DATA LITERACY & DATA INTUITION:

MAKING SMARTER DECISIONS WITH DATA

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Data Literacy & Data Intuition

Data Are Not Insights

Understanding Your Psychological Biases in Decision Making

Data-Driven Decision Making

How to Ask Data-Driven Questions

How to Evaluate Data Integrity
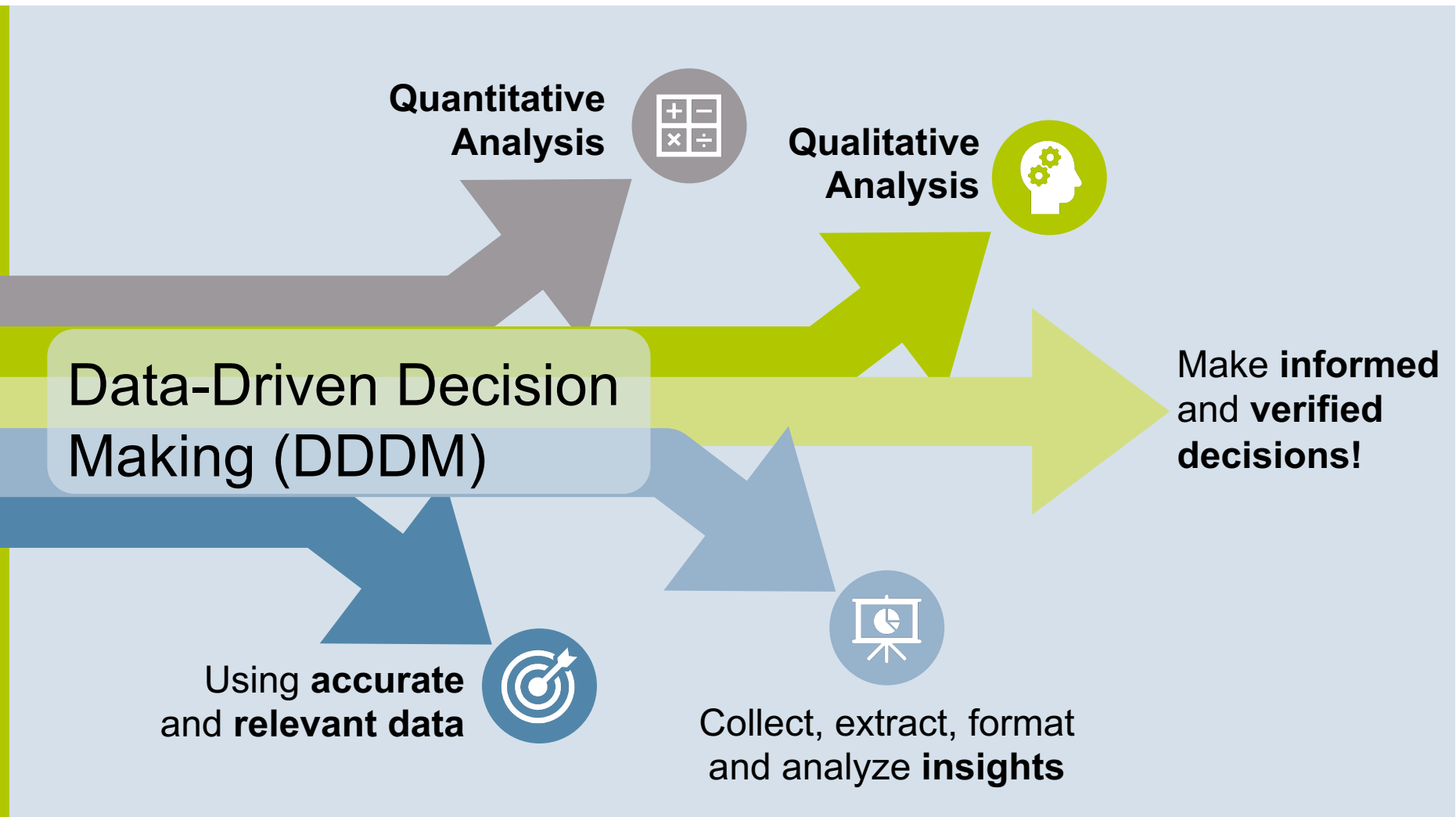
Creating Richer Data-Driven Dialogue

