

## LABOR IN POST-INDUSTRIAL SOCIETY: A READING OF DRUCKER AND DE MASI THEORIES

CLAUDIA TANIA PICININ

Federal University of Technology – Paraná / Department of Production Engineering, Brazil  
[claudiapicinin@utfpr.edu.br](mailto:claudiapicinin@utfpr.edu.br)

ROSÂNGELA DE FÁTIMA STANKOWITZ

Federal University of Technology – Paraná / Department of Production Engineering, Brazil  
[rosangelas@utfpr.edu.br](mailto:rosangelas@utfpr.edu.br)

MARCELO WEISHAUP T PRONI

State University of Campinas – São Paulo / Institute of Economics, Brazil  
[mwproni@eco.unicamp.br](mailto:mwproni@eco.unicamp.br)

BRUNO PEDROSO

State University of Ponta Grossa – Paraná / Department of Physical Education, Brazil  
[prof.brunopedroso@gmail.com](mailto:prof.brunopedroso@gmail.com)

VANESSA ISHIKAWA RASOTO

Federal University of Technology – Paraná / Rectorry office, Brazil  
[ishikawa@utfpr.edu.br](mailto:ishikawa@utfpr.edu.br)

Copyright © 2015 by Claudia Tania Picinin. Permission granted to IAMOT to publish and use.

### ABSTRACT

The post-industrial society (for De Masi, 1999) refers to the period in which the dissemination of knowledge was essential for competitiveness in organizations. The aim of the paper is to compare the work of post-industrial society through the theories of Drucker and De Masi. The research is descriptive analytical approach, justified by the published literature. There was a systematic review to compare the works of Drucker (1999a) "The post-capitalist society" and De Masi (1999) "The future of work: fatigue and leisure in post-industrial society" to establish the similarities and differences. Drucker and De Masi formulated their theories about the same time (in the late twentieth century). Works converge as in the description of the knowledge society, both deal with the transition from capitalist society is stimulated for a new configuration in the production of knowledge. Drucker (1999a) describes the historical evolution of the events changed significantly as relations of production and capitalist work a decentralized production, specialization of labor and government coercion. Already, De Masi (1999) emphasizes the science and technology engines of development of knowledge society, and the knowledge revolution, the revolution of the scientific method. At this stage, there is a concern with the nature of organizations and the social. We conclude that, despite addressing the same social event, De Masi and Drucker differ as to work in the post-industrial society. Drucker emphasizes the evolution of industrial society to post-industrial society based on the despotism of capital (predominance of skilled labor) and knowledge as a main driver of change. The economy is based on government restructuring and permanent supply of skilled labor to follow technical and organizational innovations. For De Masi, the same transition was driven by the evolution of technology and the free time to technical progress, inducing workers to produce creatively to meet the market demand driven by globalization.

**Key words:** post-industrial society, knowledge society, capitalism.

## INTRODUCTION

"Post-industrial society" and "knowledge society" - the names used by Domenico De More and Peter Drucker, respectively - are terms that refer to the period in which the production and dissemination of the knowledge become an essential factor within organizations. In this article, will be prioritized the term "post-industrial society", which has also been adopted by other interpreters of the ongoing transformations in the contemporary world.

In the emerging economic organization model, the industry loses share in the produced wealth and job creation, while services are of increasing importance. The adoption of a new technological standard increased competition lead large companies (in all sectors of activity) to restructure its organization of work methods and their competition strategies. To enlarge the profitability of capital is necessary to increase labor productivity; for to introduce machinery and equipment more "intelligent" need to hire employees who have the knowledge necessary to keep the system in operation. The worker cognitive capacity and commitment to the company's guidelines become vital for capital appreciation.

In post-industrial society, struggle loses strength class and passes to predominate greater interdependence between capital and labor. In parallel, increase emphasis on building information networks and in the validation and dissemination of knowledge (Drucker, 1999a). Before, there was a focus on standardization of goods and specialization of labor; now, the post-industrial model calls for the diversification of consumers and the versatility of the worker. Administration of human resources gives rise to personnel management, which becomes concerned with the quality of life.

Of course, this transition to a post-industrial society progresses faster in developed countries, which increases the distance from the developing countries. For Carvalho and Kaniski (2000), the monopoly of knowledge as power production is the crucial point of distinction between central and peripheral countries.

Drucker (1999a) believes that in post-industrial society, physical work tends to be performed primarily by machines. The men and women have the irreplaceable function of the planning tasks, troubleshoot, and devote himself to contemplation of ideas. Tends to predominate the "knowledge worker", however, this assumption is not valid for all work situations. In the post-industrial era, innovation and increased productivity through knowledge (and easier access to information) occur in concentrated form in some segments, while certain branches of services remain organized in traditional ways.

Drucker discusses three moments of rupture in the history of capitalism: the Industrial Revolution, the Revolution Productivity and Managerial Revolution. Currently, a new revolution is changing society and especially organizations. Because of the ongoing transformations, the role of governments must also be reformed, as well as the educational system. This is for overcome the typical features of capitalism and establish a new economic, social and political.

De Masi emphasizes that the work continues to be executed as in the past. However, it's necessary adapt the behaviors rules of the post-industrial work, integrating the idleness and the work in life.

