

Smart Construction Report 2016 Kpmg

Leading innovation expert Alec Ross explains what's next for the world, mapping out the advances and stumbling blocks that will emerge in the next ten years—for businesses, governments, and the global community—and how we can navigate them. While Alec Ross was working as Hillary Clinton's Senior Advisor on Innovation, he traveled to forty-one countries. He visited some of the toughest places in the world—from refugee camps of Congo to Syrian war zones. From phone-charger stands in Rwanda to R&D labs in South Korea, Ross has seen what the future holds. Over the past two decades, the Internet has radically changed markets and businesses worldwide. In *The Industries of the Future*, Ross shows us what's next, highlighting the best opportunities for progress and explaining why countries thrive or sputter. He examines the specific fields that will most shape our economic future over the next ten years, including cybercrime and cybersecurity, the commercialization of genomics, the next step for big data, and the coming impact of digital technology on money, payments, and markets. And in each of these realms, Ross addresses the toughest questions: How will we have to adapt to the changing nature of work? Is the prospect of cyberwar sparking the next arms race? How can the world's rising nations hope to match

Silicon Valley in creating their own innovation hotspots? Ross blends storytelling and economic analysis to give a vivid and informed perspective on how sweeping global trends are affecting the ways we live, incorporating the insights of leaders ranging from the founders of Google and Twitter to defense experts like David Petraeus. The Industries of the Future takes the intimidating, complex topics that many of us know to be important and boils them down into clear, plain-spoken language. This is an essential work for understanding how the world works—now and tomorrow—and a must-read for businesspeople, in every sector, from every country.

The book is a conference proceeding on adoption and application of sustainable, Manageable, Appropriate, Rational and Transferable (SMART) Technologies in all sectors of development.

Managing expatriates and other 'traditional' internationally mobile workers is a significant part of many academic programmes and the focus of some specialist ones. But we cannot answer the big questions about global mobility if we exclude from our teaching people who do not fit with our usual conceptions and assumptions about who it is that organisations employ.

Industry 4.0 Solutions for Building Design and Construction
A Paradigm of New Opportunities
Routledge

"The principal authors were Carrie Beth Peterson (Consultant in eHealth and Innovation, WHO Regional Office for Europe), Clayton Hamilton (Editor-in-chief and Unit Leader, eHealth and Innovation in the Division of Information, Evidence, Research and Innovation, WHO Regional Office for Europe) and Per Hasvold (WHO Collaborating Centre for eHealth and Telemedicine at the Norwegian Centre for Integrated Care and Telemedicine, Troms, Norway)."--Page viii.

Are you unsure about: the current US legal environment with respect to BIM and VDC? the evolving standards of care for design and construction professionals using BIM and VDC? what practical methods and techniques can be used for analyzing construction claims and disputes involving BIM technologies and VDC processes? Building Information Modeling (BIM) technologies and Virtual Design and Construction (VDC) processes are aggressively and fundamentally changing the design, construction and operation of buildings. Supporters of BIM have highlighted the potential these technologies have to reduce the need for claims, disputes and litigation, but evidence from several early sources shows they are not universally successful in this. This timely and unique book provides crucial new methods for analyzing construction disputes in this emerging AEC technological landscape. It explains how BIM & VDC has significantly altered the production and delivery of construction drawings, quantity surveys, and

schedules, and how these changes might impact construction disputes. The findings and advice in this book are indispensable to any stakeholder in a construction project using BIM. It will help Contractors, Cost Managers, Architects, Building Designers, Quantity Surveyors, and Project Managers to navigate and understand their responsibilities and exposure to risk when working with this new technology.

This book is a comprehensive document visualizing the future of built environment from a multidisciplinary dimension, with special emphasis on the Indian scenario. The multidisciplinary focus would be helpful for the readers to cross-refer and understand others' perspectives. The text also includes case studies substantiating theoretical research. This method of composition helps the book to maintain rational balance among theory, research and its contextual application. The book comprises selected papers from the National Conference on Sustainable Built Environment. The chapters provide varied viewpoints on the core issues of urbanization and planning, especially in the economically diverse Indian market. This compilation would be of interest to students, researchers, professionals and policy makers.

