

Appendix **v**

About the Authors

About the Authors

Khaled S. Al-Sultan has been Rector of King Fahd University of Petroleum & Minerals (KFUPM), Dhahran, Saudi Arabia since May 2003. He is a Professor of Systems Engineering, holds a BS and an MS in Systems Engineering from King Fahd University of Petroleum & Minerals, another MS in Applied Maths, and a PhD in Industrial and Operations Engineering (Operation Research) from the University of Michigan, Ann Arbor, USA. Prior to his appointment as Rector of KFUPM, Dr Al-Sultan worked as Deputy Minister for Educational Affairs, Ministry of Higher Education, Saudi Arabia and as Dean, College of Computer Science & Engineering and Chairman of Systems Engineering Department at KFUPM. Dr Al-Sultan has served on the editorial boards of several international journals, published 39 papers in refereed journals (has more than 225 citations to his credit), and has co-authored one book and four book chapters. He is also a member of several national and international professional organizations/institutions and a consultant for several government and private industrial institutions. He is the recipient of several international honours and awards.

Iyad Alzaharnah completed his Bachelor's and Master's degrees in Mechanical Engineering Sciences from King Fahd University of Petroleum and Minerals (KFUPM). He obtained his Doctor of Philosophy from the School of Manufacturing and Mechanical Engineering at Dublin City University. Dr Alzaharnah has published more than 40 journal and conference papers in different fields of engineering and physical sciences. Since 2006 he has been involved with a KFUPM team in establishing Dhahran Techno-Valley (DTV) at KFUPM's campus. In 2008, he became the Director of KFUPM's Innovation Center; since then, he has been working on building the university innovation and technology transfer capacities. His activities include developing plans for creating efficient mechanisms for joint R&D interactions between KFUPM and the DTV multinational corporations. He has published two papers in international conferences on modelling innovation of universities and the aspects of efficient university-industry R&D interactions and the associated implications and requirements for strategy development.

Daniela Benavente joined INSEAD eLab in November 2010. She has been Lead Researcher and Project Manager of *The Global Innovation Index* since its fourth edition (2011 and 2012). Her previous professional experience includes working as an Economic Advisor at the cabinet office of the President of Chile and as a trade and intellectual property specialist and negotiator at the Ministries of Foreign Affairs and of Economy of Chile. She also held teaching assistant positions at the Graduate Institute of International and Development Studies in Geneva in Econometrics with Professor Jaya Krishnakumar, among others. She holds a PhD in International Economics from the Graduate Institute (obtained with highest honours), Master's degrees from Columbia University (Fulbright and Dean's Scholar) and Sciences-Po Paris, and a BA in Economics from Universidad Católica in Chile.

Irina Bokova is a Bulgarian diplomat and politician. She has been the Director-General of UNESCO since November 2009 and is the first woman to have been elected head of the Organization. She was also Minister of Foreign Affairs and Ambassador of Bulgaria. She graduated from the Moscow State Institute of International Relations, the University of Maryland (Washington), and the John F. Kennedy School of Government (Harvard University), and in 1977 joined the Ministry of Foreign Affairs of Bulgaria, where she was responsible for human rights issues. In charge of political and legal affairs at the Permanent Mission of Bulgaria to the United Nations (UN), she was also a member of the Bulgarian Delegation at the UN conferences on the equality of women in Copenhagen (1980), Nairobi (1985), and Beijing (1995). Elected as a deputy of the Bulgarian Socialist Party (1990–91 and 2001–05), she participated in the drafting of Bulgaria's new Constitution, which contributed significantly to the country's accession to the European Union (EU). She launched the first seminar of the Parliamentary Assembly of the Council of Europe on the European Convention on Human Rights. As a polyglot (Bulgarian, English, French, and Spanish), she was Minister for Foreign Affairs and Coordinator of Bulgaria-EU relations (1995–97) and subsequently Ambassador of Bulgaria (2005–09) to France, Monaco, and UNESCO. She has also represented Bulgaria at the UN. While serving as State Secretary on European Integration and Minister for Foreign Affairs, Ms Bokova always promoted European integration. As an active member of many international expert networks and of civil society and, in particular, as Chairperson and founding member of the European Policy Forum, she has worked to overcome European divisions and to foster the values of dialogue, diversity, human dignity, and human rights.

