# Online data capture

## Making life easier for everybody

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**ARTD CONSULTANTS**
*strategy & evaluation*

"Well, J.B., we're not a successful Internet company because we're not an Internet company."

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# Purpose: practitioner paper

1. What is online data capture?
2. The familiar case: online surveys
   - basic advantages (and disadvantages)
   - market research vs. evaluations
   - online is an extension of offline-principles of good design
3. Other things we've done online
4. Things other people are doing online
5. If we have time: data visualisation
6. Take Home message: <u>Are you making the most of the internet?</u>

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# What is online data capture

- Online data collection occurs when information is received via the internet

- Pretty broad huh?

  - Data may be quantitative (e.g. surveys) or qualitative (e.g. workshops)

  - Limited by the number of exiting tools that can be migrated online, and the creativity of global internet users!

  - but—a tool is not a method.

- Key criterion for success of <u>tools</u> is completeness of data; response rates, drop-outs in a Skype call etc

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# Online surveys: are we dreaming?



A client can have their project _____:

Good

Fast

when they show us the money!

in their dreams.

as a prototype and / or a publicity stunt.

if they leave us alone and let us do our job!

Cheap

GraphJam.com

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# Advantages of online surveys

- It's good: higher quality, no data entry errors
    - online forms enforce rules (e.g. numerals not text) mandatory items
    - No 'innovations' (e.g. rating 4.5 on likert 1-5)
- It's fast: a respondent finishes entering the data its in the datenbank
    - no messy excel or word files
    - mid-collection analysis possible
- It's cheap: send surveys or data collection tools to numerous people.
    - No printing or postage
    - "set-and-forget"
    - automated reminders are cheap and easy

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# Disadvantages of online surveys

- Respondents must have access/ use the internet

- Low literacy or English as a second language is a barrier (unless translations exist?)

- Specific problems exist for probability samples: the representativeness of a sample

- They are too easy to create: there are many 'rubbish' examples–poor survey design or poor online design

  - E.g. Respondents with non-mutually exclusive options for a single-answer question. Test, Test, Test

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# Online surveys for research

Probability samples and response rates

'The first decade of this century in web surveying is likely to be recalled as a time of much uncertainty on whether random samples of the general public could be surveyed effectively over the internet' (Dillman 2010).
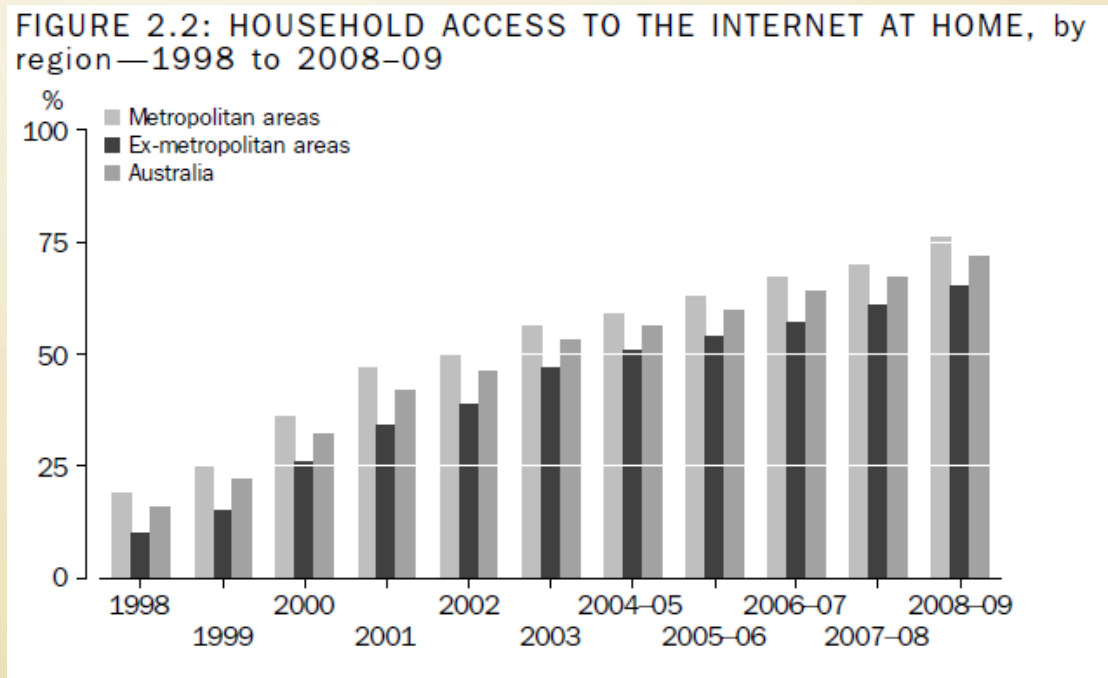
Core issues: representativeness of samples and response rates of the sample
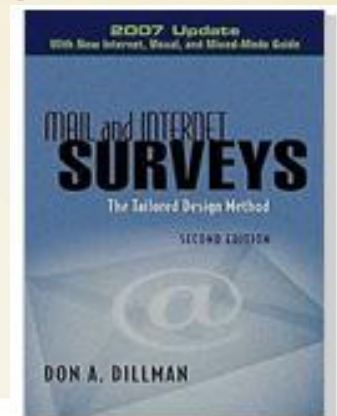
RTD

