ONE WORLD?
ONE VIEW OF OM?

The Challenges of Integrating Research & Practice

Cernobbio, Lake Como, June 16th - 18th 2003

Gianluca Spina
Andrea Vinelli
Raffaella Cagliano
Matteo Kalchschmidt
Pietro Romano
Fabrizio Salvador

Editors

Volume I
Manufacturing Strategy
Manufacturing and Supply Chain
Performance Management
Global Operations and Supply Chains
Service Operations
# TABLE OF CONTENTS

## VOLUME I

### Introduction

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>XXXV</td>
</tr>
</tbody>
</table>

## MANUFACTURING STRATEGY

### Hard and soft investment for optimal business performance

**Acur N., Boer H., Laugen B. T. and Gertsen F.**

» 3

### Disruptive changes of PC industry in the Brazilian context

**Laurindo F. J. B. and Carvalho M. M.**

» 13

### Structuring lean learning

**Bateman N., Esain A. and Hines P.**

» 23

### BPR methods applied to a manufacturer in the domotics sector

**Bevilacqua M., Ciarapica F. E. and Giacchetta G.**

» 33

### From the shopping Mall to the shopfloor - Information kiosks in CNC manufacturing

**Butcher T. J. and Greenough R. M.**

» 43

### Manufacturing strategy configurations: stability and trends of change

**Cagliano R., Acur N. and Boer H.**

» 53

### The linkage between supply chain integration and manufacturing improvement programmes

**Cagliano R., Caniato F. and Spina G.**

» 63

### An empirical examination of the order-winners manufacturing strategy framework

**da Silveira G. J. C.**

» 73

### Reducing lead times: Using operations management tools to reach global targets for tuberculosis control

**de Treville S., Smith I., Rölli A. and Arnold V.**

» 83

### The final mile: reaching for world class capability-an action learning perspective

**Dromgoole T. and Sugrue B.**

» 93
Towards a framework for analysis of collaboration in manufacturing vision development
Dukovska-Popovska I., Riis J. O. and Boer H. ........................................ pag 99

Configurations of internal and external complexity in manufacturing companies
Größler A., Grübner A. and Hasenpusch J. ........................................ » 109

Product customisation and competitive advantage: an empirical study
Hendry L. C., Kingsman B. G. and Amaro G. M. ........................................ » 119

Trade-off scenarios within the context of a manufacturing strategy
Hill T. and Portioli-Staudacher A. ........................................ » 129

Strategic decision-making for technology implementation in developing countries
Hipkin I. and Bennet D. ........................................ » 139

An Empirical Examination of the Fit between Operations Strategy and EDI Implementation
Hollingworth D. G. ........................................ » 149

Manufacturing strategy: A practical approach
Hurreeram D. K. and Little D. ........................................ » 159

A contingent view of focused operations strategy: A dynamic process industry view
Ketokivi M. and Jokinen M. ........................................ » 169

The best performing companies’ practices
Laugen B. T., Acur N., Boer H., Frick J. and Gertsen F. ........................................ » 179

The social psychology of operations strategy
Leseure M. J. ........................................ » 189

The Automobile industry in Brazil: production strategies and best practices in supply chain management
Marx R., Salerno M. S. and Zilbovicius M. ........................................ » 199

Complexity control in supply chain operations management. Empirical assessment of levers and strategies
Miragliotta G. and Saccani N. ........................................ » 209
Strategic choices in brazilian textile & apparel industries
Carvalho M. M., Serra N. and Laurindo F. J. B. ........................................ pag. 219

Sources of strategic advantage for business and operational excellence
Morita M. and Kodama M. ................................................................. » 229

Return on customer: Let the customer value drives operations management investments
Noci G. and Ostinelli M. ................................................................. » 239

Changing corporate identity with mergers and acquisitions
O’Hoy E., Waddell D. ................................................................. » 249

System dynamics methodology modelling as an aid to manufacturing systems design; 40 years on
Oyarbide-Zubillaga A. and Baines T. ................................................................. » 257

Formulation and deployment of strategy: An approach for small business
Piovezan L. H., Laurindo F. J. B. and Carvalho M. M. ........................................ » 265

Does lean production enhance financial performance? The case of UK automotive components plants
Primost D. and Oliver N. ................................................................. » 275

Linkages between operations strategy and systems integration strategy in complex manufacturing supply chains

Manufacturing strategy and human resources management: Two cases studies on Brazilian footwear companies
Salomão S. and Alves F. A. G. ................................................................. » 295

Improve your company - but in what area. A method that pinpoints improvement area related to company strategy
Swartling D. and Sigemyr T. ................................................................. » 305

Competitive manufacturing strategies for the manufacturing industries in Turkey
Ulusoy G. ................................................................. » 313