Now in its 40th year, Emerging Trends in Real Estate is one of the most highly regarded and widely read forecast reports in the real estate industry. This

Read Book Smart Construction Report 2016 Kpmg

updated edition provides an outlook on real estate investment and development trends, real estate finance and capital markets, trends by property sector and metropolitan area, and other real estate issues around the globe. Comprehensive and invaluable, the book is based on interviews with leading industry experts and also covers what's happening in multifamily, retail, office, industrial, and hotel development.

This book constitutes the refereed proceedings of the First Eurasian BIM Forum, EBF 2019, held in Istanbul, Turkey, in May 2019. The 16 full papers were carefully reviewed and selected from 44 submissions. The papers cover such topics as ?BIM adoption and implementation; BIM for project management; BIM for sustainability and performative design; BIM and facility management and infrastructural issues.

The offsite and modular market is continuing to grow. This book builds on the success of a number of initiatives, including formative findings from literature, research and development and practice-based evidence (success stories). It presents new thinking and direction from leading experts in the fields of: design, process, construction, engineering, manufacturing, logistics, robotics, delivery platforms, business and transformational strategies, change management, legislation, organisational learning, software design, innovation and biomimetics. This book is particularly novel and timely, as it brings together a number of cogent subjects under one collective 'umbrella'. Each of these chapters contain original findings, all of which culminate in three 'Key Learning Points' which provide new insight into the cross-cutting themes, interrelationships and symbiotic forces that exist between each of these chapters. This

Read Book Smart Construction Report 2016 Kpmg

approach also provides readers with new contextualised understanding of the wider issues affecting the offsite market, from the need to embrace societal challenges, through to the development of rich value-laden solutions required for creating sector resilience. Content includes a balance between case studies and practice-based work, through to technical topics, theoretical propositions, pioneering research and future offsite opportunities ready for exploitation. This work includes: stakeholder integration, skills acquisition, new business models and processes, circularity and sustainable business strategies, robotics and automation, innovation and change, lean production methodologies and new construction methods, Design for Manufacturing and Assembly, scaled portfolio platforms and customisability, new legal regulatory standards and conformance issues and offsite feasibility scenario development/integration.

This book features a selection of the best papers presented at two SIEV seminars held in Venice, Italy, in September 2017 and 2018, in the context of the Urbanpromo Green events. Bringing together experts from a diverse range of fields – economics, appraisal, architecture, energy, urban planning, sociology, and the decision sciences – and government representatives, the seminars encouraged reflections on the role of future cities in terms of sustainable development, with a particular focus on improving collective and individual well-being. The book provides a multidisciplinary approach to contemporary green urban agendas and urban sustainability, and addresses the demand for policies and strategies to strengthen resilience through concrete measures to reduce energy consumption, mitigate pollution, promote social inclusion and create urban identity.

The 30th edition of the World Investment Report looks at the prospects for foreign direct

Read Book Smart Construction Report 2016 Kpmg

investment and international production during and beyond the global crisis triggered by the COVID-19 (coronavirus) pandemic. The Report not only projects the immediate impact of the crisis on investment flows, but also assesses how it could affect a long-term structural transformation of international production. The theme chapter of the Report reviews the evolution of international production networks over the past three decades and examines the configuration of these networks today. It then projects likely course changes for the next decade due to the combined effects of the pandemic and pre-existing megatrends, including the new industrial revolution, the sustainability imperative and the retreat of laissez faire policies. The system of international production underpins the economic growth and development prospects of most countries around the world. Governments worldwide will need to adapt their investment and development strategies to a changing international production landscape. At the request of the UN General Assembly, the Report has added a dedicated section on investment in the Sustainable Development Goals, to review global progress and propose possible courses of action.

