

1. The Network Experience – New Value from Smart Business Networks

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Introduction: Beijing, 18–23 May 2008

This introduction gives an overview of the Discovery Event “*The Network Experience – New Value from Smart Business Networks*”, Beijing, 18–23 May 2008, it presents the background, the objectives, the programme organisation, the structure of the book and a readers guide. In addition, we pay tribute to the many people who helped to make the event an unforgettable experience for all who could join.

The Starting Points

Business networks rather than individual companies are now determining competitive advantage. Organisations and companies combining in agile and dynamic networks are able to generate exceptional or “smart” results. Smart business networks (SBNs) enable new ways for organisations to derive value from the combination of many individual organisations which, grouped as a network, are able to compete more effectively and respond with more agility to a changing world. The rapid advances of digital networks are creating and demanding new organics – the ways in which organisations combine and act to generate sustainable growth and profit.

In the industrial times of Marx and Taylor, the main source of growth and profit was provided by production facilities with coordinated processes in a single location (a factory or department store). Then, with improvements in communication, the coordination of processes within and between linked organisations in the supply chain provided the better margins.

We are now witnessing the emergence of smart business networks enabling dynamic and agile relationships between companies. Acting as nodes in the network, suppliers, customers, business partners and competitors combine to generate “smart” results enabled by “smart” technologies. Companies are beginning

to understand that skills in managing dynamic networks can provide more profit and greater competitive advantage than a single facility or supply chain can.

The Challenge

The individual company will no longer lie at the hub of its business network. It must participate in many technology-enabled business and social networks. Rather than acting in near-to-static value chains, dynamic process paths will connect the business network participants. To achieve this the business processes of each participant must connect quickly and effectively. To be able to participate, the business processes of all network players will need to be compatible and information needs to be portable. This is a formidable challenge!

For instance, how does one define atomic modules of processes that plug and play seamlessly within and between companies? How does one develop and implement them? How can consensus be attained? How does one manage a network of processes effectively as well as efficiently?

Companies recognise these issues but lack the benefit of a body of research and experience to underpin their actions. Academic researchers are now beginning to define relevant research topics and to provide answers and guidelines.

Taking this challenge, this book presents the results of an intense gathering of academics and business people, in Beijing, discussing and interacting to try to find answers.

Background: The Smart Business Network Initiative

On invitation of Cordys and Rotterdam School of Management, a group of international academics met for the first time in 2004 at the castle The Vanenburg, The Netherlands.¹ Cordys is a prime provider of Business Process Management software. Based on its founder's longstanding and highly respectable experience in enterprise software, in particular enterprise resource planning software (ERP), Cordys believes that the future organisation will become "process centric" and will operate in a flexible network of business partners that co-operate and execute parts of the processes among themselves. A business operating platform is required that enables the flexibility needed in tomorrow's agile world.

¹ See the results published in: Vervest, van Heck, Preiss and Pau (2005) and Vervest, van Heck, Preiss and Pau (2004).

The key question discussed in 2004 was the shape of the future organization that is increasingly “being networked”: What would be really different and what must companies do particularly well, or differently, in this new world of networks?

The Vision for Smart Business Networks

The new competitive business model will be founded on delivering smart outcomes by rapidly configuring effective capabilities from a network of organisations and people. Smart networks will cooperate and compete to fulfil customer needs in a more effective and efficient way: competitive advantage will be created by the network rather than by the individual organisation. Smartness will be enabled by accelerating the network’s ability to combine and act.

Intelligence will be embedded in the smart business network – captured in a *business operating system* which coordinates the processes among the networked organisations.

Winning organisations will grasp and act on the immediate and growing possibilities of smart business networking by identifying the real business opportunities with a thorough understanding of the science.

We continued to work on the issues across the globe; we met many new scholars and shared our views. We also discussed many business peoples’ views: How they saw this new world of networks and what they felt was important. We asked if they want to join a co-operative research programme. We met as a group for the second time in June 2006. At that meeting we laid down the foundations of what subsequently developed as the Smart Business Network Initiative (“SBNi”) (www.sbnweb.org) founded in 2006.²

The Smart Business Network Initiative (SBNi) Mission

SBNi is the not-for-profit catalyst and coordinator of a collaborative network of enterprises, governmental organisations and universities committed to identifying, researching, sharing and acting on the concepts and capabilities of smart business networks.

