



IN5000 - Qualitative Research Methods Action Research

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Learning objectives

For this topic, you should be able to...

- Describe the basic principles of Action Research (AR)
- Compare AR to other qualitative research methodologies
- Discuss the relationship between AR and different qualitative research paradigms (e.g., interpretivism and positivism)
- Reflect on and discuss the potential relevance of AR for your own research project

Why learn about Action Research?

- Adding to the 'buffet' of relevant methodologies for your own research: May be relevant as methodology for the master project of some of you
- Action Research is a common methodology within Information Systems (IS) research; helps you understand the basis of the academic literature you read
- Helps illustrate characteristics of other methodologies such as case studies with contrasting approaches.

Exercise

Exercise

For one minute: note down some bullet points for the following question:

- What do you think when you hear 'Action Research'?

What's the "Action"?

What's the Action?

Two relevant types of research methodologies:

- Methodologies for exploring 'what is' - '**descriptive**' (e.g., case studies)
- Methodologies for exploring 'what can be' - '**constructive**' or '**interventionist**' (e.g., action research, design research)

What's the Action?

- In contrast to case studies where we study a system “as is” - in AR, interventions in the system (action) are systematically planned, conducted, and evaluated.
- AR thus involves an interest in participating in changing status quo, and developing a deeper understanding of a phenomenon through processes of change

Exercise

Consider following research question:

- How can software development organizations strengthen their focus on end-user involvement in their software development practices?

For 1 minute: note down some bullet points for the following questions:

- How could you go about exploring this research question?
- Could it involve interventions?

Exercise

Consider following research question:

- How can software development organizations strengthen their focus on end-user involvement in their software development practices?

May be examined with descriptive or interventionist research:

- **With case study** → Examine one or several organizations who are in the process of strengthening
- **With AR** → Work with an organization to understand obstacles, and plan and introduce interventions (e.g., new methods, roles), and evaluate.

Action Research = interventionist

- In case studies, one tries to learn about a phenomenon by (more or less) 'passively' examining it through interviews, observations, etc, or by being an active participant in a system of study
- For instance, an organization is implementing a new information system and the researchers are examining how the process unfold(ed) (either as the process unfold or retrospective) with some phenomenon of interest in mind.
- In action research the researcher tries to learn about a phenomenon by taking an active part in planning, carrying out, and evaluating changes related to a specific problem.
- For instance, the researcher collaborate with the organization implementing the information system using scientific knowledge to guide planning, execution and evaluation of change.

Action Research = interventionist

Interventions could be:

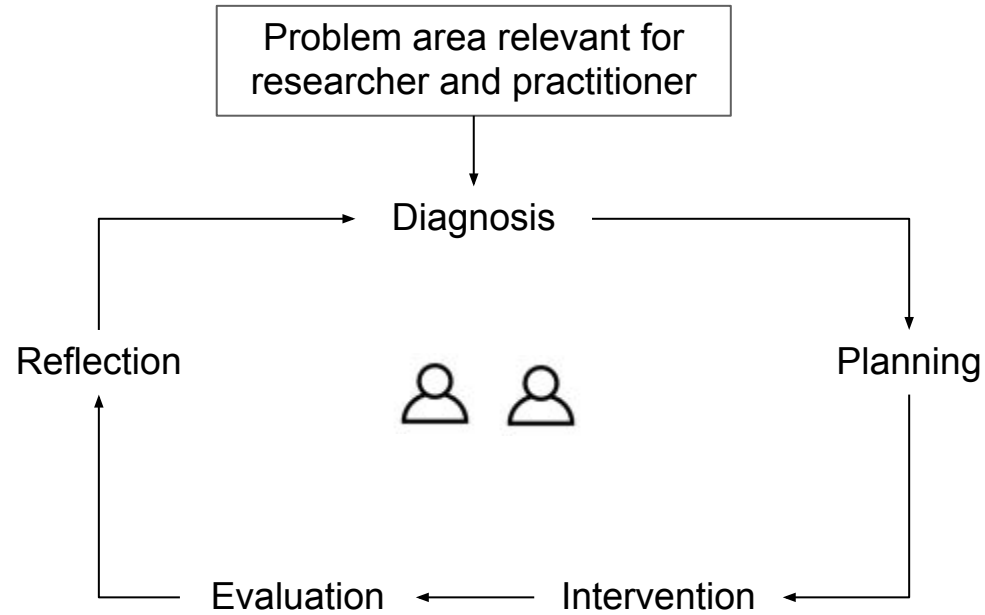
- Introducing new IT-artifacts
- Introducing new methods and processes / changing practice
- Competence building / human capacity
- Changing organizational structures / responsibilities / roles
- Etc.

