dealing with here. On the other hand, for any given level of total investment, to increase the ICT share would require reducing investment in other types of capital assets; but why should an additional dollar invested in ICT assets be more growth-enhancing than an additional dollar's worth of, say, buildings or roads? The authors assembled here all seem to think that should be so, but I am not convinced by the evidence they provide.

The studies collected in this volume offer many insights about the impact that ICT innovations are having in the modern world, and about the ways in which those technologies are being disseminated throughout Latin America. As descriptive analyses they are often quite informative, and the authors and editors are to be commended, but they should stick to the facts. They are at their best when they are not trying to push particular development strategies or policy agendas.

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Julio H. Cole
School of Economics, Universidad Francisco Marroquín, Guatemala
jhcole@ufm.edu
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http://dx.doi.org/10.1080/08109028.2012.668305

Soft innovation: economics, product aesthetics, and the creative industries, by Paul Stoneman, New York, Oxford University Press, 2010, 384 pp., US$95, ISBN13: 9780199572489

Stop press! Innovation is not just about manufacturing products and processes – though if you were a passing Martian you could be forgiven for thinking that it was, to judge by the overwhelming volume of literature about the subject. Most of what we have learned about innovation and how to manage it has come from studies in this domain – with one or two notable exceptions. The idea that innovation might also occur in services, the public sector or in the 'third sector', or that it might be concerned with creating social as well as economic value, has not had too much coverage until comparatively recently, despite Schumpeter and a host of other theorists pointing out the multiple ways in which change can take place.

Of course, the pattern has shifted significantly in the past 10 years and there is now growing recognition of the relevance of what the UK's National Endowment for Science, Technology and the Arts (NESTA) calls 'hidden' innovation. If we are to develop 'knowledge economies', then we have to consider knowledge-based innovation and its deployment in a wide range of services (as Ian Miles and col-

leagues have been telling us for some time). One of the domains which is moving much more into the spotlight is the so-called 'creative industries' – a loose bundle of economic activity which spreads from software for computer games, through literature, music, theatre, cinema and the visual arts. We are still unclear about definitions, but there is growing recognition – not least amongst policy makers – of the importance of this kind of activity for the economy; and with this multi-billion dollar contribution comes a concern to understand the dynamics of innovation within the field. How we can saddle and ride this particular white horse is an important question in the face of declining manufacturing productivity and the uncertainty surrounding many core service businesses.

We are also seeing a resurgence of interest in 'design thinking' – a recognition of the potential of methods and tools which can help create radically new products and services. Steve Jobs and Apple have provided a public touchstone for this, but the calls for action have been growing, not least through the UK's *Cox Review* (Cox, 2005) and the spreading 'D-school' movement in the United States. Design as both a service and a key activity within the creative industries is significant, yet we do not really understand how it works or contributes in the wider economics of innovation.

It is in this space that Paul Stoneman's book makes a very useful contribution. The focus is on 'products' (and the processes which create them) which are of a 'soft' nature, but a key contribution is the suggestion that despite their 'softness', they are not simply the result of random inspiration or the sudden visitation of a muse. Rather, they are amenable to organization and management in a structured way. There is an innovation process associated with them, though it may differ from that deployed in the pharmaceutical or electronics industries. This is important, in the light of conclusions to many studies of the 'creative industries' which suggest that there is something of the cult of the amateur about such activities, with emphasis placed on moments of inspiration rather than on project planning and management.

The book draws on extensive research and was originally presented as a report to NESTA in 2009. Part 1 deals with definitions and measurement – trying to put some boundaries around what 'soft innovation' covers and how it might be studied. It looks in detail at three industries (publishing, music and video games) and explores how innovations emerge and diffuse in these contexts. But it also – and helpfully – draws our attention to how soft innovation also plays out in more traditional industries, such as food, pharmaceuticals and finance, where its impact is less in terms of new products than of the wrapper around which existing products/services are presented. This distinction is not without its difficulties; for example, the problem of finding data on the intellectual components of activity in these spheres (beyond data embodied in patents).

The key issue which emerges early on is the limitation created by our terminology: we have become used to standard definitions of topics, such as R&D, which we can use in economic models of the innovation process. Soft innovation involves activities which are recognizable, but do not present in the same clear fashion and it is difficult (but necessary) to stretch and adapt these to cope. One of the strengths of the book is the attempt Stoneman makes to find relevant indicators and measures to help construct a coherent analysis of innovation patterns in soft innovation.

Part 2 looks in more depth at the economics of soft innovation and attempts to elaborate on the pattern of incentives and behaviours which characterize actors in this area. It draws some close links with product differentiation and in doing so

provides a potential bridge across which relevant concepts (and tools to support the construction of innovation management routines) might travel from a well-understood field to the newer one of soft innovation.

Part 3 considers some of the implications of soft innovation and its economic and other impacts. It explores some of the key policy issues and also offers some directions for future research – something which, given the economic significance of sectors engaged with soft innovation, is urgently needed. In policy terms, it is difficult to assess whether there is market failure which would justify intervention. On the assumption that policy intervention can be justified, options include tax incentives and targeted soft innovation initiatives, such as labour market stimulation. The main criticism, once again, is that much innovation policy making has hitherto been predicated on models linked to manufactured goods and the processes (especially R&D) which underpin them.

Overall, the book provides a good sketch map, but also recognizes that we are going to need more detail on much of the territory outlined. Soft innovation represents a huge field – everything from copyright industries, all the arts, design and creative industries, through to softer aspects of mainstream business. Developing our understanding will require a full-scale atlas and there is much more scope for in-depth studies. The strength of this book is that it gives us an analytical framework which provides a platform on which others can build; and for policy makers there are some valuable insights to help shape policies targeted towards key sectors. For too long we have relied on the blunt instruments of traditional innovation policy.

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John Bessant
Business School, University of Exeter, UK
J.Bessant@exeter.ac.uk
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http://dx.doi.org/10.1080/08109028.2012.668306

Overcoming complexity and improving the safety of medical systems[1]

Safe patients, smart hospitals – how one doctor's checklist can help us change health care from the inside out, by Peter Pronovost and Eric Vohr, London, Plume, 2011, xxii + 282 pp., US$16 (paperback), ISBN 978-0-452-29686-2

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