The Papers

The 11 papers in this book are organised into three sections entitled 'Fundamental Issues', 'Theories and Theorising in Practice' and 'The Big Picture', reflecting the wide range of topics relating to theories and theory building that were addressed in the 2010 workshop.

The fundamental issues section contains three papers, each of which puts forward a particular perspective on how theories in information systems should be structured or built. The first, by Weber, offers a view of what theory is, or should be, through a set of criteria for evaluating theory quality as well as a detailed example of how those criteria can be applied. Following this, Tate and Evermann identify a number of obstacles that they argue can, and in many instances do, seriously hinder the development of good theory in the field. Importantly, however, beyond just identifying these obstacles they also offer suggestions as to how they might be avoided or overcome. The third and final paper in the fundamental issues section is by Hovorka and Gregor, who tackle the longstanding philosophical conundrum of causality, though in the quite specific context of design science and its application in information systems. The result of their effort is a framework that they propose can be used to identify the type of causal analysis suitable for different types of theorising in designing new, and especially novel, artefacts of an information systems type.

The 'Theories and Theorising in Practice' section, which follows that on fundamental issues, constitutes the bulk of the book. It contains seven papers that discuss specific theories in information systems or the process of building them. The first, by Fidock and Carroll, is concerned with theories that deal with the entire life cycle of an information system. In it, the authors outline and critique the most well known of such theories before proposing their own, based on the 'Model of Technology Appropriation', which is aimed at overcoming the shortcomings of the other theories they consider. Next, Raza and Standing focus on a particular aspect of the life cycle—namely, that of coping with multiple stakeholders and their different interests and perspectives during the system development process. They base their analysis on critical systems thinking (CST) and propose a process of what they call 'phase-stakeholder-identification' as a tool for use by project managers engaged in information systems development in a multi-stakeholder environment, as most are.

The third paper in the 'Theories and Theorising in Practice' section is by Hoehle and Huff. Unlike the previous two papers, which aim for validity and relevance across all information systems application areas, these authors consider a particular theory (task-technology fit, or TTF, theory) in a particular context (electronic banking). More specifically, they analyse in some detail

the central concept of TTF—that of 'fit'—and then go on to use their analysis to devise and test a measurement instrument for determining the degree of 'fit' between various electronic banking tasks and the channel(s) over which they are conducted, aiming, all the while, at advancing TTF theory through their efforts. The next paper, by Koeglreiter, Smith and Torlina, changes tack again because its authors are interested in the *process* of research and theory development in general rather than the content of any specific theory, as were Hoehle and Huff. In particular, Koeglreiter and her co-authors describe how, in their own research, they have developed an integrated method, which they call 'structured-case with action interventions', that melds together the action research and case-study methods, thereby taking advantage of the strengths as well as avoiding the weaknesses of both.

In the next paper, Hasan and Banna present an argument for making use of 'activity' as a unit of analysis in information systems theory. Their case is based on the 'activity theory' of the Russian psychologist Vygotsky and his successors, of which they give a brief overview. They then follow this with an example of a research project in which they were involved and which they reinterpret using 'activity' as the unit of analysis to illustrate the benefits of doing so. The final two papers in the 'Theories and Theorising in Practice' section both report on research in progress. The first, by Mola, Rossignoli, Fernandez and Carugati, describes a continuing study of a group of agricultural cooperatives in Italy that is undertaking an extensive modernisation process, including their information and communication technology capabilities. The aim of the project, ultimately, is to achieve a better theoretical understanding of modernisation efforts of this type in the agricultural sector. The second 'research in progress' paper and the final paper in the section, by Dod and Sharma, is concerned with business analytics. After introducing the background to the research, it outlines the theory-building effort to be pursued in their future work.

The final section of the book, entitled 'The Big Picture', contains just one paper, by McDonald. This invited paper takes a critical, high-level and broad-ranging look at what theory, and 'grand theory' in particular, is from what the author terms an 'informatics' perspective based on the ideas of the philosopher Karl Popper. It argues and concludes that theories are, in fact, systematic patterns that, being themselves information constructs, should naturally be 'susceptible to examination and systems building by the IS discipline' but that are currently rather poorly served in this sense. Though this might be the case, it remains to be seen exactly how such examination and building might be effected at the level of theory (and especially 'grand' theory), and what the benefits to be expected from such efforts might be. It will be interesting to see.

Dennis Hart

Shirley Gregor