Action research

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Characteristics of action research

Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework (Rapoport, 1970, p. 499, in Myers (living version)).

- Contributing to practical concerns of a group of people
- Contributing to theory development
- Collaboration with the concerned group
- Conducted within a mutually acceptable ethical framework
- Diagnostic stage and therapeutic stage (Blum 1955 in Baskerville et al. 2002)

History of action research

Originated in social psychology

- Aim of instigating social change and empowerment of vulnerable groups
- 2nd World War – returning soldiers and prisoners of war
- Social and psychological interventions - learning by doing

Used in education and the development field

- Emancipatory education
- Participatory development interventions

Action research in information systems

AR in organizational studies and IS

- Promoting improved organizational structure, learning, culture, etc.
- Developing better information systems, including new groups of users, etc.

Action research tradition in Scandinavian IS:

- **1970's:**
- NJMF project: Working with labor union to empower workers when digital information systems was introduced
- **90's onwards**: HISP – health information systems in the Global South

Baskerville, R. L., & Wood-Harper, A. T. (1996). A critical perspective on action research as a method for information systems research. *Journal of Information Technology*, *11*(3), 235–246.

Bjerknes, G., & Bratteteig, T. (1995). User participation and democracy: A discussion of Scandinavian research on system development. *Scandinavian Journal of Information Systems*, *7*(1), 1.

Braa, J., Monteiro, E., & Sahay, S. (2004). Networks of action: sustainable health information systems across developing countries. *Mis Quarterly*, 337–362.

Nygaard, Kristen (1992). How many choices do we make? How many are difficult? In Software development and reality construction, Springer.

The “Green Bangla” project

- Pilot project 2010 - 2015: University of Oslo and Bangladeshi mobile operator “Deshi Phone”
- Mobile tower as an electricity producing hub in the village “Haorbari”
- Local solar electricity grid connecting 136 households and 2 temples at night
- Domestic mobile charging – failed
- Fee: 150 taka (less than 2$)
- Daytime electricity: 1 computer center
- Day-to-day management by local businessman

Contributing to theory and practice

- Engagement in real world situations
  - Researching phenomena in their context
- Contribute to practical matters, such as:
  - Solving a practical problem
  - Changing organizational structures
  - Stimulating empowerment, influencing organizational culture
- Contribute to theory development
  - Data collection
  - Analysis

A collaborative effort

Participants and researchers collaborate

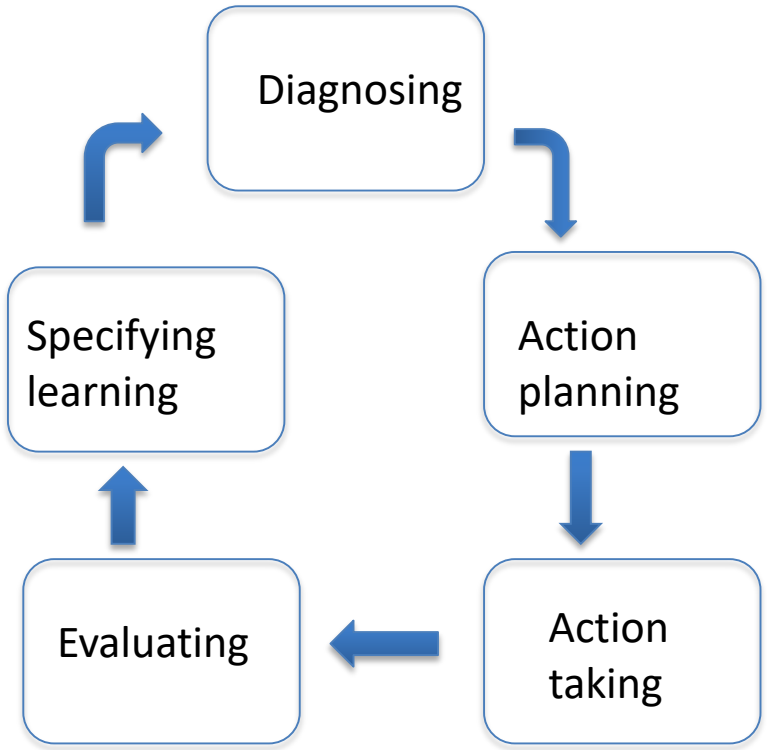
- Define the problem/need for change together
- Plan and execute the action together
- Evaluate and reflect together (reflexive learning)

- A mutually acceptable ethical framework
  - Serving the interests of both researcher and participants
  - Mutual responsibility for the process
  - Data collection methods acceptable to both parties

Checkland, P., & Holwell, S. (1998). Action research: its nature and validity. Systemic Practice and Action Research, 11(1), 9–21.

