Case Study Manufacturing Automotive Supplier

The Office of Technology Assessment, at the request of the Congress, has conducted a series of assessments of the Nation's ability to provide for its future national security technology and industrial needs. In the most recent report, Assessing the potential for Civil- Military Integration, OTA examined the potential for making greater use of common technologies, processes, labor, equipment, material, and/or facilities to meet both defense and commercial needs. This effort, often termed civil-military integration or CMI, is believed by many observers to be an essential element of a successful U.S. national security strategy. OTA's assessment found that greater CMI is possible, and confirmed the potential for cost savings and increased technology transfer as the result of increased integration. The assessment noted that CMI appears essential if defense is to take advantage of many rapidly developing commercial technologies.

This book covers the scope of supply chain and logistics, which has continued to grow with a rapid speed. The book includes core aspects of supply chain and logistics philosophy and practice. The authors then cover the general principles of supply chain and logistics that can be applied in countries throughout the world. Where concepts cannot be generalized, they are based primarily on a European model. The authors have also added some international material and examples from China, Pakistan, India, and the USA. The book is intended to help in the quest of supply chain and logistics to reduce cost and improve service, as well as to keep up-to-date the different facets of supply chain and logistics in a global market. In addition, this book helps candidates to who are undertaking examinations for universities and professional institutes, and bachelor and master students who are studying for degrees in supply chain management. In addition, the book covers technical terminologies, definitions, and a supply chain dictionary.

We look at green supply chain management from the vantage point of the triple bottom line: environmental, economic, and social. There are many sustainability decisions that can be made on which we have an incredible impact. Usually, managers have the opportunity to make decisions in five areas of the supply chain: plan, source, make, deliver, and return. Nowadays, consumers care more about where and how the products are produced and delivered, what they are made of, and who made them. Regulatory bodies are continuously creating pressure on firms to adopt eco-friendly practices in their businesses for better environmental sustainability. As a result, firms have just two choices: to adopt green and/or eco-friendly practices in their supply chain operations to fulfill their customers' and regulatory bodies' requirement or not to adopt green practices and lose their business position and potential customers.

In the 2010s, new technological and business trends threaten, or promise, to disrupt multiple industries to such a degree that we might be moving into a new and fourth industrial revolution. The background and content of these new developments are laid out in the book from a holistic perspective. Based on an outline of the nature and developments of the market economy, business, global business industries and IT, the new technological and business trends are thoroughly dealt with, including issues such as internet, mobile, cloud, big data, internet of things, 3D-printing, the sharing economy, social media, gamification, and the way they transform industries and businesses

This book gathers select contributions from the 32nd International Congress and Exhibition on Condition Monitoring and Diagnostic Engineering Management (COMADEM 2019), held at the University of Huddersfield, UK in September 2019, and jointly organized by the University of Huddersfield and COMADEM International. The aim of the Congress was to promote awareness of the rapidly emerging interdisciplinary areas of condition monitoring and diagnostic engineering management. The contents discuss the latest tools and techniques in the multidisciplinary field of performance monitoring, root cause failure modes analysis, failure diagnosis, prognosis, and proactive management of industrial systems. There is a special focus on digitally enabled asset management and covers several topics such as condition monitoring, maintenance, structural health monitoring, non-destructive testing and other allied areas. Bringing together expert contributions from academia and industry, this book will be a valuable resource for those interested in latest condition monitoring and asset management techniques.

Global production and purchasing operations create a platform for entry into new markets. However, it takes considerable effort to plan and implement a sustainable globalization strategy; this book will help in that task. The wealth of experience and analysis featured in this book is the result of an extensive survey among leading manufacturing companies as well as countless discussions with executives who have personally wrestled with the issues of "going global." The book treats the whole range of management challenges. In breadth and depth, the insights it offers surpass what a manager or most individual companies could acquire on their own.