This paper aims to conduct comparative interpretations of Peter Drucker and Domenico De Masi on the work in post-industrial society. To this, a review is made of two impactful books: "post-capitalist society" and "The future of work: fatigue and leisure in the post-industrial society", seeking to

indicate some similarities and differences regarding the emancipation of labor opportunities in the new technological paradigm.

### **POST-CAPITALIST SOCIETY: THE APOLOGETIC VISION OF DRUCKER**

Initially, one must understand the main arguments of the philosopher and economist Peter Ferdinand Drucker Austrian - considered the precursor of modern management - exposed in his work "The post capitalist society", published in 1993. The highlights of the work trends that are transforming the economic order, social and policy since the late twentieth century and are composed of three parts: 1) society, 2) government, 3) knowledge. It assumes that in complex contemporary societies the access to information and knowledge management are the main assets of an organization and individuals in general.

The thinkers with similar vision to Alvin Toffler as (1990; 1992), Drucker (1999a) makes relations between facts of economic, social, cultural and technological for support his theory. First, a theoretical reductionism is assigned to Weber, Hegel and Marx, as Drucker believes that capitalism is the result of convergence of independent social phenomena, contrary to the theories of the above authors.

At the height of the industrial society, socialism was seen as the most likely form of a post-capitalist society. However, in the last decades of the twentieth century, it became clear that the Marxist dream would not be achieved. For him, society will emerge after overcoming the current stage of capitalism will be a company focused on the development of the people, not in the accumulation of capital and the relentless pursuit of profit. Drucker (1999a) states that the post-capitalist society (ie the knowledge society) is based on the technique, knowledge as a means of production. This company will not be "anti-capitalist" or non-capitalist, because the market will continue to govern the laws of economic activity.

"Capitalist society was dominated by two social classes: the capitalists, who owned the property and controlled the means of production, and workers - the 'proletarian' Karl Marx, exploited alienated dependent. The workers that initially formed the average 'affluent' class as a result of 'Productivity Revolution' - the revolution that began at the time of Karl Marx in 1883 and reached its climax in all developed countries shortly after the Second World War. Around 1950, the industrial worker - not more a 'proletarian', but yet 'hand-to-work' - seemed to dominate the political and the 'Managerial Revolution', the workers in the manufacturing industry began to decline rapidly in number and, even more noticeably in power and status. Around the year 2000 in any developed country traditional workers, that who produce and move goods, will be representing more than one-sixth or one-eighth of the workforce "(Drucker, 1999a, p. XIV).

The Productivity Revolution begins in 1881 with the application of knowledge to the study of Frederick Winslow Taylor work. Drucker (1999a) points out that "Productivity Revolution" is a later arrival to the Industrial Revolution, in which the systematic increase in productivity is characterized by knowledge applied at work. All these skills are the result of systematic and methodical study of Taylor.

Due to a visual difficulty, Taylor left school at Harvard and became an employee of an iron foundry. Analyzing your work environment, Taylor concluded that the worker must be the most recognized

and benefited. Drucker (1999, p. 19) points out that "Taylor's motivation was not efficiency, or the generation of profits for the owners [...]. The biggest beneficiary of the fruits of productivity should be the employee, not the employer. "Workers should receive according to their qualifications and performance.

The productivity in a company and workers' skills could improve significantly through correct management with superior knowledge about work. Drucker (1999a) points out that the study, the analysis and the division of labor was essential for that Revolution in Productivity arrived to fruition in the Taylor's observations. The employee training increased production and, consequently, the number of sales and the company's profit.

Declining Productivity Revolution occurs with the concentration of work and the progress of knowledge. After a while of expertise, companies could not increase their productivity. In the post-capitalist society the non-manual workers lose space for knowledge workers, therefore considered the employees society.

For Drucker (1999a), the eminent challenge of social structure emerging transcends the dichotomy between managers and intellectuals. The challenge is to apply the knowledge to work to generate increased productivity and innovation.

At the stage of Managerial Revolution, the prominent role of great importance is of the manager. According to Drucker (1999, p. 28), manager can be defined as someone who is "responsible for the application and performance of knowledge." Only with the correct application of knowledge, improvements in the company were achieved. The Managerial Revolution extends from the 1945 to 1990, being the managers responsible for the performance of the people, for the application and by performance of knowledge. The Managerial Revolution points as the only factor of production knowledge, devaluing the capital, profit and labor.

During the revolution, the individual with central role has changed: in the Industrial Revolution it has been the owner as main beneficiary; in the Productivity Revolution the most important subjects are workers and in the Managerial Revolution are the managers.

The knowledge, as well as corporate society underwent changes. For Drucker (1999a), the most significant change was the shift from knowledge to the rank of fundamental resource, transforming society in post-capitalist, changing social dynamics, economic and political. However, only knowledge is sufficient to support the economy, productivity and society in general.

The government and the training of employees are the foundation of a stable knowledge society. The political bodies well-structured can drastically reduce corruption, exercise right attitudes and resume performance capability. Drucker outlines three steps to overhaul the state institution (DRUCKER, 1999 p. 149).

- "(1) The Abandonment of things that do not work: of the things that have outlived their usefulness and their contribution capacity;
- (2) The focus on things that work, producing results in things that improve the organization's performance capacity; and
- (3) The analysis of half-successes, the Mid-failures. A reformulation requires the abandonment of all that does not work and the emphasis on what works".

