

Action Research in Practice

Paul Coughlan

University of Dublin, Trinity College



Drawing from

Action Research

Paul Coughlan & David Coughlan

University of Dublin, Trinity College

In Karlsson C. (ed.) *Researching Operations Management*, London: Routledge, 2009, 236-264



Definition of Action Research

- ...an emergent inquiry process in which applied behavioural science knowledge is integrated with existing organizational knowledge and applied to solve real organizational problems.
- It is simultaneously concerned with bringing about change in organizations, and developing self-help competencies in organizational members and adding to scientific knowledge.
- Finally, it is an evolving process that is undertaken in a spirit of collaboration and co-inquiry

(Shani & Pasmore, 1985: 439).



Characteristics of Action Research

- Action researchers take action
- Action research always involves two goals: to exploit an opportunity or solve a problem and to contribute to science.
- Action research is interactive
- Action research aims at developing holistic understanding
- Action research is fundamentally about change

(Gummesson, 2000)



Characteristics of Action Research

- Action research requires an understanding of the ethical framework
- Action research can include all types of data gathering methods.
- Action research requires a breadth of pre-understanding
- Action research should be conducted in real time
- The action research paradigm requires its own quality criteria

(Gummesson, 2000)



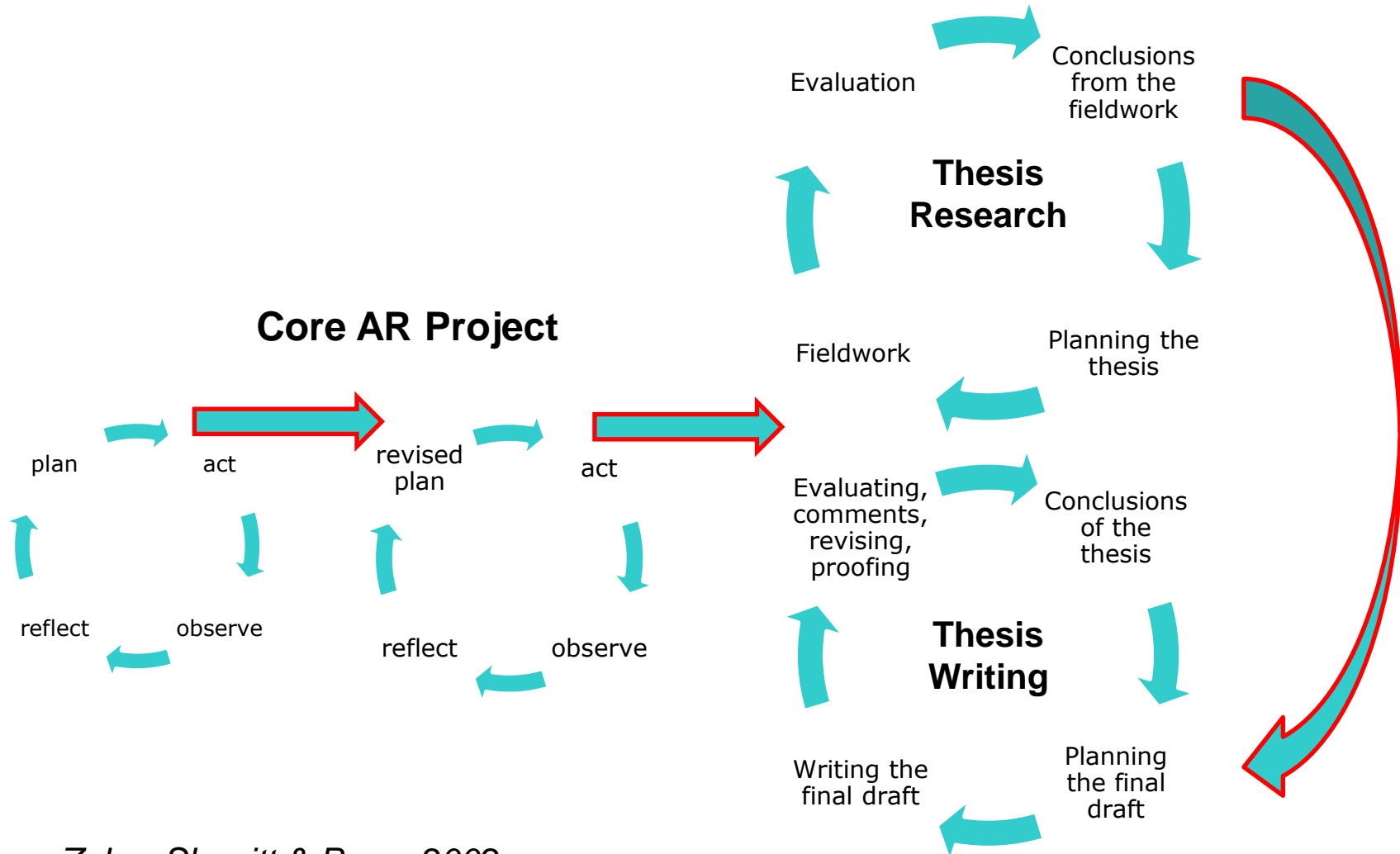
Contrasts with Positivist Science

	Positivist Science	Action Research
<i>Aim of Research</i>	<ul style="list-style-type: none"> • Universal Knowledge • Theory Building and Testing 	<ul style="list-style-type: none"> • Knowledge-in-action • Theory Building-in – action
<i>Type of Knowledge Acquired</i>	<ul style="list-style-type: none"> • Universal/Covering Law 	<ul style="list-style-type: none"> • Particular/Situational
<i>Nature of Data</i>	<ul style="list-style-type: none"> • Context Free 	<ul style="list-style-type: none"> • Contextually embedded
<i>Validation</i>	<ul style="list-style-type: none"> • Logic/Measurement • Consistency of Prediction & Control 	<ul style="list-style-type: none"> • Experiential
<i>Researcher's Role</i>	<ul style="list-style-type: none"> • Observer 	<ul style="list-style-type: none"> • Actor/Agent of Change
<i>Researcher's Relationship to Setting</i>	<ul style="list-style-type: none"> • Detached/Neutral 	<ul style="list-style-type: none"> • Immersed/Active