Today the Scottish electronics industry employs 40,000 people directly and a further 30,000 in the supply infrastructure. There are now more than 550 electronic manufacturing and supplier companies in ' Silicon Glen'. In terms of the contribution to the economy, electronics is by far the most valuable industry. Its value in 1996 was approximately £ 10billion and accounted for more than half of Scotland's exports. The major product groupings within the industry include: • PCs, laptops and workstations • Disk drives, cable harnessing • Printers, keyboards and peripherals • Semiconductor devices and PCBs • TV, VCRs, CDs, stereos and other consumer electronics • Cellular phones and telecommunications products • A TMs and funds transfer systems • Networking and security systems • Navigation and sonar systems • Microwave products • Power supplies • Software and compilers Many of these companies are multi-national OEMs, who came to Scotland as inward investing companies. Early inward investing companies were from USA, followed by companies from Japan, and more recently from Taiwan and Korea. An important segment of the industry is involved in the manufacture of computers, including IBM, Compaq, Digital and Sun. In fact approximately 40% of the PCs sold in Europe are built in Scotland. With five of the world's top eight computer manufacturers locating a manufacturing base in Scotland there has been an attraction for foreign companies keen to provide service for these multinationals. In 1995/96 the supply base output was worth £1.

A unique account of labor relations in the modern Chinese economy, Beyond the Iron Rice Bowl brings together more than thirty in-depth case studies of key multinational, Chinese, and overseas Chinese enterprises in the automotive, electronic, and garment industries. Analyzing the regimes of production and their segmentations in the context of global and national production networks, the authors discuss Chinese and international industrial relations theory and labor sociology and explore the perspectives of collective bargaining, trade union reform, and democratic workplace representation in China.

This book is a volume of essays celebrating the life and work of Yoshiro Higano, professor of Environmental Policy, Doctoral Program in Sustainable Environmental Studies, Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan. Prof. Higano’s research strongly focuses on the comprehensive evaluation of resources and research content for decision science and engineering, including simulation modeling for environmental quality control, the evaluation of environmental remediation technologies, integrated river (lake) basin management, and synthesized environmental policy. Yoshiro Higano is the past president of the Regional Science Association International (RSAI) and the current president of the Japan Section of the RSAI (JSRSAI). He also served as executive secretary for the Pacific Regional Science Conference Organizations (PRSCO). This edited volume covers a wide range of regional science approaches, theory, policy, evaluation, modeling, simulation, and practice. It is a valuable reference work for researchers, scholars, policy makers, and students in the field of regional science. The volume celebrates Prof. Higano’s contributions to the JSRSAI, PRSCO, and RSAI. Essay contributors include his former students and a wide array of regional scientists, each with a personal connection to Prof. Higano.

?Business Process Management (BPM) has become a widely adopted management approach, prompting significant investments

by private and public companies since 2000. Since neither the concept of BPM nor the factors leading to successful BPM initiatives are grounded in theory and also lack empirical support, Tahvo Hyötyläinen explores what business value BPM and BPM Systems can cause and how they can bring about improved firm performance. The author’s main implication is to show how to enhance the probability of success with BPM and its Systems. His research also adds to the understanding on how to increase customer-centricity –an empirically supported yet less studied direction of BPM.

Supply chains are faced with a rising complexity with manifold effects. Because of the strong link between a supply chain's complexity and its efficiency, supply chain complexity management becomes a major challenge of today's business management. Therefore logistics and the supply chain management can play a significant role in mastering and managing complexity. The new book, edited by Thorsten Blecker and Wolfgang Kersten, is exemplifying the current progress in complexity management. Separate chapters are dedicated to clarify complexity management in transportation, networks and supply chains. It offers important insights of global and flexible network modelling to manage complexity, complexity in supply chains - developing human resource strategy, performance measurement of green supply chain management, complexity in transportation by means of containers and air-cargos. The volume, written by well-known experts of supply chain management from all over the world, shows applicable solutions, practical examples and use cases to illustrate complexity management and its application in logistics and supply chain management. It presents the central perspectives for a modern complexity management in supply chains. Therefore the book offers a fundamental understanding for workable complexity management concept their implementation to practitioners. The book offers fundamental insights into actual problems of an general complexity management concept and their implementation to practitioners in industry, logistics, management, service sector, research and apprenticeship. In addition to this it gives a valuable insight to the status of complexity management also for lecturers and students.

