Introduction to IN 5000/9000 Qualitative Research Methods in Information Systems

IN 5000/9000

January 26, 2022

Guri Verne,

Design of information systems group

Research versus journalism or opinionating

My advice after a year without tech: rewild yourself
Mark Boyle

We can't all go and live in the woods, of course. But if we resist debt, resist gadgets, and reconnect with nature, the world might just change

DO YOU WISH TO CONTINUE?
EVERYTHING NOT SAVED
WILL BE LOST
YES   NO

www.forbes.com/sites/realspin/2013/09/20/how-technology-will-greatly-enhance-the-life-and-work-of-the-middle-c

Forbes / Opinion

Top 20 Stocks for 2016

SEP 20, 2013 @ 08:00 AM   8,099 VIEWS

How Technology Will Greatly Enhance The Life And Work Of The Middle Class

Capital Flows, CONTRIBUTOR
Guest commentary curated by Forbes Opinion.
FOLLOW ON FORBES (444)
Opinions expressed by Forbes Contributors are their own.

FULL BIO ⌄

By Gary Shapiro

(Photo credit: Wikipedia)

There's been some buzz lately around the not-so-new idea that emerging technology is destroying jobs and will ultimately destroy the middle class. Fears about a shrinking job pool are understandable: our economy is still recovering from the recession, and jobs have not returned to pre-recession levels. Meanwhile, technology is replacing some low-skilled jobs. Yet, changes to the job landscape, while they may require some adjustments, are not bad news for the middle class. Instead, advances in innovation and technology promise to make life better for everyone, both professionally and personally.

Just look at the usual trend for tech developments: they start for the wealthy and are later taken up by the middle class. The combine, tractor, car, phone,

Discuss in groups

What can be differences between opiniating and research?

Research produces new knowledge

… by asking questions and answering them.

There are different kinds of research
+ different kinds of questions
+ different approaches to answering them

Research logically begins with a question:
the Research Question

Different kinds of research

Qualitative research
Quantitative research
Technology research
Design research

Natural science
Social science
Cultural science

Different kinds of questions

Descriptive:
opens up for descriptions of conditions or situations, and explanations of how something changes or stays unchanged.
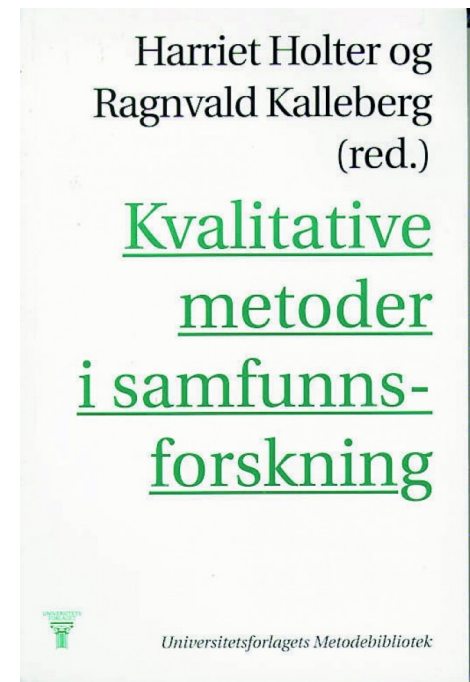
Evaluative/ normative:
we ask which value something has. Normative arguments are required to answer evaluating questions.

Constructive:
evaluating something can logically be used to suggest and discuss improvements to it.

(Kalleberg 1992, 2002)

Harriet Holter og
Ragnvald Kalleberg
(red.)
Kvalitative
metoder
i samfunns-
forskning

Universitetsforlagets Metodebibliotek

Different approaches to answering

Qualitative research
Aimed to understand a social phenomenon
Working with qualitiative data

Quantiative research
Originally from the natural sciences to study natural phenomena,
Working with quantitative data
Include survey methods, laboratory experiments, formal methods (e.g. econometrics) and numerical methods such as mathematical modeling.
(Myers living version)

Qualitative research

"Qualitative research methods are designed to help researchers understand people and the social and cultural contexts within which they live. [..] the goal of understanding a phenomenon from the point of view of the participants and its particular social and institutional context is largely lost when textual data are quantified" (Myers living version).

Qualitative research involves working with *qualitative data*
- interviews,
- documents,
- participant observation data,
- photos, ...

to *understand and explain social phenomena.*

We study use, design and development of technology as social phenomena.

