



Topic 3: Research Paradigms

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Ontology and Epistemology (1)

- Ontology

- The starting point of all research and influences the method employed
- Assumptions about the nature, existence and composition of the world
- First of all, ontology, then epistemology, thirdly methodologies and method



Ontology and Epistemology (2)

- Two kinds of ontology
 - Foundationalism (Basicalism)
 - There exist basic beliefs, which are self-evident truth and infallible, incorrigible, indubitable, and certain. Non-basic beliefs must ultimately be justified by basic beliefs using deductive
 - Three Newton's laws are the basic beliefs of classical physics
 - Axioms are the basic beliefs of the Euclidean geometry
 - The world exists independently on people's knowledge about it



Ontology and Epistemology (3)

- Anti-foundationalism (Anti-Basicalism)
 - Society is socially and discretely constructed by people as participants
 - Social institution, laws, rules and regulations
 - Social phenomena and their meanings are accompanied by people and in the process of constant improvement
 - The world exists dependently on people's knowledge about it



Ontology and Epistemology (4)

- Epistemology

- The way people advancing knowledge and understanding
- Two kinds of epistemology: Positivism (Basicism) and Interpretivism (Anti-Basicism)
- Hold different views on the same social phenomenon with different epistemology
- Guide the choice of research methods



Research Paradigms (1)

- Research Paradigms
 - Understanding of both the ontology and the epistemology
 - The basis for identifying research method
 - Exist in the method adopted by the research



Research Paradigms (2)

- There kinds of research paradigms
 - Positivism
 - The most important one in the past few centuries
 - Can be traced back to Aristotle at the earliest
 - Scholars made important contributions include Bacon and Descartes
 - Empiricism, objectivism, scientific methods, and naturalism



Research Paradigms (3)

- Characteristics of positivism
 - Based on foundationalism
 - Objectivity
 - Facts are independent of the researcher's personal values and beliefs
 - Universality
 - Looks for generalizations, universal laws, patterns or irrefutable facts



Research Paradigms (4)

- Measurement and modelling
 - Discover the world by making observations and measurements and producing models of how it works
- Hypothesis testing
 - Based on the empirical testing of theories and hypothesis, leading to confirmation or refutation of them
- Quantitative data analysis
 - Strong preference for mathematical modelling and proofs, and statistical analysis



Research Paradigms (5)

- Interpretivism
 - Formed in 1950s
 - Kant、Hegel、Weber、Herbert、Ervin、Barney and Strauss made important contributions
 - Relativism, understanding, phenomenology, hermeneutics, idealism, semiotics and constructivism



Research Paradigms (6)

- Characteristics of interpretivism
 - Based on anti-foundationalism
 - Multiple subjective realities
 - No single version of 'the truth' and different groups or cultures perceive the world differently
 - Dynamic and socially constructed meaning
 - Language and shared meanings differ across groups and over time
 - Study of people in their natural social settings
 - Not in the artificial world of a lab as in experiment



Research Paradigms (7)

- Researcher reflexivity
 - Own assumptions, beliefs, values and actions will shape the research process and affect the situation
 - Be reflexive to acknowledge how they influence the research
- Qualitative data analysis
 - Strong preference for generating and analysing qualitative data
- Multiple interpretations
 - Will not arrive at one fixed explanation of what occurs



Research Paradigms (8)

- Critical research
 - Originates in 1970s
 - Scholars made important contributions include Habermas, Bourdieu, Foucault, Latour and Marx
 - Feminism, Marxism, Racism



Research Paradigms (9)

- Characteristics of critical research
 - Combination of interpretivism and positivism
 - Firstly, society is created and re-created by people (interpretivism) – a golf club with separate committees for male and female members
 - Secondly, society possesses objective properties (patterns of power and control) that tend to dominate experiences and ways of people seeing the world (positivism) – the male captain has the first choice of dates to hold competitions, with the female captain choosing from the remaining dates



Research Paradigms (10)

- Emancipation
 - Committed to freeing people from the power relations that shape society – help the women members in the golf club to organize themselves and to effect changes
- Critique of tradition
 - Do not accept the status quo, but question and challenge it - IS developers serve as a tool for managers to exploit employees
- Non-performative intent
 - Reject research aiming at improving managerial efficiency and control to maximize profits and enhance managers' control and power



Research Paradigms (11)

- Critique of technological determination
 - Disagree that technological development follows its own rules and people must adapt to the technology
 - Argue that people can shape the technology developed
- Reflexivity
 - Research projects are often shaped by those with power and vested interests – governments can decide which topics to be funded and reviewers can decide which papers to be published

Choice of Research Paradigms (1)



- The choice depends on
 - The field of research
 - Natural VS Social
 - Personal beliefs and values
 - Determine the knowledge want to create and shape the way perceive the world
 - Whether want to do a typical research in a field

Choice of Research Paradigms (2)



- Whether willing to take a risk and challenge the status quo
 - Positivism still predominates, especially in USA, and can still be a safer option
 - Interpretivism has been increasingly adopted and accepted in IS over the last 40 or so years
 - Although a growing community knows and argues for the critical research, it is not anywhere near mainstream



Discussion

- What's the research paradigm used by the case
- Choose a research paradigm for your research title and explain the reasons of the choice