Presents research and thinking on agile information systems. This book brings together academic experts, researchers, and practitioners to discuss how companies can create and deploy agile information systems. This book presents cutting-edge research and thinking on agile information systems. The concept of agile information systems has gained strength over the last 3 years, coming into the MIS world from manufacturing, where agile manufacturing systems has been an important concept for several years now. The idea of agility is powerful: with competition so fierce today and the speed of business so fast, a company's ability to move with their customers and support constant changing business needs is more important than ever. Agile information systems: have the ability to add, remove, modify, or extend functionalities with minimal penalties in terms of time, cost, and effort have the ability to process information in a flexible manner have the ability to accommodate and adjust to the changing needs of the end-users. This is the first book to bring together academic experts, researchers, and practitioners to discuss how companies can create and deploy agile information systems. Contributors are well-regarded academics known to be on the cutting-edge of their fields

This book provides some recent research advances in the field of lean manufacturing. Its content is of interest to students in management and production engineering. Topics covered include Just in Time (JIT), Kaizen activities and Critical Metrics. The chapters are written by worldwide well-known experts in the field.

This book is written for practitioners and researchers who are currently working in the field of supply chain management and operations management. It provides a thorough explanation of the supply chain configuration problem as well as offers solutions that combine the mathematical aspects of problem solving with applications in modern information technology.

This book analyzes environmental supply chain management theory and practice, with contributions by a international experts. Coverage includes concepts and principles of green supply chain management; studies of practices and concerns in industries worldwide; tools for environmental supply chain design and development; and case studies of green supply chain practices. Professionals, policy makers, researchers and students will value this book for the insights it provides into a topic of growing concern.

This book discusses the conference that forms a unique platform to bring together academicians and practitioners from industrial engineering and management engineering as well as from other disciplines working on production function applying the tools of operational research and production/operational management. Topics treated include: computer-aided manufacturing, Industry 4.0, big data and analytics, flexible manufacturing systems, fuzzy logic, industrial applications, information technologies in production management, optimization, production economy, production planning and control, productivity and performance management, project management, quality management, risk analysis and management, and supply chain management.

This book reports the best practices that companies established in Latin America are implementing in their manufacturing processes in order to generate high quality products and stay in the market. It lists the technologies, production and administrative philosophies that are being implemented, presenting a collection of successful cases of studies from Latin America. The book describes how the tools and techniques are being integrated, modified and combined to create new technical resources for assisting the decision making process for better economic performance in manufacturing companies. The efforts deployed for assisting the transformation of raw materials into products and services are described. The authors explain the main key success factors or drivers for success of each tool, technique or hybrid combination approach applied to solve manufacturing problems.

Rightshore® - a registered trademark of Capgemini - is about organizing the distributed delivery process that embraces on-site, nearshore and offshore services. This book describes successful global delivery models utilizing industrialized methods to deliver SAP® projects from India. The first part is devoted to management concepts, service offerings and the peculiarities of working together with India. The second part features eight case studies from different industries and from around the world describing how India delivery centers have been successfully deployed in SAP® development projects.

Issues in Technology Theory, Research, and Application: 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Ocean Technology. The editors have built Issues in Technology Theory, Research, and Application: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Ocean Technology in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Technology Theory, Research, and Application: 2013 Edition has been produced by the world’s leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

This book focuses on supply chain management in emerging markets. The authors present issues relating to supply chain development covering countries such as Brazil, China, the Czech Republic, Russia, Indonesia, Malaysia, Nepal, Turkey, Egypt and South Africa and focuses on the challenges faced when the supply chain is designed and maintained. Such challenges derive from issues to do with risk, security, quality management and infrastructure among others. Case studies and survey results are presented in chapters which explore practical solutions to these issues. The latter will be of interest not only to local and international managers, but also to students who are interested in emerging economies. The book covers manufacturing, retail and food chains at the local and international levels.

In the increasingly competitive corporate sector, businesses must examine their current practices to ensure business success. By examining their social, financial, and environmental risks, obligations, and opportunities, businesses can re-design their operations more effectively to ensure prosperity. Sustainable Business: Concepts, Methodologies, Tools, and Applications is a vital reference source that explores the best practices that promote business sustainability, including examining how economic, social, and environmental aspects are related to each other in the company's management and performance. Highlighting a range of topics such as lean manufacturing, sustainable business model innovation, and ethical consumerism, this multi-volume book is ideally designed for entrepreneurs, business executives, business professionals, managers, and academics seeking current research on sustainable business practices.

This book provides a holistic picture of the digital age as it emerges in the 2010s. On the background of business analysis concepts from firm to megatrends and all business sectors of the World, the digital age of information systems and digital drivers are thoroughly laid out.

