This book introduces the concept of the ‘autonomous city’ - a concept that has been developed from the ‘smart cities’ model that is based on a city’s ability to gather data and take action. This section tackles urban public health, and one piece details the use of a program called EpiSims to answer the question: What if smallpox struck Portland, Oregon? In short, while the definition of “smart city” might still be murky, the book presents a coherent, novel vision of Smart Cities, built around a value-driven architecture. It describes the limitations of the contemporary notion of the Smart City society and smart future manufacturing technologies, and it helps provide a better understanding of the interplay between sustainable development and knowledge society issues, and how these could lead to a better future.

Smart Cities, Smart Future

This book presents a coherent, novel vision of Smart Cities, built around a value-driven architecture. It describes the limitations of the contemporary notion of the Smart City society and smart future manufacturing technologies, and it helps provide a better understanding of the interplay between sustainable development and knowledge society issues, and how these could lead to a better future.

The findings are relevant to academics, students, practitioners and urban stakeholders who are questioning how urban innovation relates to politics and place. There are several different definitions of smart cities based on the very different notions that separate the roles and responsibilities of the different actors involved: public, private, institutional, and civil. The book presents a coherent, novel vision of Smart Cities, built around a value-driven architecture. It describes the limitations of the contemporary notion of the Smart City society and smart future manufacturing technologies, and it helps provide a better understanding of the interplay between sustainable development and knowledge society issues, and how these could lead to a better future.

The book presents a coherent, novel vision of Smart Cities, built around a value-driven architecture. It describes the limitations of the contemporary notion of the Smart City society and smart future manufacturing technologies, and it helps provide a better understanding of the interplay between sustainable development and knowledge society issues, and how these could lead to a better future. In Smart Cities, Anthony M. Townsend documents this emerging futuristic landscape while considering the motivations, aspirations, and shortcomings of the key actors—entrepreneurs, mayors, philanthropists, and software developers—at work in shaping the new urban frontier. Become empowered to build and maintain smart cities! As the book points out, while the definition of “smart city” might still be murky, the book presents a coherent, novel vision of Smart Cities, built around a value-driven architecture. It describes the limitations of the contemporary notion of the Smart City society and smart future manufacturing technologies, and it helps provide a better understanding of the interplay between sustainable development and knowledge society issues, and how these could lead to a better future.
In that to action response — a city should be able to collect data and render real time decision to self-manage a variety of functions based on its interpretation of that data. The book discusses how this could lead to the automation of urban functions for increased efficiency and decreased risks, but also discusses how such a process would require careful consideration when put into practice. This book will be a valuable resource for scholars and students across Urban Planning, Sustainability, and STS, as well as practitioners and policy makers involved in the development of urban life. Smart Cities and Smart Future enables readers to think about the broad implications of how technology and urban life intersect, and encourages discussions about the role that technology plays in shaping our cities.

This volume is highly relevant for professionals involved in city planning and urban ecology. This book provides a practical tool for city planners, urban architects, and environmental professionals to efficiently manage and plan the development of smart cities and technologies. It is an excellent resource for students, researchers, and practitioners interested in urban planning, public management, and environmental science. The book offers a comprehensive overview of the challenges and opportunities presented by smart city development, and provides practical guidance for effectively integrating technology into urban planning and management.

For city planners and urban designers, this book offers insights into the latest trends and technologies in urban development. It provides a foundation for understanding the potential benefits and challenges of smart city initiatives, and offers practical guidance for implementing successful projects that balance technological advancements with social and economic sustainability. The book also serves as a valuable reference for policymakers and regulatory bodies seeking to develop policies and strategies to support smart city development.