# Australians online (ABS data)

- Almost three quarters (72%) of Australian households have access to internet

FIGURE 2.2: HOUSEHOLD ACCESS TO THE INTERNET AT HOME, by region—1998 to 2008–09

%

- Metropolitan areas
- Ex-metropolitan areas
- Australia

100

75

50

25

0

1998  1999  2000  2001  2002  2003  2004–05  2005–06  2006–07  2007–08  2008–09

- Nearly all (94%) use it at least weekly

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# Home and work access to internet

- Most people access the internet at home (68%) rather than work (30%)



**Professionals**
**Clerical and Administrative Workers**
**Managers**
**Community and Personal Service Workers**
**Sales Workers**
**Technicans and Trades Workers**
**Machinery Operators and Drivers**
**Labourers**

● Work
◐ Home
○ Any location

0  20  40  60  80  100

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# Who is not on the internet?

- Older: 37% of those aged 45-54 don't use the internet, 69% of those aged 65 and over do not use the internet at all.

- Low income: the majority (56%) of those in the lowest income quintile did not use the internet at all

- Lower education: 36% of those with Yr 12 or below did not use the internet at all

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# Dillman's prescription for <u>probability</u> samples in 2010

1. Make contact by post
2. Provide a web address for the survey
3. Small incentive ($5) included
4. Three weeks later... paper version of survey sent to non-respondents

- Adequate (optimistic) response rate-55%
- Motorcycle survey (no reminders)-24%

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# Online surveys for evaluation

- A recent review of authors' book on online surveys in the AJE suggest its strongest warning is in the concluding chapter 'online surveys are effective for closed populations, when probability sampling is not essential, and target populations have access to the necessary computer technology'

- Representativeness of sample, irrelevant, response rate is still important

- At ARTD we have run over 80 online surveys in evaluation or monitoring contexts: 50 had email invitations, 40 of these are complete.

- Our response rates from 18 to 92%

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# Online surveys for evaluation

- Average response rate 61%
- Surveys of staff (68% average)
    - 66% is a benchmark response rate for a staff survey ES
- Surveys of stakeholders (48% avg.)
- Small negative correlation between sample size and response rate for stakeholders (-.224)
- No correlation between sample size and response rate for staff surveys
    - Small number of agencies
    - Common salience

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# Getting good response rates

In a meta-analysis of online surveys (2000)