If you're a manager of a supply chain operation, or a student learning about supply chain management, this book will provide not only an overview of supply chain management but also a framework for subsequent, more detailed study in various aspects of supply management. This book reviews the evolution of supply chain management concepts and discusses trends in global markets and strategic competitiveness. It then focuses on the major issues involved in managing a competitive supply chain including: forecasting, inventory management, distribution, dealing with uncertainty, reverse logistics, and customer service. Coverage of the dynamic, evolving issues pertaining to supply chains that affect the global business community

Read Book Smart Construction Report 2016 Kpmg

concludes the book. With this book in hand, you'll be better equipped to conceptualize the management of supply chains as a collection of business processes; identify primary and secondary value chain processes; distinguish between the umbrella term, "supply chain management," and its component functions; and understand the basic tools of forecasting and the need for accurate data and forecasts on which to base supply chain management decisions.

This open access book explores supply chains strategies to help companies face challenges such as societal emergency, digitalization, climate changes and scarcity of resources. The book identifies industrial scenarios for the next decade based on the analysis of trends at social, economic, environmental technological and political level, and examines how they may impact on supply chain processes and how to design next generation supply chains to answer these challenges. By mapping enabling technologies for supply chain innovation, the book proposes a roadmap for the full implementation of the supply chain strategies based on the integration of production and logistics processes. Case studies from process industry, discrete manufacturing, distribution and logistics, as well as ICT providers are provided, and policy recommendations are put forward to support companies in this transformative process.

Provisions for Abundance is a Christian's one year financial guide to abundant living, complete with daily scripture readings to combine budgeting and financial stewardship guidance with the Word of God. This 365-day book is loaded with interesting and empowering information for readers to achieve fiscal abundance within a year's time. Each entry contains a tip for the reader to put into action, along with a Christian-based takeaway on which to reflect. Renowned public speaker and financial expert Ryan Mack, also known as the "Financial Evangelist," has

Read Book Smart Construction Report 2016 Kpmg

a life mission to build a durable financial empire geared toward educating his community and beyond. With this timely book, he guides readers to reset their finances, dream bigger, and reflect on their spending while giving gratitude for all they have. He explains the benefits of paying attention to spending and focusing more on enriching our lives with purpose. The book also teaches that there is no greater blessing than to be a blessing to someone else. Built on the unique premise of using the Bible's principles for money management, this book offers monetary planning and tools for enriching our lives in all areas. It is perfect for group Bible studies, as well as individual reflection. With this book, you will: Learn about financial planning through the lens of Scriptures Create a budget based on your own financial needs Learn how to trust God with your financial success Reflect on your fiscal situation with a reinforced confidence in God

This issue discusses a number of factors affecting global growth, as well as growth prospects across the world's main countries and regions. It assesses the ongoing recovery from the global financial crisis in advanced and emerging market economies and evaluates risks, both upside and downside, including those associated with commodity prices, currency fluctuations, and financial market volatility. A special feature examines in detail causes and implications of the recent commodity price downturn; analytical chapters look at the effects of commodity windfalls on potential output and of exchange rate movements on trade.

In establishing the Levy Control framework, the Government has recognised the importance of monitoring and controlling the considerable cost of energy schemes that consumers fund through their energy bills. The NAO concludes that the Levy Control

Framework is a valuable tool for supporting control of the costs to consumers that arise from the Government's energy policies, and has prompted the Department of Energy and Climate Change to monitor actual and expected costs to consumers from the schemes it covers. However, the operation of the Framework has not been fully effective in some key areas. Spending and outcomes have not been linked in deliberations by the joint Treasury and departmental levy control board and reporting on Framework schemes has not supported effective public and parliamentary scrutiny of the overall costs and outcomes from levy-funded spending. As consumer-funded spending on energy policies increases and new schemes are introduced, the Department needs to assure Parliament and the public that it has robust arrangements to monitor, control and report on consumer-funded spending, and the outcomes it is intended to secure. The spending cap under the Levy Control Framework is set to rise from £2 billion in 2011-12 to £7.6 billion in 2020-21 (in 2011-12 prices). By establishing this cap, the Department has provided greater certainty for investors. The NAO's report highlights that the Framework does not cover the consumer-funded Energy Companies Obligation scheme and that it is not yet clear whether it will cover the new Capacity Market including electricity demand reduction measures.

