

Visions for the Future

Theoretical Perspectives on Management
SBPD7004

Intensive Session 2

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Session 2: Comparison of Management Theories 1

The origins of Management Science

- The school of scientific management and the emergence of “systems theory”
- Question: According to systems theory, what is ‘management theory’ a theory of?
- The transitions from GST (“General Systems Theory”) through cybernetics to Checkland’s “soft systems design”.
- Principles of scientific management – a comparison of Fayol / Taylor’s theory of scientific management.

Systems Theory

- The notion of a General Systems Theory derives from early work in biology by Ludwig van Bertalanffy (1901 – 1972).
- Bertalanffy introduces the notion of any ('organic') organisation being an 'open system' not confined to classical laws of physics – especially the axiom (thermodynamics) that all physical systems tend towards a less-organised, entropic state.
- The key idea of an 'open system' is that evolutionary processes in 'organisms' do not deteriorate towards more entropic states. They evolve by means of adaptation and natural selection towards more effective and efficient states.
- Van Bertalanffy's "General Systems Theory" contributed to the emergence (in the USA) of "Cybernetics" as a 'science' of organisations and their management.

Systems Theory 2

- **Cybernetics** – Norbert Wiener (1894-1964) – sought to apply two core principles to the study of organisational behaviour:
- The principle of positive feedback: A feedback loop to control human behaviour involves four distinct stages:
 - Evidence.** A behaviour must be measured, captured, and data stored.
 - Relevance.** The information must be relayed to the individual, not in the raw-data form in it was captured in, but in a context that makes it emotionally resonant.
 - Consequence.** The information must illuminate one or more paths ahead.
 - Action.** There must be a clear moment when the individual can recalibrate a behavior, make a choice, and act. Then that action is measured, and the feedback loop can run once more, every action stimulating new behaviors that inch the individual closer to their goals.
- The principle of **sub-optimality**: In many 'open' systems, despite the fact that most or all sub-systems are functioning effectively and efficiently, the overall performance of the total system may be sub-optimal. The performance of the whole (organisation) is not merely the sum of the performances of its parts.

Comparison 1: Fayol / Taylor

Exercise: In your groups: read through the John Hudson summary of the importance of Henri Fayol to the development of management theory.

1. Identify the six basic activities of management defined by Fayol –Do these define the managerial role adequately?
2. Fayol lists fourteen 'principles' of management. Give examples of what you think these principles concern.
3. Then (in your groups) read through the section of the Hudson reading (pp. 2-3) on F. W. Taylor and "Taylorism". What are the key characteristics of Taylor's conception of 'scientific management'?
4. Taylorism is often attributed with the modern view of 'factory mass production'. What, in your view, are the chief advantages / disadvantages of Taylorist principles of 'scientific management'?

Workshop: "What kind of analyst / researcher are you?"

- Empiricism – knowledge is based on experience, observing something through the five senses.
- Rationalism – knowledge is acquired through rational deductive processes or is derived from axioms.
- Constructivism – knowledge is 'constructed' through social interaction, convention and perception ('inter-subjective experience' and consensus).
- Reductionist – regards 'explanation' as breaking complex items into simplest components (e.g. molecular chemistry).
- Positivism – to be scientifically acceptable, knowledge (theories) have to be based on observable, testable evidence.
- Interpretivism – in the human sciences, knowledge (theories) require common understanding, intuition, empathy and positional interpretation.