Verne og Bråthen (2014)
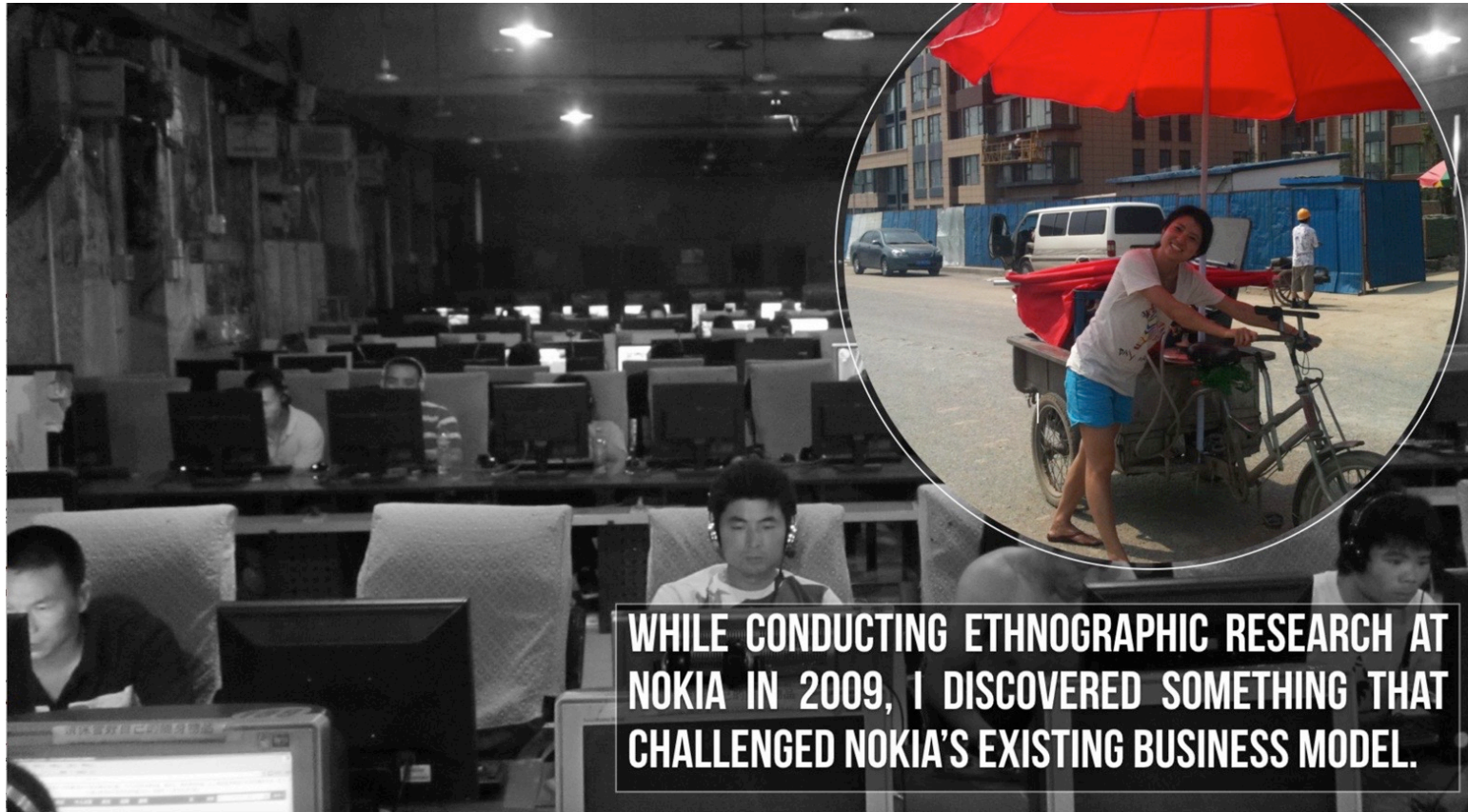
QUALITATIVE – QUANTITATIVE

- Observation
- Interview
- Texts/documents
- Audio / video
- Small numbers (focused)
- In-depth
- How, what, how come

- Questionnaires
- Surveys
- Experiments
- Statistics
- Large numbers (broad)
- Broad rather than in-depth
- How many? Why (causality)?

What is best?

