

Martin Fransman, *The New ICT Ecosystem – Implications for Europe, 2007.*

About the author

Martin Fransman is professor of economics and founder-director of the Institute for Japanese-European Technology Studies in the School of Business and Economics at the University of Edinburgh. He has published widely in the fields of innovation and competitiveness. His recent books include *Global Broadband Battles: Why the US and Europe Lag while Asia Leads* (Stanford University Press, 2006); *Telecoms in the Internet Age: From Boom to Bust to...?* (Oxford University Press, 2002); *Visions of Innovation: The Firm and Japan* (Oxford University Press, 1999); *Japan's Computer and Communications Industry: The Evolution of Industrial Giants and Global Competitiveness* (Oxford University Press, 1995) and *The Market and Beyond: Information Technology in Japan* (Cambridge University Press, 1990).

INTRODUCTION

Telecoms and computers gave birth to the Internet which transformed its parents, leading to what has been called *the New ICT Ecosystem*. The New Ecosystem is made up of equipment (computers, servers, routers, switches, phones, etc) configured in networks and providing platforms which Internet providers use to deliver content and applications. It is a dynamic system which provides a key engine for economic and social development at both the global and national levels. However, the New Ecosystem requires new ways of thinking and new modes of governance if most is to be made of its potential.

The main argument of this present book is that at the heart of the New Ecosystem is innovation. It is innovation that fuels the system as it transforms it. However, the innovation that occurs at national levels of the New Ecosystem does not occur automatically. It cannot be assumed that the innovation process in this system will always work the way we want it to. Indeed, the comparative analysis of the New Ecosystem in different countries reveals that some components of the system work better in some countries and regions than in others. This raises at national level the policy dilemma of whether to try and catch up in an area where a country has fallen behind or to abandon it to the shifting sands of the international division of labour.

For example, in the early days of the mobile industry mobile communications worked best in Scandinavia. Europe was able to mobilise the learning process (including standards) that emerged in Scandinavia and this resulted in GSM which in turn encouraged the global diffusion of mobile and in the process helped turn companies like Nokia and Ericsson into the global success stories they have become.

However, in terms of Internet-based content and applications it is US companies like Google, Yahoo!, eBay, Amazon and MySpace that dominate the world stage. In consumer electronics it has been Asian companies such as Samsung and Sony that have dominated, although the emergence of new products from the New Ecosystem such as the iPod and iPhone shows that success can rapidly shift to other parts of the global system. In optical fibre to the premises (FTTP) it is the Japanese who are way ahead.

These few but important examples have significant implications for thinking about policy and governance, more specifically, for a process of re-thinking in these

areas. Indeed, it is the main aim of this book to contribute to this process of re-thinking. One key area in which re-thinking is required is regulation. The reason why re-thinking is needed in this area is that the conceptual framework within which regulation has evolved has omitted significant parts of the process of innovation (see below for further details). Since, as we have seen, innovation is at the heart of the New Ecosystem this state of affairs in the field of regulation is inadequate. A more appropriate conceptual framework is needed both for policy and governance purposes, one that puts innovation at the centre. This book suggests a way forward.

The book is structured in the following way. In Chapter 1 the basic argument of the book is presented, including the major challenges facing Europe. Chapter 2 elaborates on the New ICT Ecosystem, its various sub-sectors and how they are structured. Chapter 3 treats the New ICT Ecosystem as an innovation system and asks how does innovation occur within this system. In Chapter 4 the contemporary ICT Ecosystem is examined through a quantitative analysis. Chapter 5 examines the role of telecoms regulation in the New ICT Ecosystem. Chapter 6 suggests how government policy might be formulated for the New ICT Ecosystem and in Chapter 7 the main conclusions of the book are presented, spelling out the message that is being sent to policymakers. Finally, particularly for those who want more background on the ICT sector, a number of appendices are added providing further information.

Excerpts and material related to this book are available at:

http://www.web2foryou.com/store/shop.php?maincat_id=6