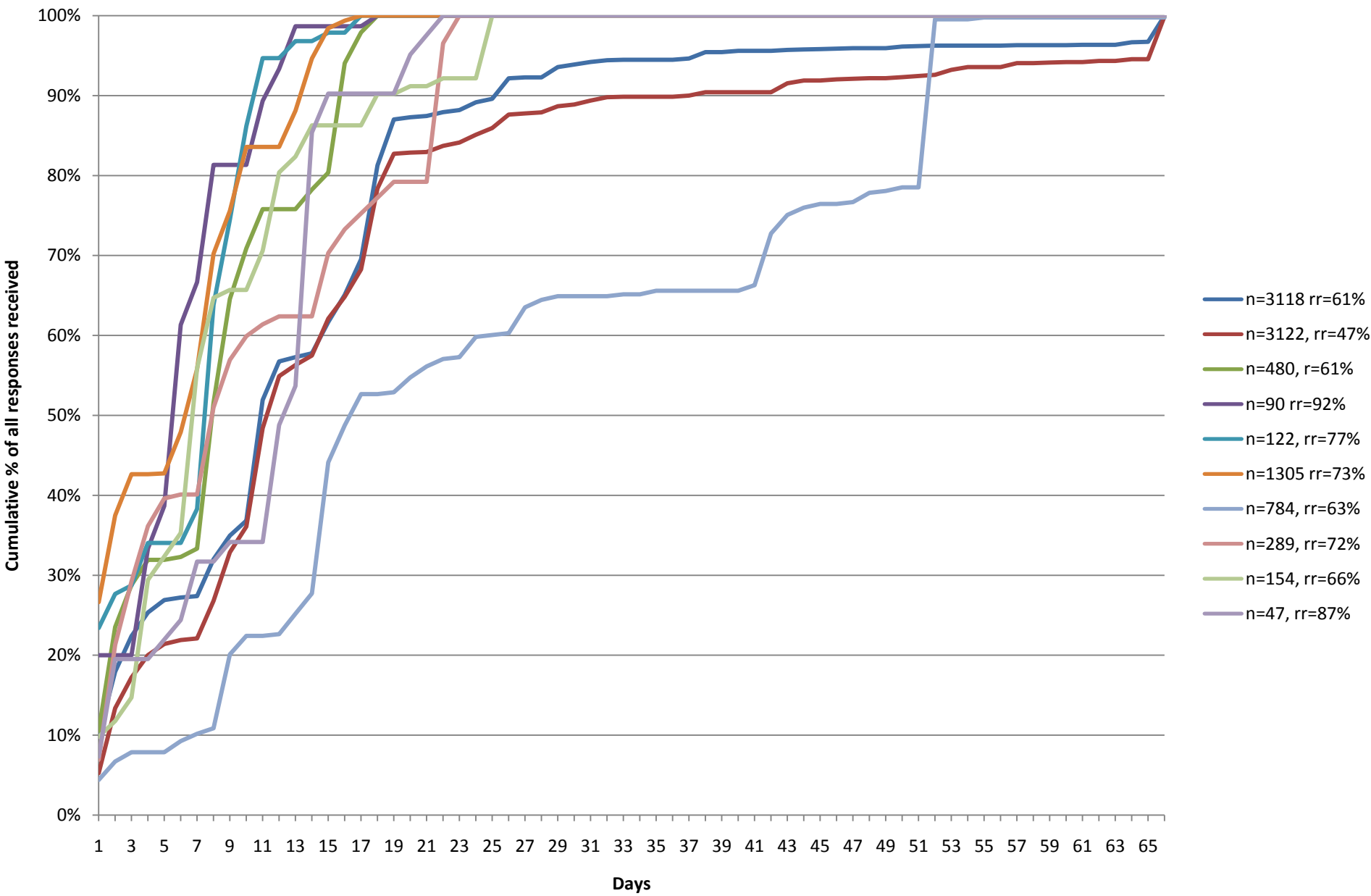- pre-contact

- the number of contacts

- a personalised letter

Also in a meta analysis of paper surveys (1999)

