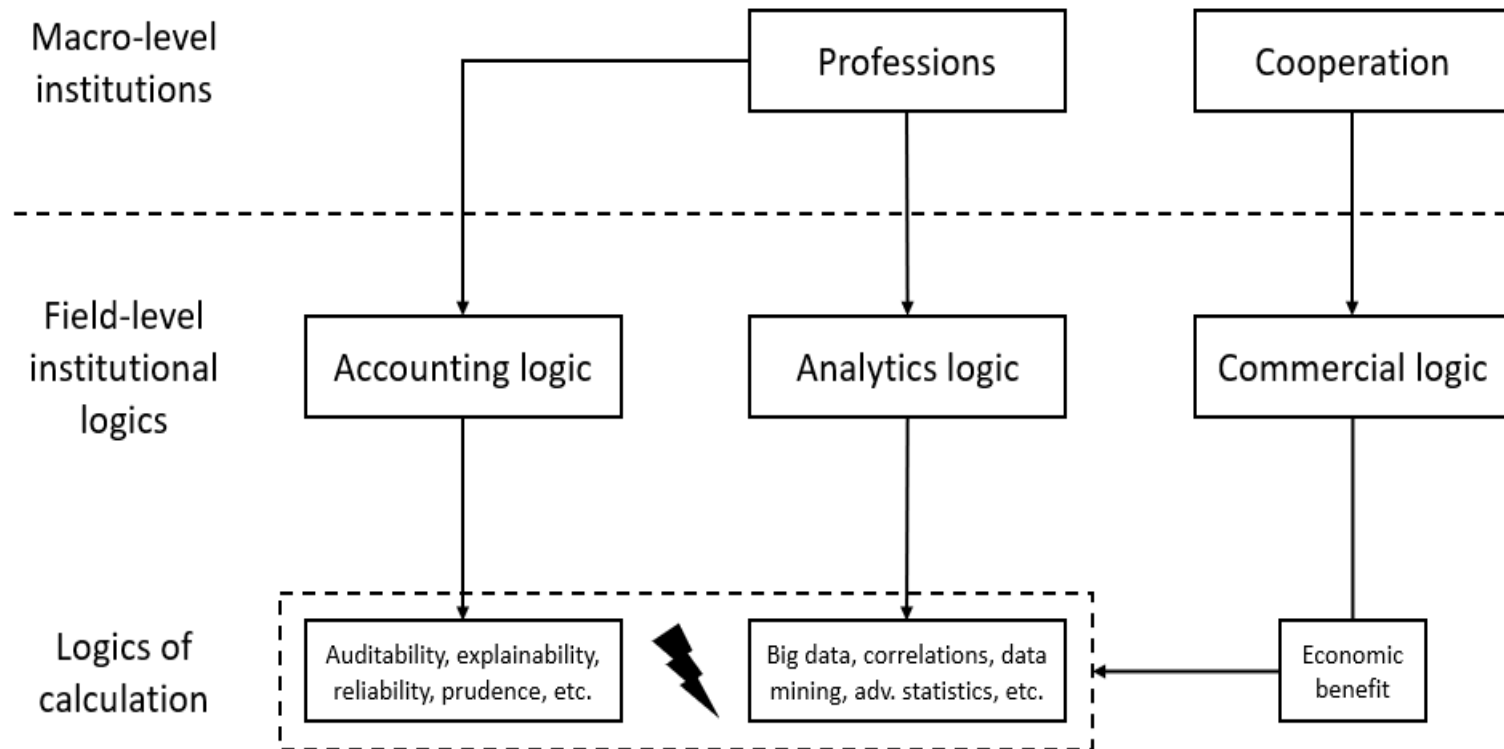


Element	Themes	Link to DA
Practices	• Generic analyses (vertical, horizontal, ratio analyses) • Industry-specific analysis (price-volume, customer churn, etc.) • Accounting adjustments • Reconciliations	• Strong diagnostic focus. Paves way for descriptive and diagnostics use of DA. External data rarely needed • DA tools needed to process transactional data. Adds unprecedented depth to long-practiced analyses • Require reasoning and judgment. Ill-suited for DA solutions • Complicates the integration of (external) non-financial data
Norms	• Homogeneity and assumptions • Explainability and auditability • Time and 80-20 • Scope and customization	• Complicates the integration of (external) non-financial data • Obstructs the use of more complex/less transparent models • Disincentives additional big data-based/DA-driven efforts • Uncertain DA pay-off // Customization vs. scalable DA

