

How to communicate results: Experiences from the Data Interpretation Workshop at Statistics Canada

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Presentation

◆ Part I

- What is the Data Interpretation Workshop (DIW)?
 - main objectives, participants, projects, structure and deliverables

◆ Part II

- DIW tools to help participants communicate results

◆ Part III

- Some lessons learned and concluding remarks



Part I

What is the Data Interpretation Workshop (DIW)?



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The DIW is...

- ◆ a unique learning-by-doing experience in analyzing and interpreting data
- ◆ in six weeks, participants work through the different steps of developing an analytical article/study for publication at Statistics Canada
- ◆ pilot took place in January 1996
- ◆ workshop keeps evolving
- ◆ advisory committee helps guide management

DIW main objectives

- ◆ Provide guidance and support for the development of an analytical article
- ◆ Provide a “self-learning” experience in data analysis and interpretation
- ◆ Raise awareness of analytical activities at Statistics Canada
- ◆ Provide an opportunity for networking
- ◆ Provide a “toolbox” for doing analysis at Statistics Canada

DIW participants

- ◆ New hires
- ◆ Other employees wishing to analyze data and eventually publish their findings
- ◆ Those with prior research experience and/or technical skills can still benefit from the DIW

DIW projects

- ◆ Projects range from descriptive profiles to regression-based analysis
 - choice reflects participant preference, data availability, skill level, etc.
- ◆ Projects are aimed towards one of the STC flagship publications
 - audience is 'educated layperson'
- ◆ More specialized work can also be produced



DIW structure

Pre-course activities

- ◇ info session, library sessions, planning meeting (manager and coach), proposal (13 questions), brainstorming session

Course activities

- ◇ two weeks of classroom instruction
 - analytical techniques, case studies, communication and writing tips
- ◇ four weeks of individual work
 - progress meetings
- ◇ three review and feedback sessions

DIW deliverables

- ◆ Research proposal
- ◆ Project outline
- ◆ Preliminary results and plan
- ◆ First draft
- ◆ Final draft
- ◆ *The Daily*
- ◆ Abstract
- ◆ Presentation



Part II

DIW tools to help participants communicate results



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DIW tools

A good analytical article:

- uses data to provide insight into a relevant issue
- is an *information* product, rather than simply a statistical project

To help participants understand what constitutes a good analytical article - and hence a good information product - the DIW offers a number of tools

