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OPERATIONS MANAGEMENT FOR SUSTAINABLE COMPETITIVENESS
JUNE 26TH - JULY 1ST, 2015 | NEUCHÂTEL, SWITZERLAND

Key issues in the development of action research projects in operations management field: case study of VW Navarra – University of Navarra

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OUTLINE

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2. ACTION RESEARCH
3. OBJECTIVES
4. THEORETICAL FRAMEWORK
5. METHODOLOGY
6. FINDINGS
7. CONCLUSIONS
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1. FRAMEWORK OF THIS STUDY

Research group: Industry for Society

Reserach line: Innovation decisions in business environment

Why VW Navarre?

Business Chair VW Navarra – University of Navarra



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2. ACTION RESEARCH

ORIGINS AND DEFINITION OF ACTION RESEARCH (*Chein, 1948*)

Social sciences – Late 40s

Definition from social sciences (Lewin, 1946):

“A pioneering approach toward social research which combined generation of theory with changing the social system through the researcher acting on or in the social system”

Most frequently quoted definition of AR (Rapport, 1970):

“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 collaborations within a mutually acceptable ethical framework”



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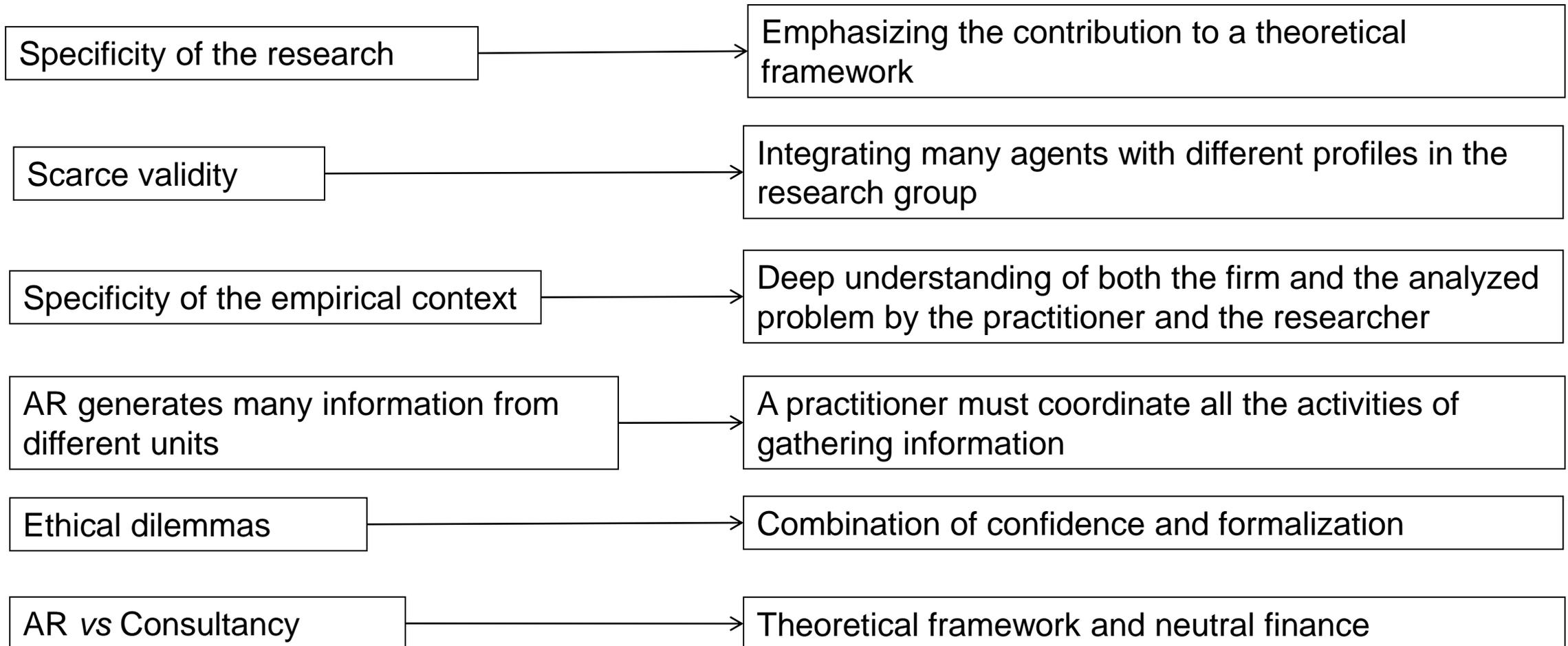
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USUAL BARRIERS AGAINST ACTION RESEARCH AND COUNTER ARGUMENTS





