



DA,  
Spring, 2026



# Report Structure

*Faculty of DS & AI*  
*Spring semester, 2026*

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# Content

- **Reporting Structural Paradigms**
- **Audience Strategy**
- **Overleaf**
- **LateX Workshop + VS code**

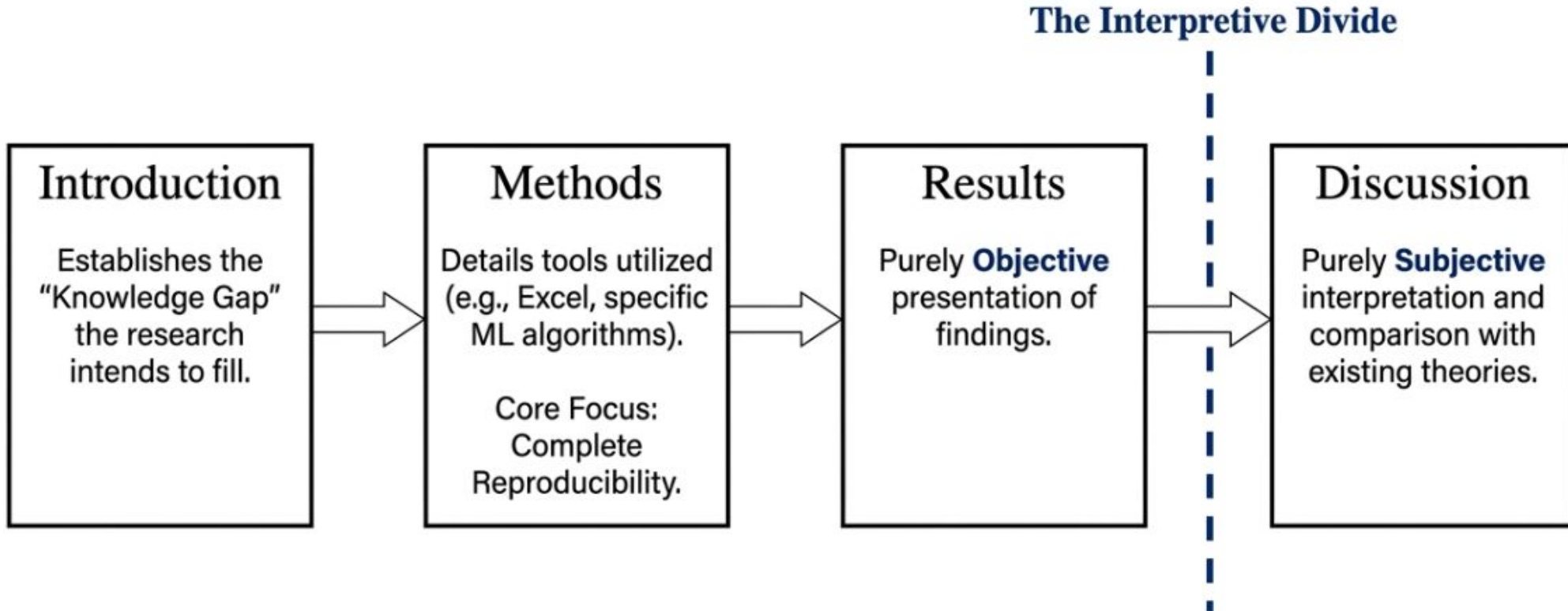
# Reporting Structural Paradigms

## Purposes



# Reporting Structural Paradigms

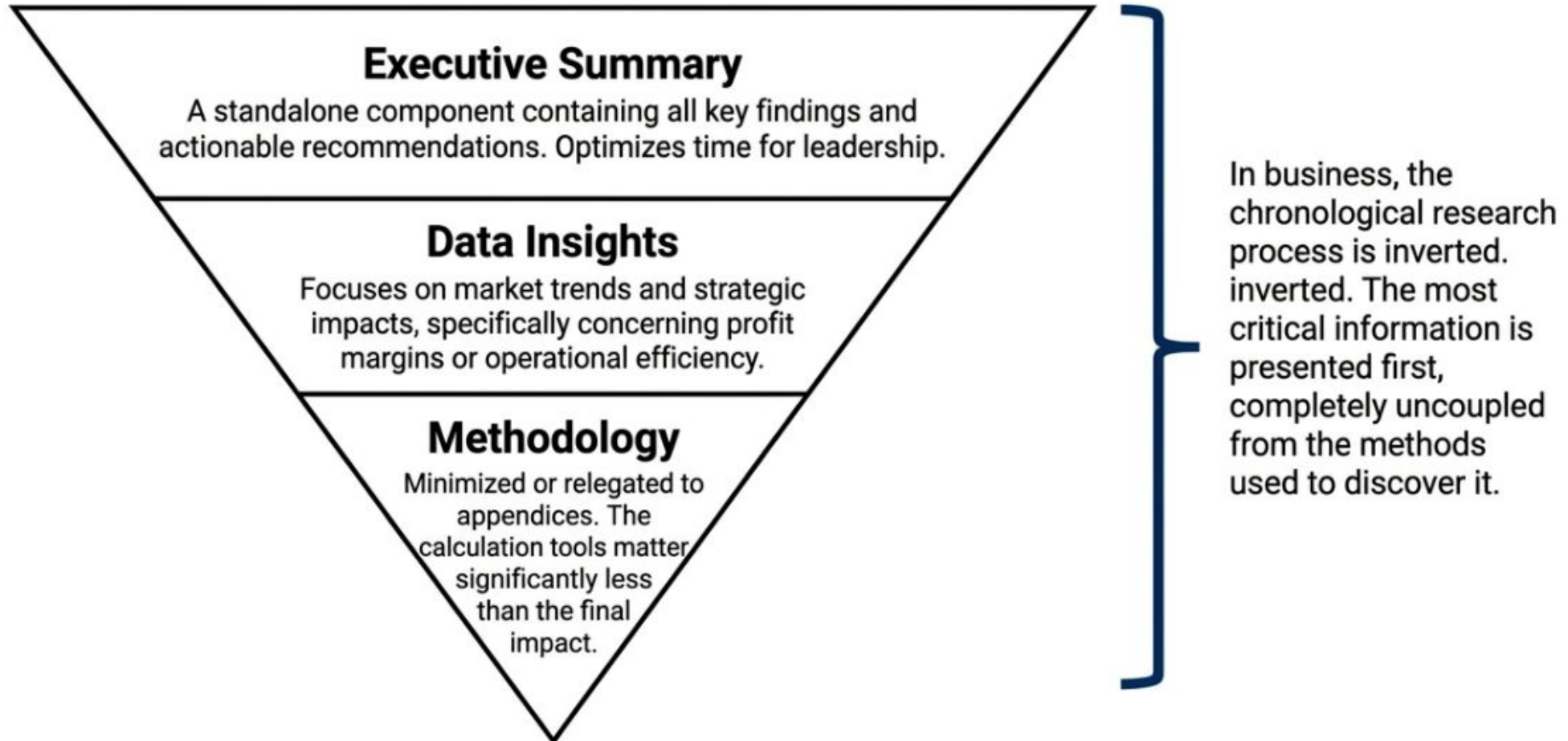
## IMRaD Standard (Academic)



*Academic reporting relies heavily on formal language, specialized terminology, and exhaustive empirical evidence to prove rigor.*

# Reporting Structural Paradigms

## Business Standard



# Reporting Structural Paradigms

## Standard

<b>Dimension</b>	<b>Academic (IMRaD)</b>	<b>Business (Executive-Led)</b>
Core Objective	Prove knowledge, show rigor, and contribute to the field.	Support decision-making, solve specific problems.
Opening Element	Abstract (Brief summary of question & results).	Executive Summary (Immediate findings & actionable recommendations).
Content Focus	Detailed methodology and comprehensive empirical evidence.	Clear data insights, market trends, and strategic advice.
Length & Style	Long, formal tone, high density of specialized terminology.	Concise, direct, simplified language optimized for non-experts.
Conclusion	Summarizes findings and outlines future research directions.	Specifies immediate action steps and practical implementation plans.