Supply chain management (SCM) disciplines have produced a flood of new concepts, methods, and tools; if applied wisely, they will improve results. A resource that weeds out and consolidates this new information will lower the business risk of implementing change. Interpreting models and viewpoints from many fields into a supply chain contex

In recent years, supply chain planning has emerged as one of the most challenging problems in the industry. As a consequence, the planning focus is shifting from the management of plant-speci?c operations to a holistic view of the various logistics and productionstages, that is an approach in which suppliers, productionplants and customers are considered as constituents of an integrated network. A major dr- ing force behind this development lies in the globalization of the world economy, which has facilitated the co-operation between different partners working together in world-wide logistics networks. Hence, considerable cost savings can be gained from optimizing the structure and the operations of complex supply networks li- ing plants, suppliers, distribution centres and customers. Consequently, to improve the performance of the entire logistic chain, more sophisticated planning systems and more effective decision support are needed. Clearly, successful applications of supply chain management have driven the development of advanced planning systems (APS), which are concerned with s- porting decision-making activities at the strategic, tactical and operational decision level. These software packages basically rely on the application of quantitative methods, which are used to model the underlying complex decision problems c- sidering the limited availability of resources and the need to react on time to customer orders. The core module at the mid-term level of APS comprises op- ational supply chain planning. In many industries, productionstages are assigned to differentplantsand distribution centreshave been established at geographicallyd- persed locations.

This volume contains revised and extended research articles by prominent researchers. Topics covered include operations research, scientific computing, industrial engineering, electrical engineering, communication systems, and industrial applications. The book offers the state-of-the-art advances in engineering technologies and also serves as an excellent reference work for researchers and graduate students working with/on engineering technologies.

This book highlights a number of social sustainability issues at different stages of the supply chain, and demonstrates how these issues can be addressed by adopting social sustainability practices in the manufacturing supply chain. In the wake of emerging social issues in developing countries, research on social sustainability has gained importance for academics and practitioners alike. The three distinguishable social sustainability dimensions in manufacturing that emerge as a result of this research provide insights for supply chain managers and practitioners who might otherwise be unaware of what constitutes social sustainability. A better understanding allows supply chain managers to address these issues more appropriately to increase their supply chain competitiveness in the market. The book presents a social sustainability scale that can be used by practitioners to measure supply chain social sustainability to benchmark their supply chains globally. The research also helps academicians to gain an understanding of the social issues related to the manufacturing supply chain, while the social measures developed serve as reference material for policy-makers and sustainability experts in emerging economies.

Discusses various methods of generating know-how in one region and speedily deploying it elsewhere to meet market demands or exploit competitive manufacturing advantages. Three detailed cases studies cover the Philippines, India and Ghana.

NIST's Manufacturing Engineering Laboratory (MEL) is developing standards that promote interoperability among members of the U.S. automotive supply chain. This study assesses the costs of imperfect interoperability to the U.S. automotive supply chain and describes the sources of these costs. This study estimates that imperfect interoperability imposes at least $1 billion per year on the members of the U.S. automotive supply chain. By far, the greatest component of these costs is the resources devoted to repairing or reentering data files that are not usable for downstream applications.

Corporate Finance in der Praxis. The authors present all core aspects of Corporate Finance: M&A, Private Equity, Acquisition Financing, IPO, and Going Private. Furthermore, the techniques Due Diligence and Valuation are scrutinised. The book includes various case studies, which help to get a practical understanding and apply the techniques in the user ?s day-to-day business. Investment bankers, lawyers, accountants, experts working in strategic departments, consultants, shareholders, management professionals, professors, and students seeking in-depth knowledge of Corporate Finance will profit from the book`s practice oriented approach. The information supplement includes - for students: samples of final written examinations - for professors: Excel solutions for the final written examinations as well as a course syllabus - for business professionals: a fully integrated Excel valuation model covering all spreadsheets analyzed in the valuation section of this book The authors Dr. Dr. Dietmar Ernst is Professor for International Finance at Nürtingen University (Germany) and Director of the German Institute of Corporate Finance. Dr. Dr. Joachim Häcker is Professor for Finance at Munich University, the University of Louisville (USA), as well as Director of the German Institute of Corporate Finance.

