

The Knowledge as the Main Determinant on the Employment and the Employees' Profile

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Abstract

Throughout history, there has been a radical transformation concerning the developmental stages in the lives of human beings. The first stage that initiates with the agriculture continues with industry which is the main turning points in the sociological perspective of work and working life. The Industrial Revolution that was the sign of transformation from the manual oriented economy to the machine oriented ones also shifted the requirements of the human resource capital. The new terms about the work entered to the literature such as the time, wage, trade unions, working conditions, factories and so forth. This event called as industrialization as different from the period of agriculture isolated the work and family life from one another. In the third period, the economic, sociological, and the political procedures resulted in the development as well as the importance of the knowledge and the knowledge economy. Today, the knowledge which is the particular indicator of knowing something and know-how is associated with the welfare and the power. Those who can produce and utilize the knowledge can compete with the others easily. Therefore, it can be stated that the knowledge is the main determinant of current age called as 'the age of information'. In a way, this inclination shaped a great many things in the society from the education to the employment strategies of the nations. Even more, the requirements of the employees altered unlike those in the industrial period. As an example, the internationalization of the human capital in terms of their qualifications, the occurrence of the knowledge workers put a different point to the employment based strategically approach. Within this framework, the main aim of the study is to analyze the changing perspectives of the employment and the employees by referencing to the information centered society.

Key Words: Knowledge economy, knowledge, knowledge worker

Introduction

There has been an ongoing change all over the course of the history in every fields of the society, that is to say, politically, economically, scientifically and so forth. From this perspective, it can be argued that the change is the main dynamism of the world. Each member of the world renew themselves based upon this change criteria perpetually. Concerning the developmental process of humankind, that is also the case. For example, the industrial revolution which is the root of the economic growth in the Western countries on technology which results from the usage of useful knowledge and the interaction of the knowledge itself can be interpreted as the turning point in the life cycle of the humans. The reason is that the industrial revolution which was a kind of transition from hand made

products to the industrial manufacture provided the productivity growth and the relative quality in the life. ¹

In the aftermath of industrial revolution, the parameters belonged to the age of agriculture was redefined. Along with the development of industry, new terms such as factory, wage, trade unions, and social policy implementations entered to the life and the life of one's own was isolated from the working place. The working hours occurred and the freedom of the employees was submitted to the initiative of the employers in spite of the fact that the means of production did not belong to the employees which bring about the alienation to the work, to the employers and to the product that they manufactured. The gap between employees and the employers resulted in the clash, so to say, the clash of power on the manufacturing system. At the same time, the capitalism which can be taken into account as the social system in which "the means for producing and distributing goods (the land, factories, technology, transport system etc.) are owned by a small minority of people." To put in another way, the capitalists are those who possess the capital. And the majority of the people who work for them are called the workers who sell their ability to work in return for a salary or wage. That's why, the ultimate effect of industrial revolution is the occurrence of the class of employees and the employers. But, the profile of the employees are too low, they are not so talented and they just serve for the capitalist idea which is profit driven. Here, it can be said that in the early times of the industrial revolution, the great majority of the people who were workers were exploited by the employers because of the fact that they do not have the bargaining power and they are not so skilled. All these also cause the low wage for the workers as well. ²

The third turning point in the lives of humankind is the knowledge revolution which lays a great emphasis on the production and the usage of the knowledge. In this age, the knowledge is synonymous with the power. Those who produce knowledge and those who use it have the power all over the world. In this term, the employment and the worker profile radically changed on account of the fact that the requirements of the employment and the worker altered too. Therefore, in this study, the ultimate objective is to reveal the significance of the knowledge economy on the labor relations generally, and specifically the employment and employees profile.

Knowledge

Knowledge that is regarded as the asset of the upcoming future is "understanding of or information about a subject that you get by experience or study, either known by one person or by people generally" or "the state of knowing about or being familiar with something". ³ What about information, wisdom, data and the other terms? What are the differences of these terms with knowledge? Are they the same or similar? The equation among these terms can be revealed in the following formula: ⁴

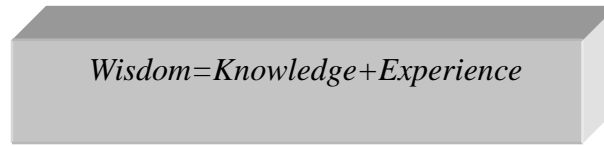
¹ Joel Mokry, "Why Was The Industrial Revolution A European Phenomenon?" **Supreme Court Economic Review**, Vol 10, The Rule of Law, Freedom and Prosperity, 2003, pp. 27, 28.

