Chapter 5
Sensemaking as Feral Information Systems: Conceptual and Framework Development

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ABSTRACT
In this chapter, the authors outline how feral information systems are part of a sensemaking process for employees. The core argument lies in the notion of sensemaking as a creation of a conceptual framework to explain disruptions in the flow of working life. As a response to disruptive ambiguity, those “making sense” often revert to causal explanations that help them come to grips with the situation at hand. The authors argue that, when work processes create disruptive ambiguity because of information systems, people in the system are likely to use feral systems to help them understand and tame (or make sense of) the ambiguity faced. They introduce a small case for discussion and conclude with some research questions.

PROBLEM STATEMENT
Feral Information Systems (FIS), sometimes referred to as ‘shadow systems’ (Behrens, 2009), are those that are argued to be unsanctioned (Kerr, Houghton & Burgess, 2007) by management but essential for the support of day-to-day work (Thatte, Grainger & McKay, 2012). They often arise as a result of the current system-in-use being too difficult or obscure in the way it manages processes and workflows (Kerr & Houghton, 2010), especially as it relates to operational planning. FIS research to date has looked at the development of workarounds as a response to large-scale corporate information systems such as Enterprise Resource Planning (ERP) systems like Peoplesoft or SAP R/3 (Houghton & Kerr, 2006).

Early research (Houghton & Kerr, 2006) pointed towards the idea that management and operational worker conflict may be the reason why FIS are developed. This earlier idea for the purpose of FIS was based on
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concepts of conflict, and that workers were developing FIS as a response to political crises in the FIS domain. From the workers’ points of view, this caused conflict to arise between management practices of information control and the choices of workers to respond to non-routine and difficult problems. The argument was made that degrees of variance from system acceptance could be explained by levels of ‘feralness’ or the difference between worker expectations of a system and managerial intent. However, the early work set up an unfortunate conflict that was later found to be problematical.

Since that time, other research has softened the conflict-based perspective. Burgers, Padgett & Concha (2010) explain that FIS are often essential in successful ERP development and implementation. Others, such as Urus, Molla & Teoh (2011) point out that FIS help users cope with poor implementations, thereby sidestepping the conflict issue entirely. These authors highlight that FIS are often used to support user activity given absences that should have been factored into user design (Kerr, 2008). Most recently, the focus in the FIS literature has picked up on issues of training (Kerr, Burgess, Houghton & Murray, 2012). Interestingly, ongoing research into FIS is exploring the reasons why ERP systems can actually hinder productivity from the angle of the opportunities actors have during their work and professional lives (Spierings, Kerr & Houghton, 2012).

In the earlier research, suggestions were made that there may be cognitive reasons, referred to as ‘idea incompatibility’, between managerial thinking and worker thinking. This was further explored (in Houghton & Metcalfe, 2010) as an opportunity for problem solving because the lack of idea compatibility gave rise to chances for synthesis (or Hegel’s dialectical synthesis) that could subsume tensions and reveal new interpretations for problem solving. The problem is that, while modern FIS research has sought to explain reasons for FIS, including ideas of training, conflict and work-based practices (Thatte et al., 2012), research still has not explored the cognitive or socio-political reasons for their creation from either a social theory point of view or a philosophical point of view (that is, with the exception of Spierings et al., 2012). This is problematic, because to understand why users create FIS, the authors need to unpack their thinking as they develop them. In particular, we need to begin to look at the social reasons for which people react this way to large-scale ERP implementations. A further problem here is that there are only a handful of studies conducted so far. There really are not enough studies to know whether FIS have had a great or small impact on organisations. The paucity of studies, including the general framework of information systems research under which this paper sits, demonstrates the need for more research in this area.

To begin this discussion, the authors propose a framework using an established theory from the managerial cognition literature to begin to understand how a socio-cognitive view can yield interesting insights for FIS research. Building on the work of Karl Weick (1995) and his interpretative view of organisations, the authors draw on the sensemaking framework to develop a proposal for researching the cognitive view of FIS. While Weick’s (1995) work is not strictly cognitive in the psychological sense, it provides a robust framework for the analysis that we believe could be useful for future research. To demonstrate this in this chapter, the authors conduct a brief literature review of sensemaking, develop the conceptual framework needed to explore it and then use a small case study to demonstrate how this framework can yield insights into
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