The importance of technology transfer for the competitive advantage of companies and the economic success of nations cannot be overstated. Technology is a determining element for firms and nations to increase productivity, to compete, and to prosper. In The Competitive Advantage of Regions and Nations, the authors stress that companies, investment promotion agencies, and government bodies cannot simply sit and wait until new technologies arrive in their domain. Rather, they need to manage the identification, assessment, attraction, absorption and application of new technologies. In this comprehensive book, Boris Ricken and George Malcotsis explain how

technology transfer in Foreign Direct Investment (FDI) projects can be systematically managed. Using some 40 case studies as illustration, they give step-by-step guidance for managers. The explanation of theory in this book, together with the frameworks and cases delivering solutions to the various challenges of technology transfer will be highly appreciated by managers of companies, investment promotion agencies, and government bodies alike. It also offers students confronted with the topic an understandable study guide.

The building industry is a fragmented and project-driven industry with specific characteristics, which can sometimes result in negative effects. This title intends to contribute to the theoretical and practical development of the concept of supply chain integration in the building industry.

RFID and the Internet of Things shows how RFID has transformed the supply chain over the last decade and examines the manufacturing, logistics and retail aspects of RFID. This monograph considers the related cost/benefit of RFID in these business environments. The authors describe a vision of an "Internet of Things", where each participating object has a digital shadow with related information stored in cyberspace. RFID and the Internet of Things introduces the reader to the relevant hardware and software as well as to standards and architectures. It then present several case studies and uses cases showing how RFID can be used in manufacturing and retail with a focus on intra-enterprise applications and local benefits. The authors move further down the supply chain, discussing RFID applications in logistics and the perspectives for an Internet of Things. This is followed by a discussion of cost/benefit analyses of RFID implementations. The volume discusses possible security and privacy risks of RFID and presents several architecture proposals for a less centralized Internet of Things. The authors conclude with a summary and outlook.

Greening the Supply ChainSpringer Science & Business Media

Seminar paper from the year 2010 in the subject Business economics - Supply, Production, Logistics, grade: Distinction, University of Manchester (Manchester Business School), language: English, abstract: Since 1980’s the Japanese car manufacturing industry has been celebrated as the most efficient car industry in the world regarding production systems and processes. However, on 16 July 2007 this efficiency of the entire Japanese automotive industry was challenged when an earthquake hit the Chuetsu region in Japan and decimated a small but critical portion of its supply chain. Riken Corp., a supplier of automobile engine components such as piston rings, was this critical sup-ply chain bit. Its failure to operate after the event caused a chain reaction of plant closures of the main eight Japanese car manufacturers and parallelised nearly 70 per cent of the world biggest auto production industry. The underlying qualitative study adopts some conceptual supply chain resilience management models available in the academic literature as theoretical lenses to analyze the Riken Corp. case. The main argument of this research paper is that while the Japanese automotive supply chain is capable of delivering an efficient and effective response to and recovery from an interruption, it, however, lacks the capability of event readiness, which is the active resilience preparation for a supply chain disruption.

In January 2000, Mercedes-Benz started to implement the Mercedes-Benz Prod- tion System (MPS) throughout its world-wide passenger car plants. This event is exemplary of a trend within the automotive industry: the creation and introduction of company-specific standardised production systems. It gradually emerged with the introduction of the Chrysler Operating System (COS) in the mid-1990s and represents a distinct step in the process towards implementing the universal pr- ciples of lean thinking as propagated by the MIT-study. For the academic field of industrial sociology and labour policy, the emergence of this trend seems to mark a new stage in the evolution of the debate about production systems in the auto- tive industry (Jürgens 2002:2), particularly as it seems to undermine the stand of the critics of the one-best way model (Boyer and Freyssenet 1995). The introduction of company-level standardised production systems marks the starting point of the present study. At the core of it is a case study about the M- cedes Benz Production System (MPS).

Globally, manufacturing facilities have taken a new turn with a mix of advanced robotics to fully unify production systems. Today's era of manufacturing has embraced smart manufacturing techniques by delving into intelligent manufacturing system of advances in robotics, controllers, sensors, and machine learning giving room for every aspect of the plant to be constantly accessible, monitored, controlled, redesigned, and adapted for required adjustments. Skill development within the manufacturing sector presents the advantage of high-quality products and can as well address long-term employment concerns through job creation. The development of skills for sustainable manufacturing is crucial to ensuring an efficient transition to a competitive economy by matching supply and demand for key skills. A number of factors ranging from green innovation, climate change, advances in technology, and global economic downturn are driving the need for a competitive and sustainable manufacturing value chain. The complexity of today's factories calls for new and existing workers to up-skill in order to influence design changes and production efficiency toward sustainable manufacturing.