²<http://www.worldsocialism.org/spgb/what-capitalism> (Retrieved 15.04.2013).

³ Cambridge University Dictionary, <http://dictionary.cambridge.org/dictionary/british/knowledge?q=knowledge> (Retrieved 15.04.2013).

⁴ Anthon P. Botha, **Knowledge-Living and Working With It**, Published by Juta and Co, Cape Town South Africa, 2007, p. 10.

Figure 1: The Equation of Knowledge


$$\text{Wisdom} = \text{Knowledge} + \text{Experience}$$

Source: Anthon P. Botha, **Knowledge-Living and Working with It**, Published by Juta and Co, Cape Town South Africa, 2007, p. 10.

As seen in figure one, knowledge, along with the experience, equates the wisdom. In regards to hierarchy, wisdom ranks higher than knowledge which was followed by information and data. The knowledge can be put in order in this way:

- ✚ Data includes raw and fresh facts.
- ✚ Information is the facts given in a particular context.
- ✚ Knowledge is the information that targets action.
- ✚ Wisdom is to determine which knowledge can be used in which context and for what purpose. So, wisdom is the highest level of ranking.

So as to make these terms more concrete, a new example can be given. For instance, if someone says “30”, this does not mean anything. It could be height, kilometer, kilograms or something like that. So here the number 30 is the raw material. But, if someone says 30 Centigrade, everyone will understand that it is about temperature. This is the information which is used in contexts. Additionally, if someone says that 30 is the age when a person is productive most, this is called as knowledge. So, in a way knowledge is type of information that is accepted generally by everyone. Wisdom as the upper degree of knowledge is common feeling which is also tested with the experiences as well.⁵ In a way, knowledge is something like a term that is neither data nor information but it is actually related to both. Maybe, knowledge “*is plural, heterogeneous phenomenon that comprises multiple rationalities, whose logics are not defined by a transcendental norm but relate to the pragmatics of contexts.*”⁶ There are some very particular developments that play a key role in the development of the knowledge as in the following:⁷

- a) The economic globalizations that necessitate the firms adapt themselves to the innovation and the scientific improvement.
- b) The increasing awareness concerning the value of specialized knowledge.
- c) The increasing awareness on the knowledge as a distinct factor for production.
- d) Computer networking.

As seen in the items, the knowledge taken into account as the value in 21th century does not occur all of a sudden. However, there are some turning points that contribute to the emergence of the knowledge such as industrial revolution, globalization and computer networking. All these things pave the way that the knowledge is the ultimate result concerning these development oriented issues.

Age of Knowledge and Its Reflections on the Society

Rather than the theoretical basis of the knowledge, it is a kind of name that is associated with a particular period. Especially after the neoliberal policies in the world following the

⁵ Botha, Ibid, p. 10.

⁶ Elias M. Awad and Hassan M. Ghaziri, **Knowledge Management**, Second Impression, Published by Dorling Kindersley, India, 2008, p. 56.

⁷ James W. Cortoda, **Rise of the Knowledge Worker**, Heinemann Press, 1999.

crisis of 1970, the world started to debate about the knowledge and its importance. The industry and all aspects of life started to be associated with the knowledge. The paradigms of the industrial revolution changed. Instead of physical inputs, the intellectual capabilities of the humans come to the fore.⁸ The knowledge is regarded as a sort of “unique attribute” and it is dealt with by humans through mental processes, awareness as well as intuition and can solely be transferred through learning activity.⁹

Here, this age is named after information age, knowledge age, information society and ext. The developmental process is a little bit relative. Without any hesitation, the unique feature of this society is that these societies are driven by the creativities. It is an advantage for the economy but some people like Schumpeter argue that this is a period of “creative destruction.” Yeah, it causes continuous economic growth and richness for the general society and it includes the public good but its identity of “profit” disorders the social norms and social orders.¹⁰ The availability of the knowledge in the internet erodes some of the professions and also the subject centered knowledge.¹¹

The remains of the knowledge society dates back even before the industrial revolution. To put in an explicit term, it can be argued that the knowledge society is not the first experience of the humankind in the nineteenth century.