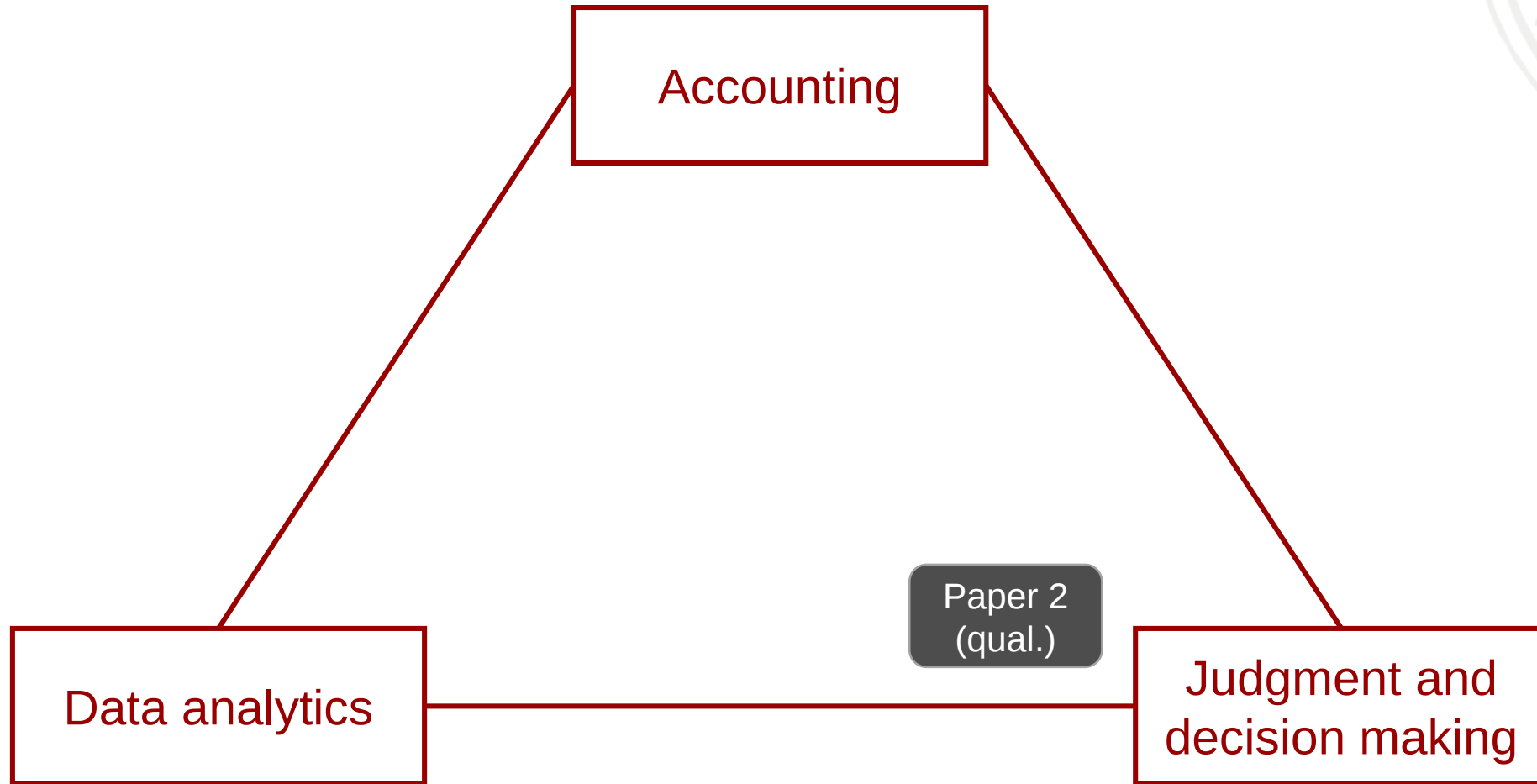
Bounded quantitative enthusiasm

...most deal advisors possessed an innate enthusiasm for numbers. However, this enthusiasm was bounded by the practices and norms of different knowledge regimes, namely financial analysis (**generic and industry-specific analysis, homogeneity and assumption**) transactions (**reconciliations, explainability and auditability, time**), and consulting (**80-20, scope and customization**)

Data analytics use in financial due diligence: The influence of accounting and commercial logic



Paper 2



Research question

- How is digitalization, especially the access to more data and more advanced data analytics tools, affecting the need for accountant's judgment in financial due diligence (FDD)?

