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# Know Thyself: Churchman's Inquiring Systems and the Future of IT Enabled Knowledge Management

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## Abstract

Inquiring systems, as presented by C. West Churchman (1971) possess the necessary scope by which to elucidate and facilitate the acceleration and advancement of organizational learning and change that is required within the field of knowledge management/ecology. This tutorial provides a readily accessible means by which to expedite the shift in thinking needed to accommodate the demands of the faster, more complex cycle of knowledge creation and action needed today and in the future, especially in terms of how to best deal with unpredictability and complexity, and in terms of how people actually go about acquiring, creating and sharing knowledge.

## Know Thyself

This tutorial provides an expedient and practical means by which to operationalize "inquiring organizations," in which learning organizations are viewed as inquiring systems, or systems whose actions result in the creation and sharing of knowledge (see Courtney, Croasdel and Paradise, 1996, 1998). It also builds on the insights put forth in Malhotra's (1997) paper on "Knowledge Management in Inquiring Organizations." As he points out, it is becoming increasingly apparent that these inquiring systems have the capacity to accommodate the complexities inherent in today's "wicked environments" of discontinuous change and unpredictability, in a way that has heretofore not been possible - given the constraints imposed by current formulations of information technology (IT) enabled knowledge management.

To provide some background, Churchman (1971) identified five traditions of inquiry basic to Western philosophy ascribed to Hegel, Kant, Singer, Leibniz and Locke. These traditions of thought were later operationalized as inquiry modes by Mitroff and Pondy (1974) and others, and were then applied to be used in situationally appropriate ways by agencies in public policy analysis and decision making. Allen Harrison and Robert Bramson, together with Susan Bramson and Nicholas Parlette (1977, 1997) then designed and developed an instrument that measures one's relative preference for these five inquiry modes. The resulting Inquiry Mode Questionnaire (InQ) has proven to be especially helpful in high knowledge fields where decisions are complex,

and diversity of approach is a recognized need (Bruvold, Parlette, Bramson and Bramson, 1983). While it has been used extensively in executive development and with managerial level government personnel, and by and with a wide range of health care professionals, it has yet to be developed for the purpose of expediting the process of change needed in the field of IT enabled knowledge management. [See Kienholz (1999) for a more extensive explanation of the InQ and its applications and its implications for information technology and knowledge management.] Socrates' admonishment to "know thyself" has special relevance in the current context. Since knowing how we are thinking, as we go about our work, brings home just how much we use one or another of these inquiring systems, which, while they are "our strengths," can also become our liabilities. Under certain circumstances, therefore, we might be better served using a different approach. Through understanding and being aware of one's relative preference for each of the five major inquiring systems, as determined by the Inquiry Mode Questionnaire (InQ), organizational members have a greater awareness and understanding of the way in which they, individually and collectively, go about gathering data, asking questions, solving problems and making decisions (Harrison and Bramson, 1982).

By thus coming to "know themselves" in terms of how they, as individuals, think, IT specialists can begin to apply their strengths most advantageously for "strategic thinking." And, because certain kinds of thinking can be more effective for dealing with a particular situation than others, this knowledge can also be used in matching people to projects, and in forming dynamic teams - and in turn, dynamic thinking organizations - *inquiring organizations*. As Malhotra (1997) points out, minimal attention has been granted to the human aspects of knowledge creation in current formulations of IT enabled knowledge management. Through an inquiring systems approach, knowledge management can be freed from its preprogrammed, convergent and consensus-oriented nature. Systems involving multiple and even conflicting interpretations are often needed to deal effectively with the "wicked environments" of discontinuous change and unpredictability that increasingly characterize IT enabled knowledge management.

The inquiring systems approach presented here, therefore, not only builds on the application of Churchman's inquiring systems approach to knowledge management as outlined by Malhotra, but also develops its practical application in a way that is readily accessible. *"...in the period ahead of us, more important than advances in computer design will be the advances we can make in our understanding of human information processing - of thinking, problem solving and decision making."* Simon, H. A. *"The Future of Information Technology Processing," Management Science, 14 (9), May 1968, p.624.*

### **Tutorial Description**

*Time: 1½ hours)*

Following a brief introduction, participants will have the opportunity to complete the Inquiry Mode Questionnaire (InQ) to determine their relative preference for the five main ways of thinking (inquiring systems). The questionnaire usually takes about 20-30 minutes to complete. It is also self-scoring and each participant charts his/her own profile. A summary chart then provides interpretation information concerning the characteristics, strengths and liabilities of each inquiry mode or way of thinking, along with some 'behavioral cues' that typify each style. Dialogue centered on how this understanding and awareness of our thinking preferences can be applied to current and future challenges facing IT and IT enabled knowledge management will conclude the session. *(Limited to 30 participants.)*

### **References**

Bruvold, W. H., Parlette, N. G., Bramson, R. M. & Bramson, S. J. "An Investigation of the Item Characteristics, Reliability and Validity of the Inquiry Mode Questionnaire," *Educational and Psychological Measurement, Vol. 43, 1983, 483-493.*

Churchman, C. West. *The Design of Inquiring Systems: Basic Concepts of Systems and Organizations*, Basic Books, Inc., New York, NY, 1971.

Courtney, James, Croasdell, David & Paradice, David. "Inquiring Organizations", *Proceedings of the America's Conference on Information Systems*. Phoenix, Arizona, Aug 16-18, 1996.

Courtney, James, Croasdell, David & Paradice, David. "Inquiring Organizations," *Australian Journal of Information Systems, Volume 6, Number 1, September, 1998, 3-15*, and *Foundations of Information Systems: Towards a Philosophy of Information Technology*, Nov. 4, 1998, <http://www.cba.uh.edu/~parks/fis/fisart.htm>

Harrison, A. F. and Bramson, R. M. *The Art of Thinking*, Berkley, New Jersey, 1982.

Harrison, A. F., Bramson, R. M., Bramson, S. J. & Parlette, N. G. *InQ: Your Thinking Profile*, InQ Educational Materials, Inc., 74 New Montgomery Street, Suite 230 San Francisco, CA 94105-3411, U. S.A., 1977, 1997.

Kienholz, Alice, "Systems ReThinking: An Inquiring Systems Approach to the Art and Practice of the Learning Organization," *Foundations of Information Systems: Towards a Philosophy of Information Technology*, February 5, 1999, <http://www.cba.uh.edu/~parks/fis/fisart.htm>

Malhotra, Yogesh. "Knowledge Management in Inquiring Organizations," *Proceedings of the 3rd America's Conference on Information Systems (Philosophy of Information Systems Minitrack)* Indianapolis, IN, Aug. 15-17, 1997, 293-295.

Mitroff, Ian, I. & Pondy, Louis R. "On the Organization of Inquiry," *Public Administration Review*, 34, 1974, 471-479.

Simon, H. A. "The Future of Information Technology Processing," *Management Science, 14 (9), May 1968, p. 624.*