- salience
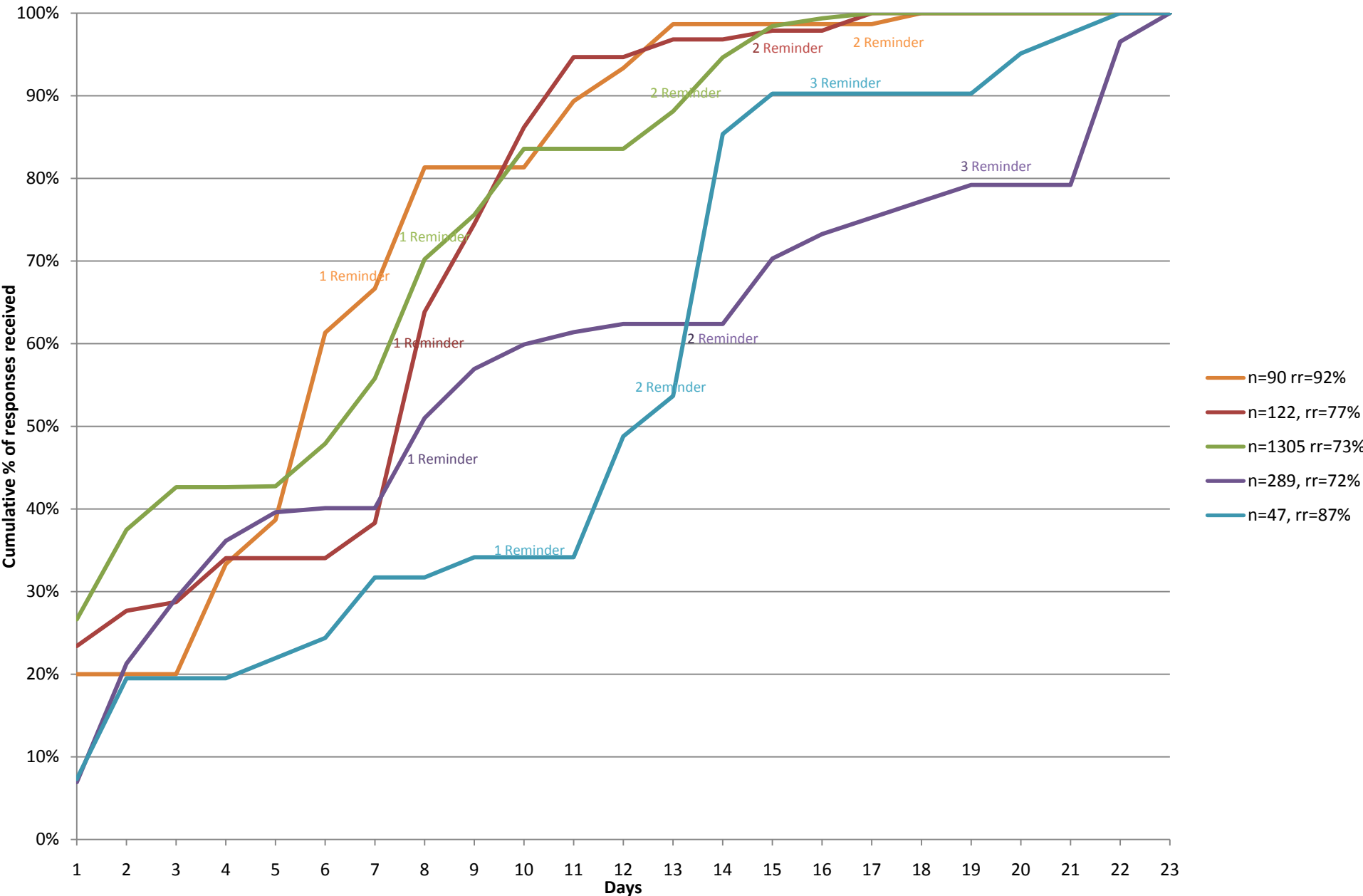
- incentives

- nature of the sponsoring agency

And

- mixed media communications

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# When responses come in (10 surveys)

# Effect of reminders (5 surveys)



A cumulative percentage of responses received chart plotting Days (x-axis, 1–23) against Cumulative % of responses received (y-axis, 0%–100%) for five surveys. Annotations on the lines mark "1 Reminder", "2 Reminder", and "3 Reminder" points.