What is Needed before Entering Action Research?

Positioning re Academic Programme



Zuber-Skerritt & Perry, 2002



What is Needed before Entering Action Research?

- Positioning re needs of the Organisation
 - real issue
 - access
 - contract



Designing an Action Research Project

- Framing an issue
- Determining the scope
- Gaining access
- Negotiating a role for the action researcher
- Developing ethical position



For Example

Action Research in Collaborative Improvement

Rick Middel

University of Twente, Enschede, The Netherlands

David Coghlan, Paul Coughlan

Louis Brennan & Tim McNichols

University of Dublin, Trinity College, Ireland

International Journal of Technology Management, 33 (1), 2006, 67-91



The Inquiry Process featured...

- Co-design of the AR process with manager
- Researchers met three times prior to start:
 - First two meetings to achieve common understanding
 - third on detailed preparation of the implementation
- Each AR group meeting was preceded and followed by a meeting of researchers to challenge assumptions and interpretations
- Instrumentation, minutes and reflective notes gathered the richness and complexity of the process, and generated a shared understanding
- Manager was present and actively participated in the researcher meetings



Implementation took place over 15 months

- AR focus was on practical concerns to the companies involved
- The AR process was guided by constant and iterative reflection as part of the process
- Companies carried out improvement activities; facilitated by researchers; evaluation and reflection in AR group in plenum on content and approach
- An enduring infra-structure towards improvement and learning was developed



Implementing Action Research

- Pre-Step: Context & Purpose
 - Rationale for action and for research?
- 4 main steps
 - Diagnosing
 - Planning action
 - Taking action
 - Evaluating action



For example

Defining the Path to Value Innovation

Paul Coughlan & Mary Ann Fergus

University of Dublin, Trinity College, Ireland

International Journal of Manufacturing Technology and Management,
16 (3), 2009, 234-249



The process involved three AR cycles



Cycle 1



Cycle 2



Cycle 3



For example

Conceptualizing operations strategy processes

Niels Gorm Rytter, Harry Boer

University of Aalborg, Denmark

Christian Koch

Technical University of Denmark, Denmark

*International Journal of Operations & Production
Management, 27 (10), 2007, 1093-1114*



The Research Process featured...