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2. ACTION RESEARCH

DIMENSIONS OF ACTION RESEARCH (*Chein, 1948*)

Diagnostic AR

Researcher finds out reasons for the problem and suggests action to be taken by the practitioner

Empirical AR

Researcher makes notes on what happens as he follows the process and shares his findings with the practitioner

Participatory AR

Researcher and practitioner actively participate in all the stages of the research

Experimental AR

Researcher conducts different experiments to solve the same problem



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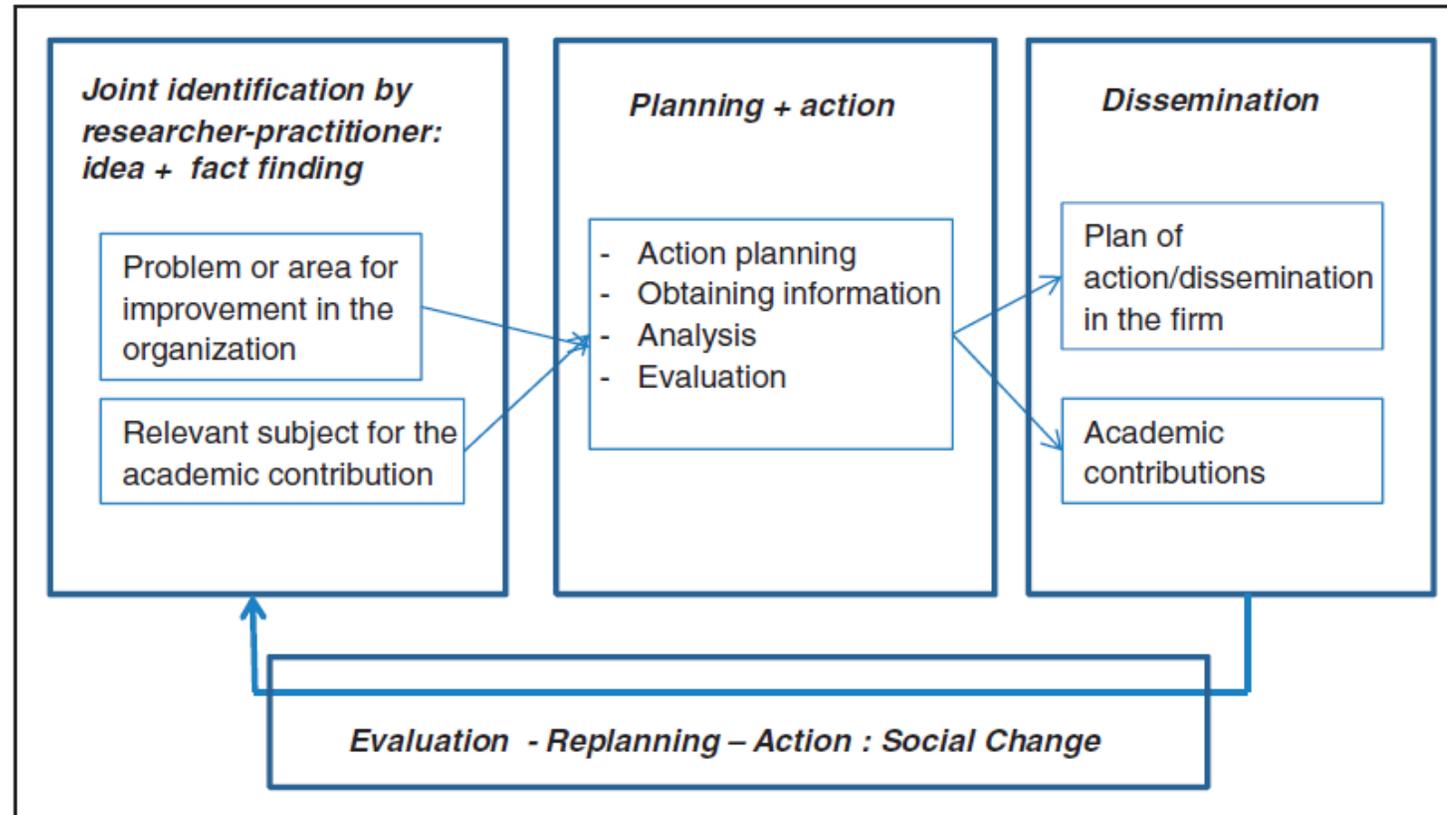