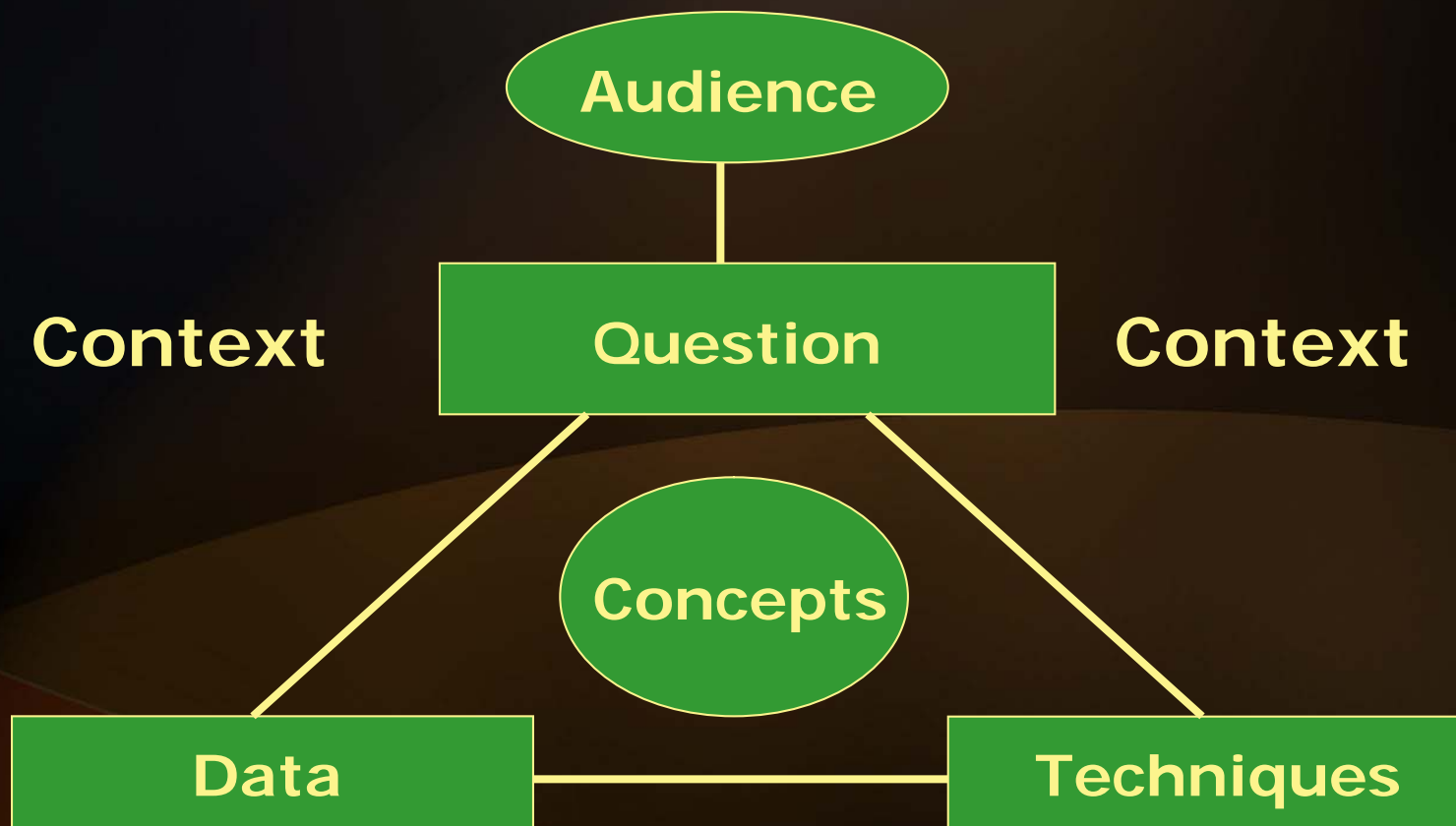
DIW tools

Instruction on the fundamentals of analysis at STC:

- ◆ The Statistics Canada analytical framework
 - objective, balanced, and neutral
- ◆ The standards of quality
 - relevant, accurate, timely, accessible, intelligible and consistent

DIW tools, continued

- ◆ The key elements of an article, known as 'The Triangle'



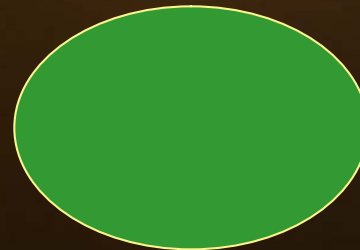
DIW tools, continued

**Why is this question interesting?
What is its value-added contribution?
"So what?"**

Context

Question

Context



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DIW tools, continued

What is the context surrounding the question, what are the pertinent issues?

