

# Management Of Knowledge And System - Evolution Of Knowledge

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**Abstract:** The study of knowledge is one of the most fundamental and necessary components in today's world. A claim to knowledge should be evaluated to determine whether or not it is knowledge in its real sense. To conduct this sort of evaluation, understanding of what knowledge is and how much knowledge is possible is required. This paper provides an overview of the important aspects of knowledge, and with the help of epistemology tries to answer the most fundamental questions of what is knowledge? Moreover, how do we know what we know? The paper attempts to show the effect of culture on organizations and how foundational knowledge can help us develop logical decisions in a fluctuating environment. To manage an organization within evolving paradigm, knowledge of variation acts as a necessary requirement. As Deming defined management as a prediction, a leader must have skills to predict and adapt to its external environment. Most of the time organizations fail to observe the paradigm shift and couldn't adjust to the changing environment. The paper also discusses the effect of diverse culture and their respective interpretation of language. Thus, the paper highlights the necessity of understanding human psychology, attaining foundational knowledge and ability to validate the knowledge to establish a successful organization.

**Index Terms:** Human Psychology, Information Psychology, Linguistics, Paradigm Shift, Profound Knowledge, Validation of knowledge

## 1 INTRODUCTION

Every organization desires to generate profits and be successful. They appoint certified leaders to manage and lead the company. However, great leaders and managers perform poorly at times and makes wrong decisions. Such unfortunate incidents occur mostly when a manager fails to see the change in the existing paradigm and adapt to its changing environment. A paradigm is a model or a pattern. It is a shared set of assumptions that have to do with how we perceive the world. Knowledge of prevailing paradigm, aid in predicting plausible occurrences in the various areas of the world and decisions are often based on these predictions. (Harrison, 1994) "But when data falls outside [the] paradigm, we find it hard to see and accept. This is called the paradigm effect" [1] which hinders our vision, and we fail to see the evolving environment. This inability to see the gradual shift of paradigm is termed as paradigm paralysis. Paradigm development across various fields have led to significant consequences for several outcomes. In organizations, a paradigm shift had given rise to the growth of a different market and consumer's need. Despite the obvious importance of prediction and adaptation to the evolving paradigm, little attention has been given to the role of statistics and human psychology in organizations. The paper claims that knowledge of variation is a necessary, although not sufficient condition for the systematic development of profound knowledge which in turn help in better prediction.

## 2 PROFOUND KNOWLEDGE

### 2.1 Knowledge of variation

Knowledge of variation helps us to manage organizations in the probabilistic world in which we do business. Any organization such as an enterprise, society or university, consists of human beings and they are influenced by human behavior which is often based on several external environment and internal factors. Ludwig von Bertalanffy (1969, p.39) referred organization as an organism and proposed an organismic view of the world. He claimed that organizations are an open system whose behavior is influenced by the system in which it exists. He said "[organizations are] essentially an open system. It maintains itself in a continuous inflow and outflow" [2] (Durant, 1926) and tries to attain the

state of dynamic equilibrium. Daniel Kahneman (2011) shows the influence of human psychology on organizations by describing the process in which people take decisions and the factors that affect them. He demonstrates how knowledge of statistics and psychology helps in making legit decisions and keeps us from getting biased.

### 2.2 Human Psychology and Language

Understanding of human reasoning includes knowledge of concepts. People from different culture views the world uniquely and have unique perspectives, understanding of these various cultures is necessary to build consensus and effective communication within an organization. Effective communication requires a common language and valid definition of terms. Aristotle laid the foundation of the importance of definition and logic. According to him, a definition consists of two parts; first part assigns an object to a class or group where it belongs and second part distinguishes the object from the rest of the member of that group. As Voltaire (1764) said, "If you wish to converse with me, define your terms." [3] Moreover, John Wilson (1963) highlighted the value of concepts and how language influences our imagination. By referring to linguistic philosophy, John Wilson (1963) tried to depict the various meanings that can be associated with a single conceptual term. Salancik and Pondy (1980) reasoned that well-developed paradigms had better consensus and are characterized by better communication. Moreover, efficient communication requires explaining concepts for the better understanding of any subject. Lodahl and Gordon (1972: 61) had noted that "the high consensus found in high paradigm fields [...] provides an accepted and shared vocabulary for discussing the content of the field [thus enriching feedback and communication]." [4]

### 2.3 Knowledge of System

Understanding of a system had been an important subject since Aristotle's era. Aristotle stated that "the whole is more than the sum of its part" and emphasized the value of togetherness. Bertalanffy (1972) traces back the foundations of his work on General Systems Theory to Aristotle's work. Bertalanffy (1972; p.67) stated that "behavior of an element is different within the system from what it is in isolation. You cannot sum up the behavior of the whole from the isolated

parts; you have to take into account the relations between the various subordinated systems and the systems which are superordinated to them in order to understand the behavior of the parts" [2]. Deming further enriched the concept of the system by claiming that a system must have a common aim and should work in a unified way to attain the desired goal. He defined the system as "a network of interdependent components that work together to try to accomplish the aim of the system" [5]. He also focuses on the understanding of the system's purpose and states that "The aim of the system must be clear to everyone in the system." [5] (Deming, p.50) In other words, Deming tries to enlighten the importance of language and human's perspective for conceptual terms such as system and aim.