Over time, besides the government, all the post-capitalist society finds difficulties in relation to increased productivity. Drucker (1999, p. 71) emphasizes that "the productivity of people working in knowledge work and services can actually be falling instead of rising." In this case, reorganization in the organizational structure of workers is necessary because the productivity generates wealth for the company and with this wealth the wages will be paid. The managerial need to find a way to increase the productivity of knowledge workers to prevent future stagnation. The outsourcing and the restructuring of organizations are possible solutions for productive problem.

The individual, in the knowledge society, plays a key role. Knowledge is not independent, impersonal, this is added and used by one person. People carry, create, expand, optimize, implement, teach and transmit knowledge, are able to control their own work, becoming the symbol of society (DRUKER, 1999). In this context, all individuals are associated, with no to have subordination.

The worker has emphasized its importance depending on the knowledge that possess. Thus, the social structure created, devalues the manufacturing work and the workforce. Drucker (1999) states that the manufacturing and the labor still exist in the new society, but to a lesser extent. If human muscles are needed, applications of manual skills and knowledge, become the greatest need. It is believed only in the productivity of highly skilled workers, of the technical knowledge. "The only long-term policy that promises success for developed countries is to transform the manufacturing, so that it is no longer based on manpower and become knowledge-based" (DRUKER, 1999 p. 60).

The previous workforce to post-industrial society was developed within the requirements set by the manufacture. The workers were supervised, dependent, subordinate to the machines and alienated. To demonstrate the difference between the machine operators in capitalism and knowledge workers, Drucker (. 1999 p. 48) describes:

Machine operators in factories did what was commanded them. The machine decided not only what to do but how to do. The knowledge worker can require a machine, be it a computer, an ultrasound analyzer or a radio telescope. But none of them tells you what to do, let alone how to do it. Without knowledge, which is employee-owned, the machine is unproductive.

Productivity is dependent on the wisdom of the operator, instead of the machine. Drucker (1999) believes that the use of knowledge leads to change, but does not hold the whole society. The use of knowledge is allied to the government and schools of specialization. The government needs to encourage the school to teach the worker and apply the acquired knowledge.

Businesses will continue to need people to contribute with manual skills. However, most companies will need for technical as these in addition to high level of ability need of high degree of formal knowledge. Drucker (1999, p. 59), points out that the technical "are basically the successes of highly skilled workers [...] that also have great knowledge and formal education and the ability to continually learn".

In the view of Drucker (1999, p. 60), the hand of work manufacturing needs to be evaluated. In the competitive manufacturing, the work will be done by knowledge workers served by machines. In this perspective, the most appropriate policy would "transform the manufacturing, so that it is no longer based on manpower and become knowledge-based".