Theory

- Logic of judgments of practice (Dewey, 1915)
- Theory of inquiry (Dewey, 1938)

Method

- Research design: Qualitative case study
- Empirical data:
 - Primary data: Interviews, observations, other meetings
 - Secondary data: Whitepapers, videos, website posts, ...
- Data analysis: Abductive thematic analysis

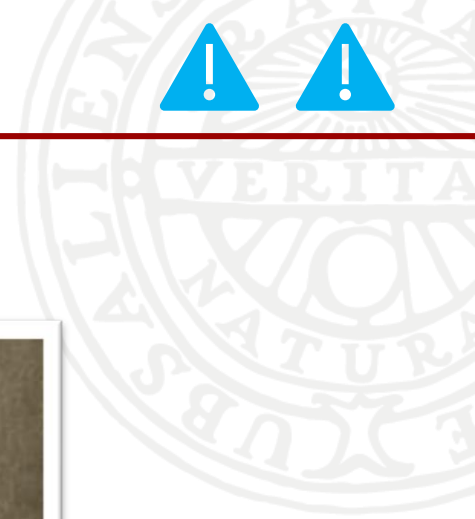
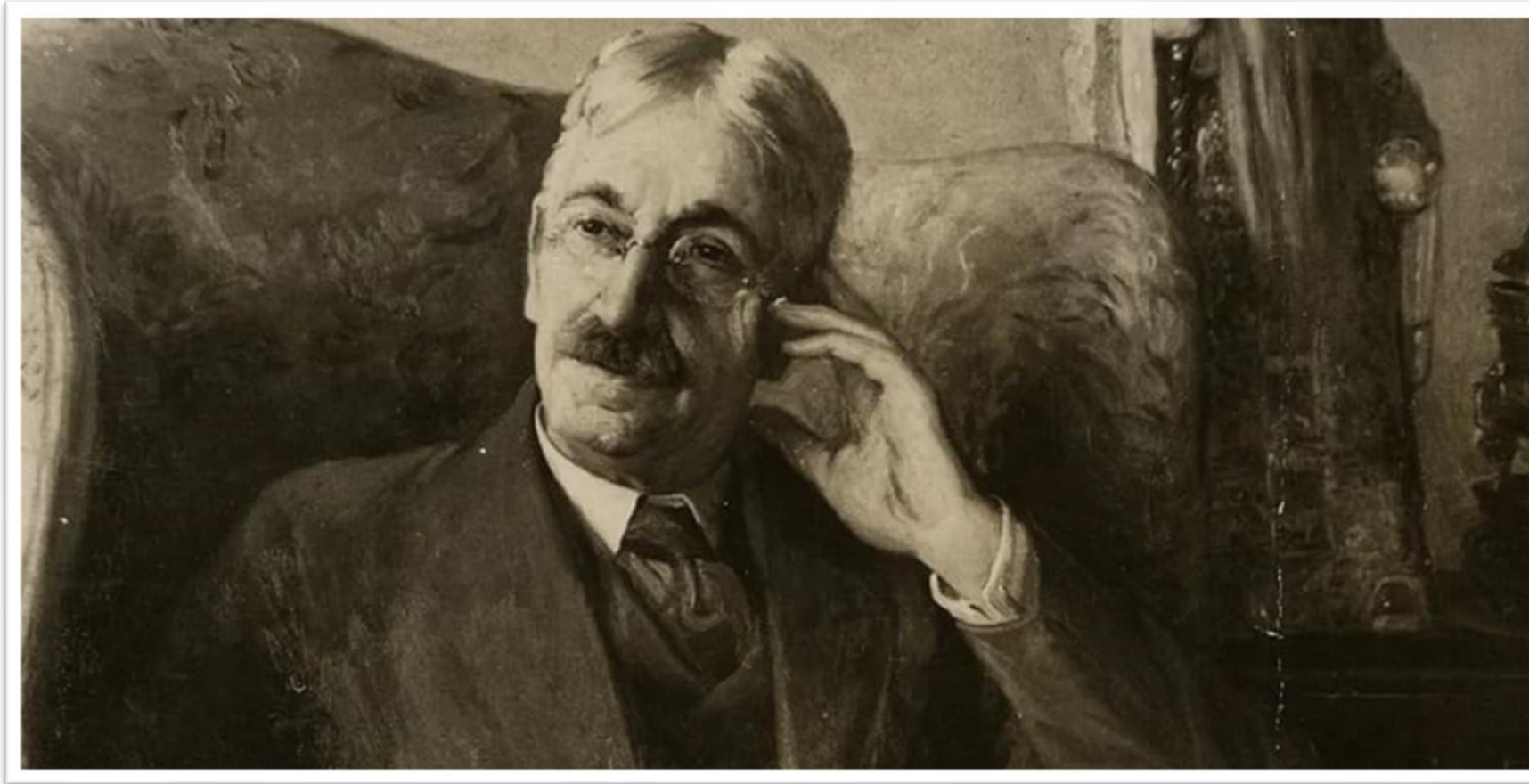
Key Findings