As an example, the Renaissance which can be interpreted as the rebirth of the Europe is well known for the scientific improvements in the Middle Ages. There were technological and communicative progresses that left a great impact on the society with the mass printing technologies that superseded the hand written manuscripts.

In the period of Renaissance, the books are started to be published and they became more accessible. As in Renaissance, the knowledge society that is the upper advance stage of the knowledge production and the usage, electronic communications, software service providers, the internet, the mobile phones symbolize the extended form of the information. In each situation, the possession of the knowledge is viewed as the social and economic resource, in a way, commercial item.

Both in the period of Renaissance and modern age, the knowledge has been practical if it is put into practice along with its theoretical side.

All these things pave the way that there is not a single knowledge society but a few which changed the vision of the nations and broadened their perspectives.¹²

⁸ Walter W. Powell and Kasia Snellman, “The Knowledge Economy”, **Annual Review of Sociology**, Vol 30, 2004, p. 199; Süleyman Kevük, “Bilgi Ekonomisi”, **Journal of Yaşar University**, 1/ 4, Ekim 2006, pp. 320-322.

⁹ Debra M. Amidon, **Innovation Strategy For The Knowledge Economy The Ken Awakening**, Heinmann Publication, USA, 1997, p .5.

¹⁰ Andy Hargreaves, **Teaching in The Knowledge Society Education In The Age of Insecurity**, Teachers College Press Publication, Colombia University, USA, 2003, p. 1.

¹¹ Peter John Williams, “Valid Knowledge: The Economy and The Academy”, **Higher Education**, Vol 54, No 4, October 2007, p. 512.

¹² Jennifer Adelstein, “What Makes Knowledge Society? Privileging Discourses”, Ed. Katerina Nicolopoulou, Mine Karataş Özkan, Ahu Tatli, John Taylor, **Global Knowledge Work Diversity and Relational Perspectives**, Edward Elgar Publishing Limited, USA, 2011, p. 9.

Table 1: The Comparison of the Knowledge Societies

Knowledge Society	Discursive Objects	Renaissance
Information technologies Computers	The shift of communication Technology	Script to printing The development of the printing press
Electronic telecommunication systems	The spread of knowledge	Book publishers and the book sellers
Knowledge as a social and economic resource	Resource	Publishing as a social and political source
Knowledge as an accessible concept	Accessibility	Greater access to the written materials
Application of the knowledge as well as its practice	Not just theory but also practice	The theories are made a knowledge framework
New forms of organization that emphasizes knowledge frameworks	Advance	The progress in the translation
Electronic databases	The storage of the information	Printed books
Information society	Informing and to be informed	The transition to medieval to early modern
From elementary education to higher education	Educational shift	From oral to literature society
Global institutions, governments, and corporations	Institutional control	Church and the state
Knowledge society contributes to the development of the globalization.	Political effectiveness	The nation states and nationalism

Source: Jennifer Adelstein, "What Makes Knowledge Society? Privileging Discourses", Ed. Katerina Nicolopoulou, Mine Karataş Özkan, Ahu Tatli, John Taylor, *Global Knowledge Work Diversity and Relational Perspectives*, Edward Elgar Publishing Limited, USA, 2011, p. 10; Michael B. Arthur, Denise M. Rousseau, *The Boundaryless Career A New Employment Principle For A New Organizational Era*, Oxford University Press, UK, 1996.

The age of knowledge brings communication technologies and the computer as the main directors of the labor and labor relations. Unlike from the agricultural and industrial revolution, the age of knowledge can be defined as the knowledge revolution as it causes radical changes in all the spheres of life. Especially those countries that adapt themselves to the knowledge based orientations get a competitive advantage over the other countries. Also, in this age, the knowledge means the power and the power means running and controlling the world.¹³

The production and the use of the knowledge which adds plus value to the productivity and innovation¹⁴ is the indispensable parts of the knowledge age. All the paradigms of the society are shaped within the knowledge identity and learning such as lifelong learning that constitutes the core of the society and that paves the way for the development of the society as well. Here it can be discussed that it is impossible to isolate the knowledge age from the ongoing learning process. The learning is not teacher centered but in the stark contrast the learning is student centered. And also the learning as different from the classic

¹³ Derek Law, "Information Policy For A New Millennium", *Library Review*, Volume 49, Number 7, 2000, p. 324.