Legend:
- n=90 rr=92%
- n=122, rr=77%
- n=1305 rr=73%
- n=289, rr=72%
- n=47, rr=87%

# When our surveys went bad...

Our horrible response rates occurred when

- No pre-notification: cold calling
- People had little interest in the survey topic, or affiliation with the agency
- Reminders couldn't save them

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# Principles of good online surveys

- Target 'desk bound' employees for highest response rates
- Be specific and recognise the difference between anonymity and confidentiality
- Importance of secure data storage
- Use a variety of media to send out warm-ups, and issue reminders
- Ensure staff have access to the web domain where the survey will come from
- Make a paper copy (.pdf) of the survey
- Allow people to save draft
- Have opt out responses and consider wisdom of mandatory responses

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# Principles of good online surveys

- Send the survey at about 10 am on a Monday or Tuesday

- Give staff two-three weeks to respond.

- Send a reminder to all non-respondents after seven days and another one after another seven days.

- Extend the survey period, say 'we have had many good responses so far but we also want your input'

- Track non-responses by workplace or geographic area

- Show that responding matters

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# Beyond the basics, good survey design generally

- The golden rule:  Ask only what you must know, not what you would like to know, or 'survey unto others as you have them survey unto you'.

- Use a few concrete and specific items; avoid general and abstract items-use factor analysis/ cluster analysis to summarise data

- Use cognitive interviews to check language

- Want to avoid all the debate and hard work? use a published scale found to be reliable and valid for your population

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"Next question: I believe that life is a constant striving for balance, requiring frequent tradeoffs between morality and necessity, within a cyclic pattern of joy and sadness, forging a trail of bittersweet memories until one slips, inevitably, into the jaws of death. Agree or disagree?"

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# Online survey technology

**Evaluation Solutions**

- Evaluation solutions (Australian and good customisation support)
- Survey monkey (disabilities compliant)
- Zoomerang (translations, online panels)
- SurveyGizmo (new)
- Lime survey (open source)

**LimeSurvey®**
the open source survey application
...refreshingly easy and free

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| Feature | Survey monkey | Zoomerang |
|---|---|---|
| Multiple users | √ | X |
| 508 compliant (for those with disabilities) | √ | X |
| Sampling frame population panel | | 2 million people |
| Deploy to mobile phones | iphone only | √ (via text messages Outbound: have mobile phone number (privacy conditions) Inbound: don't need their number they sms you. |
| Languages | Variety of languages can be programmed | Variety of languages can be programmed Translations possible |
| Survey templates | X | Skip logic |
| Qualitative data | X | Tag clouds-a visual description of words used in open-ended responses |
| Cost (Multiple users) | $US200 full multi-user access | $US199- 599 (premium) for limited shared workplace |
| Export data to SPSS | X | X |
| Download to excel | √ | √ |
| SSL encryption | For a fee | ? |
| Skip logic | √ (not in free version) | √ |
| Customer Support | Email customer support 24 hr response | Both online, email and telephone also quick to respond |

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# New horizons

# Other things we've done online

### Monitoring known clients

**Monitoring Surveys for Australian Foundation for Disability (AFFORD) Blacktown**

| Service Users - CIS codes | Survey Status |
|---|---|
| 1-82478345 | Completed Print |
| 875109 | Completed Print |
| 875950 | Completed Print |
| 885986 | Completed Print |
| PSP09147 | Completed Print |
| PSP09167 | Completed Print |
| PSP09168 | Completed Print |

Continue

### Pilot testing forms

**3. Client follow-up**

The guidelines document provides a step-by-step guide to what you need to do. The key documents that you need are available below for download. Print as many as you need. The guidelines document tells you how to use the forms and what to do with the completed forms. If you do not know how many clients to follow up, please contact ARTD Consultants.

PDF Adobe  Follow-up Interview Response Form       PDF Adobe  Follow-up client record sheet

An important part of the pilot is getting feedback from you about what worked and what didn't work so well. Use the link below to provide your feedback.

| Feedback on client follow-up | Status |
|---|---|
| Feedback on Follow-up Interview Response Form | Draft Saved |

### Surveying diffuse organisations

To ensure that systematic data is provided across projects, definitions of measures are included in this Key definitions and concepts.

