

## THE EMERGING DIGITAL ECONOMY

The goods manufactured and traded in the old industrial economy consist mainly of materials and physical products, all of them scarce and subject to all the limitations of the physical world. On the contrary, in the new economy the manufactured and traded goods, besides the cost of the physical components, have a much higher cost for the intangible components that many times make the cost of the physical components insignificant, and are not subject to the limitations of the physical world, as we will see later on. For a better understanding let us consider an example: a blue jeans bought in the flea market may cost around 8 US Dollars, whereas a branded blue jeans, acquired in a boutique of the Fifth Avenue in New York is worth more than 80 Dollars. Before making some conjecture on the reasons for the huge difference in price, reverse the branded pant and look for the tag; you will be surprised to see that in several cases it is written "Made in Perú". We can deduce that the company that manufactures the first pant could be the same one that manufactures the branded blue jeans in NY, inclusively with a good discount due to the negotiated manufactured volume. The first company is a typical company of the industrial economy and its product is mainly a physical product whereas the second one is a company of the new economy and its product is fundamentally intangible, in other words, in itself, the product is almost a concept, an idea. To think that the first company will sell much more pants than the second one due to its low price would be an error due to lack of knowledge of fact. The company that sells physical products is trading in a market in which the entrance barriers to competition are reducing day by day and many companies are selling the same product at a lower and lower price, and as a result, the company is selling less and less and is getting lower earnings. The company that is selling concepts or ideas, inclusively with physical components as in the case of the branded blue jeans, is trading in a market where the clients are paying for the concepts besides paying for the physical component, if there is any, and where owing to the talent of such a company, the concepts tend to be unique for some time, that often makes the price reach unexpected levels. ¿How is the company that sells physical products organized? Its production and logistics move materials and physical products, its marketing sells physical products and its accounting counts physical, tangible products. On the contrary, for the company that sells concepts, the manufacture and the logistic transform and distribute ideas and concepts, the marketing is specialized in the selling of concepts almost or totally intangible and the accounting tends to calculate the value generated by the intangible goods. This company of the new economy has almost no activities around the physical products but to outsource those activities to very low cost specialized companies, as we have seen in the case of the NY company of branded pants.

The emergence of the new economy is not recent, it is the result of a chain of events that are happening since decades but have been accelerated by the emergence of the so-called digital revolution, that in turn has been produced by two big explosions; the first is the dramatic fall of the cost of the processors while their power of processing has been multiplied in equal measure, and the second is the equally important fall of the cost of the telecommunications while its capacity of transmission of bandwidth has been multiplied in equal measure. The digital revolution had an incommensurable impact on the emergence of the new economy due to the direct impact on its main material: the information. Owing to the low cost of the microprocessors, any company can digitalize, that is convert all the means of information: data, texts, sounds and images into electric impulses; thanks to the low cost of the telecommunications, the companies, independent of their size or capital can move those electrical impulses to any part of the planet. In order to understand why the new economy has a direct relation with the digital revolution, it is sufficient to observe how it liberates them from the physical limitations that the material and physical products are subject to, while allowing to digitalize all the intangible forms. For example, a digitalized design can be copied or duplicated endlessly to any part of the planet with a marginal cost equal or superior to zero for each copy or duplicate. On the other hand, the cost of the distribution of the digitalized good through the communication networks is infinitely inferior to the actual cost to move it physically in a box from one continent to another. In this way, the new virtuous wealth circle is completed, where the concepts, whether unique or original in a global market convert the quasi totality of the cost of the intangible component into direct earnings (profitability?).

The economy as we knew it before was the science of the administration of scarce resources. All the factors of the manufacture were scarce, and the art of administration was residing in the optimization of the use of those resources. In the new economy, trading is about concepts and ideas, which use all the forms of information as main material that, due to the digital revolution, have become electronic impulses which move through telecommunication networks, thus becoming resources of unlimited nature, and, being the principal component of the value of this material, challenge every day the classic theories of the industrial economy, therefore creating the need of a new economic model. This, and no any other reason, is why the big US expansion in the 90's has not produced the classical re-heating that all expansion of consumption was producing in the industrial economy. Here, the growing of the consumption generates growing of production, which is put under the limitations of the physical installed capability of the offer, to the available job offer and to the availability of physical materials. If the consumption surpasses the physical limitations of the offer, the economy collapses due to excessive raise in the prices. In order to avoid this to happen, the economists of the industrial era advice to cool the economy when it grows excessively. In an economy with digitalized materials and products, the

consumption can grow endlessly, because the manufacturing is not put under the restrictions of the physical capacity of the factories. From the end of the 80's, we have been witnesses of the phenomena also known as the big expansion of US, which consisted of a constant growth by leaps and bounds of the US economy for a lapse of almost 15 years, without inflation and with an almost full employment, something never seen before in the world economic history. The spectacular results obtained have produced a change in the traditional approach of the employment of the so-called technologies of information in the company.

