The Impact of the Internet on Research Methods in Social Sciences: Are New Methodologies Being Created or Just a New

Use of Existing Methodologies?

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Presentation Outline

- 1. Internet Characteristics
- 2. Major Questions
- 3. Research about the Internet
- 4. Research through the Internet
- 5. The Implication on Carrying Out Studies
- 6. Some Conclusions

Characteristics of the Information on the Internet

- Increase the amount of data and speed of collection
- Interactive collection (e.g., study on quality of service of airline companies)
- Anonymity or exposure as you like it
- Variables can be changed dynamically
- Media can alternate dynamically (video, audio, text)
- Internationally accessible
- Easily accessible
- Multi types of data sources

- Types of Internet Research in Social Sciences

- **Research about the Internet**: Research that deals with phenomena related to or derived by the Internet itself. For instance: addiction to the Internet; quality of service in B2C services.
- Research through the Internet: Research that employs the Internet as a platform to study issues that traditionally were used to be studied through other channels. For example: political polls; customer satisfactory surveys.

Major Questions

- How the special characteristics of the Internet affect the execution of a research project (about of through the Internet)?
- Does the use of the Internet create new research methodologies or is it just a revised implementation of existing techniques?

 Research about the Internet: a new method (?) -- Structured
Observation

Structured Observation: A sample of observations made by a person or a few persons filling out a questionnaire approved by experts and validated on a pilot sample.

A Structured observation may be an appropriate substitute for a survey!

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Research about the Internet: Some Examples

- Comparative analysis of various websites (e.g., Cultural differences among Yahoo and MSN around the world, quality of service of airline companies)
- Comparative analysis between physical and virtual processes (e.g., virtual teams vis-àvis face-to-face teams)

Research about the Internet: Some Examples (cont')

Observing human interactions over the Internet in chats, forums, blogs, and the like



 Research about the Internet: Advantages

- No geographical boundaries
- 24/7 time availability
- Virgin soil for all kinds of research topics
- Ability to incorporate qualitative and quantitative analysis (e.g., content of website and quantitative data)
- Non linear walkthrough

- Research about the Internet: Problems

Methodological questions:

- Is the sample representative?
- Are structured observations made by a few observers not biased?
- Competence of the experts chosen to validate the questionnaire.

Research through the Internet: some examples

Relationship Between Thinking Styles and Creativity

self test:

Social Psychology Study

cross cultural questionnaire:

Cross-cultural definitions of abuse within families

Vanderblit University eLab

We're looking for people like you...

Dear Yael,

You've been randomly chosen from the Vanderbilt University eLab Panel to participate in a brief study. This study should take about 15 to 20 minutes to complete.

You may complete this study at any time of your choice during the next 5 days. We ask that you find a quiet time and location to sign in to the study, and to try and minimize any outside distractions. If you complete the study, you will be entered into a drawing for a cash prize of \$100. To participate in the study, please proceed to the following URL:

http://elab.vanderbilt.edu/experiments/tsts-6/study1/

You must be 18 years of age or older to participate in this study. Thanks for your participation in our research!

Tom Novak Professor of Marketing and Co-Director, eLab

Research through the Internet

Annual spending: 960 Million \$ in 2004

In 2001: 8%; in 2004: 60% of survey studies were performed through the Internet

WebSM Web Survey Methodology

Research through the Internet: Advantages

- Large samples
- Low cost
- High speed of data transfer and analysis
- Flexibility in questionnaire handling and walkthrough
- Easy to send memo
- Quick, easy and cheap feedback

Research through the Internet: Advantages (cont')

- No bias due to interaction with the interviewee
- Integration of various media
- Flexibility in questioning; adapting the questions to the population type
- Accessibility to remote places
- Anonymity; can ask sensitive questions
- 24/7

Research through the Internet: Problems

- Partial coverage (only those who are accessible to the Internet)
- Is the sample representative?
- Can you be sure no one has answered to more than one questionnaire?
- Internal and external validity
- It all boils down to the reliability of the results, analysis, conclusions and forecast

The Implication on Carrying Out Studies Through the Internet

<u>The Unique</u> <u>Trait of the</u> <u>Internet</u>	<u>The Sampling</u> <u>Process</u>	<u>The Research</u> <u>Instrument</u>
Multimedia capability	Approachable to diversified populations	Multimedia Questionnaire
Nonlinear walkthrough		Nonlinear questioning
Access to diversified communities	Richer sample	Adaptive to multicultural/ multilingual study
Interactive		Flexible to the respondent reaction
Anonymity	Approach large sample on sensitive issues	Relate to sensitive issues 17

The Implication on Carrying Out Studies About the Internet

<u>The Unique</u> <u>Trait of the</u> <u>Internet</u>	<u>The Sampling</u> <u>Process</u>	<u>The Research</u> <u>Instrument</u>
Multimedia capability	Revised definition of the sampled unit (e.g., a whole process)	New measurements (e.g., virtual distance); analysis of multimedia variables
Nonlinear walkthrough		Nonlinear investigation
Access to diversified communities	Accessible to a diversity of websites	multilanguage; multiculture; multimedia
Interactive		New measurements to observations
Anonymity	Anonymous sample (an ethical problem?)	Non-intervention observation

Some Concluding Remarks

In the area of research through the Internet, it seems that traditional research methods in Social Sciences have not become obsolete but rather have been upgraded by the introduction of the Internet as a vehicle to approach sampled population.

Some Concluding Remarks (cont')

However, it seem that a new research area is now emerging - research about the Internet. This area, beside employing the traditional methods and upgrading them, is also developing new approaches. The most salient one is the structured observation which will likely substitute the traditional survey technique in many cases.



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