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2. ACTION RESEARCH

The cyclical process of action research (Avella and Alfaro, 2014)





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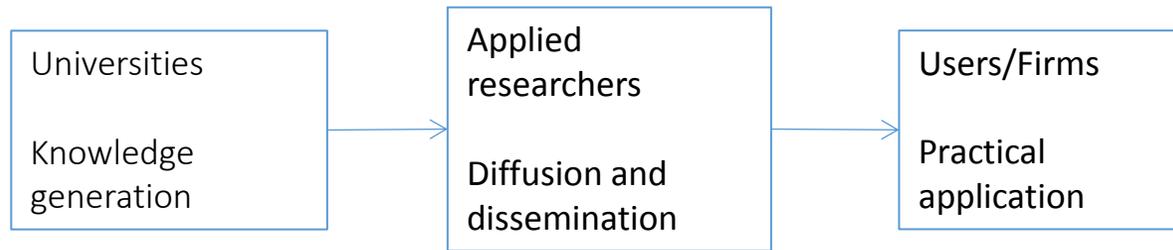


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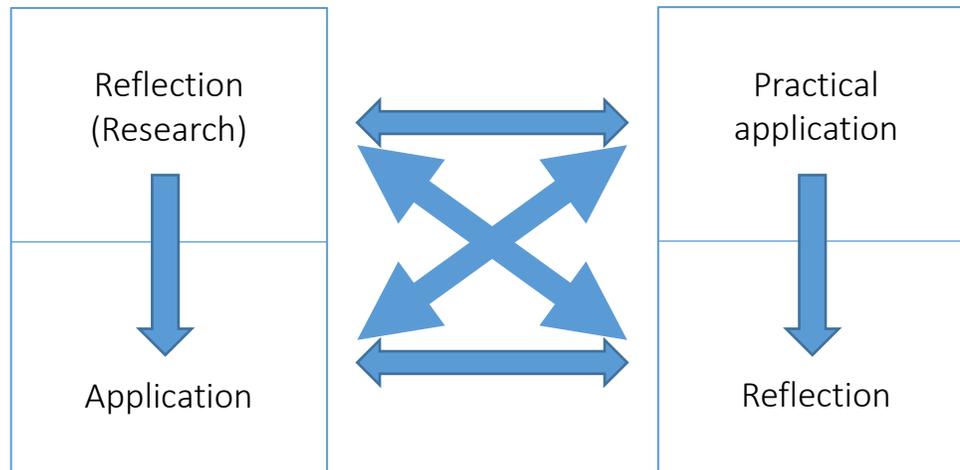
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WHY ACTION RESEARCH

It represents a new paradigm for Firms-Researchers relationships – Levin (2004)



The linear knowledge distribution model



The multidimensional knowledge distribution model



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3. OBJECTIVES

RESEARCH QUESTION

Which factors are crucial for the successful development of AR projects?

OBJECTIVES

- (1) To identify different factors that influence the development of empirical studies that apply or analyze the action research methodology
- (2) To develop a case study that analyzes the experience of the Business Chair VW Navarra – University of Navarra during the period 2011-2014



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4. THEORETICAL FRAMEWORK

STEP 1: Review the literature to find papers that analyze the factors influencing the success/failure of an AR project

Reference	Type	Description
Azhar et al. (2010)	Empirical	IAR project about an information system implementation.
Momme and Hvolby (2002)	Empirical	Indicates the critical workflow interfaces between the production system and internal support functions.
Rezgui (2007)	Empirical	Explore the role of knowledge management systems in promoting value creation in the construction sector.
Kocher et al. (2010)	Empirical	Explore and support innovation processes in SMEs in local industry sectors in Central Switzerland.
Avella and Alfaro (2014)	Empirical	Analyze in depth the concept of a “Business Chair” and its relationship with AR projects.
Näslund et al. (2010)	Theoretical	Focus on action research (AR) within the field of supply chain management.
Coughlan and Coughlan (2002)	Theoretical	It presents AR origins, definition, characteristics and application for OM.
Westbrook (1995)	Theoretical	It presents AR definition, characteristics and research problems in POM.