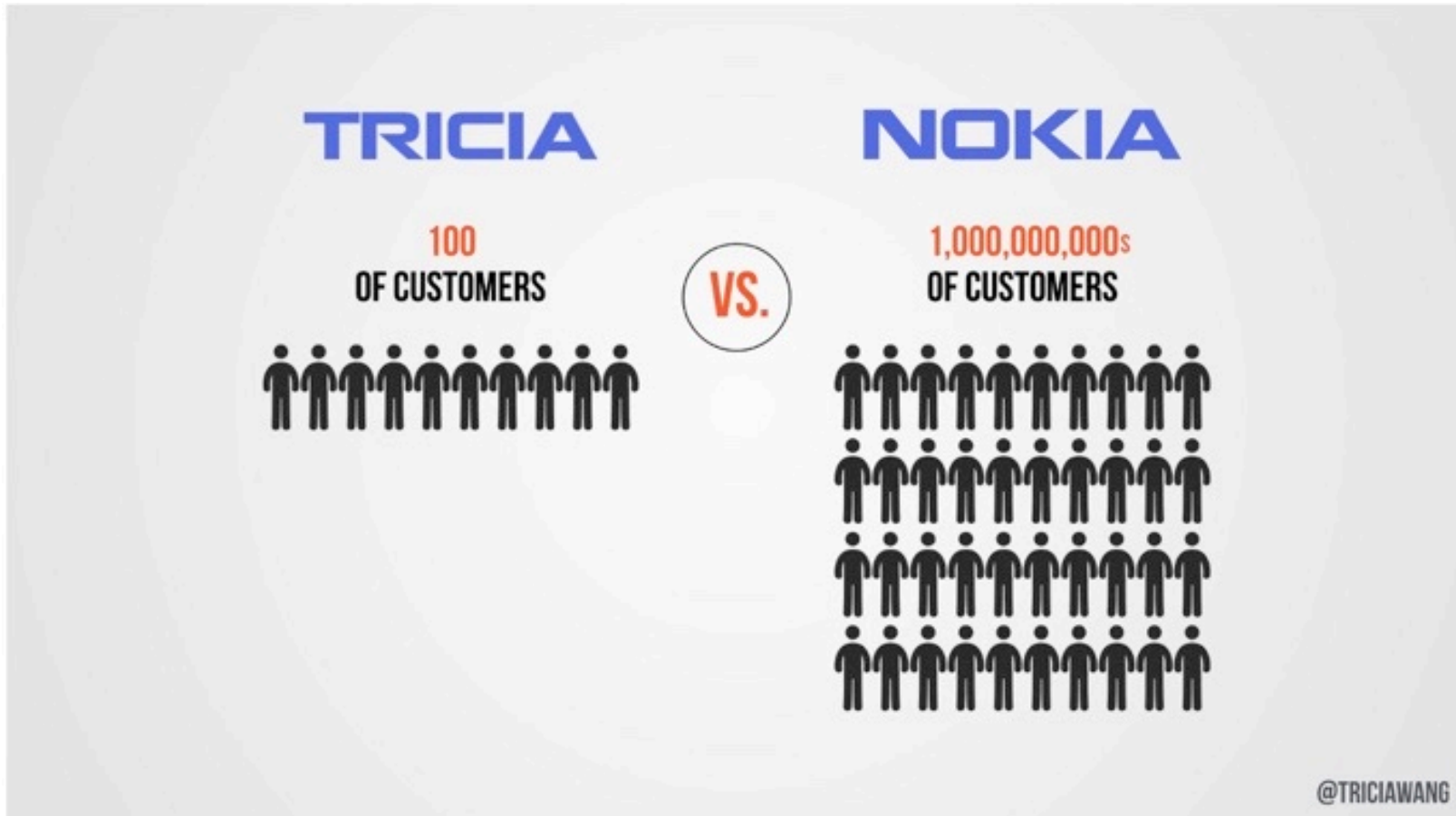No research approach (quantitative or qualitative) is better than any other.

In choosing a method, everything depends upon what we are trying to find out. Thus, it depends on your research question (Silverman 2005).