¹⁴ Giovanni Peri, "Determinants of Knowledge Flows and Their Effect on Innovation", *The Review of Economics and Statistics*, Vol 87, No 2, May 2005, p. 308.

idea is not just confined to the school and there are lots of sources to learn information. However, the function of the schools is to make the students teach how to learn.¹⁵

In the age of knowledge, the production of the knowledge as well as using it has been paramount importance as the knowledge is taken into account as the power itself. The internet, the telecommunication systems, the computer are the prominent devices utilized for the production of the knowledge which pave the way that humans come closer and the world is smaller. This also fosters the globalization itself.

The information age in which organizational effectiveness gained momentum with the various management styles such as Total Quality Management (TQM), Strategic Human Resources Management (SHRM), and Talent Management (TM) supported the competitiveness and also operational learning for the businesses.¹⁶ The old paradigms, the old management styles, and the traditional company concepts doom to change with this new trend as shown in the following table.¹⁷

Table 2: The Difference between Traditional Company and Knowledge Driven Company

Traditional Company	The Knowledge Driven Company
Procedures	Challenges
Centralized Management, Hierarchy	Self-Management, Flexibility
External Allocation of Work	Ones of allocation of work
Resistance to the change	Ongoing change
Closed to the world	Open to the world
Supervision	Self-supervision

Source: Peter Hold Christensen, *Knowledge Management Perspectives and Pitfalls*, Copenhagen Business School Press, Denmark, 2003, p. 10.

As seen in Table 2, with the knowledge oriented concept, the businesses commenced to alter their strategies, and they reshaped their ideas concerning the knowledge itself. The new age made the companies bend the rules and they put the flexibility into the center. The companies in this age are open to change and open to the world. So, they used these kinds of motives and methods to capture the attention of the knowledge workers and to adapt this new era as illustrated in Table 3.¹⁸

¹⁵ Andy Hargreaves, **Teaching In The Knowledge Society Education In The Age of Insecurity**, Published by Teachers College Press, New York, USA, 2003, p. 1, 3; Refik Balay, "Küreselleşme, Bilgi Toplumu ve Eğitim", **Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi**, Cilt 37, Sayı 2, 2004, p. 69.

¹⁶ Amit Shankar Mukherjee, Michael A Lapre, Luk N. Van Wassenhove, "Knowledge Driven Quality Improvement", **Management Science**, Vol 44, No 11, 1998, p. 35.

¹⁷ Peter Hold Christensen, **Knowledge Management Perspectives and Pitfalls**, Copenhagen Business School Press, Denmark, 2003, p. 10.

¹⁸ Christensen, *Ibid*, pp. 10, 17.

Table 3: The Motives and the Methods That the Knowledge Companies To Use

Motives	Methods
Adapting a management style that is quite modern for the knowledge workers. Searching new knowledge.	Informing the public concerning the engagement of the company in the knowledge management. Allowing the staff to produce new knowledge and making them to be productive.
Learning from the experience of the company.	Spending so much time on the projects that the company developed well in advance.
Improving the knowledge of the staff concerning the company. Guaranteeing the independence of the staff	Establishing a network that provides to the each staff what they are doing about the company. Documenting the knowledge of the employees which will decrease the vulnerability effect of the company when the staff leaves from the work.
Finding a way to retain the staff as they possess invaluable knowledge. Encouraging the staff to improve knowledge sharing.	Offering better opportunities to the staff which will motivate them. Developing the dialogue among the staff to share their knowledge on the staff.

Source: Peter Hold Christensen, Knowledge Management Perspectives and Pitfalls, Copenhagen Business School Press, Denmark, 2003, p. 17.

The companies in the age of knowledge are to use some motives and methods to increase the dynamism of them. For example, they should adapt flexible management, they should find a way to search for new knowledge, they should get lessons from their past experiences, they should give utmost importance to free mobility of the employees, they should learn to retain the staff and so forth. These new organizational ways of the knowledge companies are to be competitive and it is to strengthen the organizational culture of them which is the sinequanon of the information age. In this context, considering that the information age is effective in all parts of society, the reflections of the knowledge on the society as a whole not just on the businesses can be summarized in the following items.