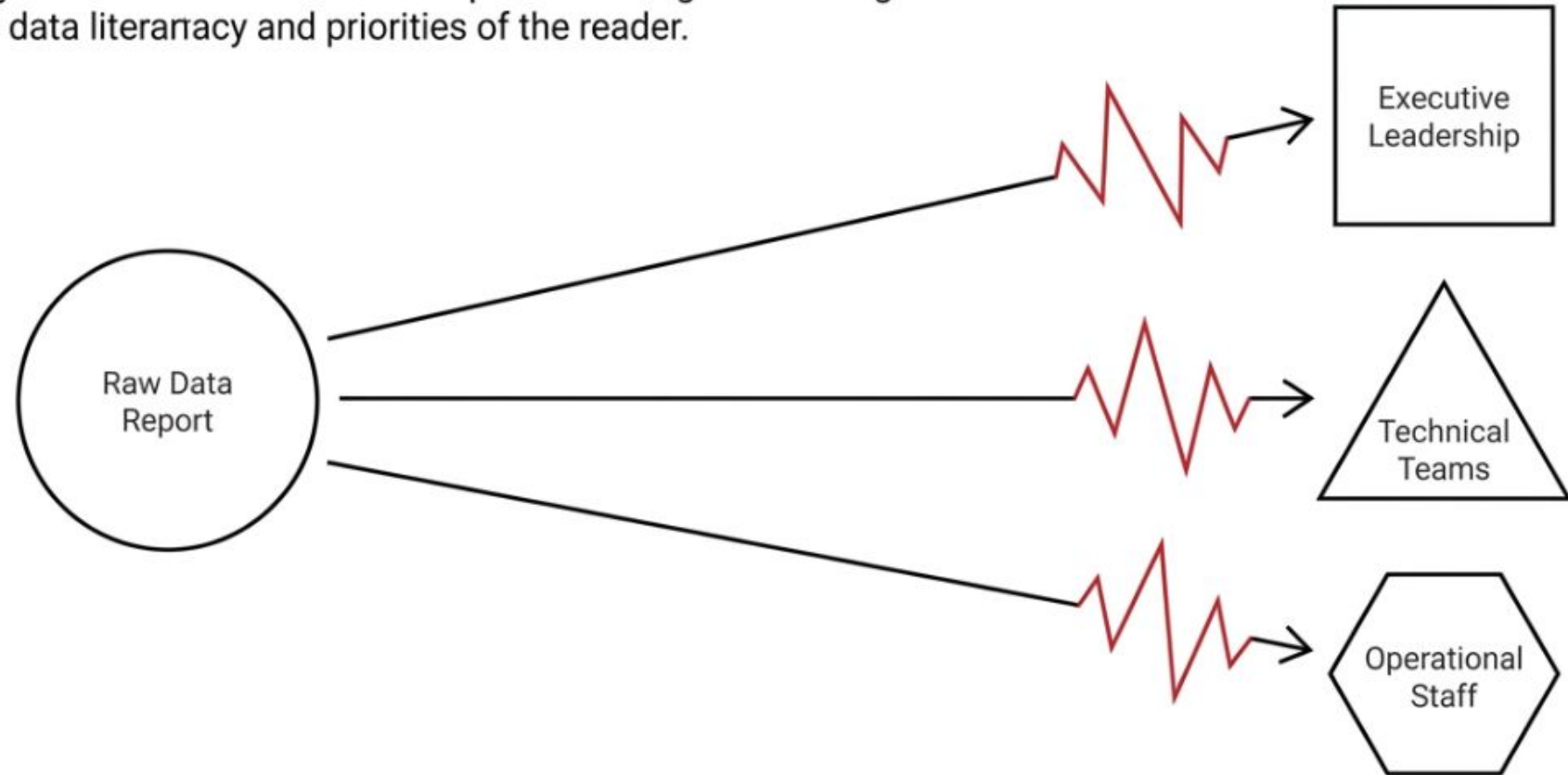
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# Audience Strategy

## Common mistake

The most common analytical failure is presenting data the exact same way to every audience. True influence requires tailoring the message to the specific data literacy and priorities of the reader.



# Audience Strategy

## Pipeline



A reproducible workflow for transforming technical analysis into business influence.

# Audience Strategy

## Pipeline

## Evaluating Data Literacy

Audience Strategy dictates that evaluating the data literacy of the recipient must happen before writing a single word of the report.



Low Data Literacy

Requires high synthesis, strict minimalism, and business-first framing.