Action Research = engaged

- Another key trait of Action Research is that it is 'engaged'
- Means that the researcher collaborate with practitioners in defining, diagnosing, and addressing problems relevant to the organization and to research.

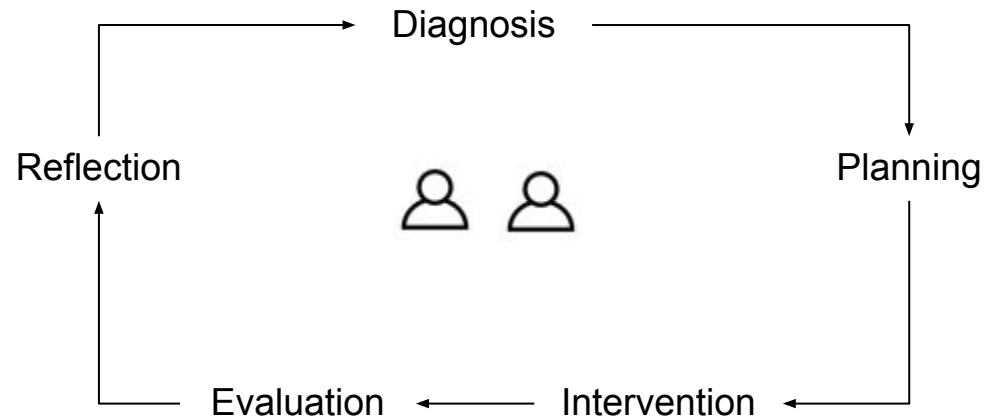
The basic AR process

The Action Research Process



Methods

- Many specific methods for data collection are relevant within the various stages of action research cycles.
 - Interviews
 - (Participant) observation
 - Document analysis
 - System logging
 - Virtual observation
 - Film and photo



Key principles (Davison et al., 2004)

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1. Principle of the Researcher – Client Agreement
2. Principle of the Cyclical Process Model
3. Principle of Theory
4. Principle of Change through Action
5. Principle of Learning through Reflection

1. Principle of the Researcher – Client Agreement

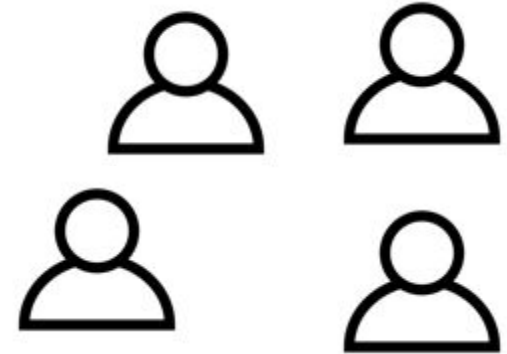
Researcher(s)



