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## Foreword

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**Biographical notes:** Professor Rob Witty is the Head of Department of Information Systems at Cranfield University. Professor Witty has had an illustrious career in industry and academia before joining the Department of Information Systems in 2005. He has led the UK's air traffic control engineering through the transition from being a public sector organisation to being a commercial one; introduced enterprise architecture and capability improvement; responsible for the corporate £1 billion programme to renew the entire UK air traffic control system. Professor Witty has led the UK's biggest and only national software engineering research programme. As Head of the Department of Information Systems, he has encouraged a wide range of projects and research, some of this is directed to develop a cutting edge knowledge management research capability.

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With the ubiquitous influence of the internet, two countervailing realities are upon us. Over the last decade manufacturing has been replaced with knowledge-based work as the central focus of many organisations. Such value-added knowledge is usually dependent on human expertise gained as a result of engaging with a particular discipline over a period of time. On the other hand, advances in technology are making the microchip capable of flexibly supporting human needs. However, experiential knowledge is probably an area that is increasingly difficult for the microchip to embed. With a noticeable shift from manufacturing to knowledge-based capacity, it is clear that there is also a shift in resource capacity from tangible to the intangible. And this is where the need to understand how knowledge could best be developed, stored and disseminated is likely to make an important contribution.

If it were true that a philosophical understanding of what knowledge was could suffice in increasing the competitive advantage of organisations, then a lot of this debate could have been resolved at an esoteric level. However, in the modern world of commerce and trade where computing is an integral part of the success of operations of organisations, it is necessary to develop an appreciation of practice-based knowledge. Over the last three decades theory building in knowledge management seems to have brought home some interesting trends. Whilst at one end of the spectrum, theory that has philosophical acceptance has evolved, in its wake there has also emerged a lack of acceptance of it in the world of practice. Consequently, like many other fields of scientific progress, it may also be said that this has resulted in the validation of research outputs with narrow remits of applicability. Instead of exacerbating the gap between theory and practice, a time may well come about when various knowledge-centric research outputs could be drawn together to develop acceptable general theoretical

principles. It is in this context that the research on knowledge management that is being carried out in the Department of Information Systems of Cranfield University can play a pivotal role.

It is expected that the special issue on knowledge management of the *International Journal of Business Information Systems* would be able to make some headway within this domain of the intangible and the vast. Practice-based research that is being reported upon on knowledge storage and dissemination in the special issue deals with several interesting challenges of using tacit knowledge. Despite the neutrality of technology employed to resolve delivery aspects of businesses, context does play an important role in ensuring generic acceptance across industry. Context varies with cultural expectations from region to region. Case studies located in Romania, China and Ireland are expected to make an important contribution to appreciating contextual knowledge within this special issue. Even after developing a usable knowledge base within an organisation, there may be threats to its integrity from employees and stakeholders outside the organisation. Such a dimension is effectively addressed through the case study on Barings Bank. Finally, tacit knowledge is an abiding challenge that, if managed effectively, can bring about many advantages to an organisation. This is another area that is addressed through a couple of interesting papers in the special issue. Given such a broad coverage of issues, the special issue on knowledge management of the *International Journal of Business Information Systems* is likely to inspire new research and take the subject to a higher level of appreciation altogether.