- For the time being, going digital had increased the need for judgment, especially practical judgment, i.e., “judgment of what to do”, in DealCo's FDD practice. By exercising practical judgment, DealCo's advisors determined
 - (i) Which data were to “go into” the analysis,
 - (ii) What to analyze, how to analyze it, and when to stop analyzing it, and
 - (iii) Which insights were to “go out” from the analysis, i.e., which information to report and prioritize

Conclusions

- Despite the recent explosion in data volumes and computing power, FDD has remained a highly pragmatic endeavor. Practical judgment, especially as a means to **manage** and **resist** digitalization-induced **abundances** and **temptations**, appears to be more important than ever

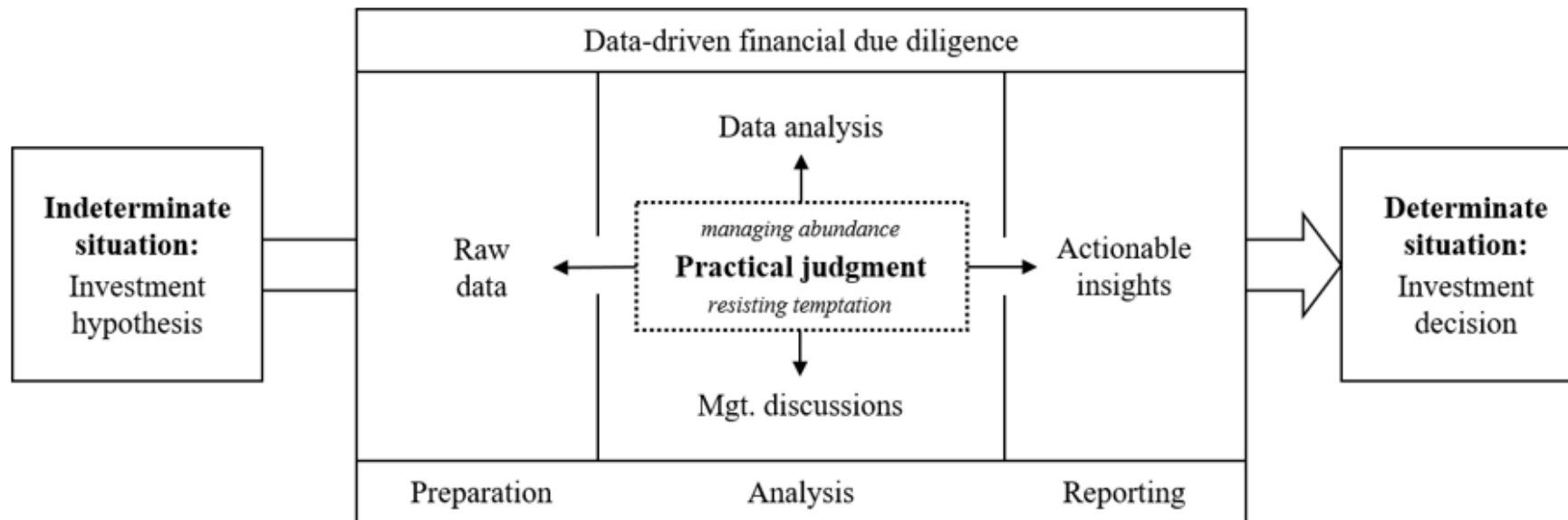
Drawing on the classics...