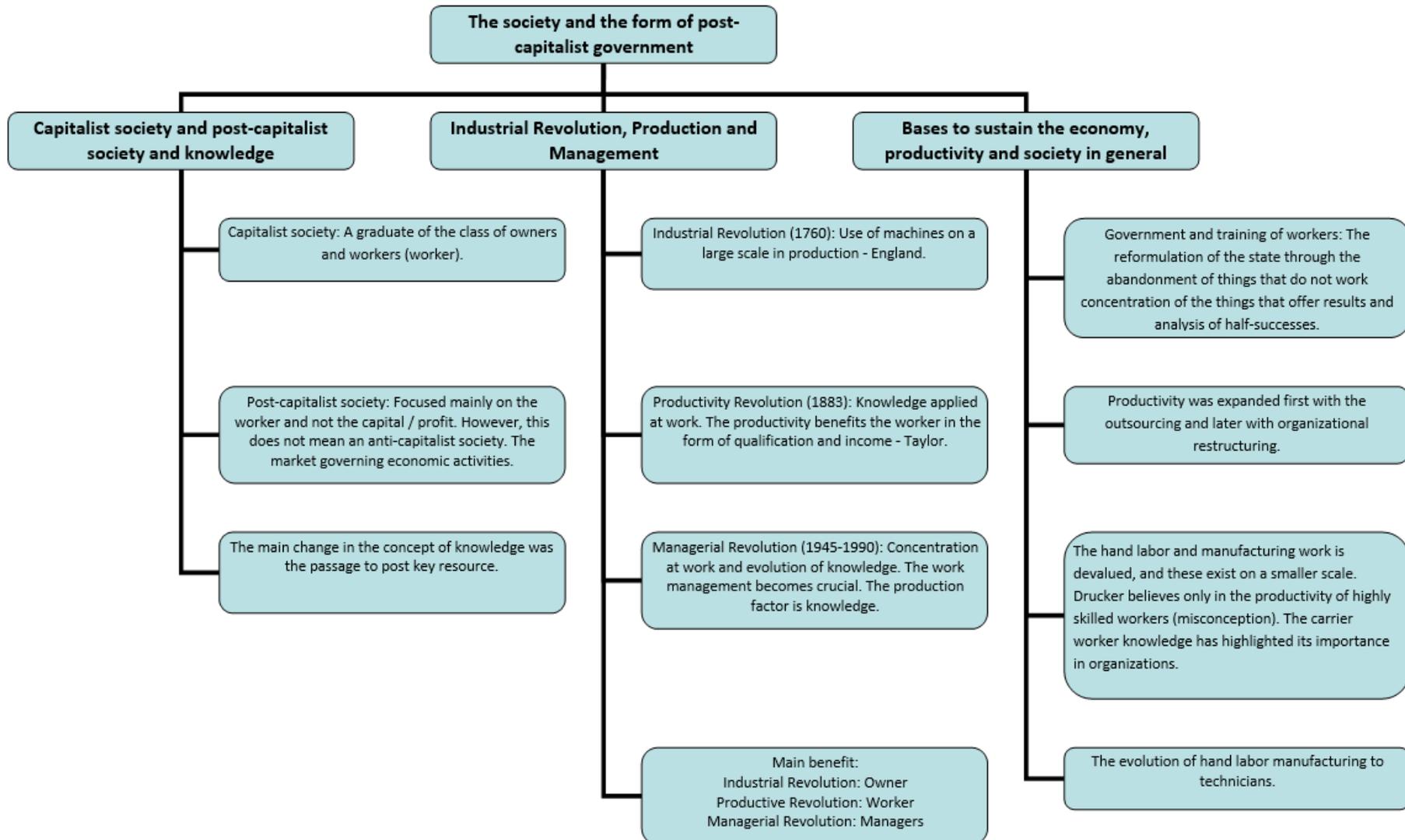


Figure 1: Key considerations in view of Drucker (1999) post-capitalist society. Source: Own authorship.

Drucker (1999a), in his "post-capitalist society", emphasizes the development of society based on capital to a society based on knowledge workers, reflecting a "labor" with the highest level of expertise. Knowledge, main generator value of this change, is one way to increase competitiveness for companies. The bases for the support of the economy and society are sustained on the government's restructuring and qualification or evolution of manufacturing labor for the training of technicians.

In capitalist society (post-industrial society), knowledge is "effective information into action, focused on results" (Drucker, 1999a, p. 25), and translated into a highly specialized well. One difficulty for the economy and for organizations is the inability to quantify the knowledge.

The trend is that companies operating in the knowledge generation exercise different techniques to capture and generate productivity with the knowledge (such as feedback), since people spend a large part of life in organizations (Drucker, 1999b).

Drucker (1997, 1998) points out that the knowledge will not be the only differential organizations to generate competitiveness, because the environment is uncertain and turbulent:

Knowledge is different from all other kinds of resources. It constantly makes itself obsolete, with the result that today's advanced knowledge is tomorrow's ignorance. And the knowledge that matters is subject to rapid and abrupt shifts--from pharmacology to genetics in the health care industry, for example, and from PCs to the Internet in the computer industry (DRUCKER, 1997, p. 18).

In the text "The rise of the knowledge society" Drucker (1993) emphasizes the phases of the Industrial Revolution, Production and Management described in the book "The post capitalist society," adding that the technology is allied organizations as key driver of change. About technology, Drucker (1982: 342) describes: "Technological advance does not occur in a vacuum, but is most frequently a direct response to a varied combination of social, economic, legal, and political forces".

In organizations with "knowledge workers", there is a predominance of decentralization and horizontality, ie the boss-subordinate relationship is undone and there is a constant need for improvement, new applications and innovation. This relationship is contrary to the period of the Industrial Revolution, in which the employee was dependent on machines and their function was to serve the capital. The premise of post-industrial society is that capital serves the employee to be keeper of knowledge. Another feature of the post-industrial society is the concentration in a single industry, since the diversification reduces the performance of organizations. In this context, outsourcing is inevitable (Drucker, 1999a). The focus of organizational performance is no longer the problem solving in the Industrial Revolution for to be the definition of problems in post-industrial society (VERGARA, 1993).

In "post-capitalist society", Drucker discusses a range of issues such as society, politics, industrialization, among others that are relevant to the various areas of knowledge (anthropologists, politicians, economists, sociologists, administrators and the like). However, the author is remiss in leaving the central theme of the work, "knowledge", to be treated in the final pages of the book. Vergara (1993) adds that while Drucker clarify ideas and concepts to his followers, little is added in relation to the work "The new realities" by the same author.

## POST-INDUSTRIAL SOCIETY: THE UTOPIAN VISION OF DE MASI

The vision of the Italian sociologist Domenico De Masi, exposed in the book "*Il futuro del lavoro: fatica and ozio nella società post industriale*", published in 1999, offers other elements to the discussion of new working relationships built within enterprises and their impact on contemporary society.

De Masi realize the transformation in the early twentieth century caused by technological advances which in turn improved the organization of factories that turn better organized, accelerated technological progress. The elements contributing to this dynamic were science, technology, globalization, education, among others. Evidencing the discoveries of atomic physics, molecular science, the development of transport, mass communications, electronics, and telecommunications.

The author attributes all this transformation to replace the isolated researcher at team work and yet, the organizational science has developed and strengthened the cognitive and operational activities within and outside the workplace.

The Taylor's discovery and Ford modified the organization and labor productivity, but it was the "scientific management" responsible for the introduction of new technologies, the creation of business networks, globalization of the economy.