High Data Literacy

Requires methodological transparency, access to raw variables, and statistical rigor.

# Audience Strategy

## Pipeline

### Audience Profiles: Diagnostic Contrast



#### Executives

- Focus: Value (\$\$\$), time savings, and systemic risk.
- Data Literacy Profile: Action-oriented; zero tolerance for unnecessary complexity.



#### Technical Peers

- Focus: Model reliability, treatment of outliers, and statistical assumptions.
- Data Literacy Profile: Methodology-oriented; requires proof of structural integrity.

# Audience Strategy

## Pipeline

### The Insight Architecture

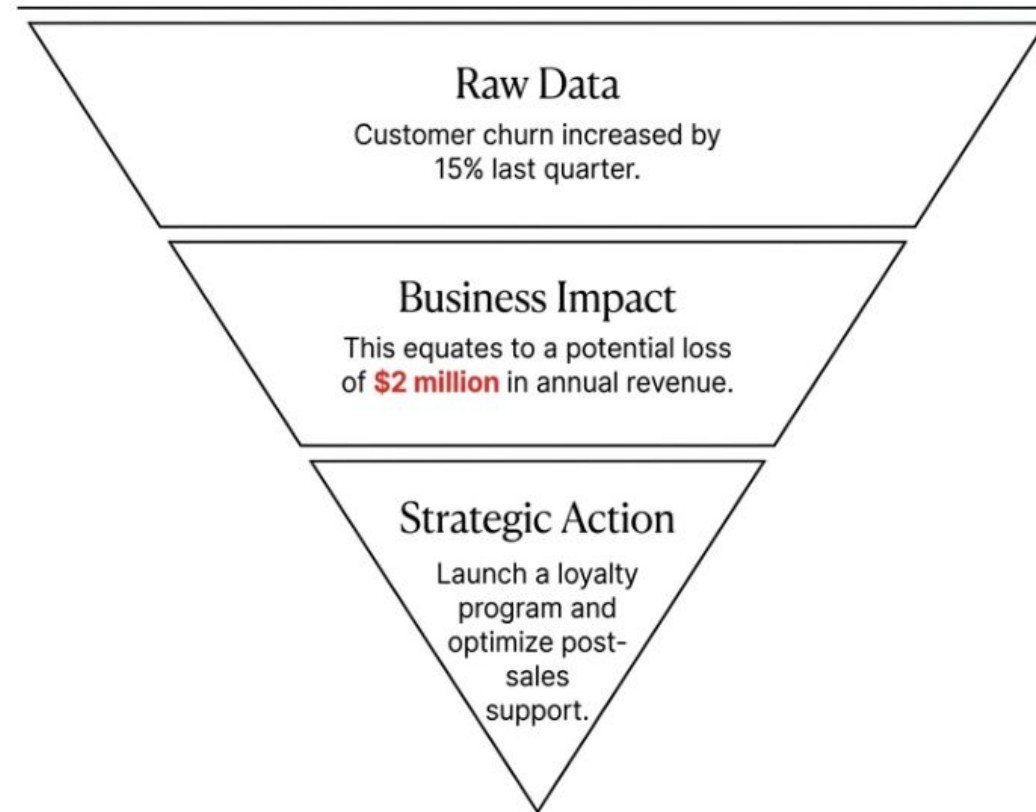
- |          |   |   |
|----------|---|---|
| <b>1</b> | <b>What<br/>Objective Observation</b>   | State the objective truth extracted directly from the raw data.                       |
| <b>2</b> | <b>So What<br/>Business Translation</b> | Explain the direct meaning and impact of that number on the organization.             |
| <b>3</b> | <b>Now What<br/>Strategic Action</b>    | Provide a specific, data-backed recommendation to solve or capitalize on the finding. |

Data storytelling is the act of guiding the reader through this exact sequence.