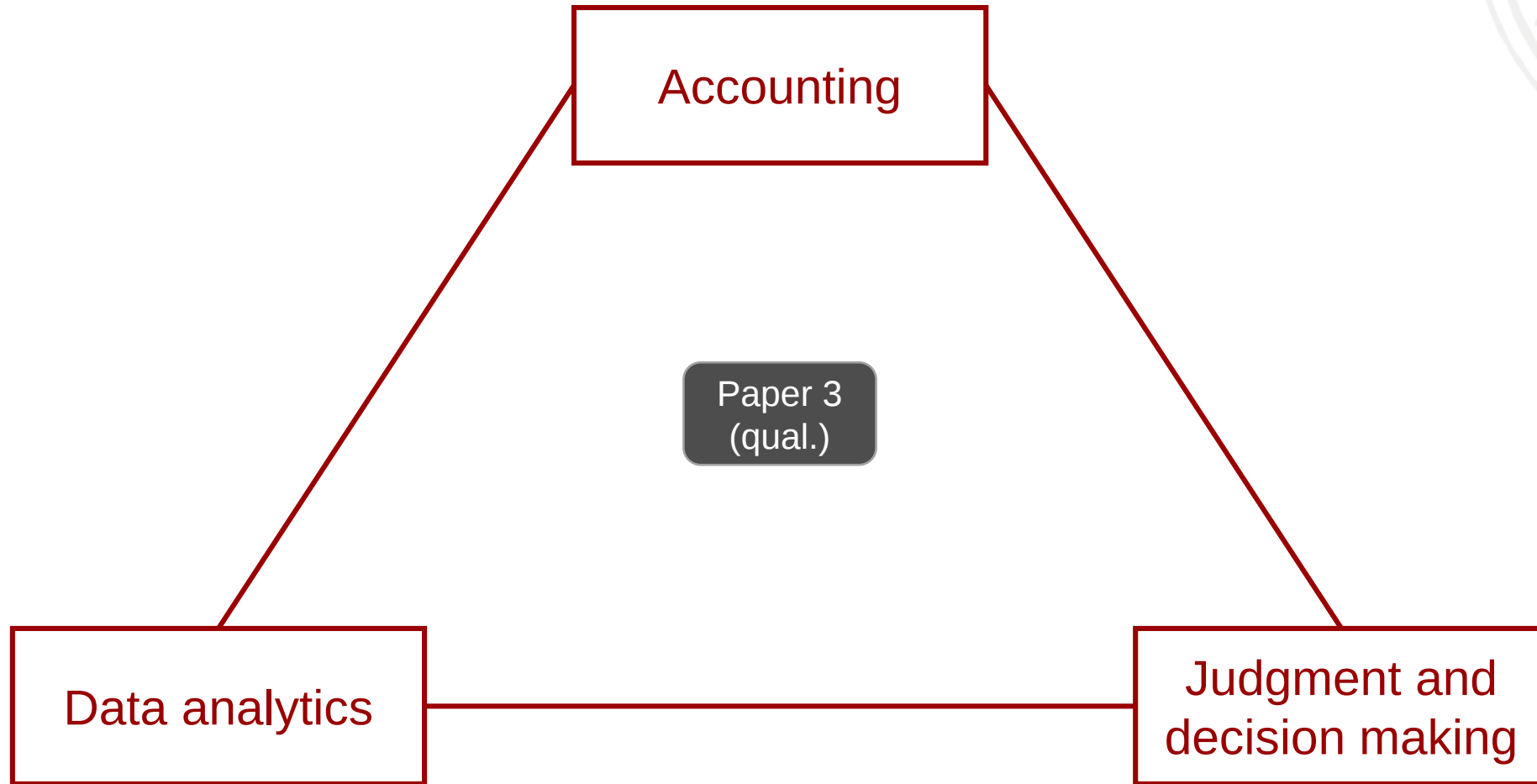
Appropriate contextualization?!