Soumitra Dutta is the Roland Berger Chaired Professor of Business and Technology and the founder and academic director of elab@INSEAD, INSEAD's initiative in building a centre of excellence in teaching and research in the digital economy (<http://elab.insead.edu>). In July 2012, he joined the Samuel Curtis Graduate School of Management at Cornell University as its 11th Dean. Professor Dutta obtained his PhD in Computer Science and his MSc in Business Administration from the University of California at Berkeley. His current research is on technology strategy and innovation at both corporate and national policy levels. He is the creator of the Networked Readiness Framework, which provides the intellectual basis for the last 10 editions of the *Global Information Technology Reports* (published by the World Economic Forum), which have become a global reference in national technology policy deployment. He also researches the impact of social media on organizations and societies; his extensive writings on this topic include his recent book, *Throwing Sheep in the Boardroom* (Wiley, 2009). Among his other books is *Innovating at the Top* (Palgrave, 2009). His research has been showcased in the international media and he has taught in and consulted with international corporations across the world. He is a Fellow of the World Economic Forum and is on the boards of several business schools and corporations.

Rasheed Eltayeb is a Principal at Booz & Company. He focuses on policy and strategy formulation relating to economic development, education, and innovation. He has worked with numerous economic and education policy entities in the GCC to define strategies and institutional models supporting sustainable economic and human capital development. His current work focuses on assisting universities and state-owned enterprises in the GCC to establish entities to serve as catalysts for innovation. Mr Eltayeb has authored Booz & Company publications relating to socioeconomic development. He holds a Master of Engineering in Civil & Structural Engineering from the University of Manchester Institute of Science & Technology (UMIST).

Leonid Gokhberg is the First Vice-Rector of the Higher School of Economics (HSE)—one of the most prominent research universities in Russia (<http://www.hse.ru/lingua/en>)—and Director of HSE Institute for Statistical Studies and Economics of Knowledge (<http://issek.hse.ru>). He holds a Doctor degree and Professor diploma in Economics. From 1988 to 1991 he was Head of Laboratory for S&T statistics at the Research Institute for Statistics, and Deputy Director at the Centre for Science Research and Statistics (CSRS) in Moscow from 1991 to 2002. Prof. Gokhberg coordinated more than 300 national and international projects—for example, projects sponsored by various national authorities, regional agencies, and industrial companies as well as by the European Commission, the World Bank, UNIDO, the US National Science Foundation, IIASA, and so on in the areas of S&T and innovation indicators, analyses, and policies. Leonid Gokhberg has served as a consultant to the OECD, Eurostat, UNESCO, the UN Economic Commission for Europe, and other international and national agencies. He is also Editor-in-Chief of the Moscow-based scientific journal *Foresight* (<http://foresight-journal.hse.ru>), ranking 1st in science studies, 2nd in management, and 8th in economics according to the Russian National Science Citation Index. Prof. Gokhberg is a member of the OECD and Eurostat expert groups on indicators for S&T, information society, and education; and the International Advisory Board of the Global Innovation Index (WIPO/INSEAD). In 2011, he was appointed Chairman of the Expert Group on Innovation Policy established by the Government of the Russian Federation to provide recommendations for a Socio-Economic Development Strategy for the Russian Federation until 2020 (Strategy-2020). Prof. Gokhberg is the author of over 350 papers published in the Russian Federation and internationally, including several monographs and textbooks for universities.

Barry Jaruzelski is a Senior Partner who leads Booz & Company's Global Engineered Products & Services Practice and is a member of the North American Management Team. He specializes in corporate and product strategy and the transformation of core innovation processes for high technology and industrial clients. Mr Jaruzelski's key areas of expertise are R&D portfolio and product growth strategy; product development efficiency and effectiveness; innovation metrics; and acquisition due diligence of technology intensive firms. Mr Jaruzelski has co-authored numerous Booz & Company publications, including the firm's award winning annual Global Innovation 1000 study; several *strategy+business* articles, such as 'Money Isn't Everything,' 'What Will Be Made in China,' 'The Customer Connection' and 'The Stealth Software Challenge,' and the book *Mastering the Innovation Challenge*. Mr Jaruzelski holds an MBA with concentrations in Finance and Management of organizations from Columbia University's Graduate School of Business, and a BS in Economics with a concentration in Marketing from the University of Pennsylvania's Wharton School of Business.