# Audience Strategy

## Pipeline

### Applying the Framework: The Insight Funnel

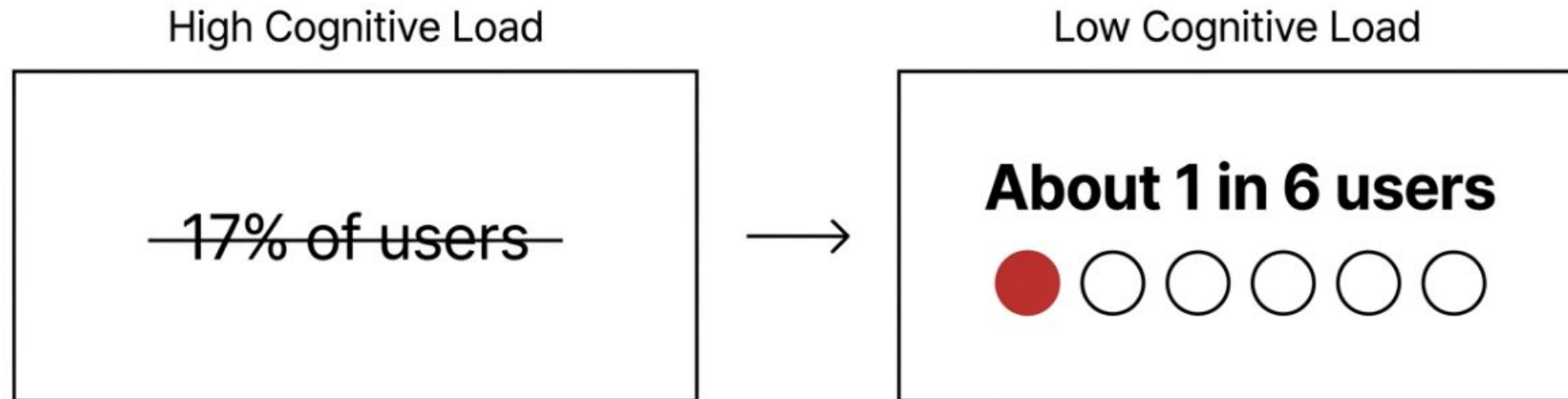


# Audience Strategy

## Pipeline

### Minimizing Cognitive Load

Clear, concise language is mandatory. Replace abstract percentages with relatable human proportions to create an immediate, intuitive understanding.



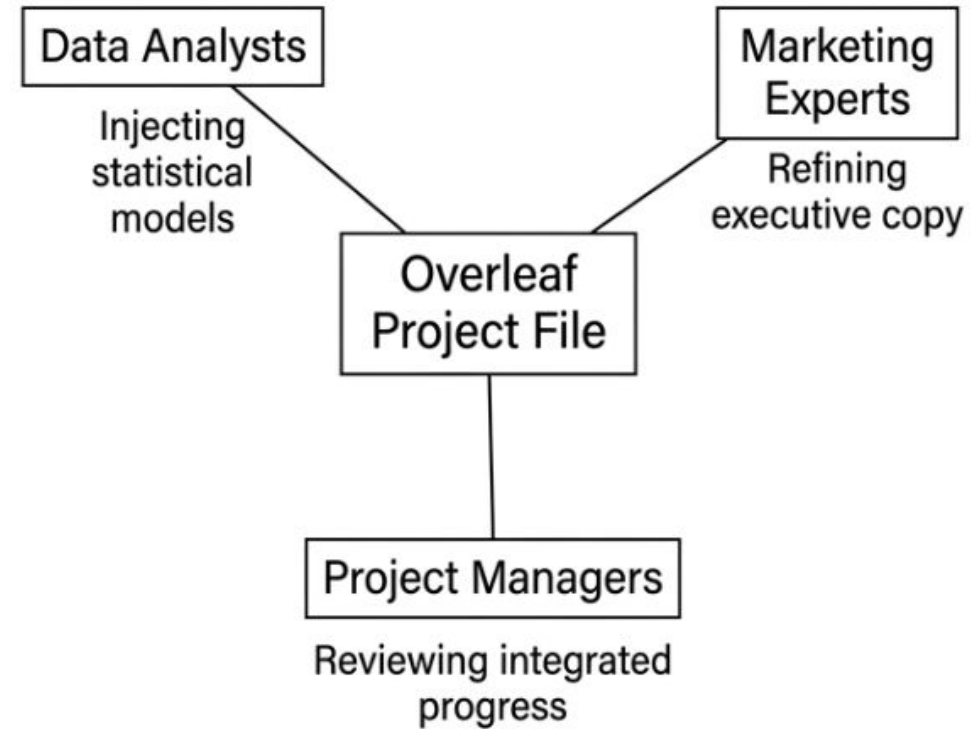
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# Overleaf

