Chapter 7.10
Conceptual Levels of Information Processing and Information Interpretation in Knowledge Management

Murako Saito
Waseda University, Japan

ABSTRACT

In managing knowledge, conceptual confusion on information arises frequently among researchers in different disciplines. The term of information is defined at least into four: data, information, knowledge, and wisdom. Procedural ways of information are different among disciplines even when the definition is similar. Interpretation of information varies in accordance with its meaning or its value for the receivers. Most of the misalignment in the field stems from different interpretations and the different procedural ways of the information presented. In this chapter, first, information processing levels in knowledge management and second, three levels in cognition-action reflective process are described. Thirdly, information interpretation in internal world, and finally juxtaposition of scientific and interpretive perspectives are discussed for developing organizational learning and organizational resilience and for building common ground for productive and constructive dialogue between and within disciplinary fields.

INTRODUCTION

It is rarely recognized, although it occurs frequently, that the way of knowledge information processing differs among different disciplinary areas. Specifically, the procedural ways of the information differentiates among academic disciplines in comparison with declarative or generalized knowledge. Even though people in the field could understand the information presented in a feed-back process, the procedural way of the information is not necessarily similar, nor confirmed

among disciplines. People follow the procedures they get used to or are trained in, in their disciplinary fields. Human errors in information processing frequently occur due to the specific procedures used in a particular discipline. The procedures in a particular area differ from the ones used in other disciplinary fields. The procedural way in the feed forward process of information acquired is very important for team members in multiple disciplines to deliver services to end-clients.

In this chapter, multiplicity of knowledge-information processing, and the three levels in cognition-action coupling process, feed-forward processes of knowledge information, holistic principles for developing stakeholders' action in organization and information interpretation in the internal world are described for understanding the development of organizational learning and organizational resilience and also for the argument in aligning the misfits among disciplines and between human cognition and action in operations management.

INFORMATION PROCESSING LEVELS IN KNOWLEDGE MANAGEMENT

In managing knowledge, conceptual confusion on information arises when we collaborate with researchers in different disciplines. The term of information has been defined into four meanings, data, capta, information and knowledge (Checkland and Holwell, 1998). Conceptual levels of information in the author's classification which is shown in Figure 1 are 1) information as data in physical and reaction level or in operational management level, 2) perceptual information in response-behavior level or in strategic management level, 3) knowledge in cognitive-action level or normative management level, and 4) wisdom in integrated and acculturated action level in the long span, which leads people to realize their healthy and purposeful lives and to accelerate global health. In the upper two levels of wisdom and knowledge, information processing is dealt with consciously by point-to-point liner processing, while in the lower two levels, routine work as a daily duty is dealt without profound consideration on each work. Most workers treat routine

Figure 1. Conceptual levels of data, information, knowledge and wisdom which are featured by human cognition-action coupling
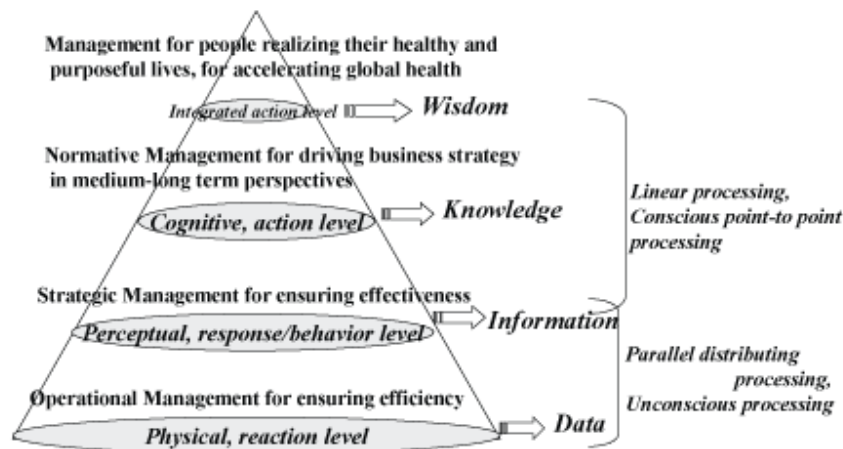
10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/conceptual-levels-information-processing-information/58230

Related Content

Creating Benevolent Organisations Through Dynamic Servant Leadership
Anju Bhartiand Ravinder Jit (2020). *International Journal of Responsible Leadership and Ethical Decision-Making (pp. 34-45).*
www.irma-international.org/article/creating-benevolent-organisations-through-dynamic-servant-leadership/276747

Designing and Adapting Services to Create Value Outside a Hospital Using Blockchain Architecture: Care Delivery in Patient Ecosystem
Mohan Rao Tanniruand Robert Tanniru (2020). *International Journal of R&D Innovation Strategy (pp. 44-67).*
www.irma-international.org/article/designing-and-adapting-services-to-create-value-outside-a-hospital-using-blockchain-architecture/258298

Exploring the Relevance of Intrapreneurship and Innovation in Mature Organizations
Fernando Almeida (2020). *Journal of Business Ecosystems (pp. 22-42).*
www.irma-international.org/article/exploring-the-relevance-of-intrapreneurship-and-innovation-in-mature-organizations/262222

Managing "Virtuality": An Integrated Model for the Implementation and Management of Virtual Teams
Sandra Morley, Kathryn Cormicanand Maébh Coleman (2017). *Remote Work and Collaboration: Breakthroughs in Research and Practice (pp. 192-213).*
www.irma-international.org/chapter/managing-virtuality/180102

Workplace Bullying in Digital Environments: Antecedents, Consequences, Prevention, and Future Directions
Leslie Ramos Salazar (2018). *Social Issues in the Workplace: Breakthroughs in Research and Practice (pp. 803-825).*
www.irma-international.org/chapter/workplace-bullying-in-digital-environments/192349