- ...an action oriented longitudinal case study
- A combination of action research and ethnography
- A team of change agents consisting of two researchers and two representatives from industrial organizations sponsoring the project
- An intervention over a period of nine months in collaboration with managers and employees
- Researchers led, conducted and participated in a number of activities leading to the development and initial implementation of an operations strategy
- The first author acted as the project manager for the intervention



The project manager / researcher acted as...

- ...process and work force facilitator,
- operations expert and active participant,
- while conducting research on the process...
- ...and on the intervention at the same time
- drawing on
 - observations
 - interviews
 - conversations
 - documents
 - and self-reflections



During the intervention period...

- ...mainly technical-rational data were collected
- Became aware of critical cultural and political issues that surfaced along the process
- Observed and documented actions
- Conducted interviews and informal conversations
- Collected archival data



After the intervention period...

- ...researchers wrote a case narrative
 - Before
 - During
 - After
- Identified plots
- Addressed technical, socio-political, process and performance



Meta Learning

- *Content*
 - Reflect on issues
- *Process*
 - Reflect on strategies, procedures and tactics
- *Premise*
 - Critique underlying assumptions and perspectives



For example

Measuring supplier performance in collaborative design: proposition of a framework

Marie-Anne Le Dain, Richard Calvi and
Sandra Cheriti

R&D Management, 41 (1), 2011, 61-79



In this research, the goal is...

- ...to build *generic actionable knowledge*, that is, knowledge taking the form of generic propositional statements and/ or principles that are mutually consistent for both researchers and practitioners
- For *practitioners*, this knowledge must be actionable in a concrete setting and for *researchers* it should be recognized as legitimate academic knowledge.
- Because Action Research addresses the theme of research in action, this approach is adopted for the co-construction of actionable knowledge between researchers and practitioners.



Practitioners and researchers participated as follows...

- A *senior researcher* joined the firm full-time for one year to create and develop the framework.
- A *mirror group* including the representatives of all the skills involved in product development was set-up to support her mission
- A *junior researcher* was integrated successively for one month in a project team of the five other industrial partners.
- Both action researchers acted as external helpers for the industrial partners in order 'to inquire into their own issues and to create and implement solutions'



The research was conducted over two phases

- **Phase I:** construction of the framework
 - Several cycles of literature review, data gathering and data analysis, led to a preliminary framework
- **Phase II:** development of the framework
 - feedback was sought on the functionality and the completeness of the framework with the objective of improving the preliminary framework
 - Working sessions discussed and built user understanding
 - Insights were shared across industrial partners
 - Supplier insights were shared through a workshop
- An action researcher was present at each workshop to host the discussions and to collect feedback.
- Multiple data-collection methods were used including verbal and written feedback.
- All remarks were taken into account for the elaboration of the generic framework.



Limitations

- This research explores a relatively new topic of supplier's performance in collaborative design but the results should be interpreted carefully:
 - the paper explains the development of a framework and does not focus on its application tool.
 - the scope of evaluation - the framework has been co-constructed with a sample set of sixteen industrial partners (i.e. six customer firms and 10 suppliers).



Action Research Skills

- Diagnosis
- Intervention – inquiry and action
- Learning in-action
- Journal keeping
 - Systematic record of events, dates, people
 - Record of interpretations
 - Dump for painful experiences
 - Analytic tool



Generating Theory

- Design must be recoverable
- Three characteristics
 - Situation specific, not general theory
 - Emergent theory, developing from reflection on implementation and outcomes of action
 - Incremental: moving from particular to general in small steps



Quality in Action Research

- Participation
- Real-life problems
- Joint meaning construction
- Workable solutions



Writing an Action Research Dissertation

- Purpose and rationale of research
- Context
- Methodology and methods of inquiry
- Story and outcomes
- Self-reflection and own learning
- Reflection on story in the light of the experience and the theory
- Extrapolation to broader context and articulation of usable knowledge