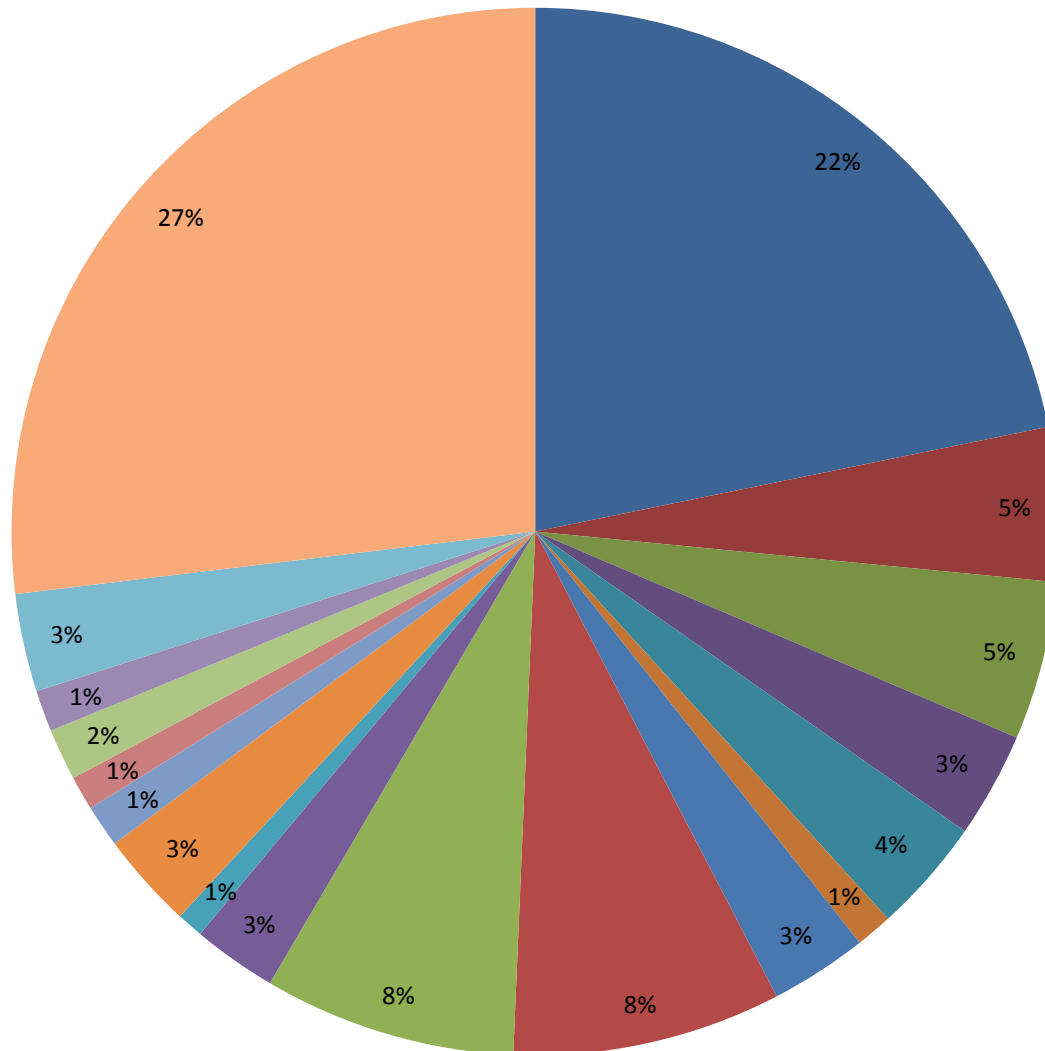| Data Collection Forms | Survey Status |
|---|---|
| Form 1: Number of clients assisted | Completed |
| Form 3: Number of clients that are housed | Completed |
| Form 8: HAP / NPA milestone status | Completed |

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When the program itself uses online technology (numeracy in Western NSW) .......?