Financial Due Diligence	
Stream A	Historical Performance
	Management Discussions
Stream B	Accounting Adjustments
Phase 1: Preparation	
Phase 2: Analysis	

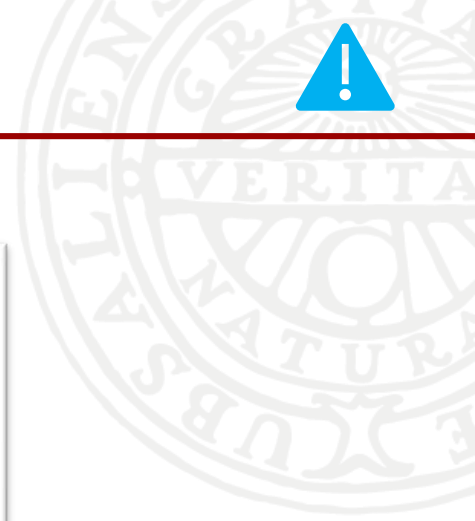
Figure 1: Practical judgment in data-driven financial due diligence



Paper 3



Addressing the...



2017

Stop Using Excel, Finance Chiefs Tell Staffs

Ubiquitous spreadsheet software that revolutionized accounting hasn't kept up, CFOs say

2021

Finance Chiefs Are Still Trying to Replace Excel With New Tools

Many companies would like to reduce their reliance on the spreadsheet application, but employees remain reluctant to give it up

2022

Accounting Pros Still Love Spreadsheets

Depending on the research, data shows that between 750 million and a billion people use Excel or other spreadsheet tools globally. This makes it one of the most-used financial tools in the world.



Research problem

- Accounting professionals have been urged to embrace digitalization and adopt new data analytics (DA) tools
- The problem is, many “accounting pros still love spreadsheets” and remain reluctant to switch to new tools
- **Open question: Is accounting professionals’ continued reliance on Excel rational or irrational?**

Knowledge gap ;-)

- Theory and field-based evidence on implementation hurdles of advanced analytics technology in management accounting (Casas-Arce et al., 2022)

Approach

1. Develop a simple but potent conceptual framework to investigate and explain seemingly irrational patterns of technology use in management accounting contexts
2. Illustrate the potency of the framework by applying it in the context of financial due diligence within M&A (re-analysis of findings from study on DA use in financial due diligence)

Conclusions

- When looking exclusively at Excel’s overt functionality, holding on to a technically inferior software tools may indeed be viewed as an instance of **irrational behavior**
- When accounting for situational factors, one may discover **lateral rationalities** for accounting pros’ continued Excel use
- When accounting for the links between overt and covert functionality, one may discover **vertical rationalities** for accounting pros’ continued Excel use

Theoretical framework (1/2)