The Art of Guestimating – The Fermi Method

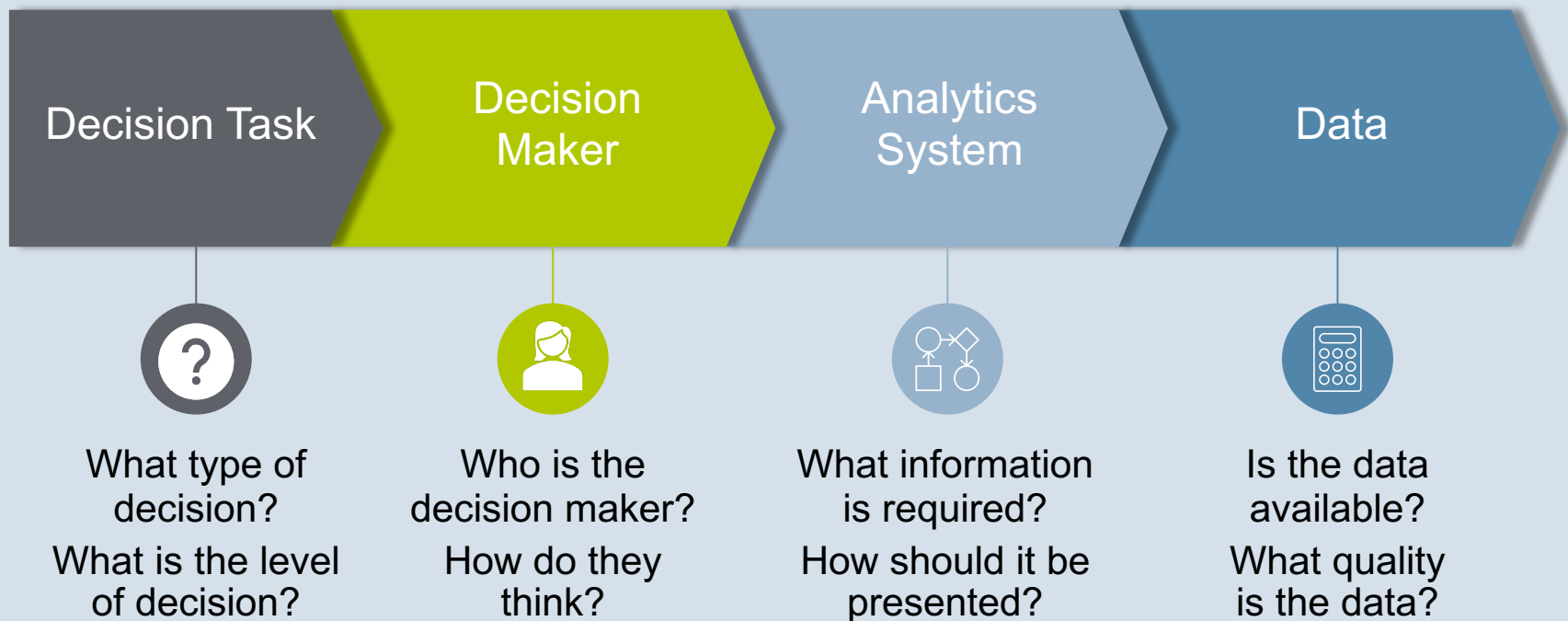Emerging Areas in Data-Driven Decision Making

What is Data-Driven Decision Making (DDDM)

Quantitative Analysis

Qualitative Analysis

Data-Driven Decision Making (DDDM)

Make **informed** and **verified** decisions!

Using **accurate** and **relevant data**

Collect, extract, format and analyze **insights**

Why Data-Driven Decision Making Is Important?

The Decision-Centric Approach

Decision Task	Decision Maker	Analytics System	Data
What type of decision? What is the level of decision?	Who is the decision maker? How do they think?	What information is required? How should it be presented?	Is the data available? What quality is the data?

