Systems Thinking (glossary)

From SEBoK
systems thinking

(1) An epistemology which, when applied to human activity is based on four basic ideas: emergence, hierarchy, communication, and control as characteristics of systems. (Checkland 1999)

(2) A process of discovery and diagnosis - an inquiry into the governing processes underlying the problems and opportunities. (Senge 1990)

(3) A discipline for examining wholes, interrelationships, and patterns utilizing a specific set of tools and techniques. (Senge 1990)

Source


Discussion

Definition (1) is the System Science view, defining system thinking as a "theory of knowledge, esp. with regard to its methods, validity, and scope", based around seeing the world as systems.

Definitions (2) and (3) focus more on systems thinking as a collection of methods for dealing with system problems. This aspect of systems thinking relates directly to the Systems Approach defined in the SEBoK.

See also the topic What is Systems Thinking?

SEBoK v. 2.4, released 19 May 2021