

# Network economy



[pic] THE NETWORK ECONOMY The Network Economy The history of economics of the Industrial Revolution since its beginnings is based on growth. Growth of people meant more customers and growth of production, which lead to growth in profits. This so-called “ old” or traditional economy was based on bulk production, demanding large quantity of resources and limited know-how. The traditional economy, according to Alfred Marshall was based on diminishing returns.

According to him producers with expansion of production will always run into limitations in the form of shrinking profits or rising costs. However, the industrial mass production of goods became less important in the last 30 years. Wriston’s prediction that “ the technology upon which the market is based will not only not go away, but it will get better and faster and easier to use” (1998, p. 343) came true.

The bond between the computers and telecommunications created global market from money to commodities. The existence of a “ new” economy became more than evident. Few versions define the “ new” economy in terms of “ two principal developments: first, an increase in the economy's maximum sustainable growth rate and, second, the spread and increasing importance of information and communications technology” (Meyer, 2000).

The purpose of this paper is to discuss the relationship between the “ old” and “ new” economy, the key players in each of them, the demand, supply and scarcity and the relevance of few economic experts and their theories. The terminology that will be used for the two distinguished economies will be industrial and traditional for “ old” economy and information, knowledge and

network for “ new” economy. Relationship between “ Old” and “ New” Economy

When looking at the relationship between the industrial and information economy one can notice that in the former object’s value is the sum of its obvious parts, while in the latter the additional value is given to the product through intangibles, such as design, brand and prestige. According to Glick and Plisch (2004) the emotional experience is another variable that adds to the value of the goods and services. Table 1 shows some of the value indicators for both traditional and network economy. Traditional Economy | Network Economy | | Scarcity drives value | Wide use drives value | | Economies of scales | Diseconomies of scale | | Competition | Collaboration | | Proximity is important | Location independence | | Predictive | Hard to foretell | | Trade secrets | Transparency | | The Media | Social Media | | Value is measurable | Value is emergent | Table 1. Value indicators for traditional and network economy. Major difference between these two economies is the shift from diminishing to increasing returns.

The diminishing returns refers to “ progressive decrease in the marginal output of a production process as the amount of a single factor of production is increased, while holding the amounts of all other factors of production constant” (Wikipedia, 2011). In economy with diminishing returns the equilibrium between supply and demand can be easier predicted. The law of increasing returns rules in the knowledge based businesses, such as software businesses. Its main motto is if you want to be bigger, you have to sell more. Yet, the uncertainty of reaching this goal is great and cannot be predicted. Nowadays, economy is not only about mass-produced products, <https://assignbuster.com/network-economy/>

but also about creating solutions for individuals. The niche culture is in its rise, and it becomes even more detailed in its specialization.

The transportation issue is still present, although the location of the customers is not so important. Due to the technology developments people from one part of the globe perform various transactions almost instantaneously with people on the other side of the planet. Companies in the network economy need to collaborate, not compete, because only by sharing knowledge they can create/reach new level of product and service offering, thus attracting larger masses. The companies in the past used to make all the fight for keeping the "ultimate secret" of their product or service. One example is Coco Cola and their well-kept secret for the "magic drink" for decades.

Although this is still not eradicated, companies today try to be more transparent and open to its clients. At the end it is all about building trust. In this respect, traditional marketing and media have been replaced today for eMarketing and social network media. Although very different these economies do not exclude each other. The questions that are part of the industrial economy are interwoven in the knowledge-based economy. According to Arthur (1996) the feedbacks about consumer's needs, distribution channels, and competitor's products from the "old" economy "operate at a different level in the market and over different time frames" (p. 9) in comparison to the feedbacks about the information economy needs.

Leading Players

During the nineteenth century the principles of laissez faire economics, which argued that economic forces should be allowed to work out themselves with maximum freedom and minimal government interference, ruled. Laissez faire advocates argued that government interference distorted the natural and fair forces of economic development. During this period key players were the companies. The enormous wealth, particularly in the United States, in comparison to the extreme people's poverty was a result of blossoming monopolies, high immigration percentages, poverty of the masses and terrible living conditions and lack of employer's rights. The customer was " a lone voice" (Steward et al. , 1999, p. 127). In the last half a century there has been changes of the major economic actors. The network economy has amplified the role of the consumer. Through means of technology and rapid spread of information the existing customers attract new ones by advocating services or products. Further, the consumer does not only try products, but also give active feedback in creating new products. In such way the distinction between producers and consumers is blurred and is the reason for the increased cooperation between producers and consumers. " The more complex the interaction is among contributors, the more sophisticated can be the innovation. " (Ghosh & Soete, 2006, p. 925)

The Role of the Government The work of the government depends on information.