To De Masi (1999, p.185), "good or bad, men's organization changed the world in the twentieth century more than politicians, priests, military or lawyers." However, a new technology alone does not have the ability to change the world if men knew not extract its potential.

But, contrary to what happened in the industrial society today is difficult to identify the place of production of any product. As an example, take up the computing instruments. These components are researched and produced in laboratories anywhere in the world. All information contained herein is disseminated in the same way, making it difficult to identify the origin of the goods or research.

Thus, there are nations and organizations that stand out in other basic research in applied research, but both have users everywhere. This relationship consumes information, products and images designed and produced by unknown. As a result, there are two opposite social classes: the producing and consuming.

The main difference lies in the fact that in industrial society there were an accumulation of problems and needs. Today, however, science provides all the answers, but, people do not know to ask the questions, that is, the computer provides all the answers, however, is not known question.

According to the author, society is facing the revolution of the scientific method and the relationship with nature. The main feature is the schedule for the future through a new way to do science through information. This information formulates problems and objectives with a view to taking advantage of opportunities. Demonstrating that can be prepared for problem solving.

In industrial society, workers struggled to get rid of exploitation and for better wages. Today, it is fighting for freedom in decision making. In this context, how to find a unitary logic?

De Masi (1999), citing the model proposed by Hegedus says that putting aside the intellect that analyzes, classifies and defines the reality and let the creativity direct the inventive work of science, there will be varieties and new opportunities, opening new fields of search.

However warns that ruling groups realize the complexities and expenditures of inventions. They need to know how to manipulate the information in being able to choose what opportunities will be transformed into practical to fund the use of these inventions and, above all, know how to create needs to be supplied with the fruit of inventions.

So, after the science open new fields and invent new products, the technical structure begins to have production for meeting the needs of consumers who were previously encouraged by marketing. According to De Masi (1999), this process requires four distinct phases:

The first phase: invention - is produced a large number of ideas, discoveries and inventions in which some translate into practice and others need to be refined and modified. The producers of these ideas, however, do not decide how to use their inventions, is not a power held by the scientific community but by the agents of modernization.

The second phase: decision - the decision makers make a pre-selection of ideas to be put into practice. In the post-capitalist society, it is in this phase that the obtaining, implementation and socialization of information derived from science and the arts are triggered. The leaders find new intervention spaces, preparation of information, and mobilization of scientific, economic and technical means producers of innovations needed for to transnationalization. Generate new production circles, getting new users. The ideas are transformed into consumer goods by decision of the modernizers.

The third phase: production - goes making the production decision - to the effectiveness of the production, which is not necessarily carried out at places where of the ideas come.

The fourth phase: consumption - the final product goes to the distribution, sale and consumption of users.

In this context, arises a new international division of labor where some areas have a monopoly of scientific research and political powers, and others, only consume the production or the ideas they take.

They identify, so two situations to consider. The first is the difference in place between the idea, the decision, production and consumption. The second, focus in the separation gap from one phase of another, that is, between the idea and consumption, there is a long time and the consumer does not realize the place, the time and the decisions made by others.

There is a prior programming in post-industrial society whose consumers are unaware of what, or who, nor where decisions are taken. This fact results in certain "impotence" by consumers drifting in a "impotence" of all against all that De Masi (1999) calls of the crisis.

In a historical retrospective, the new order emerged in the late eighteenth century, derived from an epic revolution, came from progressive changes of a conservative and persistent model. With the Second World War, accelerated the events, shifting the axis and the intersection between them.

The physics, chemistry, biology, philosophy, epistemology, technology, information systems, ecology and organizational sciences had substantial jumps revolutionizing vision, production, consumption, and cooperation and consumer desire.

The post-industrial era gives rise to a completely new model of society, whose symbol connectivity and outreach work and life, home and office, quantity and quality, ethics and business, goods and services, is adopted by everyone.

The labor market and organizations in the post-industrial era have suffered transformations. As an example, there are the computers that replaced the oral and written communication, a portion of the decision-making activities through information, changing the muscle strength by robotic systems.

With the absorption of repetitive work, left workers, the creative work, replacing the muscle by the brain. Technological changes have allowed the release of workers and consequently a payroll. However, the movement toward social development is slower than the scientific and technological revolutions resulting in the growth of unemployment and its consequences such as violence and lawlessness.

The workplaces no longer make up the organization's theorems and the working hours are not a current requirement of production. The transformations eliminate physical fatigue, the reduced work load, the displacements of the place and time of material production for local and reproduction of the time. All these changes generate a paradox: keep large amounts of idle workers, many young people subject to the inertia of unemployment or leave many needy social sectors.

To De Masi (1999), companies are increasingly market-oriented than for production, enjoying the most of the technologies that make flexible the production. Another relevant factor is the urban chaos that undermines the free time, the economy and the psychic balance of workers, making unnecessary the execution of work within the company.