About the way we use and reuse the resources in the building industry and ultimately eliminate the concept of waste. The book seeks to provide inspiration for 'building a circular future' by providing a set of principles and bringing forward the best practices

from in and outside the building industry. This book presents findings, case studies, background and context for the project "Building a Circular Future", and consist of three main chapters: Design for Disassembly, Material Passport and Circular Economy. All content comes from extensive research and through workshops with partners across industries. The book furthermore provides 15 principles for "Building a Circular Future" and a thoroughly calculated business case, which documents that a demolition, that today would cost €2.151.249,56 can be turned into a €4.705.858,41 business upside in a future circular building industry.

Times are changing and the labor markets are under immense burden from the collective effects of various megatrends. Technological growth and grander incorporation of economies along with global supply chains have been an advantage for several workers armed with high skills and in growing occupations. However, it is a challenge for workers with low or obsolete skills in diminishing zones of employment. Business models that are digitalized hire workers as self-employed instead of standard employees. People seem to be working and living longer, but they experience many job changes and the peril of skills desuetude. Inequalities in both quality of job and earnings have increased in several countries. The depth and pace of digital transformation will probably be shocking. Industrial robots have already stepped in and artificial intelligence is making its advance too. Globalization and technological change predict the great potential for additional developments in labor market performance. But

people should be ready for change. A progression of creative annihilation is probably under way, where some chores are either offshored or given to robots. A better world of for jobs cannot be warranted – a lot will be contingent on devising the right policies and institutes in place.

In order to improve competitiveness and performance, corporations must embrace advancements in digitalization. Successful implementation of knowledge management is a huge factor in corporate success. Analyzing the Impacts of Industry 4.0 in Modern Business Environments is a critical scholarly publication that explores digital transformation in business environments and the requirement for not only a substantial management change plan but equally the two essential components of knowledge management: knowledge sharing and knowledge transfer. Featuring a broad range of topics such as strategic planning, knowledge transfer, and cybersecurity risk management, this book is geared toward researchers, academicians, and students seeking current and relevant research on organizational knowledge intensity and monitoring of knowledge management development.

Access scaffolding is the most important element of plant for building, civil engineering and structural engineering contractors. In fact a building or structure cannot be constructed to a height of more than two metres without platforms to work from. These platforms have to be constructed on the site in the minimum of time but nevertheless backed up by accurate calculations and design details. Access Scaffolding brings

together for the first time all the elements of scaffolding, providing a comprehensive and unique guide to the best practice in scaffolding, its engineering properties and the hazards involved. The book covers the very wide varieties of structure which have to be built and used in practice, including suspended and completed structures.

Diagrammatic details of the commonest types are featured. Access Scaffolding is a unique and indispensable handbook on the subject for contractor's field and design staff, safety inspectors of statutory bodies, and structural, civil and building consulting engineers. It is also a useful resource for students of structural and civil engineering and building degree courses.

Risk analysis and management - an overview. When to apply risk management.

Quantitative techniques for project risk analysis. Risk in estimating. Contract strategy...

The automotive industry appears close to substantial change engendered by “self-driving” technologies. This technology offers the possibility of significant benefits to social welfare—saving lives; reducing crashes, congestion, fuel consumption, and pollution; increasing mobility for the disabled; and ultimately improving land use. This report is intended as a guide for state and federal policymakers on the many issues that this technology raises.

