Chapter 9

Cultural Problems in Applying SSM for IS Development

Trevor T. Moores
Emporia State University, USA

Frank H. Gregory
Independent Consultant, Chiang Mai, Thailand

Soft Systems Methodology (SSM) is a general problem structuring approach that seeks to incorporate multiple stakeholder views in the analysis of a given problem. When applied to IS development, the method requires negotiation and debate between the stakeholders when exploring the feasibility of developing an information system. The applicability of this approach depends, however, on the willingness of participants to enter into such an open discussion. This paper reports on a case study that highlights the problems of applying such a confrontational method in an Eastern culture, such as Hong Kong. Three main problems were identified: Group discussions were avoided; Interviews were conducted in multiple languages; and, High staff turnover made it difficult to develop and maintain mature stakeholder views.

INTRODUCTION

Soft Systems Methodology (SSM) is a general problem structuring method devised by Checkland (1981) that requires the building of rich pictures, root definitions and conceptual models of the human activity under study. The root definitions and conceptual models are built by the stakeholders in the problem domain in an iterative debate organized by a facilitator. This process allows the features of the problem area to be explored. In short, SSM takes a system’s approach to explore problem situations where there is no


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fixed outcome. If a solution has already been determined, there is no need to apply the SSM method.

With the importance placed on identifying stakeholder viewpoints, SSM would seem to be capable of recognizing the cultural values that may be central to an organization. These cultural values would include the beliefs, assumptions, and values shared by members of the organization. The need for debate, however, and the expected conflict between different stakeholder views, relies on the fact that the participants are willing to enter into such an open discussion, putting forward their personal views of whether the system is needed, and if so, what the system should do. But this, in itself, rests on the Western cultural assumption that debate is constructive and the most effective means of eliciting the information required.

Following Hofstede (1984), it is generally accepted that Western cultures are more individualistic, tolerant of different behavior and opinions and have a lower regard for status differences than Eastern cultures. Eastern cultures, on the other hand, tend to be more collectivist, have higher uncertainty avoidance and have an acute regard for status levels. The issue to be addressed here is the impact this cultural difference has on the early stages of an information system (IS) development project. Hong Kong is perhaps a unique place to investigate this problem, since, until recently, it has been Western governed for more than 150 years, but has remained an essentially Chinese culture.

The cultural problems inherent in IS development will be demonstrated by presenting the results of a case study based on an M.A. project (Lau, 1996) supervised by one of the authors. The project attempted to apply SSM in order to assess the feasibility of developing an Executive Information System (EIS) for a marketing unit in Hongkong Telecom. Three main problems were observed. Firstly, no group debate took place between the stakeholders. The student, being Chinese, avoided the confrontation inherent in this approach and conducted interviews on a one-to-one basis. Secondly, these interviews were typically conducted in Cantonese, but written in English. A feature of Hong Kong is that three languages are in common use: Cantonese, Putongua and English. As such, interviews could be conducted in different cultural modes depending on the language used. Finally, another feature of Hong Kong is the relatively high rate of staff movement among executives and professionals. Before the study had been completed all of the original stakeholders had been transferred. This clearly has a drastic effect on the ability of mature, experienced stakeholder views to be developed or captured.

The next section will outline the use of SSM in the development of information systems, and the Logico-Linguistic Modeling (LLM) enhance-
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