

# Subject matter edits in online forms: Problem definition, exploration, development and alternatives



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Australian Bureau of Statistics  
Informing Australia's important decisions



- ▶ Error messages with intent
  - Respondents to self-edit
  - Reduce unnecessary editing work
- ▶ Character and some logic edits
- ▶ Few on subject matter
  - More on the way
- ▶ Are in-form edits at the question the answer?
- ▶ Alternatives

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## General information

### 1 Period covered by the data reported on this form

#### Note

- This form is for the financial year ended 30 June 2018.
- If this business/organisation has a different financial year, please report for a 12 month period which ends between 1 October 2017 and 30 September 2018 (e.g. a financial year ending 31 December 2017).

- 1 July 2017 - 30 June 2018
- 1 January 2017 - 31 December 2017
- Other

Please specify the period covered by the data reported on this form

From  /  /



Please report a complete date

To  /  /



Please report a complete date

If the period covered by this form is not 12 months, please explain below

14 Did this business receive income from directly exporting any goods and/or services during the year ended 30 June 2017?

***Including***

- Goods and/or services that were exported **directly** by this business, or by this business's agent

***Excluding***

- Income received from:
  - overseas visitors
  - goods and/or services exported **indirectly** (i.e. through other businesses)

Select all that apply

- |     |  |                          |
|-----|--|--------------------------|
| (a) | Income from <b>directly</b> exporting goods    | <input type="checkbox"/> |
| (b) | Income from <b>directly</b> exporting services | <input type="checkbox"/> |
| (c) | <b>No</b> income received from exports         | <input type="checkbox"/> |

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# Design guidelines

- Problem definition critical to implementation
- Statistical problems, workload, light cost benefit analysis
- Conditions for triggering edits
- Defined in respondent terms
- How to fix
- Not an IT user error message
- Specification is part of design and may lead to finding better solutions than edits

# Unexpected patterns

- ▶ Common patterns in response
- ▶ But, some businesses do things differently
- ▶ Soft edits to point to “unusual”
- ▶ For respondents, soft edits can look like hard edits
- ▶ Do they change data even though it is correct?
- ▶ Are in-form edits the best way to manage this?
- ▶ Requests for comment in forms?

# Hard edits for item non-response

- ▶ If high non-response on questions
- ▶ Temptation to put a hard edit “Mandatory question”
- ▶ Puts a barrier to initial form review
- ▶ Intent to improve response of non-responding few
- ▶ Impacts the responding many
- ▶ Dummy data produces unintended consequences?
- ▶ Is it worth it?

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## Preview of survey questions

The Energy, Water and Environment Survey has a variety of questions. Before providing your answers in this secure online form, you can choose to preview the survey questions using our helpful PDF copy.

The PDF copy can be shared with others in your organisation to help gather answers to the survey questions. It can also be used to draft answers to enter directly into the online survey form later.

This PDF copy can be saved to your computer and/or printed. To access this page later use the 'Preview of survey questions' link on the left hand side navigation bar.

[Preview a PDF of survey questions](#)

This preview copy is for your assistance only and the ABS cannot accept survey responses submitted in a preview format.

## Background information for the water section of this survey

The data you are providing in the water section of this survey is used to compile the *Water Account, Australia*. The focus of the *Water Account, Australia* is to represent the interactions between users of water within the economy and the environment. It compiles information from a range of sources, including this survey, into a series of tables that show the flow of water through the economy in both physical and monetary measures. The information presented in the *Water Account, Australia* informs water and environment government policy making.

[View Survey Guide](#)



# Economic Activity Survey 2016-17

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## Form reconciliation

Please check that all figures have been correctly reported in the summary below. For dollar values please ensure they are reported in thousands of dollars (\$'000), **not** whole dollars. Please follow the links to amend the values as necessary.

[Total number of persons working for this business/organisation](#)

[Total income](#)

[Total expenses](#)

[Profit or loss before tax](#)

[Total inventories](#)

[Total capital expenditure and disposal of assets](#)

Opening

Closing

Additions

Disposals

	<input type="text"/>	
\$	<input type="text"/>	,000
\$	<input type="text"/>	,000
\$	<input type="text"/>	,000
\$	<input type="text"/>	,000
\$	<input type="text"/>	,000
\$	<input type="text"/>	,000
\$	<input type="text"/>	,000

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# Testing is tough

- ▶ Errors rarely occur naturally
- ▶ Hypothetical scenarios unrealistic
- ▶ Hard edits and soft edits
- ▶ If in test form, slow and complicated cognitive walk throughs
- ▶ Particularly hard for questions that respondents are reluctant to estimate on

- ▶ Does your organisation use in-form edits on question subject matter?
- ▶ How intensive are those edits? Selective or prolific?
- ▶ How much are hard edits used **on subject matter**?
- ▶ What have been the consequences for data quality and editing workload?
- ▶ How did you identify consequences (or, non-consequences)?
- ▶ Have there been any unintended positive or negative consequences of using subject matter edits?

# Hard edits in cognitive testing

- ▶ If a form needs testing and it has hard edits in it, how do you test it?
- ▶ When questions are complex and participants cannot enter in data (nor estimates?)
- ▶ How do you test the form and questions, without the hard edits getting in the way?
- ▶ How do you test the hard edits to see if they help or hinder response?

# Distributed user testing

- ▶ A type of unmoderated testing is to provide online forms to respondents for them to complete as they would normally and to provide feedback on their experience including on in-form edits
- ▶ This is helpful for systems testing
- ▶ But, test participants do not provide rich descriptions of experience in questionnaires
- ▶ **Do you know of any unmoderated testing of this type that has been effective for business surveys?**

- ▶ We've done some paradata analysis and we've found that character edits and other simple edits rarely triggered and, when they were triggered, respondents were able change their answers and to continue
- ▶ Since we have not implemented more invasive in-form edits, we do not have paradata for analysis. We have concerns about the ability of paradata to tell us any more than "edit triggered" and "respondent did or did not change answer."
- ▶ **What is your experience with using paradata to define how in-form edits are working in your forms?**



Other thoughts?