This book documents the experiences, development, and prospects of the construction industry in numerous developing countries. It will provide a strong base of reference for countries looking to improve their construction industries as part of their wider economic

Read Book Smart Construction Report 2016 Kpmg

development programme. The opening chapter presents a strategic overview of the contents of the book, and each country-specific chapter is structured to consider the legal and policy frameworks, administrative infrastructure and procedures, and implementation mechanisms, as well as the experiences, current activities, and future plans and programmes with respect to construction industry development in each country. The concluding chapter looks forward and considers the implications of future trends for the construction industries in developing countries and the actions which will be required to address them. Chapters cover: India, Singapore, Chile, South Africa, Tanzania, Malaysia, Botswana, Ghana, Uganda, Indonesia, China, Croatia, and Eswatini. Readers will learn about the wealth of comparable stories from global coverage from the detailed country-specific cases. Building on important scholarly works in the field, this book is essential reading for academics, researchers, and policy makers in built environments, economics, construction management, infrastructure management, and the wider construction industry.

Sixteenth in a series of annual reports comparing business regulation in 190 economies, Doing Business 2019 measures aspects of regulation affecting areas of everyday business activity.

Afin de répondre à la demande croissante de logements et aux enjeux de la transition environnementale, le secteur du bâtiment n'a pas d'autre choix que de s'industrialiser. Dans cette optique, la construction hors-site présente d'immenses atouts. Réduction des délais, accroissement de la qualité et de la sécurité, niveau d'efficacité énergétique élevé, sans compter la possibilité de construire de manière réversible, ce mode de construction consistant

Read Book Smart Construction Report 2016 Kpmg

à assembler des éléments préfabriqués par des méthodes industrielles possède un potentiel considérable mais reste sous-utilisé en France. Cet ouvrage, fruit de la vision croisée d'entrepreneurs hors-site et d'un acteur de la formation, permet à tous les acteurs de la chaîne de la construction d'appréhender les enjeux, les concepts, les technologies et les impacts des méthodes industrielles appliquées au bâtiment et à la ville.

Sustainable Urbanism in China explores the notion of "Sustainable Urbanism" by considering the role sustainable neighborhood planning plays in the larger picture of sustainable urbanism and suggests innovations and best practices that are either developed or adopted by China. These are narrated as lessons learnt for other countries where we see similar trends of development patterns or emerging practices. Through various explorations of challenges, paradigms, and innovations of urban sustainability, this book highlights how planning, policy, and design are forming and reforming in the context of China. These are offered through a set of guidelines and pathways for urban sustainability at the scale of neighborhoods/communities or districts in a wider context of urban environments, as well as strategies for planners, developers, policy makers, and educators in the field of the built environment. Through a comprehensive overview of urban sustainability practices in China, this book investigates 12 case study projects. These comprehensive explorations should in turn help construct the future directions of China's sustainable urban development and provide innovative pathways of sustainable urbanism in China and around the globe.

This book gathers the latest advances, innovations, and applications in the field of information technology in civil and building engineering, presented at the 18th International Conference on Computing in Civil and Building Engineering (ICCCBE), São Paulo, Brazil, August 18-20, 2020.

Read Book Smart Construction Report 2016 Kpmg

It covers highly diverse topics such as BIM, construction information modeling, knowledge management, GIS, GPS, laser scanning, sensors, monitoring, VR/AR, computer-aided construction, product and process modeling, big data and IoT, cooperative design, mobile computing, simulation, structural health monitoring, computer-aided structural control and analysis, ICT in geotechnical engineering, computational mechanics, asset management, maintenance, urban planning, facility management, and smart cities. Written by leading researchers and engineers, and selected by means of a rigorous international peer-review process, the contributions highlight numerous exciting ideas that will spur novel research directions and foster multidisciplinary collaborations.

This is an edited book based on the selected submissions made to the conference titled "International Conference in Smart Cities". The project provides an innovative and new approach to holistic management of cities physical, socio-economic, environmental, transportation and political assets across all domains, typically supported by ICT and open data.