14 Tips & Takeaways For An Enhanced Data-Driven Decision Making Strategy

Data Driven Decision Making Mistakes You Should Avoid

01

Quality of the data

› Data should fit its intended use
› Collecting and gathering are only good if well managed

02

Over-Reliance on past experience

› Environments and markets change
› Crises are becoming more complex

03

Going with your gut and cooking the data

› Making decisions with your gut
› Searching for data to confirm the decision

04

Cognitive biases

› Confirmation bias
› Over-confidence
› …

Successful Data-Driven Decision Making Example: Google

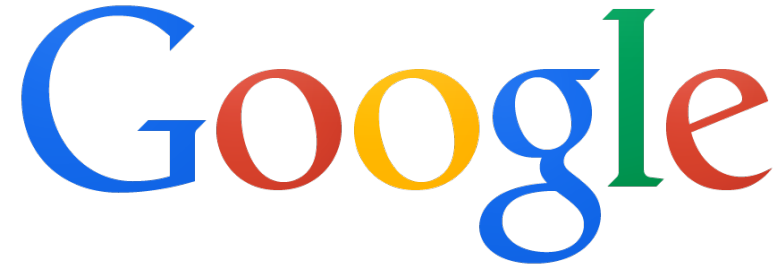**Question**: Does having a manager actually matter?

Looked at managers' performance reviews

Conducted various analyses

Researched behaviors of good managers

Successful Data-Driven Decision Making Example: Walmart

Question: What do consumers buy before a hurricane?

Reviewed purchasing behavior during last hurricane

Adapted their product portfolio

Generated profit

Successful Data-Driven Decision Making Example: Southwest Airlines

Question: Which customers should
we target?

🔍 Observe consumer
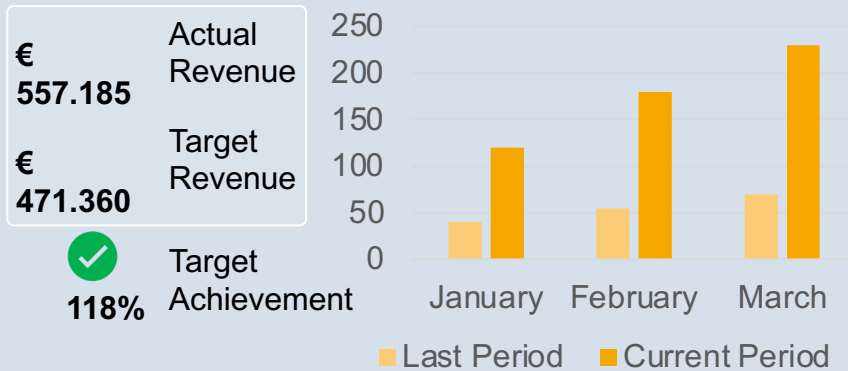behavior
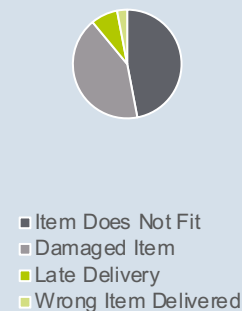
▲ Segment customers

◎ Target specific customers

Southwest®

LogoTaglines.com

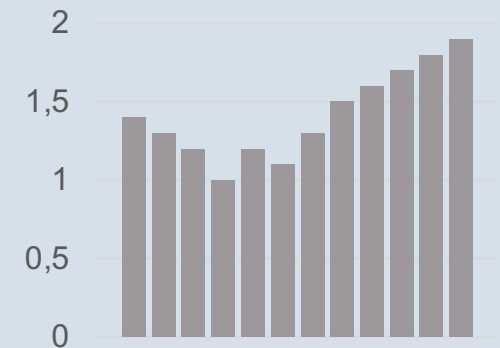# The Role of Dashboards for Data Driven Decisions

Executive Management

Revenues (in k$)

€ 557.185 — Actual Revenue

€ 471.360 — Target Revenue

✓ 118% — Target Achievement

Legend: Last Period, Current Period

Retail

Return Reasons

- Item Does Not Fit
- Damaged Item
- Late Delivery
- Wrong Item Delivered

Total Orders (in M)

Finance

Current Assets	$129,000
Cash	$34,000
Accounts Receivable	$59,000
Inventory	$31,000
Pre-Paid Expenses	$5,000

Sales

NUMBER OF SALES 115		PROFIT $39,709	
⌖ - 4%	📅 +5%	⌖ - 1%	📅 -11%

REVENUE $150,009		COST $110,300	
⌖ - 9%	📅 -4%	⌖ - 12%	📅 -1%