- Competence
- Research interests



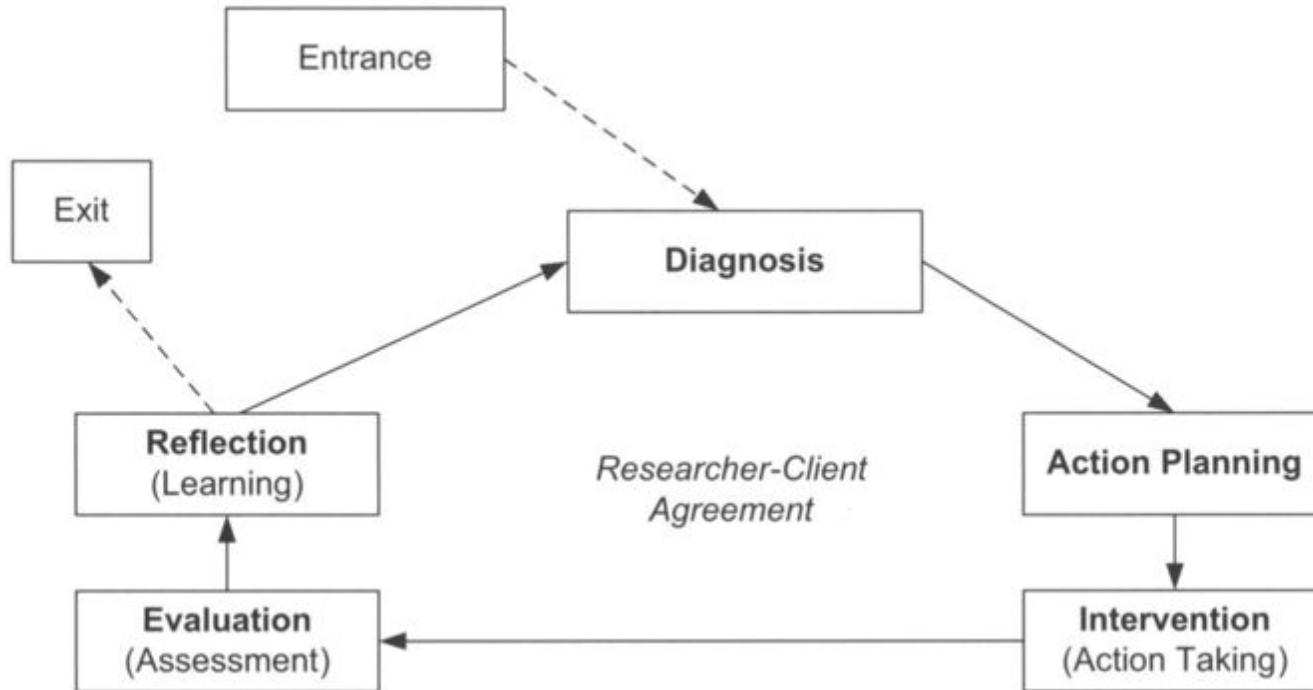
Practitioners



- Mutual interest
- Agreement on practical and academic outcomes
- Obligations and expectations
- Involvement