## Beyond a Simple Editor

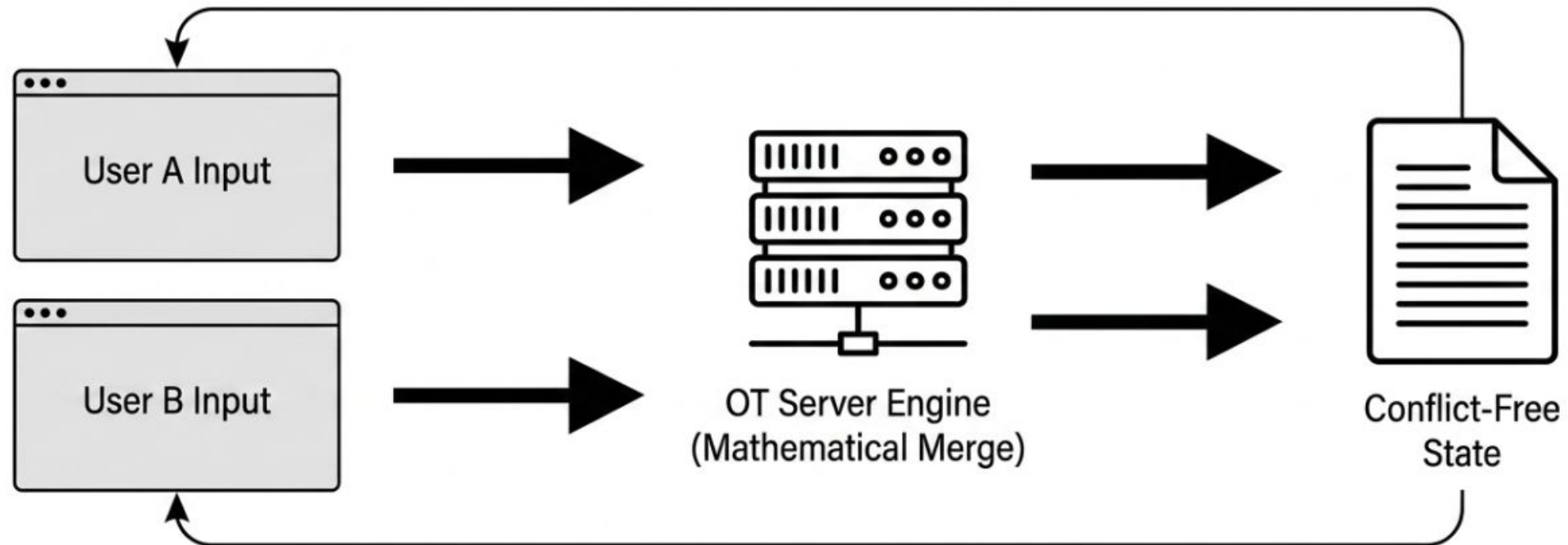
Overleaf operates as the dominant cloud-based LaTeX ecosystem in academia and engineering. It unifies cross-functional teams executing large-scale, multi-part projects like theses and comprehensive analytical reports.



# Overleaf

## The Engine of Collaboration: Operational Transformation

Operational Transformation (OT) is the core technology that allows the server to merge inputs in real-time, preventing overlapping keystrokes from corrupting the source file.



# Overleaf

## Ecosystem Synthesis: The Overleaf Tech Stack

Phase	Toolset	Core Function	Workflow Impact
Reference Management	Zotero, Mendeley, CiteDrive	Direct .bib integration	Visual, intuitive BibTeX management without manual coding.
Writing & QA	Writefull, Grammarly	Linguistic & grammatical refinement	Ensures professional academic tone and baseline accuracy.
Data Formatting	Underleaf	Automated table generation	Eliminates manual LaTeX table coding.

# Overleaf

## Eliminating the “LaTeX Table” Bottleneck

Converting raw visual data into formatted code automatically solves the primary fear of LaTeX beginners.