The workers in the post-industrial society are the wish for a more autonomous, flexible and decentralized management of the work to take advantage of the opportunities arising from technological advances. The figure 2 shows the main visions of De Masi (1999) on the post-industrial society:

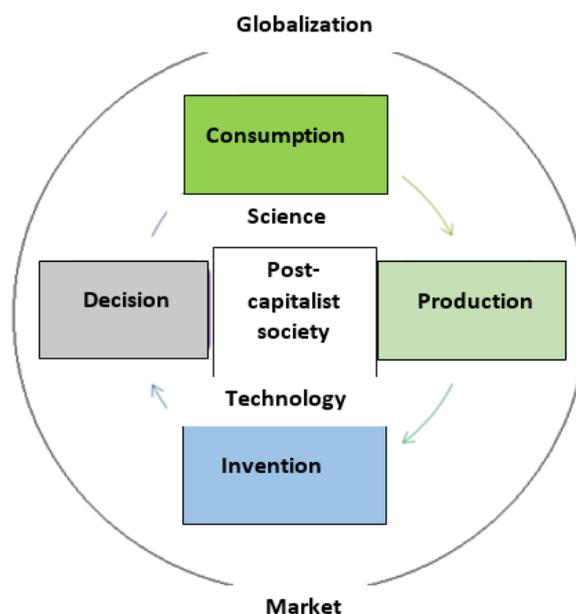


Figure 2: The key considerations of Masi's insight (1999) post-industrial society. Source: own authorship

To De Masi (1999), the transition model from the industrial to the model of post-industrial society was driven by the evolution of technology; and the free time from the facilitator use of these technologies induces workers to produce more creatively to meet the new market demands created by globalization.

### DRUCKER END DE MASI: CONVERGENCE AND DIVERGENCE OF THEIR THEORETICAL VISIONS

Drucker (1999a) and De Masi (1999) address the transition from capitalist society to a new configuration. In this new society, knowledge has a central role. In this new perspective, companies are conspicuous by their fitness and personal development.

While Drucker (1999a) focus mainly in the historical evolution of the facts that have significantly altered the form of capitalist production and labor relations, De Masi (1999) focuses its analysis on the factors that turned the degree of worker autonomy and the possibility of expand free time in contemporary capitalist society. Both emphasize that technology and science drove the emergence of the knowledge society. The figure 3 shows the convergence of the perceptions and de Drucker Masi, in terms of industrial and post-industrial society.

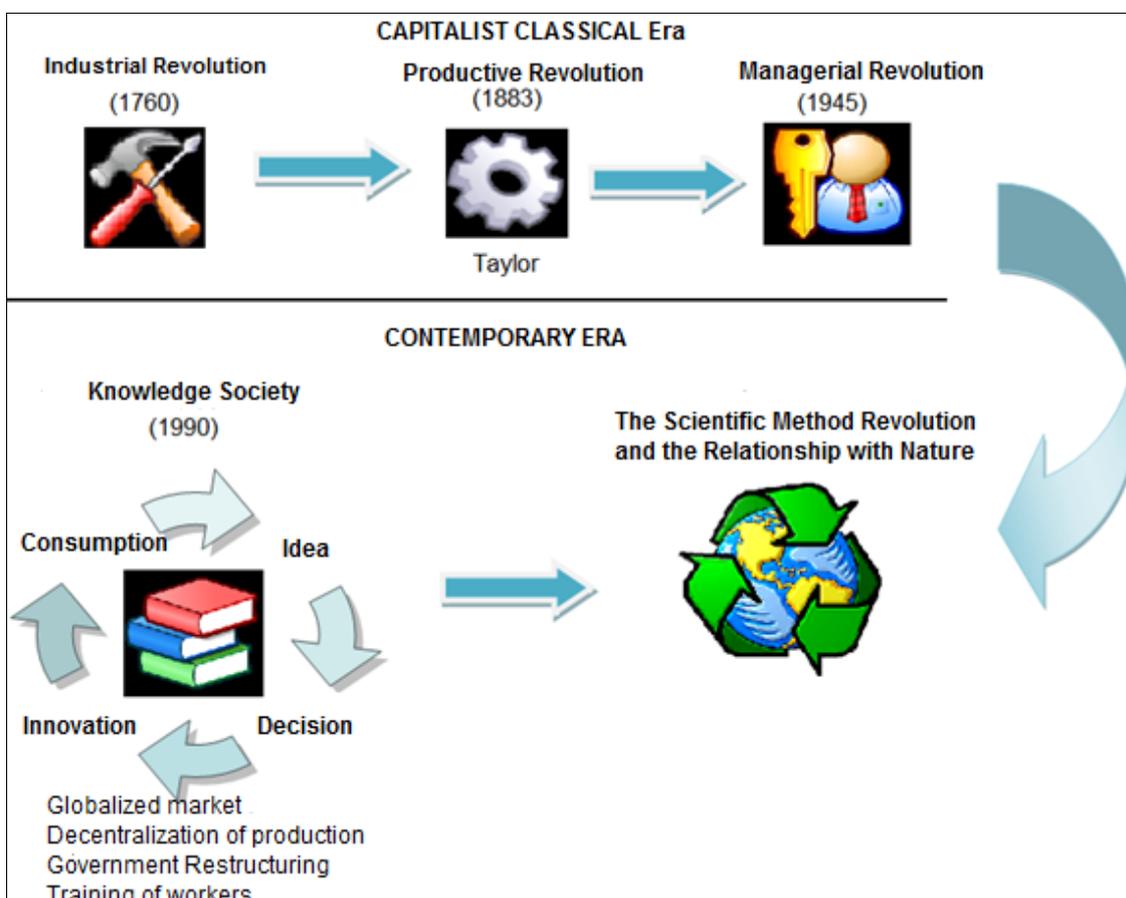


Figure 3: Representation of the transformation of contemporary society from the readings of Drucker e De Masi. Source: own authorship

Drucker has referred to the changes caused by the Industrial Revolution, followed by the Productivity Revolution in the period in which Taylor makes the most efficient production method, postulating finally the occurrence of new leap with the Managerial Revolution in that the manager's

role has become fundamental to organize the productive sector. Thus, the transition to a new stage of development in the current era assumes a logical sense.

