

CHAPTER 2

THE NEW ECONOMY

INTRODUCTION

Generally when speaking of the new economy, reference is made to the role information and communications technologies (ICT) play in society. In fact, there has been a tendency to relate much of contemporary economic successes to the contribution of ICT. Indeed, ICT has led to what is called the compression or even the collapse of space and time, meaning that it enables continuous information exchange and the development of global economic structures. Space and time do not matter as much as they did in the 'old economy'.

It is clear that we have entered a new era of economic development that is accompanied by the emergence of a new economic landscape. But it seems a landscape full of paradoxes, not in the last place due to the prominent place technology and knowledge capture. According to Alan Webber, former editorial director of the Harvard Business Review, the whole logic of the new economy is founded on paradoxes. He says:

"[The] process of technological transformation is a curious paradox. Think of it as the 'self-canceling technological advantage'. As technology transforms the logic of competition, technology disappears as a sustainable source of competitive advantage"
(Webber, 1993: 26-27).

So, what is this new economy about, really? Is it as 'new' as it has been claimed to be? Is it about globalization? Is it the emergence of the information era and the impact of ICT? Or is the new economy a mix of interdependent features that is too complex to be unraveled?

In order to explore the central characteristics of the current economic landscape, to round out the dynamics of contemporary competitive structures, to discuss the influence on the way companies behave and (re)structure themselves, and to explicate the role of ICT, knowledge and global economic structures, some essential insights on the new economy are provided in this chapter. In fact, this chapter will scout what this phenomenon called the new economy actually seems to comprise, how it can be defined, and what its main drivers are. After having briefly defined the major characteristics, the focus will first be on a macroeconomic perspective and some implications of the main drivers behind the economy. More detailed information is provided on the role ICT plays in the new economy, so as to establish its true importance, which still seems a rather controversial issue.

Next, the issue of value creation in the new economy will be dealt with from a number of specific and challenging point of views. Since the new economy will prove to be about intangibles, too, the focus of the ways of value creation will be on perspectives that include the importance of knowledge, experience, and attention.

THE NEW ECONOMY AND INDUSTRIAL REVOLUTION

In recent years, much has been said and written about the so-called new economy. Though very different conceptions of this new economy have surfaced, it has appeared that it refers to an economic era characterized by a whole new set of economic activities, economic turbulence, new organizational forms, and paradoxes. Corporate activity, including huge mergers and acquisitions, numerous internet start-ups and restructuring processes like downsizing, have become high and global, while at the same time ICT has deeply penetrated all layers of society without apparent productivity gains. In this era, change seems to be the only feature that comes close to safe *ceteris paribus* conditions.

This new economy has brought about economic industriousness of a totally different nature and of completely distinct dimensions. Just as the second industrial revolution moved society from local to national economies, by entering the third industrial revolution the global economy will be the scope that matters. Illustrative for this is the observation that the emerging global companies are larger than any national companies ever seen. The market value of the world's largest company in 1990 (a national company, Nippon Telephone from Japan) isn't even close to make it to the 1998 list of the ten largest companies in the world (Martin, 1998). The scope, reach and power of business has become global, and has – especially relative to governments – immensely increased.

For about eight thousand years, wealth was created by agricultural activity. With the world's first industrial revolution at the end of the eighteenth century and the beginning of the nineteenth century, this source of wealth creation came to a large extent to its end. While, in retrospect, the end of the nineteenth century and the steam engine can be considered to be the hallmarks of the second industrial revolution, we already speak of current structural economic transitions to be the third industrial revolution, which is commonly described as the information or knowledge revolution. Boisot (1998) speaks in terms of the transition from an energy-based to an information-based society. In the old economy, the traditional production function shows a trade-off between labor and capital. Capital, represented by new technologies, replaces labor-intensive production, while in the knowledge or information economy there's a trade-off between data and physical production factors. The knowledge or information society arises as a consequence of the gradual substitution of physical production factors by data.

As was the case in the second industrial revolution, corporations that are positioned to take advantage of this third industrial revolution can achieve high rates of returns and growth, even though the economy's growth rate is lagging compared to previous

decades. New big firms, and new big fortunes, can virtually grow as if by magic. In contrast to struggling giants, threatened by the pace at which technological developments take place, new firms have the advantage of not having to destroy (parts of) themselves in order to remain competitively viable, let alone save themselves from total downfall. The new economy demands industrial restructuring, instigates to rethinking value creation, and puts pressure on traditional sectors.

Oil is a revealing example of the impact of the information or knowledge revolution on an traditional industry. The oil industry used to be an industry of luck and brawn, but now leans heavily on brainpower. Supercomputers permit three- and four-dimensional acoustical soundings, which has resulted in a factor ten increase in hit rates for finding new oil and doubled extraction rates. Norway has now become the second largest exporter of oil in the world – instead of the prediction two decades ago that it would be out of oil by now – due to the possibility of drilling two miles deep into the water. On the offshore oilrigs, yesterday's well-paid muscular workmen have been replaced by well-paid knowledge workers. The industry is still producing oil, but in such profound different ways that it can be characterized as a knowledge industry. As a result of these technologies, reachable oil supplies have expanded much faster than demand, and real prices have fallen to the lowest levels in human history (Thurow, 1999: 27).

With rapid changes and advanced developments in technology, it is far from sure where future profits will be made. The question, therefore, is where and how wealth is created in the new economy and where value-adding activities take place. It's not just a matter of technology, nor is it solely a matter of information or knowledge. One should not take for granted the euphoric voices and noises that hail only a preoccupation with ICT, though this is undoubtedly one of the most important drivers of the new economic landscape.