- ✚ The improvement of the knowledge in the society can be regarded as a kind of revolution as it ends with radical transformations.
- ✚ In the age of knowledge, the society is started to be shaped concerning information production and its usage.
- ✚ The fundamental paradigms of the industrial society were left and the codes of the community were reshaped within the idea of innovation.
- ✚ The knowledge means economic, politic and cultural power all over the world.
- ✚ The classical management styles also changed as in personnel management. Instead of all these, new and modern ones were replaced like human resource management, strategic human resource management, talent management and so on.
- ✚ The hierarchical mechanisms of the working environment were left and flexibility was put into practice. At the same time, flexible working such as tele-work, part time work, homework entered to the working.
- ✚ The devices of the knowledge society such as internet and telecommunication accelerated the process of globalization.
- ✚ New concepts in the education like lifelong learning, distance learning occurred. So, the learning process went beyond the school environment and a particular age period owing to the fact that the information becomes old and obsolete in a short period of time, and it is to be updated. All these arguments pave the way that the learning turns into a paradigm which something like from “cradle to grave”.

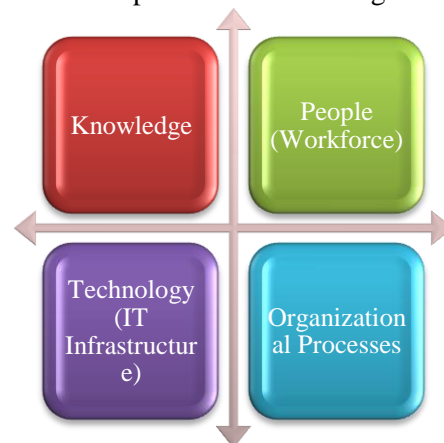
- ✚ The profiles of the employees changed as well. This means that the requirements of the workers are needed to be updated within the context of the knowledge age. Otherwise, the companies do not increase their competitive advantage as the human resource is their assets.
- ✚ The e-mail, Google, Facebook, messenger as the products of the social media are the other outputs of the information age. Through this equipment, the world come closer and the people get in touch with one another easily.
- ✚ The modern education techniques like computer assisted learning and also the technological devices like smart boards, overhead projectors, computer labs altered the vision of the education.

Knowledge Management

The internal infrastructure of the companies and the increasing complexity of the environment make them invest in innovation and the scarcity of the resources brings the knowledge to the fore as the success of the businesses. From this perspective, it can be mentioned that knowledge is taken into account as the crucial factor that surpasses the other production factors such as labor, capital, land, and so forth. Here, knowledge management occurred “as a label for consciously perceiving and addressing the issues raised by the importance and availability of knowledge.” Knowledge management can be addressed as a sort of management that manages the knowledge as the source. It is also concerned with managing the knowledge related concepts such as knowledge workers on the basis of creating and maintaining plus value concerning knowledge. Knowledge management as its perspective is so wide; it includes business studies, sociology, psychology, educational science, computer science, cognitive science, and so forth.¹⁹

Knowledge management in other words is a new, interdisciplinary concept that puts the knowledge on the center of the organizational processes. Knowledge as it provides the ultimate competitive advantage for the firms; it involves different factors like technology, people, organizational processes, and knowledge.²⁰

Figure 1: The Components of Knowledge Management



Source: Elias M. Awad and Hassan M. Ghaziri, *Knowledge Management*, Second Impression, Published by Dorling Kindersley, India, 2008, p. 27.

¹⁹ Herwig Rollett, **Knowledge Management Processes and Technologies**, Kluwer Academic Publishers, Massachusetts, USA, 2003, p. 6.

²⁰ Awad and Ghaziri, *Ibid*, pp. 26, 27.

Figure 1 reveals that knowledge management is the main framework of the management in the organizations rooted in the production of the knowledge including knowledge, people as human resource, technology and organizational processes. According to the knowledge management, the organizations use accessible knowledge from outside resources, stores knowledge in business products, represents the knowledge in various databases as well as documents, promotes the knowledge improvement by means of organizational culture and the other incentives, transfers and shares the knowledge among the different parts of the organizations and assess the value of the knowledge.²¹

Knowledge Economy

Knowledge economy which will be “complemented by a set of organizational mechanisms that encourage and promote the sharing/reuse of organizational knowledge”²² can be defined as a term that plays a key role in the production as well as the services based knowledge intensive activities that contribute to the technological scientific progress besides the quick obsolescence. This means that in the knowledge based economy, the primary thing to be taken into account is the knowledge itself and it is to be updated perpetually. Additionally the key component of the knowledge economy is the dependence on the mental in other words intellectual capabilities of a particular person rather than the physical strength or the natural resources. The main arguments mentioned here are the results of the leading sides of the economy especially in the developed countries which is actually driven by the technology and technological devices centered on the knowledge production and spread.²³