Bruno Lanvin is the Executive Director of INSEAD's eLab, managing INSEAD's teams in Paris, Singapore, and Abu Dhabi since September 2007. eLab's current areas of focus are leadership in knowledge economies, skills/e-skills, innovation, economic impact of social networks, and new roles of government. Since 2009, he has been Chair of the Global Advisory Council on the Future of Government (World Economic Forum). He has been a Commissioner on the Broadband Commission since its creation in 2010. From 2000 to 2007, he worked for the World Bank, where he was inter alia Senior Advisor for E-strategies, Regional Coordinator (Europe and Central Asia) for ICT and e-government issues, and Chairman of the Bank's e-Thematic Group. From June 2001 to December 2003, he was the Manager of the Information for Development Program (infoDev). In 2000, he was appointed Executive Secretary of the G-8 DOT Force. Before that, he worked for some 20 years in senior positions in the United Nations. The author of numerous books and articles on international economics, information technology, and development, he holds a BA in Mathematics and Physics, an MBA from Ecole des Hautes Etudes Commerciales (HEC) in Paris, and a PhD in Economics from the University of Paris I – La Sorbonne. He has worked in some 70 countries, and speaks French, English, and Spanish, and has a practical knowledge of Italian, Portuguese, Russian, and basic Chinese.

Revital Marom is head of the Market and Consumer Insight group at Alcatel-Lucent, helping the company and its customers anticipate and profit from technological and market changes. The team has a specific focus on global and local market trends and consumer behaviour. Prior to joining Alcatel-Lucent, Ms Marom was the Director of the Ericsson ConsumerLab North America, where she led LTE and UMTS Market Research and strategic planning initiatives for AT&T, Verizon, and Sprint, as well as for global clients such as Telia-Sonora, Telenor, C&W, Digicel, Telmex, and others. Ms Marom's previous experience also includes serving as a Lecturer/Research Fellow at INSEAD in the area of Technology Management, heading the research group at Thesus, France Telecom business school, and developing and implementing research and e-business strategies for clients such as AMD, ABB, 3M, and BT. Ms Marom is a frequent guest speaker and a writer on telecommunication trends and consumer behaviour at many telecommunications, IT, and international marketing events and publications.

Chadi N. Moujaes is a Partner at Booz & Company. He specializes in public policy strategy and the implementation of economic and human capital development policies. He has authored numerous national development agendas for countries in the Middle East, linking education reform strategies with socioeconomic development goals. His current work focuses on assisting universities and local industries in the Middle East to develop innovation clusters to drive economic growth and job creation opportunities. Mr Moujaes has co-authored numerous Booz & Company publications and articles on socioeconomic development. He holds an MBA from INSEAD and a Bachelor of Engineering from the American University of Beirut.

Dionisis Th. Philippas has been a Researcher for the last five years at the University of Patras (Greece) and since 2012 a Post-Doc Researcher at the Unit of Econometrics and Applied Statistics at the Joint Research Centre of the European Commission. His primary research topic is financial innovation, associated with economics and financial econometrics, indicators and time series, in the presence of risk and abrupt changes. He also examines various issues related to asset pricing and market behaviour (volatility, information asymmetries, financial engineering, and non-linear systems). He has taught various modules (Quantitative Analysis, Applied Statistics, Microeconomics, Technical analysis, and so on) to the academia and he has presented his research at a number of international conferences. He also has professional experience as a Financial Analyst, Seminar Trainer, and Consultant for the private sector on finance-related projects. His publications deal with financial innovation, financial markets and risk, information entropy, forecasting, multivariate analysis, and performance of indicators: four peer-reviewed publications, four working papers, a published book as a syllabus for Greek universities, and two published handbooks. He has a PhD in Financial Econometrics from the Department of Business Administration at the University of Patras (Greece) and an MSc in Economics from the Department of Economics at the University of Athens.

Hadi Raad is a Principal at Booz & Company with more than 15 years of experience in communication, digital media, and technology. He focuses on innovation and entrepreneurship, broadband and over-the-top business models, industry convergence and digitization, and commercialization. He has authored numerous publications and articles on innovation in business models in the digital space. Mr Raad holds an MBA with high honours from the University of Chicago Booth School of Business, a Master in Engineering Management, and a Bachelor in Engineering from the American University of Beirut. Prior to joining Booz & Company, Mr Raad was involved in the launch and management of several internet start-ups.