## 2.4 Information Philosophy and Knowledge

According to information philosophy, knowledge is information developed and captured in our minds and artifacts such as stories, books, and computers. Knowledge can also be defined as "actionable information" [6] Organization often due to biases and overconfidence misinterprets data. It is believed that data can constitute knowledge only if it passes through a reference frame and then is based on a theory. As Deming (1993) said "Knowledge is theory. We should be thankful if action of management is based on theory. Knowledge has temporal spread. Information is not knowledge. The world is drowning in information but is slow in acquisition of knowledge. There is no substitute for knowledge." [5] Validity and verifiability of knowledge depend on the credibility of its source. For example, a published article in a well-known journal provides us with valid knowledge whereas information gathered from random online blogs or advertisements might be biased and false. However, there can be instances when credible sources deliver false information. In the case of "The Challenger Explosion", (Lewis, 1988) reliable sources who ensured the safety of the mission failed to provide the correct information about the risk associated with the launch of the satellite due to poor designing and communication. [7] It is hard to point out any particular source that delivers right information and knowledge without failure. However, obtaining information from a credible source minimizes the possibility of errors. Overconfidence and faith often lead to mishaps. Interpretation of available information without a supporting theory and to develop a story around it is a natural phenomenon of human psychology. Organizations often behave overconfidently and takes decisions based on the readily available information. A company under loss immediately decides to minimize manpower and plant maintenance without even investigating the cause of the event.

## 3 HOW DO WE KNOW WHAT WE KNOW?

The paper so far reveals two components of knowledge: the concept and the sensuously given but discusses the former which is the result of thought; the latter is presented and includes no such activity. The pure concept and the sensuously given are mutually independent. Knowledge can be thus defined as the result of interpreting the given with the help of concepts. Furthermore, most of the empirical knowledge are only plausible as they are based on the application of a temporally extended pattern of possible and actual experiences to something that is given, and this pattern requires revision given what future experiences reveal. After

gaining knowledge of variation, psychology, and system, how can we be certain about our knowledge? Is absolute knowledge or absolute certainty necessary to survive in the world? These doubts are a major concern in today's business world. Clarification of these might reduce the frequency of wrong decisions taken due to false knowledge and over confidence of organizations. The paper refers to Epistemology, the study of knowledge, to discuss the importance of knowledge and the measure of its certainty. Some decision makers believe that they have the knowledge, and they know everything about their work. However, the procedure of determining the extent of human knowledge is yet unknown. How can an organization use their reason, experience, the testimony of others, and other resources to acquire knowledge? Most of the time, organizations get confused between what they believe and what is the truth. They make decisions based on their belief. Knowledge, then also requires belief, but all beliefs do not constitute knowledge. Belief can be termed as a necessary but not sufficient condition for knowledge. In the process of forming a belief, one looks for a match between one's mind and the real world. Thus some of our belief fails to describe things the way they are. We tend to filter information to suit our belief and attain false knowledge in the process. However, it can be inferred that truth is a condition of knowledge. A belief need to be true to constitute knowledge but what is true today can be proved wrong tomorrow. Hence we can say that facts can change with paradigms. Knowledge seeks justification but does not mean that knowledge requires absolute certainty. How much knowledge is enough to work and grow within an organization seeks an explanation? Beliefs that are necessarily true and those who are true by the virtue of luck lies within a spectrum of beliefs about which an organization or an individual has defeasible reason to trust and believe that they will be true. We can then say that to constitute knowledge; a belief must be both true and justified.

## 4 CONCLUSION

In an attempt to provide with an overview of the important aspects of knowledge, and to address the most fundamental questions of what is knowledge? Moreover, how do we know what we know? With the help of epistemology, the paper shows the effect of incommensurable communication and infers that knowledge of linguistics might help develop better communication via developing acceptable concepts that are common to both the communicating parties. From the paper, it can also be concluded that processing of information plays a major role in decision making. It highlights the strength of wholeness over isolation and claims that gaining profound knowledge can help an organization achieve its desired goals. The paper also discusses the need to study the paradigm evolution and how decisions must be changed along with time. It encourages external adaptation and internal integration. The paper lays down the works of Aristotle, Bertalanffy, Deming and others to describe in brief, their belief about knowledge and its use. The paper concluded that validity of knowledge changes with time and theory. The idea that Sun revolves around Earth was true in its paradigm but eventually the theory was discarded. A theory upgrades a piece of information into knowledge; this knowledge can be considered valid till the supporting theory holds good. However, the study of knowledge still needs attention. How do we know what we know, is a debatable question? The paper fails to discuss the

ultimate truth or knowledge. It talks about the knowledge that holds good within or across a paradigm. Further research on how different people interprets new information under different situations might help in understanding knowledge and its concept in a better way. The paper recommends the study of various organizational culture across the globe and how human psychology results in biases that eventually hinders gain in knowledge.

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