

---

## Editorial

---

### S.C. Lenny Koh

Management School,  
University of Sheffield,  
9 Mappin Street, Sheffield S1 4DT, UK  
Fax: +44-0-114-222-3348  
E-mail: S.C.L.Koh@sheffield.ac.uk

**Biographical notes:** Dr. S.C. Lenny Koh is the Director of the Logistics and Supply Chain Management Research Group and an Associate Professor/Senior Lecturer in Operations Management at the University of Sheffield Management School, UK. She received a Doctorate in Operations Management and a First-class Honour's degree in Industrial and Manufacturing Systems Engineering. Her research interests are in the areas of production planning and control (ERP and ERPII), uncertainty management, modern operations management practices, logistics and supply chain management, e-business, e-organisations, knowledge management, sustainable business and eco-logistics. She has 166 publications in journal papers, book, edited book, edited proceedings, edited special issues, book chapters, conference papers, technical papers and reports. She is the Editor-in-Chief of the *International Journal of Enterprise Network Management* and the Associate Editor of the *International Journal of Operational Research*. She is on the Editorial Board of several international journals and has guest edited many high-profile journals. She organised and chaired international conferences and is on the board of scientific/international/programme committee of many international conferences. She has received grants and awards from several national and international funding bodies and has been a Consultant to SMEs and large enterprises.

---

## 1 Introduction

I am pleased to introduce this Inaugural Issue of the *International Journal of Enterprise Network Management (IJENM)*. *IJENM* proposes and fosters discussion on the interaction, collaboration, partnership and cooperation between Small- and Medium-sized Enterprises (SMEs) and larger enterprises in a supply chain. More innovative analysis and better understanding of the complexity in a supply chain are essential in today's global businesses. A typical supply chain usually comprises of SMEs and larger enterprises. Supply networks at every tier have a different level of complexity and specific types of enterprises and industries have dedicated characteristics and constraints. Therefore, new and adapted theories, configurable models and frameworks are necessary for enterprises to compete and perform in such a dynamic, complex and evolving supply chain.

Coupling with the globalisation and digitisation of supply chains, enterprises have started to apply emerging and connective technologies to create a competitive advantage. These include small-scale power systems, smart materials, biometrics,

displays, voice technology, tagging, peer-to-peer networks and wireless technology. We are now entering a deeper period of digital innovation where connective and micro technologies are giving rise to startling new discoveries and groundbreaking applications. As a result, the applications of these technologies have seen its lights in supporting the management of a supply and demand network and a wider and deeper application are yet to be seen.

Hyper competition between enterprises and supply chains has triggered enterprises to look into new and more efficient ways of operations. The management of a supply and demand network in today's marketplace requires a more articulated, innovative, social-intrinsic, sustainable-driven and speed-dominance systems. This has led to the applications of Enterprise Resource Planning (ERP), Extended Enterprise (i.e. ERP II), Supplier Relationships Management (SRM), Customer Relationships Management (CRM), e-technology, Radio Frequency Identification (RFID), knowledge management, business intelligence, various business models and connective technologies in different stages of the network.

The objectives of *IJENM* are to establish an effective channel of communication between policymakers, government agencies, academic and research institutions and persons concerned with the management of enterprises and supply chains. It aims to bring together current research, development and application in improving enterprises and supply chain management performances. Study with enterprise-specific, cluster-specific, industry-specific, country-specific, national-focus, regional-focus or international-focus is welcome.

Enterprise network management is no longer a traditional boundary specific discipline. It now includes emerging theory and the applications of new technology. *IJENM* provides a domain to assist professionals, academics, researchers, policymakers and practitioners, working in the field of enterprise management, operations management, supply chain management and technology management, to disseminate information, to learn from each other's work and to shape future research and development in these areas.

This Inaugural Issue contains six papers discussing a range of issues dealing with enterprise network management. We provide a brief overview of the papers that appear in this issue.

Chow et al. in their paper, 'Design of a knowledge-based logistics management system: a case-based RFID approach' claims that the logistics planning or decision making of logistics activity; however, is still largely executed manually. They design a Knowledge-based Logistics Management System (KLMS) to support logistic service providers in making decisions during the stage of logistics planning and operations by extracting, sharing and storing real-time logistics knowledge. KLMS is developed by integrating Case-Based Reasoning (CBR) RFID, Online Analytical Processing (OLAP) technologies and a branch-and-bound resource route optimising programming model seamlessly together, which is suitable for usage in different business processes in a warehouse operating environment. Through applying KLMS in GENCO, a US-based logistic service company, the overall logistics servicing level is enhanced through accurate decision making and planning of warehouse operations.

The paper, 'Virtual Pre-Incubator: a new entrepreneurship approach', by Folinas et al., presents and analyses the Virtual Pre-Incubator approach. They argue that virtual incubation can act as a stepping stone for potential preincubator and incubator clients. On the basis of this approach, a pilot project is established with the purpose of creating

an environment where all would-be entrepreneurs construct a feasible business idea in a learning process. It is envisaged that this process would help them to acquire the tools and skills needed to transform their idea into a successful start-up.