Previously, in the industrial economy, the role of the technologies of information was to support the business through mass data processing and the generation and distribution of information to the proper persons at the proper time. Now, in the new economy, the technologies of information have a new role: to generate the main business, creating and maintaining the digital infrastructure that captures, accumulates, processes and distributes the ideas and concepts between the different actors of the business model. The companies of the new economy have understood it in this way some years ago, and that is why we have seen a spectacular growth in the US in the investment of technologies of information to such extent that, in 1998, it has reached almost 50% of the total of the invested capital, taking over from the classical investment in buildings, factories, machinery and equipments. Besides, most of the companies of the new economy have started some years back to outsource almost all the manufacture and logistic of the physical goods to other companies of the traditional industrial economy, as in the case of the company that manufactures branded blue jeans, maintaining the engineering of the product, the development of the concept, the marketing of the ideas and the administration of the loyalty of the clients across the globe. The source of wealth has been implacably transferred from the administration of physical resources to the management of intangible resources, which is creating the growth of the breach that exists not only between the rich and the poor, but also between the companies of the old industrial economy organized around the manufacture and distribution of physical goods, less and less differentiated, and with extremely little margin, and the companies of the new economy organized around the manufacture and the distribution of ideas and concepts highly differentiated, that allow them, if maintaining the differentiation, to get extremely high contribution margins. This is in fact the only reason for the origin of the constant innovation that we are witnessing today: to maintain the differentiation. In this new economy, the innovation is not the product of the consumerism or the simple look for innovation, but the main source of wealth in a market where people are ready to pay more for exclusive ideas and concepts and less for simple physical products, as we have noticed in the blue jeans example.

The new economy is based on the administration of intangible resources, which being digitalized, become unlimited. Ideas, main material of the new economy, become unlimited when, due to the digital revolution, they take the form of electronic impulses that can store, copy and distribute endlessly to any part of the planet with a cost of marginal production for each copy equal to zero. Zero is the cost spent for producing each digital copy of a digitalized idea. To have a better understanding of this, let us consider another example: after the development of a new pant design, the company that sells branded pants has to give instructions to all the selling force across the globe to understand and comprehend the new concept attributes; to achieve this target, it orders a specialized company on concepts communication to realize a very professional presentation, clear and didactic, and, in place of doing it in actual form in all the countries where it sells its concepts, which would involve a high cost, it records it digitally. There is an initial manufacture cost of the presentation, but since it has been converted into electrical impulses in the own server or in someone else's server anywhere across the globe, any seller, anywhere in the world, will be able to download a digital copy, which direct cost of manufacture will be equal to zero. If they are hundreds or thousands of sellers across the globe, the total direct cost of manufacture of all the digital copies that reached everywhere across the planet will also be equal to zero. Besides, the speed with which the company instructed all the sales global team is amazingly reduced to hours, not anymore weeks or months, as would have been the case if the presentation would have been done personally in all countries by the same experts on the new concept design. Someone could say that the marginal cost of each copy is not equal to zero, because there is a variable transmission cost for each copy downloaded from the web, and that it also depends on the volume of bits or electrical impulses involved in each digital copy. In fact the transmission do have a cost, but it is a variable cost of distribution, not a variable cost of manufacture. This is another characteristic of the new economy: it has not eliminated the distribution costs but it has reduced them amazingly. Have a look at ourselves to compare the cost of sending a video tape to each of the company sellers disseminated all over the globe, with the cost of sending each digital copy via the internet; in the first case it costs some Dollars per parcel, while in the other case, each copy has just a cost of few cents of Dollar. The marginal cost of manufacture equal to zero and the very low unit cost of distribution, combined with a fully globalized environment, represent the big opportunity of the new economy. Nevertheless, this opportunity can only be taken by companies that will be able to submit to the market proposals of very novel value, competitively sustainable by a large differentiation, and produced by a business model oriented to the management of ideas and concepts more than to the management of materials and physical products.

The new economy cohabits with the industrial economy in the same way that the industrial economy used to cohabit from its very beginning with the old economy of raw materials. In this relation, the losers were the organizations that have remained trapped in the old logic of extraction or manufacture of natural products that ended converted into materials with minimal margins (earnings?) for the industrial companies. Nowadays, exactly the same thing is happening, in the new economy, the losers are the companies that remained trapped in the old logic of manufacturing non-differentiated physical products that ended converted into materials with minimal margins (earnings?) for the companies that manufacture and distribute mainly intangible (goods?). This has been the panorama all along the 90's, and it will become even worse during the next years. The new economy, like the industrial economy in the beginning of the past century, has come to stay. It will undergo similar problems to those experienced by the industrial economy in its beginning, many companies will try to migrate from the old and secure enterprise models to the new and little experienced enterprise models, some will fail in the attempt as innumerable entrepreneurs failed in the incipient car industry in the beginning of the past century, but some other will learn from their mistakes and will recover till they achieve the economic hegemony, like it happened with Ford and General Motors in the mid 20's. The secret of the success of those companies was that they understood that their organizations were machines for moving optimally materials and physical goods, which had to be produced in mass for a market where the demand was much more higher than the offer. That is how appeared the hierarchic division in three levels, the management, the average control and the operators, and the functional division with functions like marketing, manufacture, distribution, management and finances. Today it seems funny to remember that the entrepreneurs of the world did not accept easily these models and the managerial practices associated to them, and many years had to pass for this to become the standard of the administration of the industrial economy. Today's secret behind the success lies in the deep understanding that our organizations must be machines to move ideas and concepts that have to be produced often in a personalized way, owing to the help of the information technologies (software technologies?), for markets where the offer of similar products beats widely the demand and where the consumers are now paying more for the intangible components than for the physical part of the products. That is how old hierarchies and the anchylosed functional division are disappearing to give way to very flexible organizational models where individuals can count on the permanent help of the technologies of information to extend their skills and those of their companies with the aim of achieving in general terms three characteristics: (i) a short innovator cycle for concepts, products and for the same organizational model, (ii) the greater sensitivity in front of the constant changes in the market combined with a bigger answer speed and (iii) the complete orientation of all the organizational model towards solving the needs of the clients with brand. It will take some time to the new economy to mature, but this time will be infinitely shorter to the time taken by the industrial

economy, especially due to the impact of the digital revolution. In a short time it will also be amusing to see how many other companies delayed in assimilating these changes, presuming that it was all about fashion and not a necessity.



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