The third gathering took place in Beijing, from 18 to 23 May 2008. The event was hosted excellently by Tsinghua University, Beijing, ranked as a leading university in China. Taking place in the year of the Beijing Olympics the meeting gave the participants the opportunity to be involved in the excitement and dynamics of a rapidly developing China.

² The second event was published in Vervest, van Heck and Preiss (2008).

The Programme: The Network Experience

The Objectives and Programme Design

The overriding objective of the Beijing meeting was to extend the frontiers of knowledge in this essential and challenging field of smart business networks. As a result we described the meeting as a “discovery event” rather than a conference, seminar or workshop. We invited qualified senior “SBNi scholars” with one or two of their PhD students coming from different fields such as information systems, telecommunications engineering, social network analysis, complex systems theory, management strategy and organisational development.

We also invited people from practice: Business executives and organisational leaders such as chief information officers, marketing, organisation, business development and strategy executives and other business and organisational professionals.

We asked the academics to prepare a paper which was formally peer-reviewed prior to the event. Only the best or most original contributions, selected by the Programme Committee, were invited to present in Beijing. These papers have been assessed publicly during the event by a dedicated reviewer. They were presented and discussed in focused sessions. Rapporteurs recorded each session and presented the results to the plenary convention.

We asked business participants to prepare and present a brief position paper on selected themes. Business people presented a range of topics. Cordys gave two very interesting presentations on Business Process Management. Zurich Financial Services presented business development challenges in the insurance world. Electronic business development in China was presented by Tsinghua School of Economics and Management and Tsinghua University’s Head of Department of Automation. Thebigword explained how their massive international network of individual professionals provides translation services to large customers. The BT Group presented the development and implication of their next generation IP networks replacing their current telecommunication infrastructures. Alibaba described the success and challenges of a Chinese e-business platform; Elsevier China gave the experiences and challenges of managing science and technology publishing in China. The challenges and issues in managing the logistics network for the Beijing Olympics 2008 were presented by one of Tsinghua’s professors who is a member of the Olympics organising committee.

Each presentation was assessed on relevance for the development of our understanding of smart business networks: What is new, what is different and what can we learn? Is this a new approach; does this deserve special tools and methods to do the research? What can academic research contribute? What can be the impact on business?

Developing the programme has been a challenge: We brought academics and business people together, from many different parts of the world, with clearly

different objectives. The academics would put the “why” question: The rigour of the methodology, the contribution to theory. The business audience asked the “how” question: The relevance of the topic and the contribution to tomorrow’s success. Academic presentations would not always live up to the expectations of the business person and at times they would be disappointed if an academic presentation was not instantly understandable, or applicable, to their world of today. Some had to be reminded that the networked world has been underpinned by the achievements of academics who designed the Internet protocols and the browser programmes of the World Wide Web.

Business Meets Science

The programme was divided into two parts: The first part focused on the academic contribution: *Business meets Science*. This was the academic part including the academic presentations, reviews and evaluations. In this book, selected papers have been grouped in four tracks:

- *Network Essentials*: Papers essential for understanding methodology development and theory building in smart business networks.
- *Networks in Action*: Leading examples and practical cases of smart business networks with sound analysis methods and implications for empirical research.
- *Network Enablers*: Tools and techniques available or under development that enable smartness in business networks. Network enablers include software tools and process languages as well as standards and protocols.
- *Network Orchestration*: The orchestration of cooperation in business networks – governance, conflict resolution and the allocation of risks and rewards. Many papers dealt with this important topic which is not always straightforward, in non-hierarchical networks.

We invited keynote speeches on specific topics:

- Dr. Yuhong Li, Director of Tsinghua University Office of International Affairs, and Mr. Siebe Schuur, the Dutch Economic Consul in China opened the event and introduced the basics of networks and business in China.
- Prof. Guoqing Chen, Executive Associate Dean of Tsinghua University’s School of Economics and Management and Chair Professor of Information Systems, introduced Tsinghua’s School of Economics and Management and presented his views on the development of e-business in China, in particular from an information systems viewpoint.
- Jon Pyke, Chief Strategy Officer, Cordys Company, a well-known specialist and industry leader in business process management, spoke about the process challenges in the end-to-end management of business processes with execution taking place across a network of business partners.