The concept of the knowledge society, wins evidence in the 1990s, refers to the selection of several organizational levels generated ideas and the decision to develop and disseminate the selected idea, providing a continuous cycle of innovation. In turn, these innovations expand markets and generate profit for companies. This process is affected by the decentralized production and diversification of consumption, since products can be produced in more than one geographic location to be exported from the other and be sold with different characteristics in different locations. Due to the globalization of markets producers and consumers, there is greater demand for specialized workforce and enforcement or government incentives (DRUCKER, 1999a; DE MASI, 1999).

De Masi (1999) points to a similarity between the knowledge revolution and the revolution of the scientific method, showing the predominance of a new way of thinking and organizing human activities in many different spheres of sociability. In addition, there is a major concern of companies in their relationships with nature.

In its analogies, Drucker (1999a) and De Masi (1999) have complementary views on the evolution of society, although the phases (Industrial Revolution, Revolution Productive and Managerial Revolution) are addressed with different names. But the future of work in the knowledge society is thought from different assumptions, pointing to scenarios also distinct, since each author highlights specific trends that somehow influence towards the productive and organizational restructuring, as well as transition to a new business culture and new social habits.

## **THE POST-INDUSTRIAL SOCIETY AND THE NEW BUSINESS ORGANIZATION**

Based on proposals Drucker (1999a) and De Masi (1999), set out above, can raise questions about the type of society that will prevail after the industrial age. The differences between Drucker and De Masi not limit to the nomenclature used to address the emergence of a new historical context, "post-capitalist society" and "post-industrial society", respectively. The premise suggested by Drucker that the contradictions between capital and labor (own of the capitalist system) were being overcome not find evidence of proof in the first decades of the twenty-first century. In turn, the optimistic view of De Masi about the creative leisure also seems to be confirmed by an analysis of current trends.

As the economic dynamics based on industrial production gives way to a more complex dynamics, where the role of knowledge is essential to keep pace with innovations and to enhance competitiveness, contemporary society is being reconfigured. First, it should be mentioned that a major fraction of the workforce is employed in activities related to the service sector. Second, concern about increasing productivity shall require the deployment methods "post-Fordist", combining the rational use of capital with the humane management of working in large companies. Third, there is a profound change in leisure habits, aspirations and individual behavior, in the midst of a consumer society in which the work loses its centrality in the definition of social identities. However, these trends are not highlighted in the analysis of the two authors - Drucker (1999a) and De Masi (1999).

Carvalho and Kaniski (2000) explain that the information revolution has contributed to maximizing the exploitation of labor, and at the same time modifies the economic and social processes. It must

be recognized that the enhancement of knowledge and access to information has impacts on structures and power relations. Also, as you progress deindustrialization, are established new avenues for the development of the most advanced nations.

It is evident that information the user need to know change the characteristics that transform society, because this new society requires changing of the decision-maker for an activity manager (CARVALHO; KANISKI, 2000).

In Borges' perspective (1995, p. 187-188), "understanding that the information is an intrinsic factor to any activity, this factor should be known, processed, understood and used by the consolidation of services, products and systems information ", cooperate to enhance human activities of socio-cultural area to the economic area.

Borges (2000) points out that the social scene, economic, cultural, political and technological changes is guided by changes. These changes incur in changing social patterns and the relationship between the world of work and be human.

He explains that authors with different theoretical formations provide different and complementary visions to build a scenario of industrial society and postindustrial. Looking achieve a synthesis of these contributions to the understanding of the transformation in the business context, Borges (2000) points out the main characteristics of typical enterprise of industrial society and the knowledge society (or post-industrial), described in picture 1:

*Table 1: Differences between typical companies of industrial society and of the post-industrial society*

<b>Typical Company of the industrial society</b>	<b>Typical Company of the post-industrial society</b>
Analytical approach	Focus macro, holistic
Individualism and distance between people	Equal rights, a sharing, participation
Authority centralized, paternalistic and autocratic	Adult authority, facilitator, democratic
Continuity in a single professional niche. Excessive specialization	Multiple options. Freedom of choice. general view
Economies of scale. Tendency to gigantism and centralization	Decentralization, integration
Appreciation of quantity	Quality of recovery associated with quantity
Businessman with risk averse. Search of the protectionism	Businessman entrepreneur, creative and competitive
The big lever is the money	The big lever is information, knowledge
Success is guaranteed by the power of the investment in plant and machinery	The human mind is big "software". The computer is big hardware.

*Source: Adapted from Borges (2000)*

Industrial society had a less flexible management procedure, focusing on large-scale production and centralization of information. In the post-industrial society, knowledge is the central lever of the company, which tends to decentralize management information and produce knowledge through integration with employees.