Lee et al. in their paper, 'Application of the system thinking approach in ERP implementation for flower chain-stores owned by a Taiwan enterprise in China' suggests that ineffective implementation of the ERP system often occurs due to concept differences between ERP system developers and enterprises. The subject of this study is based on a flower chain-store owned by a Taiwan enterprise in China. Using Peter Senge's 'System Thinking' and 'Grey Relation Analysis' in Grey Theory, they analyse the motive and demand for ERP, and probe into the management problems in Taiwanese enterprises in China as well as the planning blueprint of all subfunctions before they implement the ERP system. This research aims to find out a systematic alternative for the enterprise.

The paper, 'Applicability and assessment of adoption and diffusion models: review of the models of Bass, Milling and Maier, Rogers and Frambach and Schillewaert', by Wirsam and Müller, reviews two models of innovation adoption and two models of diffusion: the adoption models of Rogers and Frambach and Schillewaert the diffusion models of Bass and Milling and Maier. The examination focuses on the practical relevance for prediction of diffusion courses and explanation of adoption behaviour. The models are described, classified by attributes and assessed one by one. Then, they are examined for their applicability for different types of products and their capability for forecasting the course of diffusion.

Edelmann and Sintonen in their paper, 'Adoption of electronic invoicing in Finnish SMEs: two complementary perspectives' notes that electronic invoicing is one of the newest innovations in the field of electronic business solutions, and believes that the Finnish IT industry has expected the Finnish SMEs to adopt it widely. However, the adoption of electronic invoicing seems to be in the slow lane. This study is carried out to find out the reasons behind the slow adoption rate of electronic invoicing by SMEs and stop the conjecturing about the reasons. The behaviour of current and potential users is studied in a survey conducted in South Karelia in the Spring of 2005. The main advantage e-invoicing is considered to offer is its potential in decreasing the clerical work and costs of the invoicing process, but it is also seen as a source of new business opportunities. In order to find out the reasons for the slow adoption rate, the survey results are first analysed statistically, and then the analysis is extended by the strategic options approach for a closer view.

The paper, 'Management of Information System in Indian SMEs: an exploratory study', by Bhagwat and Sharma, highlights the increased use of information technology have forced SMEs to design and deploy effective strategy for management of IS function and follow proper IS-related practices. They believe SMEs with limited resources may be able to deploy IS for their normal operations, but may not be able to manage the IS functions or follow IS practices properly. This study aims to identify critical issues that would contribute to effective performance of the IS management in Indian SMEs sector. On the basis of four case studies from diverse SMEs from three different states of western India, this paper presents four important issues in IS management – IS strategy, competitive priorities, benefits observed/perceived by effective management of IS function and barriers observed in implementing IS management practices. On the basis of the analysis of the case studies, several propositions are recommended and discussed, including role of top management, use of IT tools, investment in IT, supply chain linkages and work culture for an effective IS management in Indian SMEs.

The *IJENM* is a refereed journal, which publishes original papers, review papers, technical reports, case studies, conference reports, management reports, book reviews, notes, commentaries and news. Special issues devoted to important topics in enterprise management, operations management, supply chain management and technology management, will occasionally be published. *IJENM* focuses on topics related to (but not limited to) Material Requirements Planning (MRP), Manufacturing Resource Planning (MRPII), ERP; Supply chain dynamics and uncertainty; Supplier Relationship Management (SRM); Customer Relationship Management (CRM); Business-to-business (B2B); Business-to-Consumer (B2C); e-procurement, e-commerce, e-business and e-organisation; Business intelligence and knowledge management; Supply Chain Management (SCM); green supply chain; Demand Chain Management (DCM); order fulfilment and quick response; strategic alliances and partnerships; outsourcing and off-shoring; SMEs competitiveness; technology and systems; supplier and distribution networks; performance measurement and benchmarking; logistics information systems; inbound and outbound logistics; Third Party Logistics (3PL) and Fourth Party Logistics (4PL); reverse logistics, eco-logistics and de-distribution.

Academics and practitioners are invited to forward their contributions in the areas of enterprise network management, supply chain management, operations management and technology management research theory and applications for possible publication in *IJENM*. Potential editors are welcome for guest editing special issues in the emerging areas.

### **Acknowledgements**

I am most grateful to Dr. Mohammed A. Dorgham, and the team from Inderscience Publishers Limited for their excellent professional support throughout the launch of this journal. Also, I would like to thank all the distinguished Regional Editors and the Editorial Board Members who are renowned for their research in the field of enterprise network management, supply chain management, operations management and technology management, for agreeing to represent the region as an editor and to serve on the board of *IJENM*, respectively. My sincere thanks go to all the authors of this Inaugural Issue for their contributions to realise this launch.