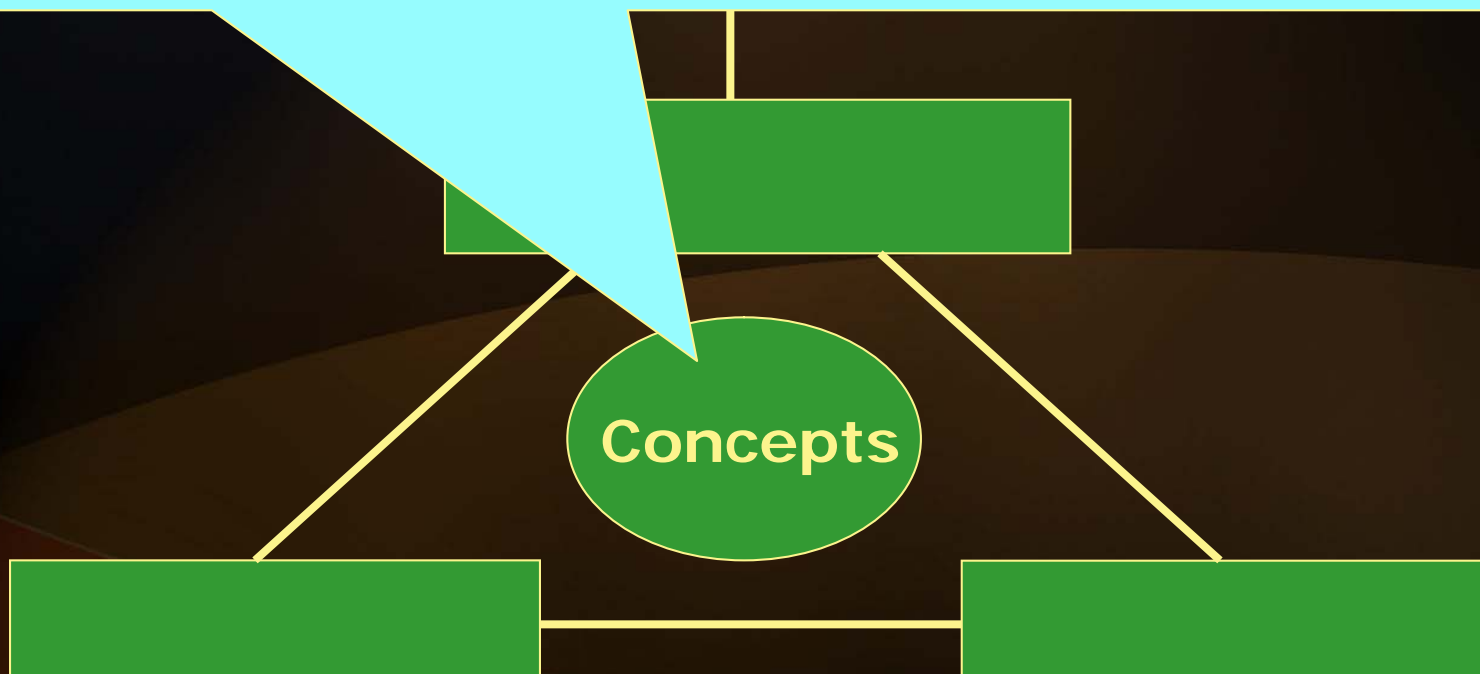
Context

Context



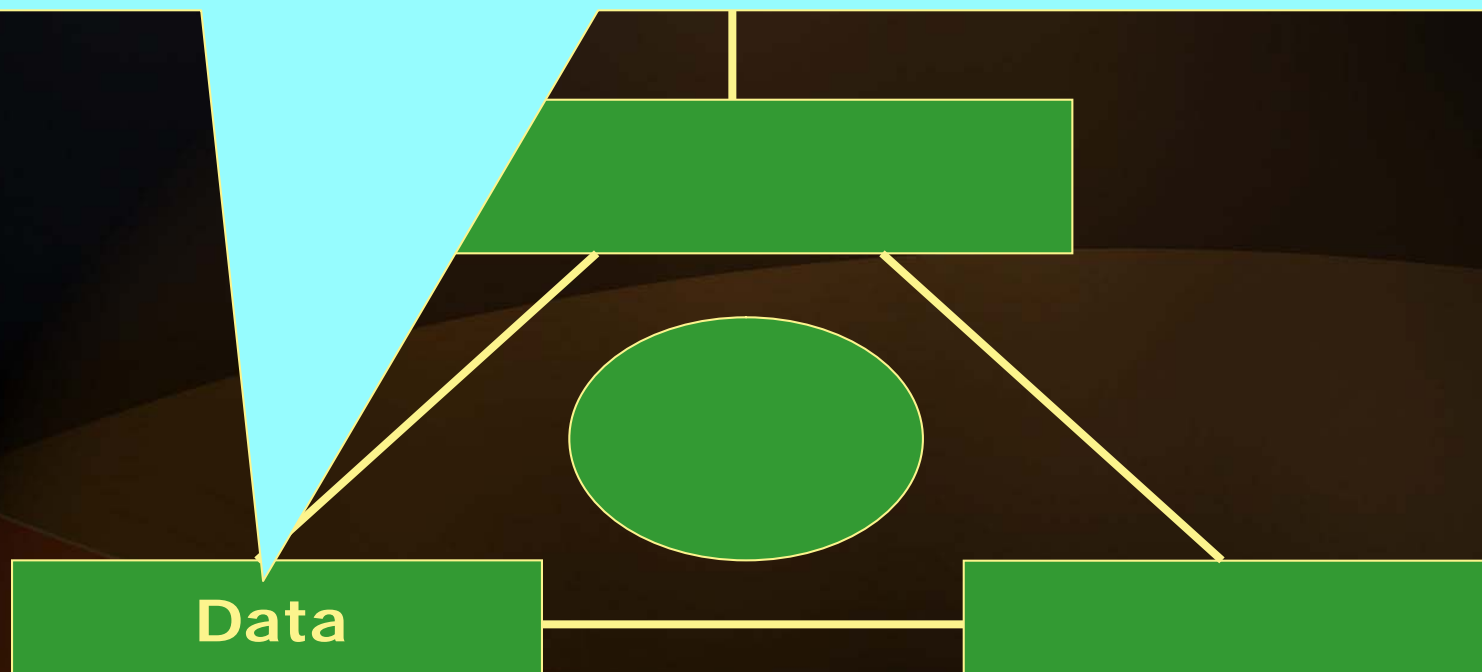
DIW tools, continued

What are the key concepts that underlie the research question? How do these compare to those that underlie the data? Are relevant concepts clearly defined?