Borges (2000) states that the knowledge society can be synthetically characterized by:

- i. The big driver of development is the man;
- ii. The information is a commodity product;
- iii. The knowledge is an economic element;
- iv. The information and communication technologies are revolutionizing the concept of "value added" to information;
- v. The distance and the time between the information source and the recipient are no longer important, because the data is easily transferred;
- vi. There are more likely to find innovative answers to critical than in the past situations;
- vii. The globalization was moved by information and communication technologies;
- viii. The new technologies have created new markets, services, jobs and businesses;
- ix. The information and communication technologies interfere in the processes, activities, management, costs, etc.;

To Alvarenga Neto et al. (2007, p. 9), a major challenge for contemporary organizations is "learn to swim in an ocean of information, prospecting and collecting information relevant to organizational survival and the understanding of a business environment increasingly dynamic and changeable".

Therefore, there are many authors who share the view that the changes in contemporary society not only caused a greater interaction between companies and employees, businesses and consumers, companies and business partners, as it turned labor relations and altered forms of relationships among individuals.

## **CONCLUDING REMARKS**

Drucker (1999a) emphasizes the evolution of society based in despotism of capital to a society based on knowledge workers, predominantly a workforce with the highest level of expertise and training. Knowledge, main generator value of this change, is one way to increase competitiveness for companies. As to the bases to sustain the economy and society, these are based on the government's restructuring and permanent qualification of manufacturing workers to follow technical and organizational innovations.

To De Masi (1999), the transition to the model of post-industrial society was driven by the evolution of technology and the free time from technical progress, inducing workers to produce more creatively to meet the new market demand driven by globalization.

The analyses of Drucker and De Masi present analogies and complementary aspects to portray the evolution of the most advanced societies over time. Are present the Industrial Revolution, the Revolution Productive and Managerial Revolution are addressed although with different names. As for the knowledge society, each author highlights some factors that, in a way, affect how companies started to organize work and manage their employees.

In the optimistic perception of the two authors, there were conditions for a significant advance. Industrial society had a more hardened management procedure, focusing on large-scale production and centralization of information. In the post-industrial society, knowledge is the central lever of the

company, which tends to decentralize management information and produce knowledge through integration with employees. However, is important to point out the limitations or weaknesses present in this line of interpretation. In particular, the two approaches seem obscure or ignore the tensions, conflicts and contradictions that remain marking the relations between capital and labor in the contemporary world and still are a real challenge for those responsible for the management of employees in undertakings.

## ACKNOWLEDGEMENT

The authors would like to thank the State of Research Parana Foundation<sup>1</sup> for their assistance for paper presentation.

## REFERENCES

- Alvarenga Neto, R.C.D.; Barbosa, R.R.; Pereira, H.J., (2007), Gestão do conhecimento ou gestão de organizações da era do conhecimento? Um ensaio teórico-prático a partir de intervenções na realidade brasileira. *Perspectivas em ciência da informação*, 12(1), 5-24.
- Borges, M., (1995), A informação como recurso gerencial das organizações na sociedade do conhecimento. *Ciência da Informação*, Brasília, 24(2), 181-188.
- Capra, F.; Luisi, P.L., (2014), *The systems view of life: a unifying vision*. Cambridge: Cambridge University Press.
- Carvalho, I.C.L.; Kaniski, A.L.A., (2000), Sociedade do conhecimento e o acesso à informação: para que e para quem? *Ciência da Informação*, Brasília, 29(3), 33-39.
- De Masi, D., (1999), *O futuro do trabalho: fadiga e ócio na sociedade pós-industrial*. 2. ed. Rio de Janeiro: Editora UnB; José Olympio.
- Drucker, P. F., (1989), A organização fundamentada na informação. In: DRUCKER, P. *As novas realidades*. 2. ed. São Paulo: Pioneira, p. 177-188.
- Drucker, P. F., (1992), Comentário final: os anos 90 e além. In: DRUCKER, Peter. *Administrando para o futuro*. São Paulo: Pioneira, p. 211-230.
- Drucker, P. F., (1993), The rise of the knowledge society. *The Wilson Quarterly*. 17(2), 52.
- Drucker, P. F., (1998), The future that has already happened. *The Futurist*. 32(8), 16.
- Drucker, P. F., (1999a), *Sociedade pós-capitalista*. 2 ed. São Paulo: Pioneira.
- Drucker, P. F., (1999b), Managing oneself. *Harvard Business Review*. 77(2), 65.
- Drucker, P. F.; Dyson, E.; Handy, C.; Senge, P., (1997). Looking ahead: implications of the present. *Harvard Business Review*, 75(5), 18.
- Lévy, P.F., (1999), *Cibercultura*. 1. ed., São Paulo: Editora 34.
- Tofler, A., (1990), *Powershift: as mudanças do poder*. Rio de Janeiro, Record.
- Tofler, A., (1992), *A terceira onda*. 18. ed. Rio de Janeiro: Record.
- Vergara, S. C.(1993). Resenha: A sociedade pós-capitalista (Druker, Peter - 1993). *Revista de Administração Pública*, 27(4), 149-151.

---

<sup>1</sup> Fundação Araucária de Apoio ao Desenvolvimento Científico e tecnológico do Paraná.