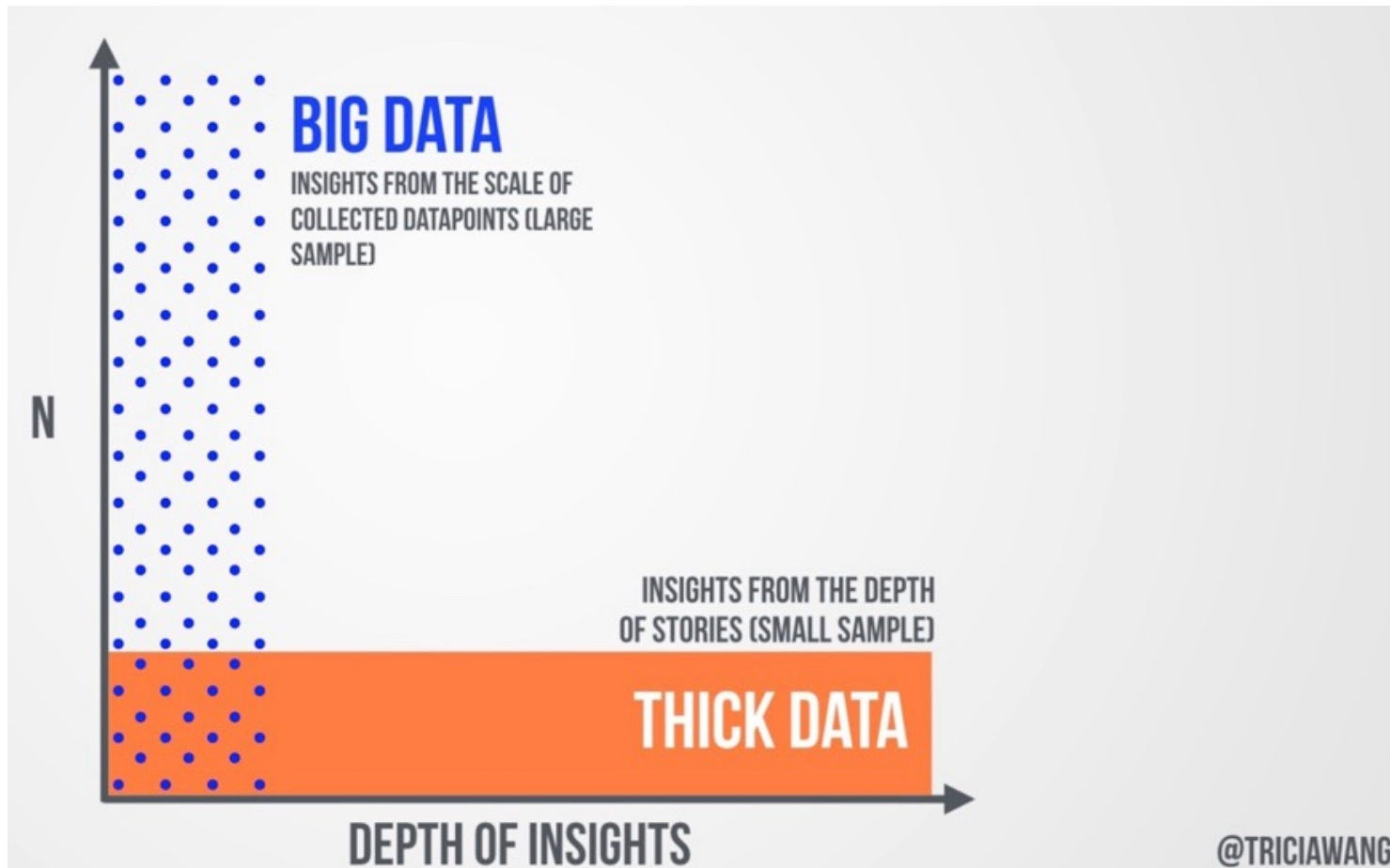# Big data versus thick data

WHILE CONDUCTING ETHNOGRAPHIC RESEARCH AT NOKIA IN 2009, I DISCOVERED SOMETHING THAT CHALLENGED NOKIA'S EXISTING BUSINESS MODEL.

Tricia Wang, 2016,
https://medium.com/ethnography-matters/why-big-data-needs-thick-data-b4b3e75e3d7

We know what happened to NOKIA

Big data and thick data

Discuss in groups

Do you have previous experience with qualitative or quantitative research?

What is your experience with qualitative research?

Philosophical assumptions

All research is based on some (explicit or implicit) underlying philosophical assumptions about what constitutes valid research and which research methods are appropriate.

These assumptions are called paradigms.
In this course, we talk about research within three paradigms:

- Positivist
- Interpretive } research
- Critical

What is Hanne Cecilie doing here? (different paradigms)

Positivist research
- Reality is objectively given

Interpretive research
- Access to reality is only through language or other social phenomena

Critical research
- social critique to uncover restrictive conditions

Having passed IN5000

After you have completed this course, you can

- explain and compare different qualitative research paradigms including the interpretive, critical, and positivist paradigms

- explain and compare different qualitative methodologies including case studies, action research, and ethnography

- explain and compare different methods used in qualitative empirical research in informatics including interviews and observations

- explain and illustrate the relationships between research questions, paradigms, methodologies and methods

- position and discuss your own and others' research with respect to the qualitative research paradigms

- make qualified and well-motivated choices of research methodology for your own research and assess others' choices of methodology