Situated functionality

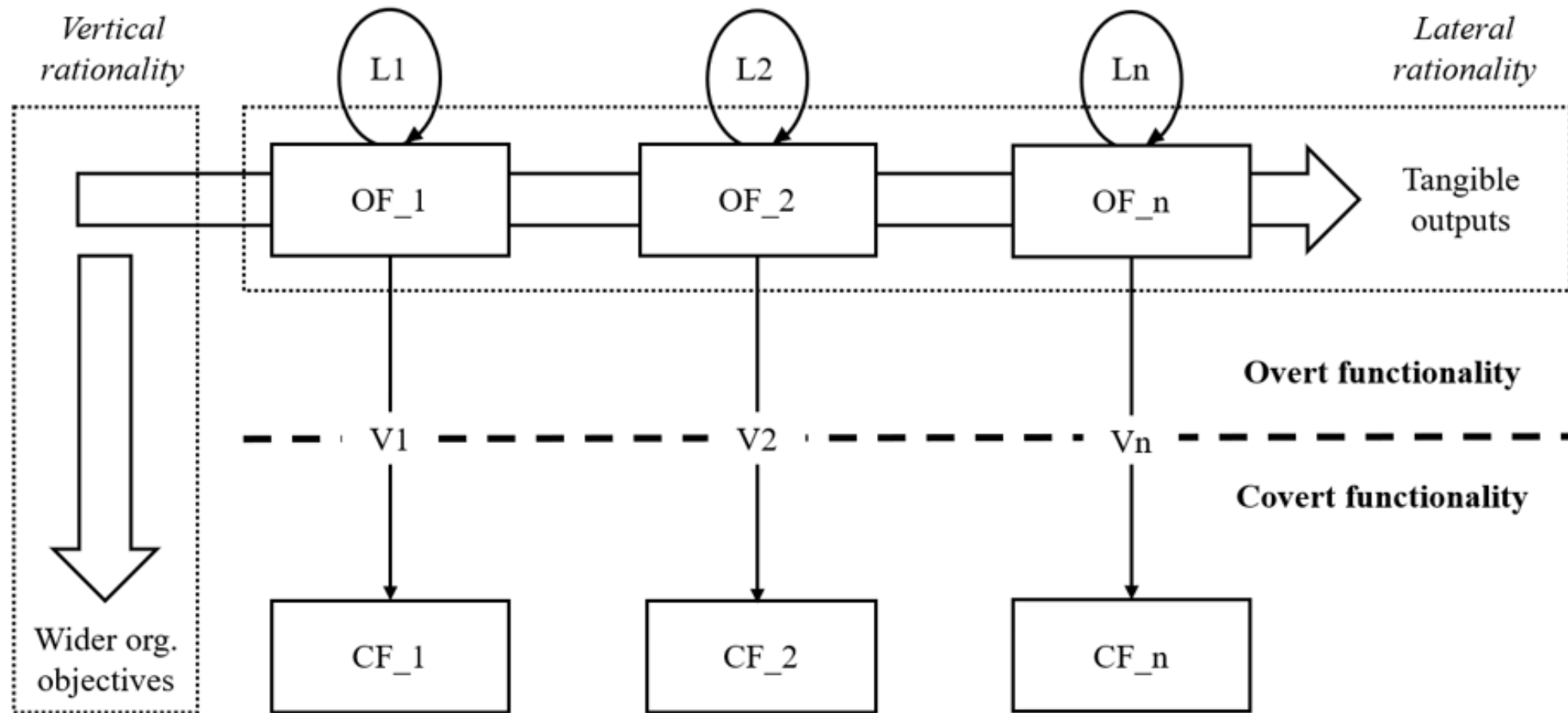
- “The ways in which specific organizational members sought to use accounting to achieve, if not grand strategic missions, at least specific subsets of organizational objectives” (Ahrens and Chapman, 2007, p. 4)
- SF lens has been used in various studies to show how accounting is made purposive in different settings (e.g., Fauré and Rouleau (2011); Name and Love (2014))
- I introduce/distinguish between two subtypes of SF:
 - **Overt functionality:** functionality that enables task-orientated action that is directly linked to the production of tangible outputs
 - **Covert functionality:** functionality that does not directly contribute to the production of tangible outputs

Situated rationality

- “The form of rationality situated social actors adopt in a specific situation – i.e. how they think about and rationalise what they should do when faced with that situation” (ter Bogt and Scapens, 2019, p. 1801; see also Lawson, 1997)
- Close resemblance to March’s appropriateness framework: What would a person like me do in a situation like this?
→ Situational recognition, role/identity, and rule-matching
- I introduce/distinguish between two subtypes of SR:
 - **Lateral rationality:** using overt functions to produce tangible outcomes efficiently and effectively
 - **Vertical rationality:** using overt functions to access covert functions to accomplish wider organizational objectives