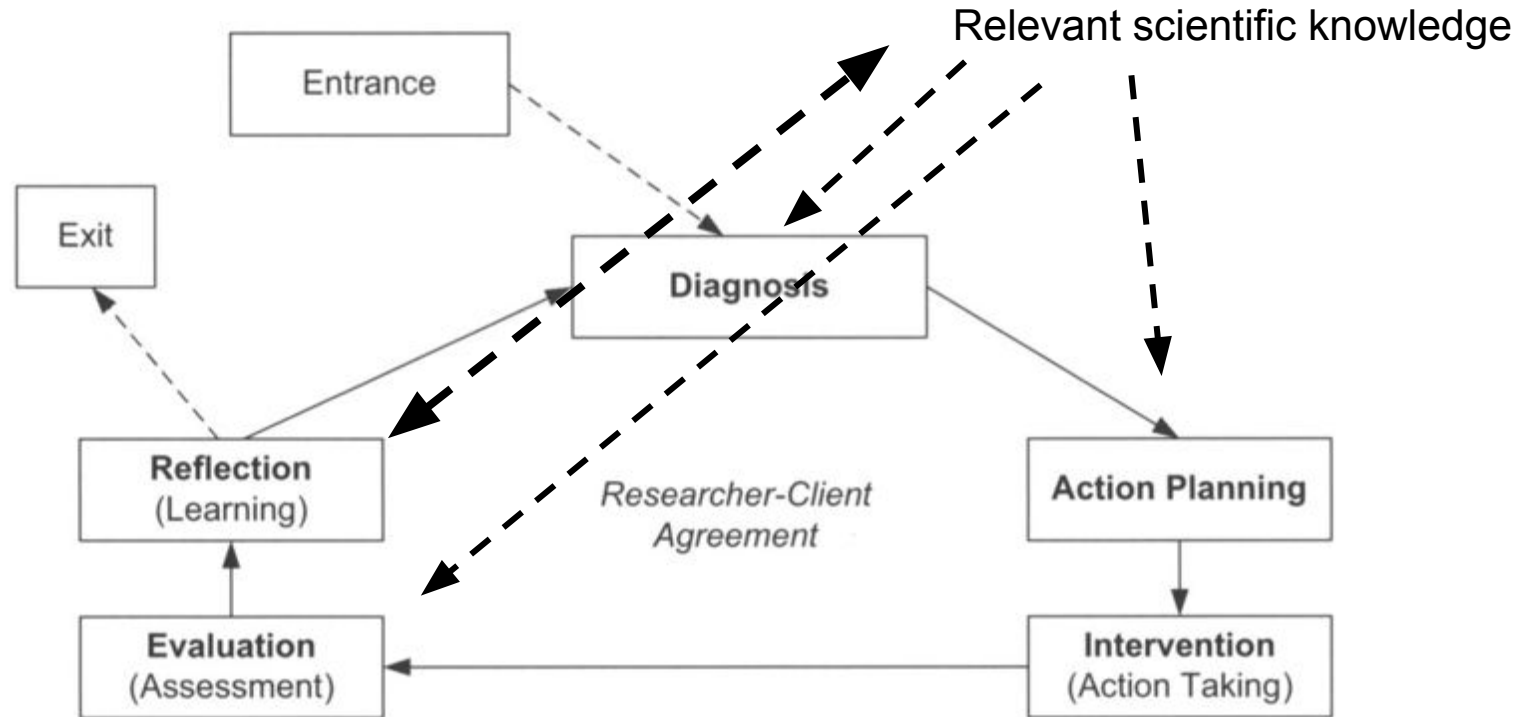
- Competence
- Practical interests

2. Principle of the Cyclical Process Model

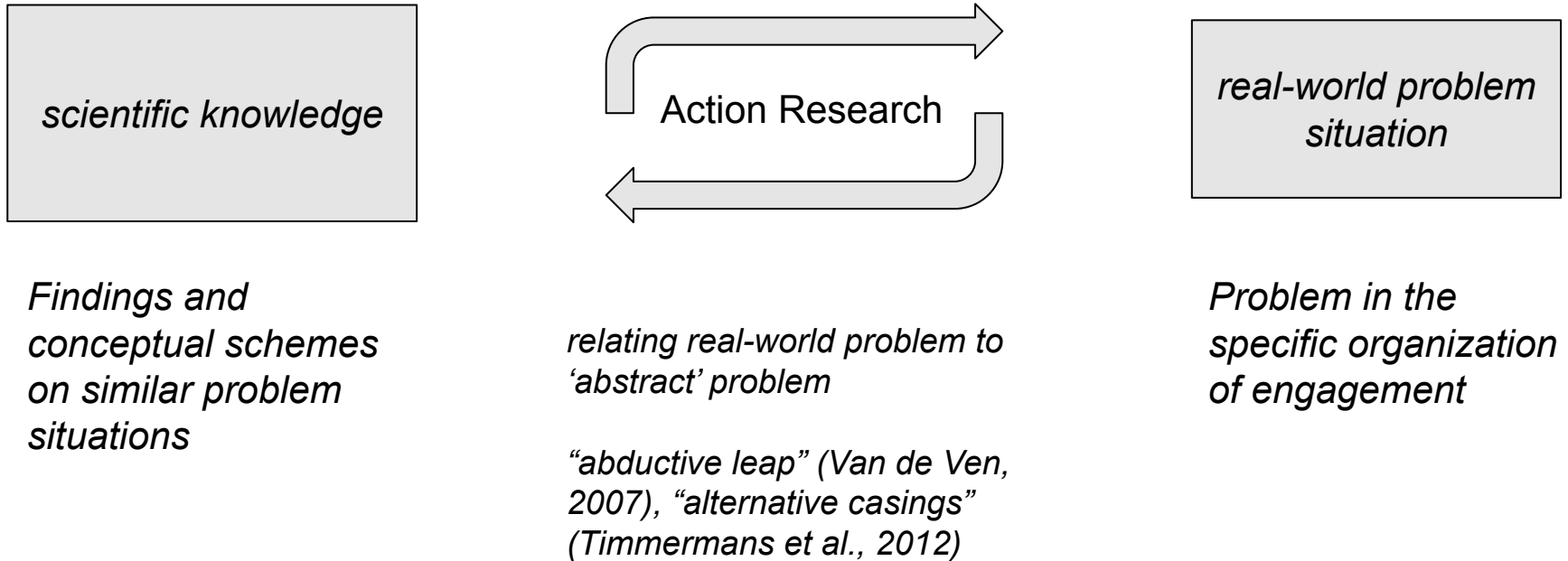


3. Principle of theory

E.g., theory on IS integration is used to guide diagnosis, action planning, analysis in evaluation and reflection + contributed back to after reflection



3. Principle of theory



4. Principle of change through action

- (Positive) change related to the problem of focus is obviously the goal of 'action' in action research.
- «A lack of change in the unsatisfactory conditions suggests that there was no meaningful problem, that the intervention failed to address the existing problem(s), or that the existing situation could not be altered because of political or practical obstacles that were neglected when the RCA was established.» (Davidson et al., 2005)

5. Principle of Learning through Reflection

- Learnings for both the client organization and related research is a key element.
 - To inform further action within the system/organization of study
 - Action in similar contexts
 - General knowledge about the problem and domain
 - On the methodology
- Research articles and theses
- For the client, continuous communication of learnings from the project is important.
 - Project reports (potentially co-written)
 - Workshops
 - Presentations

Exercise

Exercise

For one minute: note down some bullet points for the following question:

Imagine that you are planning an Action Research project

- What are important things to think about?

Research Paradigms: Ontology and epistemology

Ontology and epistemology

	Ontology	Epistemology
Interpretive	Socially constructed	Socially constructed
Positivist	A world of hard facts	Attempt to find objective truth
Critical	Socially constructed, unfair, and adverse structures of power	Socially constructed
Pragmatism	Knowledge (including theory) is a tool to help us cope with problem situations as part of nature - thus merit is in <i>utility</i> rather than absolute <i>truth</i>	

Ontology: what is the nature of the phenomenon we are studying?

Epistemology: what is the nature of (useful) knowledge that we can obtain for the phenomenon we are studying?

Exercise

Note down some bullet points on the following question:

- What form(s) of ontology and epistemology can work with Action Research?