Y.S. Rajan, Honorary Distinguished Professor, Indian Space Research Organization (ISRO) and Chief Mentor, ISRO Strategy Group (ISG), received his Master's degree in Physics from the University of Bombay in 1964. He joined the Physical Research Laboratory, Ahmedabad, as a Research Scholar to work with Dr Vikram Sarabhai's team. He is a Fellow of the Indian National Academy of Engineering and a Fellow of the World Academy of Art and Science (WAAS), and received the Honorary Degree of Doctor of Letters (D.Litt) from Jain Vishva Bharati University, Ladnun, Rajasthan. He played an important role in the emergence of Indian Space Research Organization (ISRO) as a major space power. For his work at ISRO he was elected as a Member of the International Academy of Astronautics (IAA), Paris, in 1986. He was the first Executive Director of the newly created Technology Information and Forecasting and Assessment Council (TIFAC) (1988–2002). His book *India 2020: A Vision for New Millennium*, co-authored with India's Ex President Dr A. P. J. Abdul Kalam, is the outcome of his work at TIFAC. During his long career he has served as an ISRO Engineer at NASA (USA) (1970–73); Scientific Secretary, ISRO (1976–88); Advisor, Department of Science & Technology (1988–96), Scientific Secretary to Principal Scientific Adviser to the Government of India (2000–02), Vice Chancellor and Chairman of Punjab Technical University (2002–04), Principal Adviser of Confederation of Indian Industry (CII) (2004–10), and many others. He was conferred Padma Shri (the fourth highest civilian award in India) in 2012. Besides a vast number of scientific publications and books, Professor Rajan has also written 10 books of poetry in the Tamil and English languages.

Vitaly Roud is Researcher and Scientific Coordinator at the Research Laboratory for Economics of Innovation of the National Research University Higher School of Economics and at the Institute for Statistical Studies and Economics of Knowledge, Moscow, Russian Federation. His academic interests include empirical studies of innovation, evidence-based innovation policy, methodology of innovation surveys, STI statistical indicators, and STI policy design and evaluation. Mr Roud has participated in a number of research and policy advice projects initiated by the Russian Government and enterprises including several Foresight initiatives and the latest Strategy of Socio-economic Development of the Russian Federation to 2020. He holds an MA in Economics with a specialization in the empirical theory of industrial organization from the New Economic School, Moscow, and an MSc of Applied Mathematics (optimal control, Lomonosov Moscow State University).

Michaela Saisana has been a Scientific Officer at the Joint Research Centre (JRC) of the European Commission (Italy) since 1998. Her main activities involve auditing composite indicators by means of multivariate analysis, uncertainty, and global sensitivity analysis. She has provided numerous courses on the development and robustness assessment of composite indicators for academia, international organizations, and European Commission officials. In 2004 she won the European Commission – JRC Young Scientist Prize in Statistics and Econometrics, awarded by the Commissioner for Research Janez Potočnik. She is a co-author of the book *Global Sensitivity Analysis: The Primer* (2008), a principal author of the 2008 *OECD/JRC Handbook on Composite Indicators*, and developer and moderator of the JRC Information server on composite indicators. Her publications deal with sensitivity analysis, composite indicators, multi-criteria analysis, multi-objective optimization, and air quality modelling and forecasting. She has a PhD and an MSc in Engineering from the National Technical University of Athens, received with Awards from the Technical Chambers of Greece.

Hatem Abdul-Mohsin Samman is the Director and Lead Economist of the Booz & Company Ideation Center. Previously, Dr Samman held the position of Vice President at a major Saudi Bank and was Director of Regulatory Affairs and Strategic Planning at a major regional telecommunications company. He was a Fellow at the University of Minnesota and a Consultant at the World Bank, among other positions. Dr Samman has published several academic articles in the *International Journal of Applied Economics* and the *Journal of International Trade & Economic Development*, among others. He is frequently quoted in regional and international magazines and newspapers such as the *Financial Times*, and often appears as an expert on BBC, AlArabiya, and CNBC Arabia. Dr Samman has co-authored numerous Booz & Company and Ideation Center publications, including *How to Succeed at Education Reform: The Case for Saudi Arabia and the Broader GCC Region* (2008), *The Vital Role of Sovereign Wealth Funds in the GCC's Future* (2009), and *Meeting the Employment Challenge in the GCC: The Need for a Holistic Strategy* (2010). Dr Samman holds a Bachelor's degree in Social Sciences from the University of California, San Diego, and a PhD in Political Economy & Public Policy from the University of Southern California.

Robert Shaw is the Head of the Innovation Division in the International Telecommunication Union's Development Sector, where he provides strategic thought leadership on innovation knowledge and systems. In that role, he focuses on the role of innovation as an element of national socioeconomic development, particularly as it relates to the enabling role of information and communication technologies. He blogs about innovation at <http://innovation.itu.int>. An organization based on public-private partnership since its inception, ITU currently has a membership of 193 countries and over 700 private-sector entities and academic institutions. ITU is headquartered in Geneva, Switzerland, and has 12 regional and area offices around the world. Mr Shaw began his career at ITU over 25 years ago and has previously headed ITU's Human Capacity Building Division, ICT Applications and Cybersecurity Division as well as acted as Deputy Head of ITU's Strategy and Policy Unit. During this period he has represented ITU and presented papers in numerous national, regional, and global conferences and activities. He has a Master in Telecommunications from the Technical University of Delft, the Netherlands.