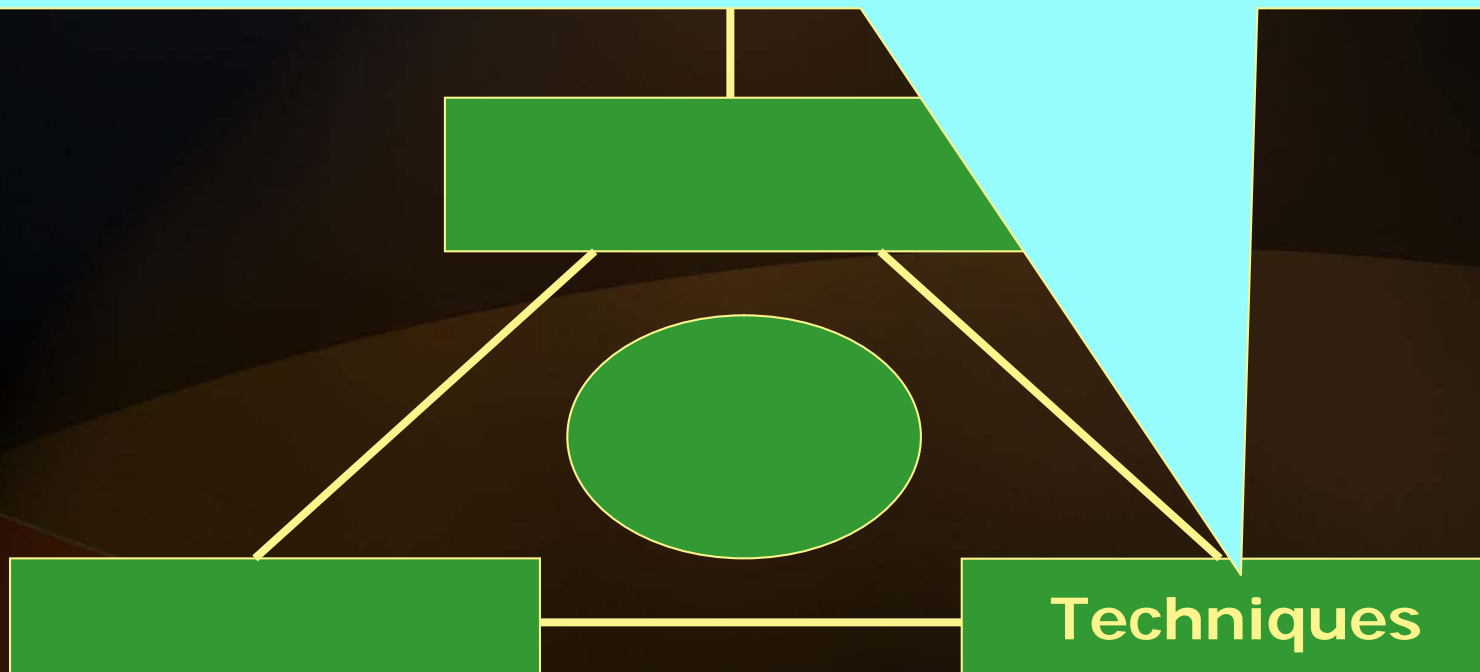
DIW tools, continued

Can the data answer the research question? Has data quality been assessed? Are the metadata well understood?