	Ontology	Epistemology
Interpretive	Socially constructed	Socially constructed
Positivist	A world of hard facts	Attempt to find objective truth
Critical	Socially constructed, unfair, and adverse structures of power	Socially constructed
Pragmatism	Knowledge (including theory) is a tool to help us cope with problem situations as part of nature - thus its merit is in <i>utility</i> rather than absolute <i>truth</i> (as correspondence to 'mind-independent' reality)	

*It is empirical, yet **interpretive**. It is experimental, yet **multivariate**. It is observational, yet **interventionist**. Enticingly, the research subjects are often quite willing to pay the costs of being studied, especially since they may **influence the outcomes** of the project. To an arch **positivist** it should seem very **unscientific**. To the post-positivist, it seems **ideal**.*
(Baskerville & Wood-Harper, 2002)

Organizations are artifacts created by human beings to serve their ends. Organizations obey laws that are affected by human purposes and actions. In this sense, they do not exist independently of human beings, like the planets, just waiting for an Isaac Newton of organizational theory to discover an equivalent of the laws of planetary motion.

[...]

Organizations are planned according to their members' conception of the future. But statements about the future have no truth value according to any criterion of confirmation acceptable to positivist science

(Susman & Evered, 1978)

Final exercise

Exercise

For two minutes: note down some bullet points for the following questions:

- Could Action Research be relevant to your research project? Why (not)?

When and why?

- When there is a desire, relevance, and opportunity to explore 'real-life' problems by testing out potential solutions in real-life contexts
- Excellent for exploring and addressing issues of IT and organizations in collaboration with practitioners
- Active collaboration between researcher and practitioners or «engaged scholarship» can benefit research and have direct contributions to practice.
- Practitioners are experts on the 'real world' situation, while researchers have time and space to reflect on practices and challenges in light of theory and related research
- **Possible:** start as a case study and turn into AR if relevant (case study to serve as part of the *diagnosis*)