

Foreword

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Ever since Adam Smith first proposed the theory of absolute advantage enjoyed by a country in producing a good or service, policymakers have sought to build and maintain such an advantage in key sectors of their economies. What has become increasingly clear over the past 12 years that the World Economic Forum and INSEAD have been publishing this *Global Information Technology Report* is the role that information communication technologies (ICTs), and specifically digitization, plays in the potential development and maintenance of absolute advantage.

Digitization—the mass adoption of connected digital services by consumers, enterprises, and governments—is far more than a disruptive wave washing over isolated industries. We have long since recognized that reality. Digitization is a fundamental driver of economic growth and job creation the world over—in both developed and emerging markets. And that is not hollow rhetoric—it is confirmed by econometric analysis that Booz & Company has conducted to quantify the actual impact of digitization on a country's economic output (GDP) and employment. In fact, we have created a Digitization Index that scores a country's digitization level on a scale of 0 to 100. This level-setter allows us to go beyond the anecdotal evidence of the transformational impact of ICTs and actually measure that impact on economic and social factors on a comparative basis.

The headline is powerful: despite the continued sluggishness of economies across the globe, digitization boosted world economic output by nearly US\$200 billion and created 6 million jobs in 2011. Specifically, our analysis reveals that an increase of 10 percent in a country's digitization score drives a 0.75 percent growth in its GDP per capita. That same 10 percent boost in digitization leads to a 1.02 percent drop in a state's unemployment rate. These benefits grow as a country moves along the digitization continuum—in other words, increased digitization yields improving returns.

Although the net effect of digitization is positive, as you begin analyzing the data by country and sector, certain tradeoffs become apparent. For example, advanced-stage economies in North America and Western Europe, for a number of reasons, realize fewer employment benefits than developing economies as their digitization level increases. Their productivity

improves; some jobs get replaced by technologies; and lower-value-added, labor-intensive jobs go overseas to emerging markets where labor is cheaper. On a sector-by-sector basis, you see the same effect in highly digitized industries such as financial services and manufacturing.

Thus no universal prescriptions are available for realizing the full socioeconomic benefits of digitization—the right formula will vary by country and industry. But there is no question that the benefits are there to be realized, and they are substantial for the foresighted and sure-footed.

The lesson for policymakers and national leaders is clear: having laid the necessary groundwork by building out broadband infrastructure and ensuring access, it is now time to differentiate around distinctive opportunities and capabilities. Governments have a role to play as digital market makers. That means making deliberate choices about what sectors furnish the best opportunity for that absolute advantage Adam Smith described and focusing on them. It means understanding the tradeoffs between job creation and productivity that increasing digitization brings, and creating mechanisms to offset potential job losses. Finally, it means understanding what capabilities you must bring as a policymaker to advancing your country's digitization agenda. Do you need to play the role of direct developer, financier, or facilitator? There are successful models of all three capability sets in practice today around the world. You have only to open your eyes and apply the right capabilities lens to chart the right path forward. This year's *Global Information Technology Report* will illuminate the way.