

MFT 1033: Humanity, Ethics and Culture

Topic 3: Sociological Perspectives on Innovation

Assoc Prof Dr Norihan Abu Hassan
UTM Perdana School of Science,
Technology and Innovation Policy

Sociological perspectives on innovation

- Sociological perspectives on innovation attempts to investigate the way that social structure influence both the process and products of innovative activity

Sociological perspectives on innovation

- Social structure influence behavior
 - Explain innovation
 - at multiple levels
 - At different stages of the innovation process

Sociological perspectives on innovation

the study of innovation in terms of social routines and social structure provides

- a way to link sociological research on organizational process innovation to technological innovation.

Sociological perspectives on innovation

- Innovation issue is fundamental for growth and competitiveness
- Innovation in the study of economics, management, sociology, science and technology studies, history

Sociological perspectives on innovation

- Sociological Theory (one example)
 - Theory of socially embedded knowledge creation
 - » Study builds on Durkheim, Granovetter, Unger (to formulate a theory of social structure and change)
 - » provides sociological alternative to economic explanation

Reference: Paul C. Hess, 2006, Bureaucracy and Total Quality Management: A Sociological Theory of Clashing Systems, Moralities, and Knowledge Methods, Brandeis University

Socially Embedded Knowledge Creation

- derived from Durkheim, Habermas, Bourdieu, Bellah, Unger, Granovetter, Sabel, and Nonaka and Takeuchi
- provides a theory of social structure based on dual embeddedness, contextual forms of knowledge, and contextual reasoning in methods of creating knowledge

Three patterns in social embeddedness

1. no learning due to nationalism or cultural identity
2. limited learning due to distortions from the old paradigm
3. and successful learning through collective associations

Deming (1993, 1986, 1982)

- is most well known for his fourteen points that cover strategic objectives, statistics, and learning and motivation
- Deming joined technical and human sides of total quality
- Deming was a pioneer in statistical thinking who explained the logic of problem-solving
- Deming was a professor of statistics, did not present his organizational ideas in a social science format

Ishikawa and TQM as an example (sociological perspectives)

- Deming's principles consistent with Japanese model – Ishikawa
- Ishikawa defined quality control
- To practice quality control is to develop, design, produce, and service a quality product, which is most economical, most useful, and always satisfying to the consumer (Ishikawa 1985:44)
- While this kind of definition is commonplace, Ishikawa's contribution is in explaining the extensiveness of the thought revolution of total quality. Ishikawa emphasizes social insight with his contrasts between the supportive social structures of Japan

Kaizen model in the sociological perspectives

- *Kaizen* (1997) (kaizen is Japanese for continuous improvement) identifies a similar aspect of the division of labor, the improvement hierarchy that distinguishes 23 between routine improvement and innovation work
- As one approaches the top of the organization the proportions are reversed with higher managers spending most time on planning /innovation and more on improving existing processes than doing routine work.

Innovation of systems

- Innovation grows out of all the processes of coordination and exchanging information between parts of the system
- The object of innovation is organizational systems and the systems of customers
- New ideas come from
 - customers or observing customers
 - analysis of causes of problems
 - learning from other kinds of organizations
 - by simply playing with old ideas until they are recombined into new ideas

Importance: Social aspects of Innovation

- new understanding of customer needs
- solutions expand markets
- Sources of innovation include all people and parts of the system as well as how those parts fit together

Importance: Social aspects of Innovation

- the process of generating new ideas follows from the continuous interaction of all these parts of the organization
- One of the most significant kinds of innovation is the creation of common goals or even a common good.

Processes

- social embeddedness reflects systems innovation
- the object of innovation is systems, both the customer's system and the firm's system
- Innovation is both technical and social
- Some of the basic processes of systems innovation in the customer focused organization are collaboration with customers, process improvement, and collective research and development through associations

Processes (contd)

- The focus on customer solutions is a source of innovation: through collaboration needs are discovered and new products and service invented
- There is no longer just an abstract market selecting firms through price signals, there are firms expanding markets by creating customers
- Learning from other firms to create and share knowledge--this is a new system of learning and innovation

Objective taking social aspects on innovation in an organization

- to simplify the organization by placing the parts of the organization in closer relation to each other physically or procedural
- to link them more tightly by removing barriers and buffers

Results: Objective taking social aspects on innovation in an organization

- can be both greater efficiency
- innovation as new connections are made between machines, people, processes, etc.

References:

- Paul C. Hess, 2006, Bureaucracy and Total Quality Management: A Sociological Theory of Clashing Systems, Moralities, and Knowledge Methods, Brandeis University

The end of Topic3