The significance of manufacturing - An analysis of outsourcing strategies in three companies
Westin S. and Bengtsson L. ................................................................. » 323
Manufacturing strategies - Implications during transition towards collaborative manufacturing network
Winroth M., Danilovic M., Björkvik L. and Öberg C. ................. pag. 333

MANUFACTURING AND SUPPLY CHAIN PERFORMANCE MANAGEMENT

Costing Waste in Supply Chain Processes: A European Food and Drink Industry Case Study
Bernon M., Mena C., Templar S. and Whicker L. ......................... » 345

Measuring and managing performance in extended enterprises
Bititci U. S., Mendibil K., Martinez V. and Albores P. ..................... » 355

Managing through measures: A study of the impact of performance measurement on performance
Bourne M., Kennerley M. and Franco M. ...................................... » 365

Supply chain management improvements’ value assessment: An innovative methodology applied to several industrial case studies
Brun A., Caridi M., Salama K. F., Portioli-Staudacher A. and Sianesi A. .......................................................... » 375

Performance measurement of supplier-buyer cooperation in supply chain system - An empirical study in China
Chen Z. .................................................................................. » 385

Supply chain performance - A meta analysis
Chibba A. and Hörte S. Å. ................................................................ » 395

Explaining variable plant performance
Collins R. S. and Schmenner R. W. ............................................. » 405

Logistics performance evaluation of Brazilian beverage supply chain
Conceição S. V. and Quintão R. T. ............................................... » 411

A model for measuring manufacturing flexibility
De Toni A. and Tonchia S. .......................................................... » 421
Supply chain performance measurement: An exploratory study in a poultry meat supply chain in Brazil
Pereira S. C. F. and Csillag J. M. ................................................................. pag. 431

Assessing customer's logistics quality gaps in the order fulfillment process
Forslund H. ........................................................................................................ 441

Business performance measurement systems: a systematic review
Franco M. and Bourne M. ................................................................. » 451

An examination of manufacturing performance measurement practices: Utilization, relevance and availability
Gomes C. F., Yasin M. M. and Lisboa J. V. ...................................................... » 461

An exploratory study about the possibility of adoption of the theory of constraints in the identification and analysis of bottlenecks in supply chains
Gusmão S. L. ........................................................................................................ 471

Extended enterprise metrics: The key to achieving synthesized effectiveness
Kamauff J. W., Branningan Smith D. and Spekman R. ............................ » 481

Assessing and maximising the impact of measuring business performance
Kennerley M. and Bourne M. ................................................................. » 493

Proposal for a project-applied differential operating value added decision framework (PADOVA)
Noro M. G., Piccirillo E., Neri F., Chen B. C., Fleet D. and Shi Y. .. » 503

Impact of IT enabled performance measurement on business and management
Nudurupati S. S. and Bititci U. S. ................................................................. » 513

Inter-organisational cost management and supply chain management: Evidence from Belgian automotive supply chain
Peeters J. and Limère A. ................................................................. » 523

Customer oriented supply chain performance management
Reiner G. ........................................................................................................ » 533
Supply chain variation, trade-offs and ongoing improvement
Stratton R. ................................................................. pag. 543

Functions of supplier performance measurement a conceptual framework for system analysis
Schmitz J., Platt K. and Erlich M. ........................................... » 553

A quantitative framework for assessing manufacturing responsiveness
Shaw A., Noury P. J. G., McFarlane D. C. and Chang Y. S. ........... » 563

Operational performance criteria in business-to-business relationships
Staughton R. and Johnston R. ............................................... » 573

Predictive performance measurement: An exploratory study into development and use
Unahabhokha C., Platts K. and Tan K. H. .................................. » 583

The trade-off between cost and flexibility in manufacturing: An empirical study
Vereecke A. and Pandelaere E. .............................................. » 593

Predictive performance measures
Wilcox M. and Bourne M. .................................................. » 603

Dynamic measurement of customer satisfaction (DMCS): The key to customer knowledge
Zhu G., Gelders L. and Vits J. ............................................... » 613

GLOBAL OPERATIONS AND SUPPLY CHAINS

Clusters and regional development
Gobbo J. A. ........................................................................... » 625

An analysis on the conditions for the development of the Brazilian semiconductor industry
Neto J. A. and Garcia R. ........................................................ » 635

Achieving competitiveness through the integration of subsidiaries in global product development: Some case studies from the Brazilian automotive industry
Carneiro-Dias A. V. and Salerno M. S. ....................................... » 645
Development paths and internationalisation of local manufacturing systems: The case of the Italian chair district
De Toni A., Nassimbeni G. and Sartor M. ........................................ pag. 655

The evolution of organisational competencies in international networks: The case of the Telecommunications industry
Fleury A. C. and Fleury M. T. ....................................................... » 665

Governance, industrial clusters and global chains: An integrated analysis and application to Brazilian shoe and furniture industries
Garcia R., Neto J. A. and Motta F. G. .......................................... » 675

