Service Industrialization and the Global Information Economy

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Uday Karmarkar, professor at the UCLA Anderson School of Management, took part in a research seminar in which he explained his vision of the major global trends regarding information economy. The information economy implies a quick shift to the industrialization of services, a shift whose probable economic, political and social consequences were pointed out by professor Karmarkar.

During his recent visit to IESE, the UCLA professor Uday Karmarkar holds a broad definition of Information Economy (IE) Karmarkar holds a broad definition, which includes every industry that addresses the eventual production of information goods and services, ranging from pure information goods to knowledge-based professional services or to the means to transfer information. From this perspective, Karmarkar sees and foresees a profound change in the developed economies in terms of the end product as well as its delivery form. As for the latter, the “service” mode is taking over from the “product” mode. At the same time, the information economy is steadily increasing its significance, taking into account that both information products and services already account for 59% of the US GNP.

What is more, an easier synergy is noticed between information products and services, which means that a firm can combine the making of an information product and the provision of the service that makes it available to the customer, while the same is harder to be seen between material products and services.

This shift from a material economy to an information economy, in which most of the labor force is already located, relies significantly on the increase in productivity that has been possible with the adoption of new technology. Information technologies are leading to the “industrialization” of services and it is in this scenario that we can talk about information chains separate from value chains.

The industrialization of services enables a standardization of work processes and provides the ability to specify and test output requirements and the ability to package and ship output. In addition to this, other factors must be taken into account: costs are lowered when reliable logistics are available (i.e. bandwidth) because skills and technologies travel more easily and competition pushes innovation and productivity growth.

Professor Karmarkar points out that the current transformation of services, driven by technology improvements, can be seen parallel to the transformation of industry in the seventies, which led to automation, out-sourcing, off-shoring and self-service, the latter shifting the process to the consumer. All these might have also been expected in the transformation of services. There is actually empirical evidence that today, thanks to automation, out-sourcing, off-shoring and self-service, caused by the implementation of IE technologies, productivity is rising and a few other related facts are worth-noticing.
First of all, the shift to an IE and the industrialization of services are followed by their globalization, particularly of information services. This emphasizes globalization as a whole. Secondly, the shift has linguistic or/and cultural patterns and in fact its impact is deeper in the largest and wealthiest linguistic markets, English being the first linguistic market and Spanish the second one.

The industrialization of information services, strengthened by the growth in information logistics, also increase the globalization of information chains. The more standardized and/or simple a task is, the easier it is to outsource. A core of very complex and non-standardized tasks is hard to outsource, like Literature, Product Design or Education, but many are. The simpler commodity services like simple data and content management globalize first; services such as skill-based content or specified business processes are next.

There are also unknown consequences regarding income distribution, tax collection and social patterns. We must keep in mind the fact that it was because of the growth of jobs in the services industry that women, immigration and baby boomers were absorbed massively by the labor market.

There is evidence that globalization of services leads to a loss of jobs. Professor Karmarkar estimates that 10% of the jobs in the US could be either outsourced, off-shored, etc. which roughly means 10 million jobs. This may not be a problem due to the labor shortage expected in 2008 when the baby boomers retire. Besides, offshore comes back to the country and its revenues overpay the investment while the foreign workforce substitute the need for immigration.

On the other hand, though the labor force may have to face significant adjustment costs, such as the decrease in white-collar jobs and their weaker replacement for less attractive, less paid jobs, which turns the phenomenon into a big political issue.

The Anderson Graduate School of Management at UCLA and the e-business Center PwC&IESE are working together in BIT (Business Information Technologies) a worldwide project that studies the impact of IT in business practices.