Raw Spreadsheet / Screenshot

	A1	B1	C1
	A2	B2	C2
	B1	B2	C1



Underleaf  
Plugin



```
\begin{tabular}{lcc}  
\toprule  
Data & Val 1 & Val 2 \  
\nmidrule  
A & 12.5 & 8.4 \\  
B & 15.2 & 9.1 \\  
\nbottomrule  
\end{tabular}
```

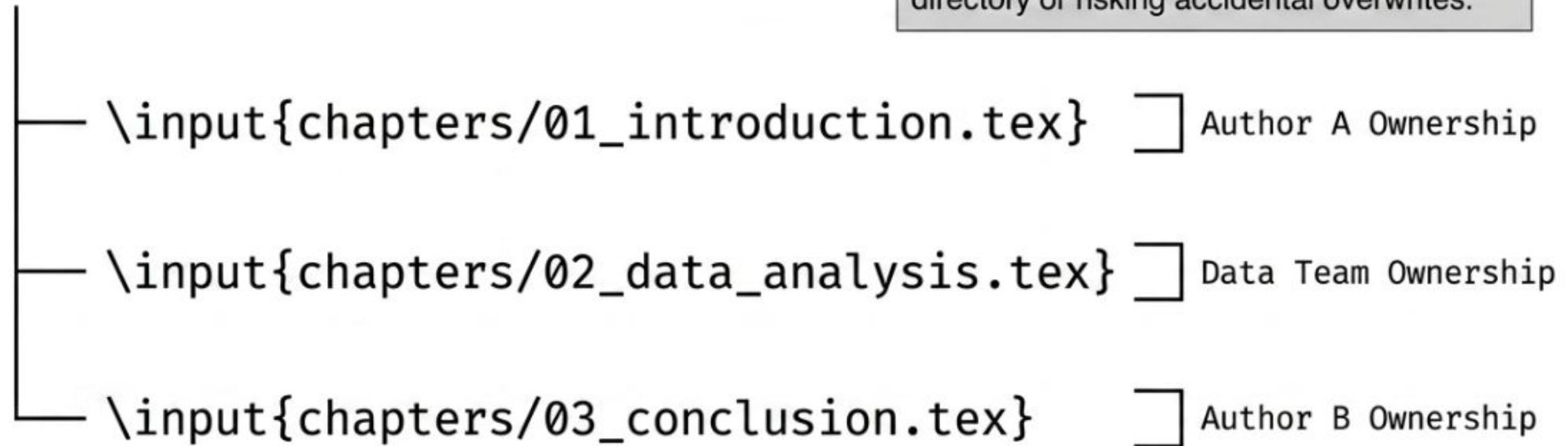
Data	Val 1	Val 2
A	12.5	8.4
B	15.2	9.1

# Overleaf

## Pillar 1: Modular Document Architecture

**Never write a large report in a single file.**  
Splitting files allows team members to own specific sections without cluttering the main directory or risking accidental overwrites.

**main.tex**



# Overleaf

## Pillar 2: Standardizing Team Edits with Custom Macros

Custom commands create highly visible, un-ignorable action items, helping colleagues immediately identify high-priority targets.

```
\newcommand{\fixme}[1]{\textcolor{red}{\textbf{FIXME: #1}}}
```

```
The dataset shows a 20% increase \fixme{Verify this exact percentage  
with Data Team}.
```

The dataset shows a 20% increase **FIXME: Verify this exact percentage with Data Team.**

# Overleaf

## Pillar 3: Semantic Line Breaks for Version Control

**Rule:** Write **exactly one sentence per line**. (LaTeX automatically compiles this into standard paragraphs).

System marks **entire block** as conflict.

The initial analysis revealed significant discrepancies. These discrepancies were traced back to data entry errors. Furthermore, the experimental setup was flawed from the beginning. Consequently, all subsequent results must be treated with caution. We recommend a complete re-evaluation of the methodology.

System isolates the **exact revision** for clear auditing.

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# LateX Workshop + VS code

- For installation, see:  
[https://nghianguyen7171.github.io/excel\\_course/materials/install-guide.html](https://nghianguyen7171.github.io/excel_course/materials/install-guide.html)
- For Lab instruction, see:  
[https://nghianguyen7171.github.io/excel\\_course/lab-5-instructions-nokeys.html](https://nghianguyen7171.github.io/excel_course/lab-5-instructions-nokeys.html)

**Thank you!**