Infrastructure Investment in Indonesia: A Focus on Ports presents an important and original collation of current material investigating the efficient facilitation of major infrastructure projects in Indonesia and Australia, with an emphasis on infrastructure investment and a focus on port planning and development. This interdisciplinary collection—spanning the disciplines of engineering, law and planning—draws helpfully on a range of practical and theoretical perspectives. It is the collaborative effort of leading experts in the fields of infrastructure project initiation and financing, and is based on international research conducted by the University of Melbourne, Universitas Indonesia and Universitas Gadjah Mada. The volume opens with a

Read Book Smart Construction Report 2016 Kpmg

macroscopic perspective, outlining the broader economic situations confronting Indonesia and Australia, before adopting a more microscopic perspective to closely examine the issues surrounding major infrastructure investment in both countries. Detailed case studies are provided, key challenges are identified, and evidence-based solutions are offered. These solutions respond to such topical issues as how to overcome delays in infrastructure project initiation; how to enhance project decision-making for the selection and evaluation of projects; how to improve overall efficiency in the arrangement of project finance and governance; and how to increase the return provided by investment in infrastructure. Special focus is given to proposed improvements to the port cities of Indonesia in the areas of major infrastructure project governance, policies, engagement, operation and processes. By rigorously investigating the economic, transport, finance and policy aspects of infrastructure investment, this book will be a valuable resource for policy makers and government officials in Indonesia and Australia, infrastructure investment organisations, and companies involved in exporting services between Indonesia and Australia. This book will also be of interest to researchers and students of infrastructure planning and financing, setting a solid foundation for subsequent investigations of financing options for large-scale infrastructure developments.

This key resource is often referred to as the "Green Book". Federal policymakers and program managers are continually seeking ways to better achieve agencies' missions and program results, in other words, they are seeking ways to improve accountability. A key factor in helping achieve such outcomes and minimize operational problems is to implement appropriate internal control. Effective internal control also helps in managing change to cope with shifting environments and evolving demands and priorities. As programs change and as agencies

Read Book Smart Construction Report 2016 Kpmg

strive to improve operational processes and implement new technological developments, management must continually assess and evaluate its internal control to assure that the control activities being used are effective and updated when necessary. The Federal Managers' Financial Integrity Act of 1982 (FMFIA) requires the General Accounting Office (GAO) to issue standards for internal control in government. The standards provide the overall framework for establishing and maintaining internal control and for identifying and addressing major performance and management challenges, and areas at greatest risk of fraud, waste, abuse and mismanagement. This report explores the Five Standards for Internal Control as identified by GAO for policymakers and program managers: - Control Environment - Risk Assessment - Control Activities - Information and Communications - Monitoring These standards apply to all aspects of an agency's operations: programmatic, financial, and compliance. However, they are not intended to limit or interfere with duly granted authority related to developing legislation, rule-making, or other discretionary policy-making in an agency. These standards provide a general framework. In implementing these standards, management is responsible for developing the detailed policies, procedures, and practices to fit their agency's operations and to ensure that they are built into and an integral part of operations. Other related products: Government Auditing Standards: 2011 Revision (Yellow Book) --print format can be found here: <https://bookstore.gpo.gov/products/sku/020-000-00291-3> --ePub format can be found here: <https://bookstore.gpo.gov/products/sku/999-000-44443-1> Reducing the Deficit: Spending and Revenue Options can be found here: <https://bookstore.gpo.gov/products/sku/052-070-07612-7> The Budget and Economic Outlook: 2016 to 2026 can be found here: <https://bookstore.gpo.gov/products/sku/052-070-07612-7>

Read Book Smart Construction Report 2016 Kpmg

[//bookstore.gpo.gov/products/sku/052-070-07697-6](http://bookstore.gpo.gov/products/sku/052-070-07697-6)

With Asia's cities undergoing unprecedented growth in the 21st century, lauded the 'urban century' by many, Sustainable Cities in Asia provides a timely examination of the challenges facing cities across the continent including some of the projects, approaches and solutions that are currently being tested. This book uses numerous case studies, analysing topical issues ranging from city cycling in India, to green spaces in China, to the use of community-led energy generation projects in post-Fukushima Japan. Containing contributions from an international team of scholars, it also takes a multi-disciplinary approach and draws on examples from a wide range of countries, including China, India, Japan, Korea, Taiwan, Singapore and the United Arab Emirates. Ultimately, by providing a comprehensive discussion of the broader debates around the shape of sustainable urbanism, it demonstrates that Asia is one of the most active regions in terms of the development of sustainable city strategies. Tackling the contemporary issues of key importance for sustainability, such as property markets, migration and transport, this book will appeal to students and scholars of Urban Geography, Sustainability, Environmental Studies and Asian studies.

