Action Research in Supply Chain Management A framework for relevant and rigorous research

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US versus EU/Scandinavia

- Benefits of working in two countries (plus France, Italy and Belgium)
- Different traditions/approaches to research
  - Three search committees in US (ops/scm)
  - Compare conferences (DSI, Poms with Euroma and Nofoma)
- Simplified: quantitative (positivistic) versus qualitative
- ME: not opposed to any approach, favor all good research, different problems require different methods, we should all have appreciation and tools

Problem 1: Relevance

- Gap between management and research
- Articles do not have any impact on the field

  - *McCutcheon and Meredith 1993, Markides 2007, Shapiro et al 2007*

  Practitioners seem to view the abstraction of quantified material and statistical correlations as very remote from everyday practice and therefore of little use

  - *Alvesson, 1996, p.455*

Problem 2: Case Studies and Rigor

- Case Studies in applied field such as SCM
- White Space
  - *Näslund 2002, 2005 (with Frankel and Bolumole)*
- Industrial Tourism
  - *Voss et al 2002, p.196*
- Consulting masquerading as research
  - *Coughlan and Coghlan, 2002, p.237*
- Lack of Action Research

Goals For This Study

- Develop Framework
- Relevance AND Rigor
- Focused on Action Research
- Tips and Ideas for authors

Action Research

- Real world problems
- Contributes both to science and practice
  - Research informs practice and practice informs research
- Actively involved researcher(s)
- Collaborative
- Longitudinal
- Cyclical (loops of research, analysis, action)
- All data collection methods are appropriate

Methodology

- Review of Existing Frameworks
- Identify Key Aspects
- Review of 26 SCM articles
  - *Journal of Business Logistics* (JBL), *Journal of Supply Chain Management* (JSCM), *Journal of Purchasing and Supply Management* (JPSM), *International Journal of Physical Distribution and Logistics Management* (IJPDLM), *Transportation Journal* (TJ), *Production and Operations Management Journal* (POM) *Journal of Operations Management (*JOM), *International Journal of Operations and Production Management (* IJOPM) and more.
- Rank Each Aspect 0-3

Design Aspects

- Design Aspect 1: Research Question
- Design Aspect 2: Change: Science and Practice
- Design Aspect 3: Action Research Discussion/Motivation
- Design Aspect 4: Unit of Analysis, Context of Case

Data Collection Aspects

- Data Collection Aspect 1: Methods, Triangulation 1 and 2, Field Notes
- Data Collection Aspect 2: Researcher Role, Team Based Approach
- Data Collection Aspect 3: Access and Trust

Data Analysis Aspects

- Data Analysis Aspect 1: Structure: Categorization and Pattern Matching
- Data Analysis Aspect 2: Cyclical Process, Project Reviews
- Data Analysis Aspect 3: Presentation: Logical Chain, Frameworks, Contributions to Science and Practice
- Data Analysis Aspect 4: Rigor and Validity

Evaluation Criteria/Article #	1	2	3	4
1. Research Question	3	3	2	2
2. Design: Contribution to Practice and Science	2	2	1	1
3. Discussion of AR in general	0	1	1	1
4. Unit of Analysis	2	3	2	1
5. Context of Case	2	2	1	2
5.1. Where was the research conducted?	Y	Y	Y	Y
5.2. Time Frame	Y	Y	N	N
5.3. Multiple time periods	N	N	N	N
5.4. Time on Site	N	N	N	N

Design Aspects

Design Aspect	Average Score	Aspect Rank	No. of 0 and 1
Research Question	2.15	1	3
Science and Practice	1.69	5	4
AR discussion	0.62	16	13
Unit of Analysis	1.92	3	3
Context of Case	2.00	2	1

Data Collection Aspects

Data Collection Aspect	Average Score	Aspect Rank	No. of 0 and 1
Methods, Triangulation	1.54	7	5
Field Notes	1.00	15	9
Researcher Role	1.23	10	9
Team Based Approach	1.08	14	8
Access and Trust	1.15	12	9

Data Analysis Aspects

Data Analysis Aspect	Average Score	Aspect Rank	No. of 0 and 1
Categories	1.23	10	10
Patterns	0.62	16	10
Cycles/Change	1.15	12	9
Reviews	1.54	7	6

Data Analysis Aspects, cont d

Data Analysis Aspect	Average Score	Aspect Rank	No. of 0 and 1
Logical Chain	1.85	4	3
Frameworks	1.62	6	5
Contributions	1.46	9	7
Rigor and Validity	0.23	18	12

Best Aspects

Design Aspect	Average Score	Aspect Rank	No. of 0 and 1
Research Question	2.15	1	3
Context of Case	2.00	2	1
Unit of Analysis	1.92	3	3

Not So Good Aspects

Data Analysis Aspect	Average Score	Aspect Rank	No. of 0 and 1
Rigor and Validity	0.23	18	12
Patterns	0.62	16	10
Design Aspect			
AR discussion	0.62	16	13

Teaching with Cases

- Main advantage: real world relevance
- Many cases exists (e.g. Harvard Business School)
- Main problem: student preparation
- Four approaches:
  - Ask to read, analyze and prepare
  - Ask to read, analyze , prepare AND cold call
  - Ask to read, analyze AND write paper
  - Ask to read, analyze AND prepare presentation
- Case Rubric to guide