

## Foreword

When Dr. Dwivedi told me about his plan to edit a book on adoption, usage, and global impact of broadband technologies, I was not sure if broadband technologies had come that far to necessitate editing a book on their adoption and usage. Then one of my dear friends told me about an information revolution that is taking place in remote villages in developing countries like India, thanks to Internet and broadband technologies. The \*information revolution\* my friend was referring to is individual empowerment where a fisherman in a remote village in India can access market information in real time at an Internet kiosk before deciding where and at what price to sell his produce. While growing up in a developing country, I could not have fathomed something like this which seemed like a dream then to turn into a reality so fast. This made me realize that possibly, I am not up to date on something powerful which is reconfiguring the information landscapes in the remotest parts of the world. During my brief exploration of broadband technologies, I felt the idea of a book on adoption and usage of such technologies was a great one. I applaud Dr. Dwivedi to undertake this initiative to put together a compilation of practices and experiences about broadband technologies across the world.

We all have seen broadband rapidly emerge as the building block for the global economy. Already, we are observing widespread deployment of broadband networks as an essential component of infrastructure for global information economy, providing businesses and consumers with on demand access to Internet-based services, content, and applications. Recently, broadband technology has become more reliable, readily available, cost effective as well as easy to deploy. Despite significant growth in broadband networks and accelerating rate of broadband adoption, significant differences still exist between developed nations and developing nations in terms of existing infrastructure, regulatory environments, and urban-rural divide. Such differences point to the need of sharing best practices or experiences that facilitate even more rapid and more cost-effective deployment and adoption of broadband technologies across different countries.

The major challenge to widespread broadband adoption is the ability of policymakers to ensure that broadband supply meets the demand while keeping the costs low. The first two sections of the book provide rich insights into impact of government policies across countries on diffusion of broadband technologies. Documenting the experiences of broadband development and adoption across a wide range of countries from developing countries like South Africa to highly developed countries like USA, this book provides outline for the steps that other countries can follow. This book provides guidance to legislators, policy makers, and regulators to compare development of broadband in their respective countries to that in other countries and identify the key issues in regulation and spectrum management. A number of key issues surrounding market competition, national policies, regulatory challenges, and socio-cultural impacts of broadband technologies are highlighted in this section. The case of countries

such as China, as presented in the first section, where regulatory arrangement and approaches are hindering the establishment of well functioning and competitive market, could be insightful for practitioners from other countries. On the other side, the lessons learned from the leaders in broadband deployment, as documented in the book, could be equally valuable for the countries that are just starting to catch up with others in broadband deployment.

The nationwide impact of broadband begins in communities and individual businesses, where research has repeatedly identified positive effects including greater productivity and rapid employment growth. Section 3 of the book explores such impact and social consequences of broadband diffusion. With experiences as diverse as the countries they are derived from such as USA and Bangladesh, this section covers a spectrum of impacts broadband adoption and usage is having on urban and rural communities. With broadband technologies empowering individuals either through “Village Phone” in Bangladesh or through social networking in South Africa, it underlines the depth of broadband penetration. Such experiences underscore the opportunities that lie ahead for broadband vendors, telecom executives, and community organizations to empower individuals. This is where the future is and this book provides a good overview of social impacts of broadband technologies. Finally, the book provides sneak peek into technological advances and its impact on emerging applications in Section 4. This is particularly important for technology vendors to chart out their future strategies.

In essence, I am convinced this book is an excellent collection of experiences and best practices in broadband adoption and usage across countries that can set the stage for broadband future. It is time now to empower someone, somewhere, in some remote part of the world to experience the power of information through broadband. It is time to provide guidance to vendors and influence policies of regulators across countries to ensure widespread reach of broadband, free from regulatory shackles. This book is a right step in that direction.

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