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# WAAT DATA for front line staff of a large Housing agency



- 1 Answering enquiries & providing advice [all products & services]
- 2 Processing public housing applications
- 3 Assessing and approving public housing applications
- 4 Offering, allocating & signing-up for public housing
- 5 Assessing and approving RentStart, SAS, Temporary & Emergency Accommodation
- 6 Delivering private rental tenancy assistance
- 7 Undertaking routine client service visits
- 8 Undertaking general tenancy management
- 9 Managing arrears
- 10 Managing N&A / ASB
- 11 Managing other breaches of Tenancy Agreements
- 12 Undertaking CTTT action and evictions
- 13 Reviewing decisions, client feedback and appeals
- 14 Closing a tenancy
- 15 Managing assets
- 16 Facilitating tenant and community engagement
- 17 Planning and service development
- 18 Keeping the office working (HR, administration)

# Things we've done online

- Codes
- Training
- familiarisation day dummy day
- Responses over two weeks from 984 staff (90%)
- 70,897 activities
- 54,478 hours
- 13,610 individual clients
- Standard reports

## FCM Work Activity Analysis Tool

Name: Andrew Hawkins

Enter one task and the duration at a time. Once entered click on the ADD RECORD button to update your days activities. Help

**Add Activity**

Activity Start time (hh:mm): [ ]    End time (hh:mm): [ ]

Duration: [ ] hours [ ] mins

Description (Optional): [ ]

Activity Code: [Please select an Activity ▼]

[Add]  [Clear]

| 04/08/2010 | 09/08/2010 | 10/08/2010 | 11/08/2010 | 12/08/2010 | 13/08/2010 |
|---|---|---|---|---|---|

Activity Records for: Friday, August 13, 2010

| | Start time | End time | Duration | Activity Code | Activity Description |
|---|---|---|---|---|---|
| | | | There are no records available. | | |
| **Total:** | | | **0:00** | | |

Records per page: [ All ▼ ]

! Indicates a manditory field that hasn't been completed

[Confirm this day's Activities]

If you have any questions about the WAAT classification codes for your work activities please contact Andrew Hawkins or Ofir Thaler by email at waatFCM@artd.com.au or by phone on 02) 9373 9900.

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# Online monitoring principles

- Start small
- Be nimble
- Sunshine is the best disinfectant
- Describe the data you need-let service providers determine the methods of provision
  - an online portal will work for some others will want to send you a file.

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# Things other people are doing online

- Online diaries: evaluating project implementation

- Google earth: deforestation

- User generated: Haiti Response

- Integrated governance: Wellnet (NSW Government)

# Things other people are doing online

*The single biggest problem in the delivery of human services where the solution is within out grasp*

- Efforts to outcomes software



**Social Solutions**
transforming human services

**Traditional Case Management vs. Performance Management Software**

| Nonprofit Need | Case Management Software | Performance Management Software |
|---|---|---|
| Participant Intake | x | x |
| Participant Assessment | x | x |
| Participant and Family History | x | x |
| Structured Measurement of Efforts | x | x |
| Structured Measurement of Outcomes | - | x |
| Structured Application of Best Practices When Assessing Participants Needs and Progress | - | x |
| Rollup of Efforts and Outcomes to Program Level | - | x |
| Clear Measurement of Participant and Program Effectiveness | - | x |

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# Parting gifts: data visualisation

Google docs    docs.google.com

http://manyeyes.alphaworks.ibm.com/manyeyes/
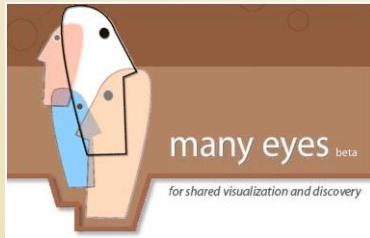
Wordle™    www.wordle.net/

Drawbacks:
- Whose data is it anyway?
- What if there is a problem with the website?

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# Wordle: text visualisation in 20 seconds

Survey respondents were asked to complete this sentence
**'The main reason I ride a motorcycle is.....'** these are the top
100 words used by all respondents.

# Take home messages

- What profession could benefit more from Information Technology than evaluators?
- Online surveys are great for evaluations when invitees are expecting the survey (using mixed media; team meetings, posters in the work place etc) when they use a computer for work, when they are interested in the program and when you remind them, and when responding matters
- The internet is enhancing existing tools: saving time, money and angst and improving quality.
- The power of computers and the reach of the internet mean  useful new tools being developed every day
- Its easier than you think
- A tool is not a method: reliability, validity, inclusivity (representativeness)

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