Solving Urban Infrastructure Problems Using Smart City Technologies is the most complete guide for integrating next generation smart city technologies into the very foundation of urban areas worldwide, showing how to make urban areas more efficient, more sustainable, and safer. Smart cities are complex systems of systems that encompass all aspects of modern urban life. A key component of their success is creating an ecosystem of smart infrastructures that can work together to enable

Read Book Smart Construction Report 2016 Kpmg

dynamic, real-time interactions between urban subsystems such as transportation, energy, healthcare, housing, food, entertainment, work, social interactions, and governance. Solving Urban Infrastructure Problems Using Smart City Technologies is a complete reference for building a holistic, system-level perspective on smart and sustainable cities, leveraging big data analytics and strategies for planning, zoning, and public policy. It offers in-depth coverage and practical solutions for how smart cities can utilize resident's intellectual and social capital, press environmental sustainability, increase personalization, mobility, and higher quality of life. Brings together experts from academia, government and industry to offer state-of-the-art solutions for urban system problems, showing how smart technologies can be used to improve the lives of the billions of people living in cities across the globe Demonstrates practical implementation solutions through real-life case studies Enhances reader comprehension with learning aid such as hands-on exercises, questions and answers, checklists, chapter summaries, chapter review questions, exercise problems, and more The City of Manchester, once the birthplace of the 1st Industrial Revolution, is today a pioneering hub of the 4th Industrial Revolution (Industry 4.0), offering Industry 4.0 solutions in advanced materials, engineering, healthcare and social sciences. Indeed, the creation of some of the city's greatest academic institutions was a direct outcome of the industrial revolution, so it was something of a homecoming that the Sustainable Smart Manufacturing (S2M) Conference was hosted by The University of Manchester in

2019. The conference was jointly organised by The University of Manchester, The University of Lisbon and The Polytechnic of Leiria – the latter two bringing in a wealth of expertise in how Industry 4.0 manifests itself in the context of sustainably evolving, deeply-rooted cities. S2M-2019 instigated the development of 61 papers selected for publication in this book on areas of Smart Manufacturing, Additive Manufacturing and Virtual Prototyping, Materials for Healthcare Applications and Circular Economy, Design Education, and Urban Spaces.

The Economic Outlook for Southeast Asia, China and India is a bi-annual publication on regional economic growth, development and regional integration in Emerging Asia. It focuses on the economic conditions of Association of Southeast Asian Nations (ASEAN) member countries: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam. It also addresses relevant economic issues in China and India to fully reflect economic developments in the region.

The Global Innovation Index 2020 provides detailed metrics about the innovation performance of 131 countries and economies around the world. Its 80 indicators explore a broad vision of innovation, including political environment, education, infrastructure and business sophistication. The 2020 edition sheds light on the state of innovation financing by investigating the evolution of financing mechanisms for entrepreneurs and other innovators, and by pointing to progress and remaining

challenges – including in the context of the economic slowdown induced by the coronavirus disease (COVID-19) crisis.