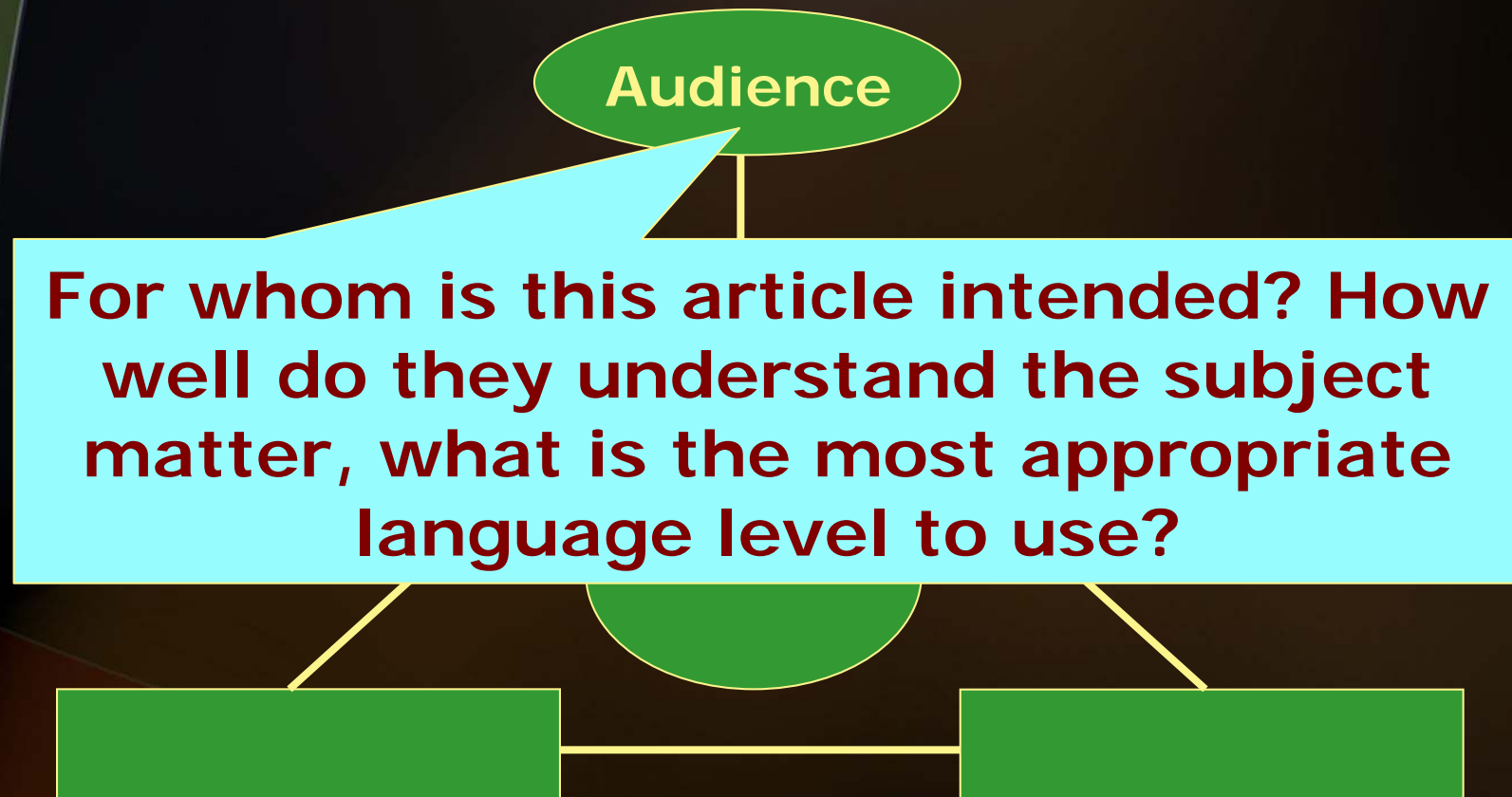
DIW tools, continued

**Are the selected techniques adequate?
Are the results robust?**



DIW tools, continued

- ◆ The key elements of an article, known as 'The Triangle'



DIW tools, continued

- ◆ Preparation of an outline, reviewed by experienced analysts
 - increases quality of final product, helps estimate workload, allows for timely input and endorsement, and stakes out territory
- ◆ Instruction on analytical techniques, illustrated by presentations of published research
 - helps demonstrate applicability, interpretability

DIW tools, continued

- ◆ Peer review of first draft
 - relevant; ‘the Triangle’; flow and readability
- ◆ *The Daily* exercise
 - key messages
- ◆ Institutional review of final draft
 - relevant; objective; balanced; neutral
- ◆ Presentation of final draft to the group and institutional reviewers

Part III

Lessons learned and concluding remarks



Lessons learned

- ◆ A reasonable first draft *can* be prepared in 6 weeks*
- ◆ A focused research question aids in writing a coherent article
- ◆ Answering the ‘so what?’ question can be a challenge, and can make or break a project
- ◆ Consultation is essential

* *This represents the view of the DIW manager and may not necessarily reflect the views of participants, past or present*

Concluding remarks

- ◆ The DIW's effectiveness depends on the valued contribution and collaboration of *many* people
- ◆ Effectively communicating results can be challenging but extremely satisfying

Thank you



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