- perform interviews and observations and analyze the resulting empirical data

+ photos and documents

+ design methodologies
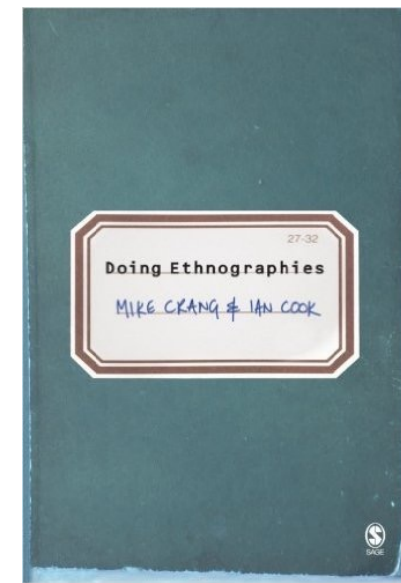
You'll learn about different types of research (as sketched above).

- How to do it yourself (assignments are central for learning), and how to analyze and write up your findings.
- The course has one course book (Crang and Cook (2007)).
- In addition, we will work with a number of articles, both discussing methodological issues and as exemplars of these different types of studies.
- See course page for literature (syllabus) + detailed teaching plan for readings and assignments.
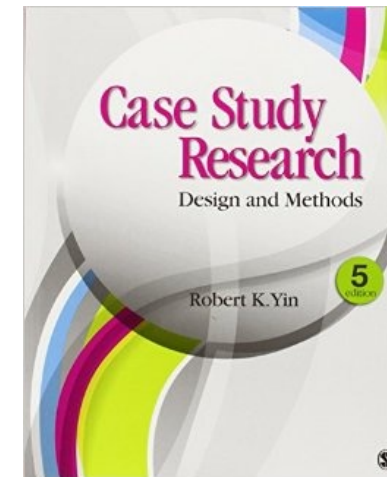
A word of caution

You may have experience with other textbooks, e.g.:
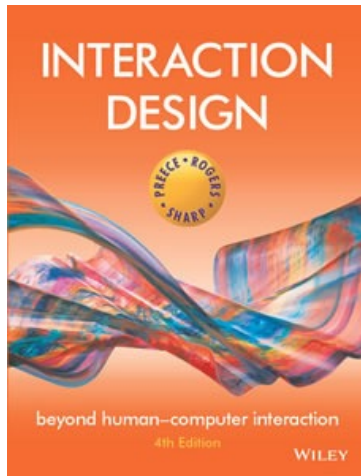

(INF 1500/1510)
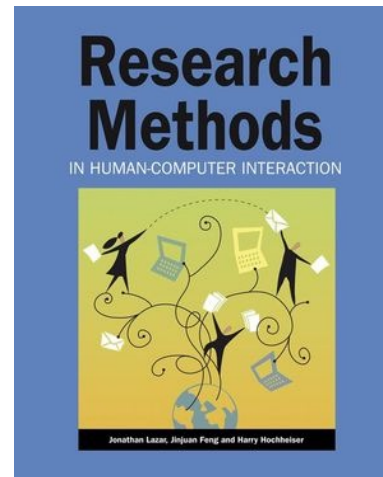
(INF 2260)

They take other approaches.

Preece, Sharp and Rogers on data gathering

«.. data gathering is a central part of establishing requirements, and of evaluation. Within the requirements activity, the purpose of data gathering is to collect sufficient, accurate, and relevant data so that a set of stable requirements can be produced, within evaluation, data gathering is needed in order to capture users' reactions and performance with a system or prototype»

Yvonne Rogers, Helen Sharp, Jenny Preece (2015, p 226)
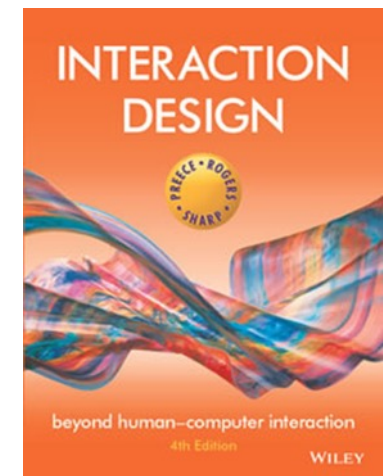
Comparing Rogers, Sharp and Preece with Crang and Cook on data gathering

RSP:

«.. data gathering is a central part of establishing requirements, and of evaluation».

CC:

«… research must involve the struggle to produce *inter-subjective thruths*, to understand why so many versions of events are produced and recited».

Rogers, Sharp and Preece (2015, p 226)
Crang and Cook (2007, p 14)