This book provides in-depth results and case studies in innovation from actual work undertaken in collaboration with industry partners in Architecture, Engineering, and Construction (AEC). Scientific advances and innovative technologies in the sector are key to shaping the changes emerging as a result of Industry 4.0. Mainstream Building Information Management (BIM) is seen as a vehicle for addressing issues such as industry fragmentation, value-driven solutions, decision-making, client engagement, and design/process flow; however, advanced simulation, computer vision, Internet of Things (IoT), blockchain, machine learning, deep learning, and linked data all provide immense opportunities for dealing with these challenges and can provide evidenced-based innovative solutions not seen before. These technologies are perceived as the “true” enablers of future practice, but only recently has the AEC sector recognised terms such as “golden key” and “golden thread” as part of BIM processes and workflows. This book builds on the success of a number of initiatives and projects by the authors, which include seminal findings from the literature, research and development, and practice-based solutions produced for industry. It presents these findings through real projects and case studies developed by the authors and reports on how these technologies made a real-world impact. The chapters and cases in the book are developed around these overarching themes: • BIM and AEC Design and

Optimisation: Application of Artificial Intelligence in Design • BIM and XR as Advanced Visualisation and Simulation Tools • Design Informatics and Advancements in BIM Authoring • Green Building Assessment: Emerging Design Support Tools • Computer Vision and Image Processing for Expediting Project Management and Operations • Blockchain, Big Data, and IoT for Facilitated Project Management • BIM Strategies and Leveraged Solutions This book is a timely and relevant synthesis of a number of cogent subjects underpinning the paradigm shift needed for the AEC industry and is essential reading for all involved in the sector. It is particularly suited for use in Masters-level programs in Architecture, Engineering, and Construction.

The city is the home of prosperity. It is the place where human beings find satisfaction of basic needs and access to essential public goods. The city is also where ambitions, aspirations and other material and immaterial aspects of life are realized, providing contentment and happiness. It is a locus at which the prospects of prosperity and individual and collective well-being can be increased. However, when prosperity is restricted to some groups, when it is used to pursue specific interests, or when it is a justification for financial gains for the few to the detriment of the majority, the city becomes the arena where the right to shared prosperity is claimed and fought for. As people in the latter part of 2011 gathered in Cairo's Tahrir Square, in Madrid's Puerta del Sol, in front of London's St Paul's cathedral, or in New York's Zuccotti Park, they were not only demanding more equality and inclusion; they were also expressing the

Read Book Smart Construction Report 2016 Kpmg

need for prosperity to be shared across all segments of society. What this new edition of State of the World's Cities shows is that prosperity for all has been compromised by a narrow focus on economic growth. UN-Habitat suggests a fresh approach to prosperity beyond the solely economic emphasis, including other vital dimensions such as quality of life, adequate infrastructures, equity and environmental sustainability. The Report proposes a new tool – the City Prosperity Index – together with a conceptual matrix, the Wheel of Prosperity, both of which are meant to assist decision makers to design clear policy interventions. The Report advocates for the need of cities to enhance the public realm, expand public goods and consolidate rights to the 'commons' for all as a way to expand prosperity. This comes in response to the observed trend of enclosing or restricting these goods and commons in enclaves of prosperity, or depleting them through unsustainable use. The Report maps out major policy steps to promote a new type of city – the city of the twenty-first century – that is a 'good', people-centred city. One that is capable of integrating the tangible and more intangible aspects of prosperity, and in the process shedding off the inefficient, unsustainable forms and functionalities of the city of the previous century. By doing this, UN-Habitat plays a pivotal role in ensuring that urban planning, legal, regulatory and institutional frameworks become instruments of prosperity and well-being.

This open access book describes the three planning approaches and legacy impacts for the Olympic Games in one locale: the city of Los Angeles, USA. The author critically

Read Book Smart Construction Report 2016 Kpmg

compares the similarities and differences of the LA Olympics by reviewing the 1932 and 1984 Olympics and by analyzing the concurrent planning process for the 2028 Olympics. The author unravels the conditions that make (or do not make) LA28s argument "we have staged the Games before, we can do it again" compelling. Setting the bids promises into the contemporary local and global mega-event contexts, the author analyzes why LA won the bids, how those wins allowed LA to negotiate concessions with the IOC and NOC, and how legacies were planned, executed, and ultimately evolved. The author concludes with a prediction which 2028 legacy promises might and might not be fulfilled given the local and international Olympic contexts.

[Copyright: 6b907b6be79a0f93ea0119b9722d187b](#)