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Storytelling with Data and Ethical Considerations

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Learning Goals

By the end of this session, you will be able to:

- Adapt data communication to different audiences
- Build clear and persuasive data narratives
- Apply ethical principles in data visualization
- Present insights using a structured business story
- Understand emerging trends in data visualization

Session Roadmap

- Communicating Data to Different Audiences
- Crafting Data Narratives for Decisions
- Ethics in Data Visualization
- Group Project Presentations
- Future of Data Visualization & Discussion

Why Communication Matters

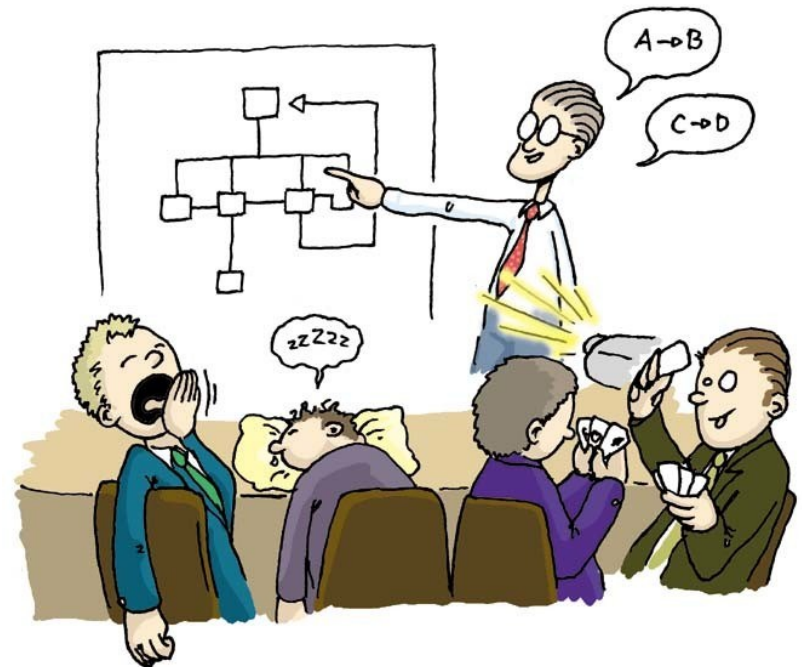
- Data alone does not create impact
- Insights must be understood to drive decisions
- Different audiences require different communication styles



“If I want to impress a woman online, what font should I use? Aristocrat Bold so she’ll think I’m rich or Comic Sans so she’ll think I’m funny?”

Know Your Audience

- **Executives:** Strategic decisions, KPIs, business impact
- **Technical Teams:** Methods, assumptions, accuracy
- **General Stakeholders:** Meaning, impact, clarity



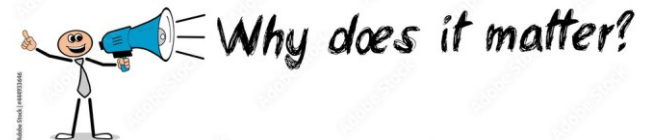
The “So What?” Principle

Every visualization must answer:

- Why does this matter?
- What should we do about it?

Structure:

- Hook: Problem
- Tension: Insight from data
- Resolution: Recommendation
- Action: Next step



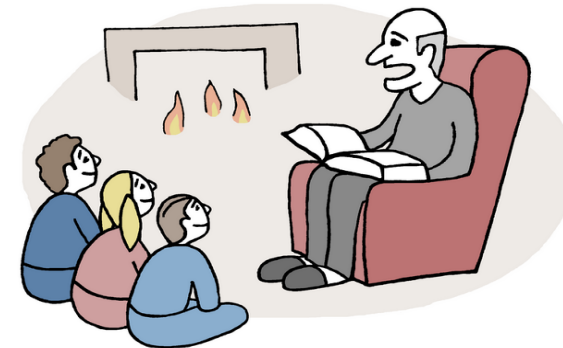
What is Data Storytelling?

Data Storytelling = Data + Narrative + Visuals

It transforms:

- Numbers into Meaning
- Insights into Decisions

DATA STORYTELLING



LONG TIME AGO, IN Q4-2015,
FAR FAR AWAY, IN EMEA REGION,
IN A SMALL CUSTOMER DEMOGRAPHY...

 Dataedo /cartoon

Plotv@Dataed

Structure of a Data Narrative

A strong business story follows:

- **Context** - What is happening?
- **Change** - What shifted?
- **Insight** - Why it matters
- **Action** - What to do next



Business Example

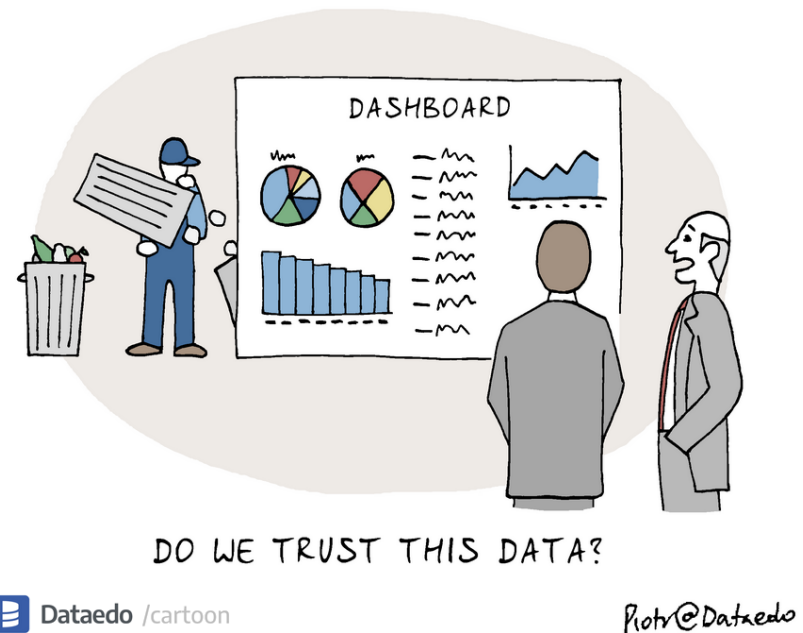
Problem: Sales Decline

- Context: Sales down 15%
- Change: Drop in online channel
- Insight: Mobile checkout drop-off
- Action: Improve mobile UX

Why Ethics Matter

Data visualization influences decisions, therefore:

- It can inform or mislead
- It can build or destroy trust
- It carries ethical responsibility



Key Ethical Risks

- **Bias:** selective data presentation
- **Misrepresentation:** misleading scales or visuals
- **Omission:** hiding important context
- **Privacy risks:** exposing sensitive data

The Three-Check Rule

Before publishing any visualization:

- **Context Check:** Is the message clear and honest?
- **Scale Check:** Are axes and scales fair?
- **Privacy Check:** Is sensitive data anonymized?

The Future of Data Visualization

Key trends:

- **AI-Augmented Analytics:** automated insights & chart suggestions
- **Immersive Analytics:** AR/VR data exploration
- **Democratization:** non-experts building dashboards



Discussion Questions

- Will AI replace data analysts?
- Can dashboards replace storytelling?
- What new ethical risks will emerge?

Conclusions & Key Takeaways

- Data only creates value when communicated effectively
- Every audience requires a different narrative approach
- Strong data stories follow a clear structure
- Ethical responsibility is non-negotiable
- The future will amplify both opportunity and risk in data visualization

Final Message

“If you can’t explain it simply, you don’t understand it well enough.”