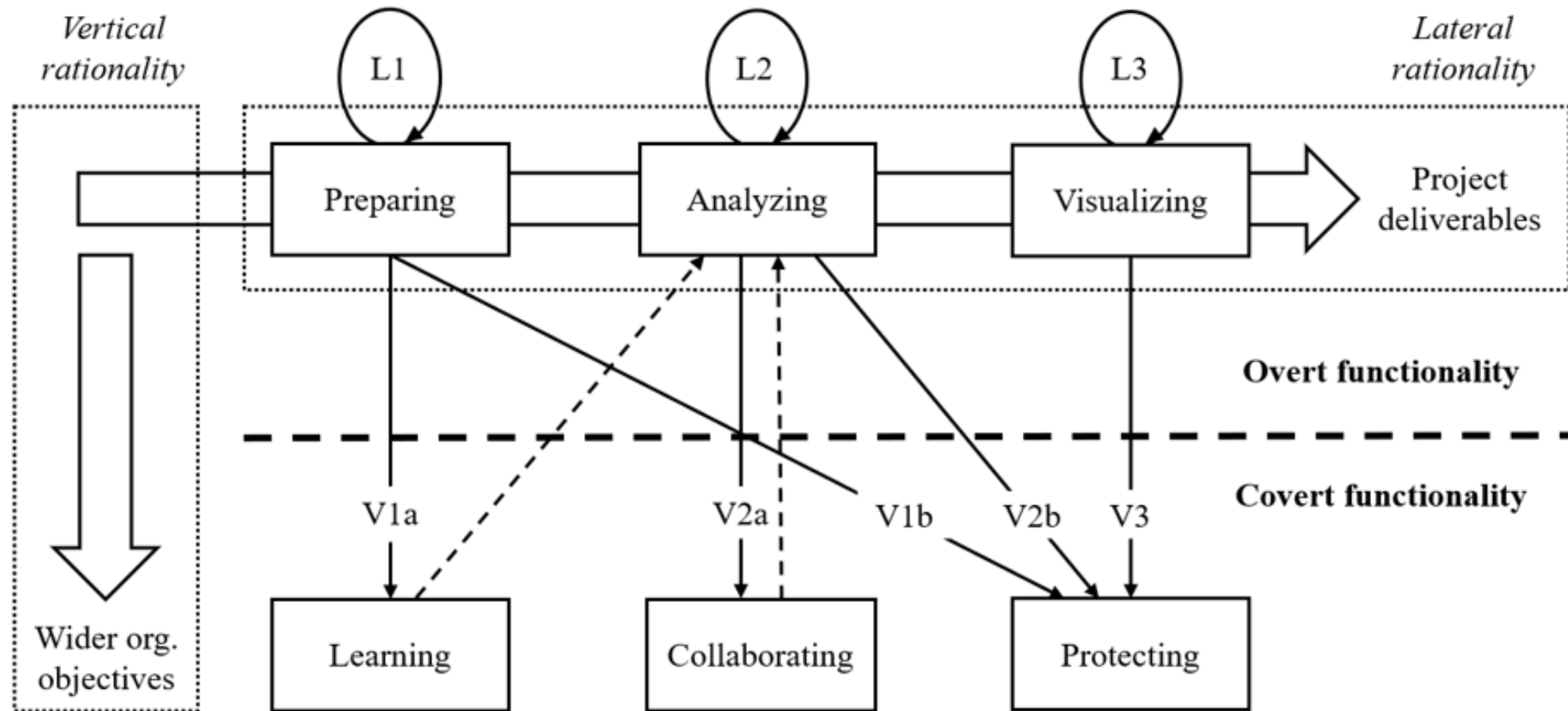
Figure 1 The SFR framework



L = Lateral rationality; V = Vertical rationality; OF = Overt functionality; CF = Covert functionality

(Gist of the) Findings

Figure 2 Excel use in FDD practice: Lateral and vertical rationalities



L = Lateral rationality; V = Vertical rationality

Final thoughts...

Stay true
— to —
YOURSELF

Accountants' love for inadequate technology: On the situated rationalities of Excel-clinging

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Abstract Accounting professionals have been urged to embrace digitalization and become more analytics savvy. The problem is, according to recent research, many accounting professionals resist moving beyond Excel and adopting new data analytics tools. This has sparked a debate about the (ir-)rationality of Excel-clinging or, more generally, accounting professionals' continued reliance on seemingly inadequate technology. Based on the twin



Time for...



Questions and discussions