Platform products: Theory and evidence from international operations
Hadjinicola G. C. and Kumar K. R. ............................................. » 685

Localization of manufacturing - A systematic framework
Johansen K. and Winroth M. ................................................. » 693

Product adaptation by multinational companies subsidiaries: An empirical investigation in an emergent economy
Luchi R., Dambra L., García F., Inchauspe S. and Hatum A. .......... » 703

Development and performance of European automotive supply chains in emerging markets
Luchi R., Loppacher J. S., Tamanini H. and Luzuriaga N. ............ » 713

The evolution of factory roles in international manufacturing networks: Experiences of Dutch factories in Eastern Europe
Meijboom B. and Vos B. ......................................................... » 723

International sourcing: Empirical evidences from a sample of Italian firms
Nassimbeni G. ................................................................. » 733

The foreign market as an innovation inductor in the fresh fruit productive chain in Brazil
Souza R. and Neto J. A. ............................................................. » 743

Organizational and technical change: A Multi-Paradigmatic approach
Poulsen P. and Boer H. ............................................................. » 751
Global manufacturing virtual network (GMVN): Revisiting of the concept after three years fieldwork
Shi Y., Fleet D. and Gregory M. J. .......................................................... pag. 761

Globally integrated value-chain analysis applying simulation techniques
Song S-J. and Kubota H. .......................................................... » 773

Why the 'world car' concept doesn't work: The case of the Australian auto sector
Spring M. and Cooney R. .......................................................... » 781

Exploring causes for productivity differences in international manufacturing
Steenhuis H-J. and de Bruijn E. J. .......................................................... » 789

Global manufacturing network design: Content and process
Sweeney M. T. and Szwejczewski M. .......................................................... » 799

Systemic competitiveness approach: Experiences from manufacturing firms in Eritrea
Tewolde M., de Haan J. and de Groot G. .......................................................... » 807

A taxonomy for selecting global supply chain strategies
Towill D. R. and Christopher M. .......................................................... » 817

SERVICE OPERATIONS

Determinants of process structure and delivery in service operations: Empirical evidence from the insurance industry
Apte U. M., Cavaliere R. A. and Kulkarni S. S. .......................................................... » 829

Operational modernization and management in the service-sector companies - A discussion based on multiple cases
Bianco M. and Waiandt C. .......................................................... » 837

Determinants of the productive efficiency for the bank systems in the European Union countries
Espitia-Escuer M. and García-Cebrián L. I. .......................................................... » 847

Service operations: The question of productivity and quality management
Shafti F., Van Der Meer R. B. and Williams T. M. .......................................................... » 855
Lessons from the adaptation of a lean service concept and design to a developing country context: A case study in a Brazilian airline

Figueiredo K., Arkader R., Paixão R. and Suarez M. .......... pag. 865

Service operations management in the telecommunications industry

Fleury M. T. and Fleury A. C. ........................................ 875

Managing the knowledge asset in air traffic control operations

Samuel J. and Fowler A. ................................................ 883

Information technologies and operations management in the tourism industry

Garcés S. A., Gorgemans S., Sánchez A. M. and Pérez M. P. ......... 893

Development of a regional real estate portal exhibiting an extended customer value proposition

Hamilton J. and Selen W. ................................................ 903

Cellular manufacturing in health care: The case of a trauma unit

Hyer N. L., Wemmerlöv U., Morris J. and Shtub A. ....................... 913

Spontaneous customer feedback and its impacts on assortment decisions in hypermarket: A case study

Järvi P. ............................................................................. 919

Linking product-process matrices for manufacturing and service operations

Johansson P. and Olhager J. ............................................... 927

Impact of the ‘Governance Model’ on public service delivery: How public sector plans, operates, and controls its service

Kudo H. ................................................................. 937

Measuring business process management: A case study from UK financial services

Maddern H. and Maull R. S. ............................................... 947

Improving the validity of service quality questionnaires

Maguire J. ................................................................. 957
Determinant factors in the outsourcing of service operations from the resource-based view of the firm. An empirical application in the hotel sector
Rodríguez T. F. and Robaina V. P. ................................................................. pag. 963

A model of lean indicators for service operations management
Sánchez A. M. and Pérez M. P. ................................................................. » 973

How service businesses have survived and prospered
Schmenner R. W. .................................................................................. » 983

Leanness and agility in a services perspective: A case study in the logistics services industry
van de Vijver M., Vos B. and Meijboom B. ............................................. » 993

Value chain accounting to support service operations management: Empirical needs and design alternatives
Wall F. and Schröder R. ................................................................... » 1003

Systematic innovation in service design through TRIZ
Zhang J. , Tan K-C. and Chai K-H. ....................................................... » 1013

Structuring front office and back office work in mixed services
Zomerdijk L. G. and de Vries J. ............................................................ » 1023

Author Index....................................................................................... » 1035