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4. THEORETICAL FRAMEWORK

STEP 2: Define the factors influencing the development of AR projects

	Factor	AR process stage
F1	The project is part of the activities of the Business Chair	Idea, planning, action, evaluation and replanning.
F2	Motivation and commitment of the researcher	Idea, action and replanning
F3	Search results both academic and managerial.	Action, evaluation and dissemination
F4	Expectation of effective and concrete results by researchers	Evaluation and dissemination
F5	The solution provided is based on a solid theoretical framework known by researchers	Planning
F6	Existence of a general project coordinator by the Chair	Planning and action
F7	Motivation and commitment of people from lower and middle level of the company to participate in the AR project	Idea, planning and action
F8	Motivation and commitment of coordinator's company to participate in the project	Idea, planning, action and evaluation
F9	Disposition of VW Navarra to implement innovative and creative solutions that generate changes	Action



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4. THEORETICAL FRAMEWORK

STEP 2: Define the factors influencing the development of AR projects

	Factor	AR process stage
F10	Direct access to company information	Action and evaluation
F11	Existence of confidentiality and rights agreements on intellectual production research	Planning
F12	The specific problem to be defined is well defined and shared by the company and the university	Idea and planning
F13	Expectation for effective and concrete results by the practitioner	Evaluation
F14	The budget meets the needs of the project	Planning and action
F15	Participation of master or doctoral students in research projects	Action
F16	Availability of staff to hold regular meetings	Planning and action
F17	Existence of periodic evaluation mechanisms, feedback and adjustment of the research process	Evaluation and replanning
F18	Existence of dissemination actions of experience and research results	Dissemination



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5. METHODOLOGY

AR PROJECTS - FEATURES

	Topic	Department - Firm	Faculty - University
P1	Optimizing internal routes	Logistics	Business
P2	Open innovation practices in supplier-firm relationships	Innovation	Economics
P3	Human Resources	Human resources	Engineering
P4	Continuous improvement		Engineering
P5	Changing shifts of employees – Productivity	Human resources	Medicine
P6	Incentives systems for managers	Human resources	Economics
P7	Motivation of workers	Human resources	Economics
P8	Environment of work	Human resources	Economics
P9	Optimizing external routes	Logistics	Economics
P10	Social issues – family policies	Human resources	Economics
P11	Productivity of workers		Economics
P12	Environmental training	Environment	Engineering
P13	Resilience		Engineering
P14	New materials in supporting tasks		Physics



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5. METHODOLOGY

QUESTIONNAIRE

For the empirical research, we have worked with a Likert Scale from 1 to 7, where the values mean:

- 1 - The factor has had a very negative influence in the performance of the project.
- 2 – The factor has had a negative influence in the performance of the project.
- 3 – The factor has had a slight negative influence in the performance of the project.
- 4 – The factor has had no influence in the performance of the project.
- 5 – The factor has had a slight positive influence in the performance of the project.
- 6 – The factor has had a positive influence in the performance of the project.
- 7 – The factor has had a very positive influence in the performance of the project.



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6. FINDINGS

RESULTS OF THE QUESTIONNAIRE

	Average	Minimum value	Maximum value
F1	6,33	5	7
F2	6,11	2	7
F3	6,00	4	7
F4	6,44	4	7
F5	6,67	6	7
F6	5,78	4	7
F7	4,67	2	7
F8	5,67	2	7
F9	4,67	2	7
F10	5,56	4	7
F11	4,56	3	7
F12	5,33	3	7
F13	5,89	4	7
F14	5,33	1	7
F15	6,00	1	7
F16	5,67	3	7
F17	5,22	3	7
F18	5,89	3	7



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6. FINDINGS

Factors that have a positive relevance in the performance of the projects

F1: Role of the Business Chair

F2: High motivation of researchers

F3: Expectation of effective and concrete results by researchers

F4: Projects are based on a theoretical model

F5: The solution provides is based on a solid theoretical framework known by the Chair

F15: Research is linked to a doctoral thesis



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6. FINDINGS

Factors that have a less positive relevance in the performance of the projects

F7: Role of the coordinator of the Business Chair.

F10: Direct access to the information

F11: Existence of a confidentiality agreement.

F16: Existence of regular meetings.

F17: The fact that they have to send intermediary reports .



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7. CONCLUSIONS

- Influence of personal features of the coordinators
- Relevant role of the infrastructure system
- Lack of motivation



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8. LIMITATIONS

- Practitioner's view point – imply to analyze other literature
- Confidentiality about the practical performance of the results



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THANKS A LOT FOR COMING !!!