An iterative cycle

- Often conceptualized as cycle of 5 stages
- Evaluation may lead to a new diagnosis, cycle is repeated.
- Multiple methods in different stages:
  - Interviews
  - Observations (passive, participant)
  - Document analysis (e.g., specifications, task descriptions, guidelines)
  - Film/photo



See Baskerville et. al 2002, p. 10

Epistemology – how is knowledge produced in action research?

- Associated in IS with the critical and interpretive paradigms
- Co-construction of knowledge, reflexive learning
- Researching a phenomenon that is changing, where the researcher contributes to change
  - Researcher's role may change over time
  - Calls for reflection about researcher's positionality

How can we evaluate action research?

- How to evaluate research where the research question as well as the methods is likely to change in the process?
- **Recoverability** (Checkland and Holwell 1998):
  - Being transparent about methods, access/roles, data and analysis so the readers can assess the quality of the research
- **'Catalytic validity'** (Sykes and Treleaven 2009):
  - the degree to which the research generates change among the participants

Kristen Nygaard (1992) about the trade uinion project:

"In most research projects the results of the project may be said to be what is written in the project reports. In this project another definition will be applied: We will regard as results actions carried out by the trade unions, at the local and national levels, as a part of or triggered off by the project."

Nygaard, Kristen (1992). How many choices do we make? How many are difficult? In Software development and reality construction, Springer.

How do action research and consultancy differ?

- **Action RESEARCH:**
  - Scientific methods for data gathering and analysis
  - Following ethical guidelines for research
  - Contribution to theory development as well as practice

- **Consultancy:**
  - Funded in full by the organization
  - Does often have an explicit mandate (less room for changing area of interest, less open to divergent voices)
  - Rarely more than one iteration of the cycle

Baskerville, R. L., & Wood-Harper, A. T. (1996). A critical perspective on action research as a method for information systems research. *Journal of Information Technology*, *11*(3), 235–246.

Critique and challenges

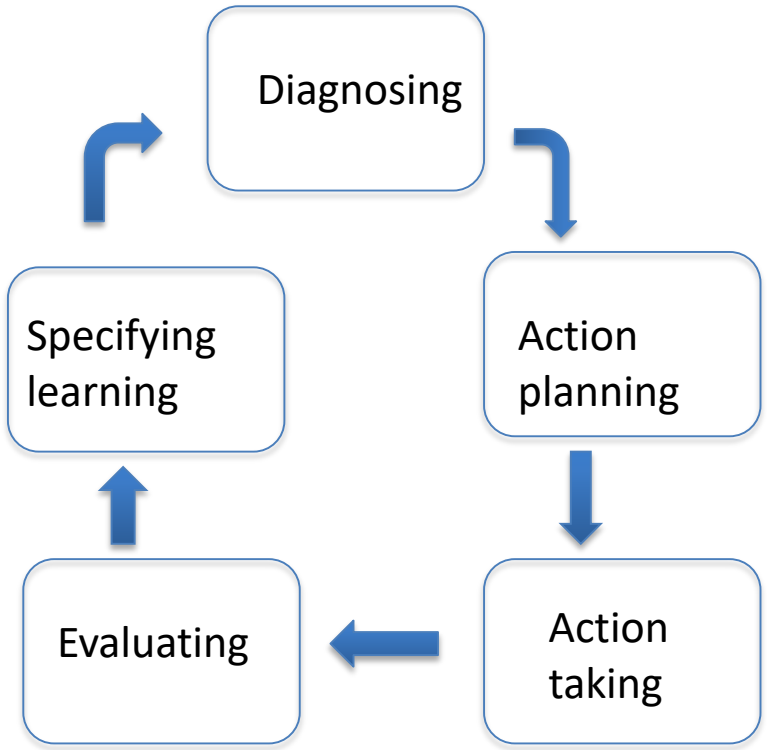
- More action than research? More research than action?
- Researchers' vested interests in some kinds of change over other
  - Will IS researchers accept an action plan that does not involve digital artifacts?
- Are values sufficiently addressed?
  - E.g., taking for granted that uptake of ICT will promote development?

Critique and challenges cont.

- Power imbalances
  - Can participants afford to voice their opinions?
  - Whose voices are heard? Communities represented by community leaders, dissidents marginalized in organizations
- Should researchers intervene at all?
  - Difficult to control interventions – ethical concerns.
- On the other hand is it ethical for researchers *not to* contribute to needed change?

Summary

- A methodology with the aim of contributing to practical concerns as well as theory development
- Collaboration between researchers and the concerned group
- Within a mutually acceptable ethical framework
- An iterative cycle: diagnosing, action planning, action taking, evaluation, specifying learning, repeating if needed
- Prescriptive, explicit goal of changing something



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