- Theo Bouts, Chief Executive Officer, Direct & Partnership Business, Zürich Financial Services, presented the challenges of “networked insurance” and the cooperative research – the “Being Networked” programme – with the universities combined in the Smart Business Network Initiative.
- Prof. Yueting Chai, Professor of Automation, Tsinghua University, Head of the Chinese Government National eBusiness Research Center. On his behalf, Dr. Hao Sun spoke on the experiences with e-business in China showing the specific approaches and different solutions.
- Gerrit Schipper, Chief Executive Officer, RDC, The Netherlands, presented his business experience in developing a smart business network and his views for future directions.
- Nicola Carmyllie, General Manager of *thebigword* translation services company, China – a key example of a smart business network – hosted one of the dinners and challenged our understanding of the business issues around operating a network of thousands of linguists working together to deliver professional services to demanding customers.

The Experience Tour

The second part of the programme was called the *Experience Tour*. We visited a number of companies; others joined us to give presentations. We had intense discussions on what our smart business networking thinking could contribute to real-life business issues. It was a learning expedition for all concerned. It has given some very valuable insights in the networked world and the new ways of generating value. It helped to initiate the development of a common framework for research and the SBN business agenda. Experience Tour speakers included:

- Curtis Eubanks, General Manager, BT Group, Dalian, China, who spoke about the development of networks in practice, experiences in China, and the BT view on how business can use networking technologies as well as networking methodologies in a smart way.
- Dr. Liang Lu, Senior Director Research and Development, Alibaba, who made us understand not only the enormous success of the Alibaba Group, but more precisely how it is done and how it is different from the commonly known American equivalent, eBay.
- Sharon Ruwart, Managing Director Elsevier Publishers, China, presented Elsevier’s experiences in China in respect of science and technology publishing and gave her views on how networks impact their business.
- Tsinghua University has delegated a number of its professors and experts to the committee for the preparation and organisation of the Beijing Olympics. Dr. Adrian Guo, Asset Management Manager, Beijing Olympic Logistics Center, presented the logistical network and his view on “networks and organising”.

- Jan Baan, founder and Chief Executive Officer, Cordys Company, summed up the week brilliantly and put the development of process management and business networks in an industrial historical context.
- Nico Barito, Senior Fellow and Director of the United Nations Institute for Training and Research, spoke on training and research issues in a global world; and specifically what UNITAR’s views are on assisting the research into networks and SBNs.

We were also introduced to some of the latest technologies that help organisational networks becoming smart at IBM’s Beijing Innovation Centre and Tsinghua University Science Park (Tuspark).

Readers Guide

For academics this book should provide a challenging view and innovative ways to understand the pervasive impact of networks on business and organisations at large. Business and organisational professionals should gain from the latest insights in essential, new developments, and their application in real life. The executive level may benefit from understanding the SBN guidelines and management implications applying these for a successful development of their organisation in a “being networked” world: A future where everything a manager tries to manage is directly impacted by the network effect.

The first part of the book, *Setting the Scene*, summarizes the development, organisation and structure of SBN 2008 for the Beijing meeting. The next chapter, *The Network Factor – How to Remain Competitive*, sets the scene for the development of smart business networks. We present our conclusions, the insights and the indicators from the presentations and discussions at the meeting. We propose four guidelines for business attention and academic research. We conclude with a plea for a unified theory of business networks and an exploration of the manager’s challenges.

In Chap. 3, *Process Management in Business Networks*, Jon Pyke of Cordys sums up his views on smartness in business networks arguing that organisations require a business operating platform to capture and manage processes within and between themselves. Jon emphasizes the need to manage and control process execution in real time. In Chap. 4, *Next Generation Agility – Smart Business and Smart Communities*, Professor Roger Nagel of Lehigh University gives an intriguing contribution on “next generation agility” discussing how value is created in global communities. While this is work in progress we felt it too important not to be included. Roger stresses the role of people as connectors in a networked world and makes us understand that there are networks within networks; and that social networks are embedded in business networks and vice versa (see also Janneck et al., 2008). The next part of the book brings together the selected academic papers in four sections: *Network Essentials*, *Networks in Action*, *Network Enablers*,

and *Network Orchestration*. These papers were selected by the Programme Committee being the most relevant for the future directions in SBNs. Each section has a brief introduction of its content. Where applicable we have included the reviewer's report of specific papers.