In other words, its work is very information-intensive. Having in mind that information, and even more so knowledge are the main features of the information economy, the government should strive to continue to stimulate, nurture and support knowledge. It should carry on with encouragement and

promotion of education, health care system, transportation, investment in human capital - the workers, and with support of the industrial research and development, etc. With the aim to keep pace with the informational and technological changes, as well as to increase efficiency and delivery of services the government needs to “ go electronic”. This will also increase the transparency of its work.

In addition, the informational (new) economy pushes the government to be more flexible, and supportive of entrepreneurial initiatives compared to the industrial (traditional) economy where the government had tight antitrust laws, and promoted long-term relationships, and stability. The governments also need to decentralize, a trend that is seen since the beginning of the 21st century. The government role will not diminish, as Shapiro and Varian said. Still the government will need to adjust, be more agile and respond faster to the changes in the economy and society. Consumer Lock-In and Switching Costs Companies are known to bind customers by implementing lock-in strategies. However, the trend in the past to satisfy customers and to maintain stimulating supplier-consumer relationships, has taken a different shape today.

According to some economists, consumer lock-in occurs when consumers have significant evasive costs for switching between networks or suppliers. Buschken (2004) defines switching costs as “ any type of financial or emotional barrier that prevents customers from switching between brands or suppliers” (p. 5). Klemperer (1987) gives the following classification of switching costs: transaction, learning and artificial or contractual costs. Transaction costs occur when someone switches between identical brands, i.

e. transfer of account from one to another bank. The learning that one might invest in order to start to use one brand might not always be transferable to other functionally identical brand, i. e. Apple and Microsoft.

Further, Klemperer (1987) explains that the artificial switching costs are related to various loyalty programs, such as trading stamps and frequent - flyer programs. To avoid locking consumers would be almost impossible, since this strategy is used by most of the companies today as a way to increase their profits. Professor Singh (2000) defines company's profit from a current customer to be equal to the total switching costs. However, he says that the total switching costs are born not only by the customer, but also by the potential new supplier. Therefore, one possibility for decreasing locking and switching costs is to find suppliers that will be willing to bear the costs of the switch in their entirety or compensate for the direct switching costs in kind.

For example, when changing from one to another mobile provider, the new service provider should compensate the customer for their switching costs and offer free calling minutes for a certain period of time. Ensuring customer loyalty is another reason for the existence of switching costs. Thus, customers need to be aware of the lock-in situations and should not go straightforward for various loyalty programs. Consumers should buy less impulsively goods. They should wait and evaluate the offers available on the market and should be aware what they sign in. One example of lock-in situation that reflects the latter is getting mortgage for financing a home.

Usually, the costs for changing mortgage provider are extremely high and completely discouraging. Some banks in small prints have binding rules for paying penalties if the home is sold within period of 20 years. Being informed about all aspects of the client-supplier relationship will also limit the lock-in effect and decrease the switching costs. Scarcity and price mechanism

Scarcity, as defined by Robert Schenk, is a misbalance between people's demands and availability for them. The scarcity can be external, when referring to lack of most natural resources, and internal or man-made. This is a phenomenon that affects both individuals and societies.

On a personal level, limited income, time and ability, keeps individuals away from doing what they would like to do. On a larger scale, limited resources (such as manpower, machinery and natural resources), put a limit on the amount of goods and services that can be produced. Professor Soete's concept that price mechanism will solve the scarcity problem in any economy is valid. Even the thought-provoking Dr. Sam Vaknin agrees that the market is harmonizing supply and demand. According to him scarcity is quality of a "closed economic universe" that can be eased by either increasing supply of goods and services through technology and innovation or by enhancing efficiency in resource allocation through free trade and rational governance. Dr.

Vaknin (2005) introduced new term related to the information economy - inverse scarcity - that is "unlimited resources (or products) verses limited wants." This idea can be explained with the following: in the network economy one of the main resources, the information and knowledge, are available in abundance. It is known fact that abundant products are cheap.

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The supply of the information - servers, technical staff, etc. , is finite; thus it can be considered as scarce. Having in mind the extremely fast development of the information technology the demand could not be in tune with the supply. This is how the phenomenon “ inverse scarcity” was shaped.

According to Dr.