The concept of knowledge economy is the direct results in the development of the new technologies which starter to emerge in the late 1950s and gained momentum with the advance in the personal computers and then systematically become so widespread through the use of email and the internet technology.²⁴ All these things make the knowledge as the main important factor in the development of the economy as a result of the high technology investments and high technology industries.²⁵

The usage of the knowledge economy dates back to the OECD report from 1996 and also the Lisbon strategy in the European Union from 2000 in spite of the fact that the debates about the central role of the concept for productivity and the competitiveness commenced so earlier. The knowledge economy entails the production of the knowledge as a sort of must for the countries along with the innovation. These requirements also necessitate the transformation of the employment policies as well as the employees’ profiles.²⁶

The emergence of the knowledge economy is the indicator of the human development. It ruins the particular parameters of the agricultural and industrial period. For example, in the agricultural economy, the key source is the land while in industrial economy, natural

²¹ Awad and Ghaziri, *Ibid*, p. 27.

²² Uday R. Kulkarni, Sury Ravindran and Ronald Freeze, “A Knowledge Management Success Model: Theoretical Development and Empirical Validation”, **Journal of Management Information Systems**, Vol 23, No 3, Winter 2006, 2007, p. 311.

²³ Powell and Snellman, *Ibid*, p. 199.

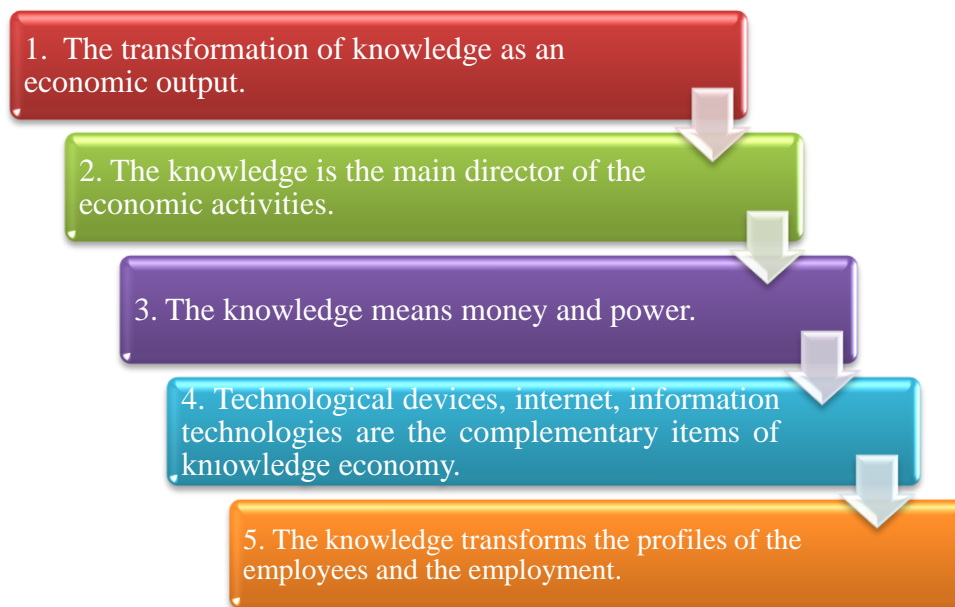
²⁴ Powell and Snellman, *Ibid*, p. 199.

²⁵ **OECD The Knowledge Based Economy**, General Distribution, Paris, 1996, p. 7.

²⁶ Knut Ingar Westeren, “Developments In The Analysis of The Knowledge Economy: Introductory Comments”, Ed. Knut Ingar Westeren, **Foundations of The Knowledge Economy Innovation, Learning and Clusters**, Edward Elgar Publishing Limited, USA, 2012, pp. 1, 6.

resources like coal or iron ore as well as the labor are of great significance. On the other hand, in the knowledge economy the key resource is the knowledge which plays an important role in the development of the economy which is not a new idea actually. At the same time, it is to be demonstrated that knowledge is not a peculiar concept to the knowledge economy or knowledge age, contrarily; it has been used since the period of Industrial Revolution. However, the intensity of the knowledge and its main significance increased in the age of knowledge and it becomes the main dynamics of the economy as well which means that there is a rise in the knowledge intensity of the economic activities and the concept of globalization process.²⁷

Figure 2: The Dynamics of Knowledge Economy



Source: John Houghton and Peter Sheehan, *A Primer On The Knowledge Economy*, Centre For Strategic Economic Studies, Victoria University, Australia, 2000, pp. 1, 2.

