

to convince a knowledgeable audience should guide the researcher rather than a dogged attachment to one particular method.

In Chapter 3, Metcalfe begins to engage his reader in the process of developing and using argument as a strategy for research. Metcalfe initially asks his readers to lay aside notions of theory, propositions, inductive–deductive loops, thesis, hypothesis and so on and concentrate on the questions ‘... “What is your argument?”; “What evidence will you present in support of your argument?” ...’ (p. 39). Metcalfe uses the analogy of a court of law to further develop this understanding. He contends that a sceptical audience is most likely to be won over by an eclectic mix of evidence pointing to the one conclusion rather than evidence derived from one method or experiment.

Chapter 4 deals with the topic of argument structure. Metcalfe likens this to ‘packaging’ the argument and evidence in an attractive manner. While development of the argument structure requires a logical plan to assist the reader in understanding relationships within the evidence, Metcalfe also emphasises the need for writers to maintain the reader’s interest through surprise, teasing questions and the like. The remaining three chapters are concerned with covering the basic principles usually associated with qualitative research. Chapters 5 is devoted to discussing the role and uses of commentaries in argumentation while Chapters 6 and 7 contain good advice on the subject of conducting interviews and questionnaires, respectively.

While the discovery of typographical errors normally doesn’t warrant specific comment in a book review, the number noted in this book does. In places, the text has the appearance of an unchecked draft. This is a pity because the frequency of these errors does tend to detract from the book’s overall quality and message. The expectation is that these errors will be corrected in future editions. The necessity for proof-reading emerges as another important, though tacit, issue which the book reveals.

Metcalfe’s book is an excellent reference for those students having difficulty getting their research started. By challenging assumptions concerning the scientific method, he assists his readers to determine what from their current knowledge represents baggage that should be kept and what should be jettisoned. One could imagine a similar problem in other areas of research besides Business Studies. For example, a need could conceivably exist in the social study of technology where there is a requirement to undertake interpretive research in an environment dominated by the scientific method. By orientating the researcher’s mind to what they really want to say and how they are going to say it, Metcalfe provides them with the confidence to venture into such areas. In terms of recommending a research methods text to new researchers, *Business Research Through Argument* by Mike Metcalfe represents a very safe choice.

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Managing Knowledge: Experts, Agencies and Organizations

Steven Albert and Keith Bradley

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Albert and Bradley offer an account of the changing nature of employment relations from the point of view of the expert worker. They argue that accounts of labour markets

which show the increase in atypical work as necessarily a negative trend for employees have been focused on demand-side issues. That is, this kind of change is seen to be driven by the needs of employers and, in particular, by large corporations. The authors' task is to convince us that this only tells part of the story because there is a supply-side dimension as well. The case is put that much organisational change in relation to employment contracts has been the result of experts demanding more flexible, more personally rewarding work arrangements. They argue, for example, that many professional women are choosing agency-based contract work because the large corporations do not offer the kind of compensation packages that they find attractive or conducive to the kinds of life styles they wish to have.

Managing Knowledge is divided into two parts. The first part looks at experts and their new organisations. It begins with some solid historical analysis of trends in labour markets. The authors then look at changing employment structures that have arisen from the influences of, for example, women professionals, the organisational impacts of information technology, environmental concerns, the changing role of employment agencies, and the temporal advantages of agency work. Albert and Bradley's aim in this part of the book is to establish an analytical framework for understanding the supply-side dynamics of the emergent conditions in the labour market. Central to this aim is the presentation of their theory of punctuated breaks: the achievement by an expert worker, through atypical labour arrangements, of advantages that significantly increase, for example, their productivity, incomes, and discretion over work content and timing. The central analytical device used is Winston's time-sensitive economic model that describes rhythmical fluctuations in time and their effects on markets.¹ With this model they are able to show that the value of working is time-sensitive and people will place different values on particular work depending on the time at which it occurs. Using this model they are able to explain the economic implications of organisations giving temporal control of work to the worker (expert worker). In doing so they are able to successfully show that an organisation relinquishing control in this way makes good economic sense for the expert and the organisation. It can be a situation in which both sides win. Furthermore, because this scenario requires that traditional managerial assumptions of the need for hierarchical control and stability be questioned, they attack the management tradition following Coase that has encouraged these beliefs.²

In the second part, there is a presentation of a number of case studies of changed employment relationships in AT&T, two London accountancy agencies, and the Hollywood agency system. Albert and Bradley then move on to speculate on the role of the Internet as an agent for atypically employed experts, they undertake a re-examination of labour market segments, and consider a future where the mediation between expert knowledge and organisations is conducted through capital market-like mechanisms (knowledge exchanges). In looking at the agency case studies they present a thesis which says that experts engaged in atypical employment arrangements already exist and these arrangements are demonstrably beneficial to the atypical workers and the organisations that they service. In relation to the mechanisms for the exchange of labour they argue that labour market exchanges are increasingly exchanges of knowledge. In essence, what is being asked is, is it reasonable to assume that existing labour market mechanisms are the best way to exchange expertise or intellectual capital? They posit that a knowledge exchange can accurately assess market conditions and efficiently allocate scarce resources thus producing higher levels of productivity. They call this intellectual capitalism—the buying and selling of future options of returns to knowledge in the form of hiring and firing employees. There is, however, an admission of the fact that there may be significant obstacles to such a market forming because of the intangibility of knowledge

that makes it difficult to quantify and to negotiate over in the way that traditional capital markets do. Important to the operation (or otherwise) of a knowledge market is that tacit knowledge can never be owned by the purchasing organisation because it cannot be completely separated by the organisation from the person in whom it exists. As a consequence, the expert (the seller) will still retain much control of the asset.