This book is highly relevant for students and professionals in the fields of urban planning, architecture, and environmental science. It provides a comprehensive overview of the opportunities and challenges presented by smart city development, and offers practical guidance for implementing successful projects that balance technological advancements with social and economic sustainability. The book is an excellent resource for anyone interested in understanding the potential benefits and challenges of smart city initiatives.
studies for each domain, the book looks at payment mechanisms, fog/edge computing, green computing, and algorithms and consensus mechanisms for smart cities implementation. It looks at tools such as Hyperledger, Ethereum, Corda, IBM Blockchain, Hyperchain, as well as policies and regulatory standards, applications, solutions, and methodologies. While exploring future blockchain ecosystems for smart and sustainable city life, the book concludes with the research challenges and opportunities academic researchers and companies in implementing blockchain applications. Independently organized chapters for greater readability, adaptability, and flexibility Examine numerous issues from multiple perspectives and academic and industry experts Explore both advances and challenges of cutting-edge technologies Coverage of security, trust, and privacy issues in smart cities Global Trends of Smart Cities provides integrated analysis of 135 cities that participated in the IBM's Smarter Cities Challenge in 2010-2017. It establishes evidence-based benchmarking of city geographies, city size, governance structures, and local planning contexts in smart cities. This book uses a combination of descriptive statistical analysis and real-world case study narratives to evaluate the ways in which each individual urban variable or their combination matter in the diversity of smart city approaches around the globe. It is acknowledged that the Smarter Cities Challenge offers a particular set of smart initiatives and is not representative of all smart cities around the world. Nevertheless, the global presence of the Challenge across five continents and its involvement with 135 cities of all size and socioeconomic status provides a solid foundation to conduct comparative research on smart cities. Considering limited comparative research available in the smart city debate, this book makes significant contribution in understanding the state of smart city development in urban governments worldwide. Offers an integrated assessment of smart cities using a combination of statistical analysis and real-world case study narratives Compares smart city interventions from the 135 cities that participated in the Smarter Cities Challenge with detailed case study narratives included for 17 cities Demonstrates the ways in which geography, size, governance, and local planning context—each individually and in combination with each other—influence smart city development around the globe. Develops an urban research perspective to the smart city discourse otherwise dominated by digital and IT-specialists, engineers, and business experts. Identifies the North-South divide as the most influential factor explaining how smart urbanism is framed worldwide and argues that the future of smart city development depends on how “smart” approaches the ongoing and increasing levels of inequality and inequality not only within our cities but also at the transregional and transnational level. Cities often form the backbone of economic, social, and cultural activities for countries around the world, with over half the world’s population living in these complex urban centers. Sustainable futures for humanity will depend, to a large extent, on achieving sustainable living within these large urban centers. Cities are also very complex: They require a vast network of infrastructure, resources, services, technologies, management and planning to keep the flows of goods, people, waste and general social and economic activities going. Dr. Maysoun Ibrahim analysis captures these complexities as she develops a practical road map of things that need to be in place to help a city move towards improving smartness and sustainability. The insights generated have both practical and theoretical use. As such the book provides a base for planners, researchers, analysts and the interested observer to consider cities in a coherent and holistic model. Smart Cities for Technological and Social Innovation establishes a key theoretical framework to understand the implementation and development of smart cities as innovation drivers, in terms of lasting impacts on productivity, livability and sustainability of specific initiatives. This framework is based on empirical analysis of 12 case studies, including pioneer projects from Europe, Asia, the Middle East, and more. It explores how successful smart cities initiatives nurture both technological and social innovation using a combination of regulatory governance and private agency. Typologies of smart city-making approaches are explored in depth. Integrative analysis identifies key success factors in establishing innovation relating to the effectiveness of social systems; institutional thickness, governance, the role of human capital, and streamlining funding of urban development projects. Cases from a range of geographies, scales, social and economic contexts. It explores how smart cities can promote technological and social innovation in terms of direct impacts on feasibility, productivity and sustainability. Establishes an integrative framework based on empirical evidence to develop more innovative smart city initiatives. Investigates the role of governments in coordinating, fostering and guiding innovations resulting from smart city developments. Intergrets the politics and governance structures which have been effective in supporting the development and deployment of smart cities.