Derek Slater defends the open Internet on Google's public policy team and leads the company's global advocacy efforts on innovation policy. Derek has been writing about digital media since he bought a Diamond Rio PMP300 MP3 player as a teenager. As a fellow at Harvard's Berkman Center for Internet and Society, his work focused on recommendation engines' impact on consumer behaviour and how public policy can support emerging media business models. More recently, he worked with Vint Cerf to start a discussion about #ourweb and creativity on google.com/takeaction. In 2009, they helped a group of network researchers launch Measurement Lab, an open platform for Internet measurement tools.

Lynn St. Amour is President and CEO of the Internet Society, a nonprofit organization founded in 1992 to provide leadership in Internet-related standards, education, and policy. She joined the Internet Society in 1998 as Executive Director of its Europe, Middle East, and Africa (EMEA) division, and has been responsible for the Internet Society's international expansion. She became Global Executive Director and COO in 1999 and held that position until her appointment as President and CEO in March of 2001. St. Amour has extensive experience in global IT and international business. Her background includes positions at the highest levels in international sales and marketing, strategic planning, partner management, and manufacturing. She also has considerable experience in corporate restructuring and start-up management. St. Amour has spent most of her career working in the United Kingdom, France, and Switzerland, with significant long-term assignments in other European countries. Prior to joining the Internet Society, she was director of Business Development and Joint Venture Operations for AT&T's Europe, Middle East, and Africa division. A graduate of the University of Vermont, St. Amour began her career in information technology with the General Electric Corporation.

Kurt Steinert has more than 20 years of experience in corporate public relations, advocacy communications, and nonprofit management with a focus on high-tech, international security, and global environmental issues. Over the past decade, Mr Steinert has held a number of senior communications roles in Alcatel-Lucent, including serving as Head of Communications for the company's Solutions Organization, where he was responsible for external and internal communications in support of the company's initiatives in a variety of emerging technology sectors, and as Head of Portfolio Media Relations for the company. Prior to this, Mr Steinert helped manage a program that brought together leading members of the Washington, DC press corps with senior government officials in defence and foreign policy for frank discussions on the most pressing issues of the day. Mr Steinert received his Bachelor's degree in Journalism and Environmental Public Policy from Rutgers University, the State University of New Jersey, USA.

Louis Witters is part of the Market and Consumer Insight team at Alcatel-Lucent, where he has responsibilities in the areas of market analysis, market sizing, and growth and core programs initiatives. Previously Mr Witters held a variety of roles in product and consumer segments in Alcatel-Lucent. His responsibilities have included commercial activities in the transmission and public switching field, market analysis and market sizing of key markets and key product segments, product rationalization, and strategy definition for regional markets. Mr Witters graduated from the Catholic University of Leuven (Belgium) in Criminology, Sociology, and Law. He also graduated from the University of Nanjing (China) in Chinese Economy.

Patricia Wruuck is a Policy Analyst at Google in Brussels focusing on economic policy and innovation. Her previous professional experience includes working at the European Policy department of the German Federal Chancellery and as a researcher at the University of Mannheim. She has taught Political Economy and International Relations and published on various economic policy topics such as economic patriotism and bank governance. Her research interests focus on economic policy with a particular emphasis on the governance of financial institutions and trade issues. Ms Wruuck has studied political sciences and economics at Freie Universitaet Berlin, Corvinus University (Budapest), Duke University (DAAD fellowship) and at the University of Mannheim. She obtained her Master's degree from Freie Universitaet Berlin writing a thesis on the political economy of services trade and continues her work on trade policy as part of her PhD research on antidumping at the University of Mannheim.

Sacha Wunsch-Vincent is Senior Economic Officer under the Chief Economist of the World Intellectual Property Organization (WIPO) in Geneva. Before joining WIPO, he was an Economist at the OECD Directorate for Science, Technology, and Industry for seven years, most recently as co-leader of the OECD's Innovation Strategy. Previously, he was the Swiss National Science Fellow at the Berkeley Center for Law and Technology (University of California, Berkeley) and at the Peterson Institute for International Economics. He has testified to parliaments on copyright and innovation matters and acted as advisor to the World Economic Forum, the World Bank, and other fora. He holds a Master's degree in International Economics from the Maastricht Economic Research Institute on Innovation and Technology, University of Maastricht, and a PhD in Economics from the University of St. Gallen, Switzerland. He teaches International Economics at Sciences Po Paris and the World Bank Institute.