Put in perspective, there are some important contributions that are undoubtedly made by Albert and Bradley. There is a convincing attempt to place their thesis in an historical perspective and this provides the book with a strong backbone which adds substance and rigour to their position. Although this historical analysis is not original it is welcomed because the idea of the postindustrial economy and, indeed, the knowledge economy are deeply rooted in historical events and cannot be properly understood for their importance and shape without such analysis. The absence of this kind of analysis often leads to nothing more than trivial sloganeering and is something that is all too frequently left out of much of the management literature. The criticism presented to the reader of the labour market literature for presenting a demand side account of recent changes is also very much welcome because it places much needed shape to the dynamics at the top end of the labour market which are presently not well understood. Many firms in knowledge intensive industries are daily presented with the problem of how to attract and keep highly skilled and valued employees. The rapid churn of these workers in the computer industry and the financial services sector testifies to their lack of ability to deal with such employees. For these latter reasons alone the book stands on its own merits as a major contributor to knowledge.

Despite the convincing argument that there is a significant and under-estimated supply-side element to the changing dynamics of employment relations around the western world there are some critical issues that have not been adequately addressed in *Managing Knowledge*. First and foremost among these is the issue of a future employment market that continues to widen the gap between the knowledge rich and knowledge poor. Save for a few words towards the end of the book, nothing is said of this critical issue. Knowledge management and, indeed, knowledge-related public policy will have to confront this problem in the very near future and design processes that can close the gap. It will be a serious oversight if scholars and others with an interest in knowledge management do not respond adequately to such a critical and difficult issue.

What is also of concern is that knowledge diffusion is reduced only to a market mechanism. As Albert and Bradley suggest, a knowledge market is somewhat problematic given the very nature of knowledge. It is, therefore, worrying that there is no exploration of, for example, the literature on the social construction of knowledge and meaning or on the role of social capital in the diffusion of knowledge. It is surely possible to find alternatives and qualifications to the market rhetoric in this literature. The market explanation is an easy fall back in the absence of ready alternatives, but there are alternatives that have been suggested and they have to be given due regard.³ Moreover, given that Albert and Bradley argue that the dynamics of the economy are changing because of knowledge—so much so that the old explanations of industrial capitalism applied to intellectual capitalism are inadequate—it is surprising that they have nevertheless retained one of the central explanatory devices of a tangible-goods driven economy, the market.

The contribution of *Managing Knowledge* is, regardless of the criticisms offered here, important. At a time when more and more attention is being paid to the role of knowledge in the economy it is timely to have a supply-side account of labour market change that suggests that not all atypical, agency-based work and other casual work arrangements are deleterious to the worker.

Notes and References

1. G. C. Winston, *The Timing of Economic Activities—Firms, Households, and Markets in Time Specific Analysis*, Cambridge University Press, Cambridge, 1982.
2. R. H. Coase, 'The nature of the firm', *Economica*, 4 November 1937, pp. 125–52.
3. For a brief (and incomplete) sample of work that may offer alternatives to market mechanisms, see, Antonio Etzioni, *The Moral Dimension: Towards a New Economics*, The Free Press, New York, 1988; Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press, New Jersey, 1993; W. Barnet Pearce *Interpersonal Communication: Making Social Worlds*, Harper Collins, New York, 1994; and Janine Nahapiet and Sumantra Ghoshal, 'Social capital, intellectual capital, and the organisational advantage', *The Academy of Management Review*, 23, 2, 1998, pp. 242–66.

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Digital Cash

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Digital Cash is about the, primarily Australian, legal and policy issues raised by the emergence of new payment systems that facilitate commerce over the Internet. As Landerer Professor of Information Technology and Law at the University of Sydney, Alan Tyree, BSc, MSc, PhD, LLB(Hons), is ideally qualified to contribute to this topic.

The book starts with a brief history of the Internet, World Wide Web, indexing the Web, and the rapid development of the commercial use of the Internet. This leads naturally to the need to offer low cost items to a huge but low-density market. Cash, cheque, credit and debit cards each have limitations—new solutions are needed. This necessity has mothered the invention of new payment methods for low-value items over this sparse electronic market space.

Chapter two introduces cryptography as a tool to provide analogous features to those available with signed paper documents; features such as certainty of origin and non-repudiation, the challenge of forgery, original documents, alterations, and control over reuse. Symmetric (private key), asymmetric cryptography (public key), hash functions and digital signatures are covered in layman's terms with helpful examples.

After a brief history of payment systems, to again set the requirements for a digital analog for paper-based systems, chapter three describes the application of cryptography to payment systems to secure and authenticate credit card, stored value (digital cash), digital cheques, and debit systems. This chapter also introduces the smart card as an electronic purse for stored value and touches on experimental and emerging systems that use password hashing instead of public key cryptography.

With the basic technology introduced, the book moves into the practical and legal problems of security and control. Chapter four discusses the issues of money creation and issue, counterfeiting, clearing house functions, seigniorage, and unclaimed money. Criminal activity and money laundering is also discussed. Chapter five deals with the legal nature of digital cash, including the legal status of digital signatures and jurisdictional problems. While paper currency is accepted as legal tender, digital cash does not yet enjoy such a status. Buyers and sellers must be able to rely on the acceptability of digital payment methods before such methods can flourish. Paper currency serves the function of a promise to pay. The issuer of digital value must be recognised by law as the promisor. Interesting contract issues arise: is a merchant making an offer via a