Knowledge Worker

The importance of the knowledge also has a deep impact on the worker and employment profiles. Knowledge worker is the output of the knowledge society who emphasizes the significance of the knowledge. The progress in the knowledge didn't just transform the society, education but also it affected the worker profile and the employment policies. The knowledge skills are quite different from the industry or agriculture skills which can be assessed that the employment tactics of the twentieth century are not the case for the organizational innovation in the age of information. As in the management skills of the organizations, the requirements of the workers strikingly changed. As an example, the basic skills like reading, writing become so irrelevant and inadequate when we enter the twenty first century as the main parameters to be focused in this period is the continual learning oriented knowledge production. Even the skills like computer programming,

²⁷ John Houghton and Peter Sheehan, *A Primer On The Knowledge Economy*, Centre For Strategic Economic Studies, Victoria University, Australia, 2000, pp. 1, 2.

system analysis and system design have to be redefined again by taking into account the critical in the society.²⁸

The knowledge workers are quite distinctive from the other workers in regards to their task structures and skill requirements that bring them creative use, manipulation, and the extension of the knowledge. Moreover, the requirements of the knowledge workers are those: continuous job learning, partly formal education, the capability to use modern technology, information and the communication technologies. The knowledge workers also do not work alone they work in teams. Based upon all these, the knowledge workers can be defined as the groups of workers or wage earners whose job meet these criteria: “(1) the use of information technology; (2) independent design of important aspects of the job; and (3) at least upper intermediate vocational training (a college degree).²⁹ The differences between knowledge workers and the workers in the industrial revolution are stated below.

- ✚ The knowledge workers rely upon their intellectual capabilities while the industrial workers depend on their physical strengths.
- ✚ The knowledge worker focuses on innovation but the industrial workers centers on production.
- ✚ The knowledge workers are goal oriented. The industrial workers are wage oriented.
- ✚ The knowledge workers’ objective is the production of the knowledge. However, the industrial workers aim at the production of the commodities.
- ✚ There is no time and space limitation for the knowledge workers, but that is not the case for industrial workers on account of the fact that their works are carried out in a limited area, that is, the factory.
- ✚ The knowledge workers are educated and skilled but this is not the point for the industrial workers. For example in the early years of the industrialization, the workers are low skilled.
- ✚ The instruments of the knowledge workers to produce the knowledge are strikingly different from the industrial workers. Knowledge workers use computers, information technologies whereas the industrial workers utilize the machines in the factory.
- ✚ The knowledge workers have the bargaining power as they cannot be replaced easily, but this is not so in industrial workers.
- ✚ The knowledge workers view the work as a time demanding activity while the industrial workers regard it as a type of time consuming activity. This means that their perception of the work is quite different.
- ✚ The added value of the product of knowledge workers are higher than the others because the knowledge that can be used in the real life is something like the money itself.

Conclusion

The change is the main paradigms in all the societies. Throughout history, there are various events that cause radical transformations in the society like renaissance, industrial revolution, French revolution, knowledge revolution and so on. Particularly from the

²⁸ A.D. Amar, **Managing Knowledge Workers Unleashing Innovation and Productivity**, Greenwood Publishing, USA, 2002, p. 10.

²⁹ Pasi Pyörä, Harri Melin and Raimo Blom, **Knowledge Workers in The Information Society**, Tampere University Press, Finland, 2005, p. 14.

perspective of industrial relations and labor economics, it can be stated that the knowledge economy shifted the employment procedures as well as the employees' profile. In a way, knowledge revolution increased the standards of the employees. The employment policies changed as the information become so obsolete in a short period of time. The employee characteristics changed as they turn into the workers who produce knowledge and the knowledge is regarded as added value for the economy. The knowledge also means money and the power despite some arguments. No one can deny the fact that the gaining momentum of the knowledge economy is resulted in fundamental changes in all the spheres of society.

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