We aim to create and contribute to a new way of thinking on the management issues of business networks specifically and interorganisational networks in a broader sense. As such the book is intended for:

- Academics from such fields as information systems and strategy, telecommunications, engineering, social network analysis, complex systems theory, management strategy and organisational development;
- Business and organisational professionals in information systems and information strategy, marketing, organisational development and change management, and management strategy;
- Senior business executives and organisational leaders such as chief information officers, marketing and human resources officers and business strategists.

The Actors

When we were challenged, back in 2006, to organise this event, it seemed a very good idea: The exciting combination of China, Beijing, Olympics, Tsinghua University, networks, a new economy, an international programme committee, speakers from all over the world, academics and people from practice mixing and mingling to generate new questions and ideas. It turned out to be that and much more. What began as a loosely-coupled network of individuals became a web of strong nodes. As organising, programme and executive committees we all searched for our role, we all carefully watched what the others were doing before we did it ourselves.

It worked – and the result has been magnificent. The event was impressive. Beijing, the environment, the receptions, the hotel and Tsinghua University, watching the Olympics at the new stadium – the “Bird’s Nest”; even the coaches that transported us back and forth, have given us indelible memories. With the Chinese we shared the pain of the aftermath of the Sichuan earthquake during the three days of national mourning. We understood the enormous size of the disaster and the daunting task for the area’s recovery. It made us appreciate China even more.

The result is a strong network of senior and young academics and business executives that have shared their work and views and, in so doing, have created enthusiasm and friendships. Weak ties became strong ties, non-connectors became connected. This book is the immediate result. We hope and anticipate that it has further impacts: The meeting, the book and the follow-up is intended to create a community of people to carry the Smart Business Network Initiative into the research community and into business execution.

Some people deserve special mention. We would like to thank our project manager, Mrs. Ria Visser, Rotterdam School of Management, who was with us throughout the whole eighteen month journey. Her continual support and infectious optimism really made this event take place. Professor Ming Yu from Tsinghua University and his wife, Betty, were always there to organise the many practical details that are required for such an event. Mrs. Ting Li, our Chinese PhD student at Rotterdam School of Management understood the fine art of translating not only the language but also culture. Dr. Diederik van Liere after receiving the prestigious Rubicon grant from The Netherlands Organisation for Scientific Research (NWO) took on the enormous task to manage the whole process from call for papers to review, selection, instructing authors, preparing the proceedings, reviewing again, informing everyone, and making some final choices on the papers. Arnoud van de Laak provided technical support and Tsinghua's local student team ensured great local support!

We also respect and thank our business sponsors and their CEO's for their support: Jan Baan of Cordys and Larry Gould of thebigword. David Fung of Cordys Greater China and his team brought Chinese business people to make the closing dinner a truly unforgettable event. Theo Bouts of Zurich Financial Services has always been a keen supporter of SBNi and his presence has been both inspiring and joyful. We thank the Erasmus University Trust Fund whose contribution made it possible for many to attend. We are also grateful to the Erasmus Research in Management School (ERIM) and Tsinghua University for their contributions.

Active participation makes for a good event: This is what the participants of SBN 2008 Beijing have achieved. We compliment them. Their roles are captured in this book for the future to see.

The Next Steps

One and a half years ago, as we planned for this event we chose the title *The Networked Experience – New Value from Smart Business Networks*. We believe we chose right – even though the discoveries may differ in many ways from our expectation. From our Chinese colleagues we learned in practice that Western-style planning is not always a good idea: If you plan too early it takes too much time to make all the changes and keep everyone informed. “Do not plan if you can improvise” is an expression that remains with us.

We learned also that the gap between business and science is wider than we expected. It does not have to be! And for management scientists it should not be! Rigour and relevance are two sides of the same coin. Academics should be clearer in respect of the business and societal impact of what they do and the practitioners should articulate what they need and expect more clearly. Everyone agreed on one fundamental: Networks matter – and new management tools and methods are needed to master the rapid change spurred by technological as well as social innovation.

During the event the Programme Committee awarded the Best Paper Award to the author(s) who made the most innovative contribution for smart business network research and was best able to present and explain his or her research to the business and academic audiences. Dr. Wolfgang Ketter and his co-authors John Collins and Maria Gini were announced as the winners for their contribution *Flexible Decision Support in a Dynamic Business Network*. This Award is sponsored by the Network Foundation and was presented at the launch of this book. Let the spirit of our experiences in Beijing spill into the academic and business communities to generate new ideas, new business and new discoveries.

Prof. Dr. Peter H. M. Vervest
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(General chairs)

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