DEFINING THE NEW ECONOMY

The use of the term 'new economy' is by now more than widespread, though managers, policy-makers, scholars, and business magazines that are referring to it, seem to have different perceptions, or even models, in mind. One prominent conception of the new economy is the view that it is merely about information and communications technologies (and young entrepreneurs starting internet companies). Though it's an understandable view, and also a partly true one, this seems to be only a small part of what the new economy actually comprises. Besides, several prominent scholars and new economy gurus, like Donald Tapscott, actually do, in fact, place ICT at the center of anything that pertains to the new economy. Important here is to keep in mind that ICT is a central element in the new economic order as a driver in the sense that ICT has an enabling role. Therefore, it's the central aim of this section and the following sections to acquaint the reader with a broad range of (macro)economic topics related, and often directly assigned, to the concept of the new economy. In order to do this, however, it's necessary to get a definition of this

new economy. A good starting point and a rather encompassing definition of the new economy is provided by Wired's Encyclopedia of the New Economy:

"When we talk about the new economy, we're talking about a world in which people work with their brains instead of their hands. A world in which communications technology creates global competition – not just for running shoes and laptop computers, but also for bank loans and other services that can't be packed into a crate and shipped. A world in which innovation is more important than mass production. A world in which investment buys new concepts or the means to create them, rather than new machines. A world in which rapid change is a constant. A world at least as different from what came before it as the industrial age was from its agricultural predecessor. A world so different its emergence can only be described as a revolution" (Wired's Encyclopedia of the New Economy).

A quote originating from Davis & Meyer complements this definition, by saying that the new economy is governed by new rules, since it encompasses a whole new business reality and economic landscape:

"It's a whole new economy. It's a new business reality resulting from the convergence of three huge forces. You can't get a bead on it because it's a moving target – today's business is marked by unprecedented speed. You can't get your arms around it because it's intangible – the assets that create the most value are not on the balance sheet. And you can't sort it out because it's a rat's nest. The interconnectedness of computers, workers, firms, and economies has reached a point where the famous 'six degrees of separation' is starting to feel more like three" (Davis & Meyer, 1997: 17).

The new economy, following these descriptions, is a knowledge and idea-based economy where the keys to job creation and higher standards of living are innovative ideas and technology embedded in services and manufactured products; it is an economy where risk, uncertainty, and constant change are not the exception but the main rule (The New Economy Index website). Looking at these definitions, one could draw the conclusion that new economy adherents say it really is a new economic era, while, on the other side, new economy adversaries say it definitely isn't: there are no new rules to survive in this economy. Old economic rules still apply, skeptics and adversaries say.

Different scholars assert that this new economy is characterized by fundamental economic transformations. With these transformations, some say, new economic rules are coming into force. But it is the strong and blatant presence of such proclaimers of the new economy, especially those who have been labeled new economy gurus and fad-chasers, that has triggered criticism: this period of disinflationary growth (continuing rapid economic growth, without a stronger than proportional rise in the level of inflation) will end, critics say, and they predict that growth will eventually decline. In a more fundamental and general sense, some authors say there's not that much new to this new economy or even that there's no such thing like a new economy. The influential economist Paul Krugman, for example, is one of these authors. He contends that there is in fact nothing new about technological change and that productivity measures do not measure all productivity in 'any new economy'. Moreover, economic change always seems more dramatic to the people living in such an era of change than mankind, in retrospect, tries to believe when people encounter economic change.

However, there is something new about the economy, as tends to happen about every fifty years (defined as Kondratieff cycles). In fact, it's not the first new economy. From a different point of view, and depicted in table 2.1, global development unfolds through the succession of new economies, underpinned by Schumpeter's concept of creative destruction. The new economy about which people are talking now is, in a sense, an economy that's somewhat reborn, meaning it has successfully weathered what could be termed as a maturity crisis and has challenged relatively recent predictions of economic decline (Norton, 1999).

	Also known as	Period	Main symbols
<i>New Economy #1</i>	The Industrial Revolution	1787-1842	Cotton textiles, iron, steam power
<i>New Economy #2</i>	The Bourgeois Kondratieff	1842-1897	Railroadization
<i>New Economy #3</i>	The New-Mercantilist Kondratieff	1897-1939	Electricity, automobile
<i>New Economy #4</i>	The Cold-War Kondratieff	1939-1989	Defense, TV mainframes
<i>New Economy #5</i>	The Information Age	1989-????	PCs, telecommunications, entertainment

Table 2.1. Five 'new economies'.

Source: Norton (1999)

When taking a broader and more profound economic perspective, some unique elements and developments that constitute the new economy can be discovered. In the next sections a macroeconomic perspective and a focus on the contribution of ICT is taken to illustrate this.

THE MACROECONOMIC VIEW: STRUCTURAL FEATURES OF THE NEW ECONOMY

Looking from a macroeconomic perspective, Norton (1999) states that the idea central to the new economy is that ICT is creating higher productivity growth, which in turn accounts for faster growth in output without a rise in the rate of inflation. Though it can be argued that some of the skepticism of people seems very legitimate ("Everywhere I see computers, but in productivity statistics", Robert Solow once said), others state that in the new economy measurements of productivity are simply useless. After all, the only ones who should worry about productivity are in fact not human beings, but robots, as Kevin Kelly's argument reads. And the areas of the economy that has shown a rise in productivity have been US and Japanese manufacturing sectors, which have seen an annual increase of 3% to 5% in the 1980s and the 1990s. It's these kinds of sectors where the measure of productivity can be a useful one (Kelly, 1998).¹

¹ In later sections of this chapter, a more profound look into the interplay (and discrepancies) between ICT contributions and productivity measures is taken.



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