Vaknin the price mechanism is the only solution that could put the economy in balance and could revert it to economy of scarcity where people would need to make choices (Schenk, n. d. ). Supply and Demand and Various Theories Market prices are driven by supply and demand, and their rules will continue to describe the behavior of markets. Paul Samuelson defines supply, all other things being equal, as a quantity of goods the producers are willing to make and sell to the consumers. He explains demand as a “ quantity of a good that buyers would purchase at each price” (p. 658). Aforementioned Picture 1 illustrates the differences between supply and demand-side scale economies.

The industrial economy is a supply-side scale economy where with the increase of output, the marginal and average unit costs declined (Mauboussin, p. 6). Since competition is one of the traits of the industrial economy, and knowing that competition in the market increases the supply, the prices of the goods decrease, shifting the supply curve rightwards. The manufacturing companies are under influence of the huge bureaucratic mechanisms and input scarcity. The latter is one of the key things the manufacturers support, since it is a way to impose prices and “ hold tension” among consumers. The information economy is demand-side driven

economy of scale. In other words, “ the value to the users increases ... and irrespective of costs, the willingness-to-pay rises” (Mauboussin, p. 6).

One characteristic is the network effect - where the value of a product to individual increases as more people uses that product. Throughout the text the term information, knowledge and network economy were used instead of so called “ new” economy. The reason for it was that this notion is not completely justifiable. As Shapiro and Varian said no matter how much the technology influences our lives and way of doing business, the basic economic laws cannot change. The entire study that these two economists did gives a detailed and based on examples picture of the changed economy. However, one cannot only agree with their views. Both Krugman and Soete discuss legitimate aspects of the network economy.

For example, Krugman with his explanation of changed demand and supply curve only supports the existence of the law of increasing returns, as well as the positive externalities of the networks. Soete, on the other hand, covers the topic of scarcity and price mechanism that was discussed in the previous paragraphs. Conclusion It is indisputable that the development of technology and spread of information changed people’s lives. It created networks, both public and private, for individuals and societies. The innovation and the globalization are the drives behind the current changes in the economy. The global market is very complex system, and due to its volatility it is difficult to predict how this market will grow.

One this is sure: demand for products, services and information will continue to exist, and companies will continue to strive for higher profits, will continue

to compete and try to satisfy the consumers' desires. The basic economic laws will continue to exist, besides the new trends. References Achrol, Ravi S. , & Kotler Philip (1999). " Marketing in the Network Economy", Journal of Marketing. Chicago, Vol. 63, pp. 146-164 Arthur, Brian W. (July-August 1996), " Increasing Returns and the Two Worlds of Business", Harvard Business Review Bouckaert, J. , Degryse, H. , & Provoost, T. , (October 22, 2008). " Enhancing Market Power by Increasing Switching Costs", Retrieved from [http://www.ifo.eportal/page/portal/DocBase\\_Content/WP/WP-CESifo\\_Working\\_Papers/wp-cesifo-2008/wp-cesifo-2008-11/cesifo1\\_wp2449.pdf](http://www.ifo.eportal/page/portal/DocBase_Content/WP/WP-CESifo_Working_Papers/wp-cesifo-2008/wp-cesifo-2008-11/cesifo1_wp2449.pdf) Buschken Joachim (2004). " Getting Out of the Customer Satisfaction", Higher Profits through Customer Lock-In, Retrieved from <http://www1.ku-eichstaett.de/WWF/MKT/lock-in/04-SPTLH4.pdf> Ghosh Rishab & Soete, Luc (November 3, 2006). " Information and Intellectual property: the Global Challenges", Industrial and Corporate Change, Volume 15, Number 6, pp. 919-935 Glick Byron & Plisch Sandy (February 4, 2004). " The Old Economy Vs. the New Economy", Retrieved from <http://wistechnology.com/articles/557/> Klemperer Paul (May 1987). " Markets with Consumer Switching Cost", The Quarterly Journal of Economics, pp. 75-394 Mauboussin, Michael (October 11, 2004). " Exploring network economics", Retrieved from <http://www.lmcm.com/pdf/ExploringNetworkEconomicsRevised.pdf> Meyer, Laurence (June 6, 2000). The New Economy Meets Supply and Demand, Retrieved from <http://www.federalreserve.gov/boarddocs/speeches/2000/20000606.htm/> Samuelson, Paul & Nordhaus, William (2010). Economics, Nineteenth Edition Schenk, Robert E. , " Scarcity and Choice", Retrieved from <http://ingrimayne.com/econ/Introduction/ScarcityNChoice.html> Singh Nirvikar, (April 19, 2000). <https://assignbuster.com/network-economy/>

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Picture 1. Supply- versus demand-side driven economies. Source: Legg Mason Capital Management