

Visions for the Future

Theoretical Perspectives on Management
SBPD7004

Intensive Session 3

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Session 3: Comparison of Management Theories 2

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 methods”.
- Social systems theory and management – a comparison of Maslow, Mintzberg and Mayo: the “human relations school”.

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 'theory' 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 behaviour, make a choice, and act. Then that action is measured, and the feedback loop can run once more, every action stimulating new behaviours that move 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.

Systems Theory 3

The emergence of soft systems methods (SSM) from cybernetics and GST: Peter Checkland (from 1966 onwards).

- SSM lends itself particularly well to dealing with complex situations, where those involved lack a common agreement on what constitutes the problem, and that needs to be addressed. In such situations (e.g. How to improve health service delivery?; How to conduct a business in a more sustainable way?; How best to deal with youth unemployment?; or How best to deal with drug abuse?), there will exist many different perspectives, values, and beliefs around what aspects of the situation are most important and how to address them. Those various aspects perceived as problematic tend to be highly interrelated; changing one aspect is likely to have knock-on effects on other aspects. It is important therefore to develop a comprehensive understanding of those interrelationships between the various aspects of the problem situation.
- Peter Checkland (at Lancaster University, with colleagues like Brian Wilson) developed SSM as a methodology for “action research” into how organisations tackled large, complex, ‘soft’ problems

Systems Theory 4: SSM – Peter Checkland

The stages of ‘Soft Systems Methods’: (compare Vickers on ‘appreciative systems’).

The original methodology for analysing and reasoning about ‘fuzzy’ complex organisational problems envisaged seven stages:

The seven stages are:

1. Entering the problem situation.
2. Expressing the problem situation.
3. Formulating root definitions of relevant systems.
4. Building Conceptual Models of human activity systems.
5. Comparing the models with the real world.
6. Defining changes that are desirable and feasible.
7. Taking action to improve the real world situation.

The dynamics of the method come from the fact that stages 2. through 4. are always an iterative process

The **CATWOE** principle: (Criteria for constructing a relevant root definition):

Clients – Who are the beneficiaries or victims of this particular system? (Who would benefit or suffer from its operations?); **Actors** – Who are responsible for implementing this system? (Who would carry out the activities which make this system work?); **Transformation** – What transformation does this system bring about? (What are the inputs and what transformation do they go through to become the outputs?); **Worldview** – What particular worldview justifies the existence of this system? (What point of view makes this system meaningful?); **Owner** – Who has the authority to abolish this system or change its measures of performance?; **Environmental constraints** – Which external constraints does this system take as a given?

Comparison 2: The human relations school

Exercise 2: In your groups: read through the John Hudson summary of how the “human relations school” (Maslow, Mayo, Mintzberg) took exception to the ‘scientific management theories of Taylor.

1. What were the objections of the “human relations school” to Taylor’s ‘principles of scientific management’?
2. Some of their criticisms of both Fayol and Taylor appear to count against management theory being a ‘science’. Which of their criticisms suggest this – and how might they be countered?
3. Work carefully through the extensive Mintzberg (2003) reading. Does Mintzberg present a ‘management theory’? Does his “Folklore and Fact” discussion imply that management theory cannot be taught?