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INFORMATION SOCIETY AND THE VIRTUAL LABOUR

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Abstract:

One of the current prevailing concepts in general system theory since the last decade of the twentieth century is the concept of labour in the context of a knowledge society, in which work is becoming more virtual as a direct result of continuous scientific development through the use of internet software and social networks. The present piece attempts to emphasise the relationship and complementarity between a number of key surrounding notions and the new concept of labour. It also attempts to identify the causes for emergence in such situations, as well as to highlight the need of learning such concepts at both the theoretical and practical levels, in order to suggest a rational structure of new societies with a lower proportion of social and economic corruption.

Keywords:

virtual work; virtual trade unions; cybertaria; digitally intellectual

JEL Classification: A14, Z10, A13

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The concept of society of knowledge

This word originated thirty years ago. However, significant changes, such as digitization and globalisation, have occurred since then, exaggerating the use of the phrase. Furthermore, this term is often used, yet it might have multiple, even unclear or contradictory meanings in some instances. Humanity has undergone significant changes in terms of lifestyles and styles over time. It is always challenging new needs. Humanity relied on agriculture for a long time before turning to industrialization to meet its requirements following the first great industrial revolution in the eighteenth century, which saw the replacement of hand-powered machines with steam engines and mining operations. The second industrial revolution began with the invention of electricity and the internal combustion engine, as well as the use of innovative chemical substances as a result of scientific research, the efficient operation of steel casting, and the most sophisticated communication tools such as telegraphs, phones, and mailing. The second revolution resulted in the adoption of innovative deducing approaches and systemic scientific methods. Our modern era is distinguished by imposed norms and the proliferation of new media and communication technologies. Modern civilization has altered many elements of life; it has unique qualities, particularly an evolving system that has resulted in the birth of the knowledge society.

The world of information technology is moving towards information conglomerates and wide-ranging communication networks. Our period has been referred to by various names, including the knowledge era, post-industrialized society, information society, and the knowledge society. Certain researchers disagree with the last point since they believe that the primary aspect of our era is the creation of information. Despite the tremendous relevance of information in our day and age, it is not more important than other aspects such as automobiles or electricity.

According to Mohammed Sayed Said, "the concept of society of knowledge is more sublime than the concept of information society; because the ambiguity of the term information as there are no brute information that are transmitted without an ideological background, while knowledge is a data system with proper signification and meaning, because we are not seeking information as such, but for their allusion to the society of knowledge."

The term "society of knowledge" refers to a historical epoch that occurred after others in human history. Each period has its own characteristics: man, first hunting techniques, then agriculture techniques, and finally information technology, which focuses on operations for processing information; its primary raw material is information, which is invested in such a way to generate knowledge, new knowledge. different societies adopted different raw materials, which may be exhausted due to consumption. In contrast, in the information society, information is generated from previous ones, making the information society a renewable one with untapped resources. This is why information is so important in the new society, as it is seen as the primary key building block and a necessary condition for its advancement as well as the optimal operation of networks, computers, communication, artificial intelligence, and expert systems.

Information society also refers to the transition from an industrialised society to one in which information is expanded, diversified, and given more power and influence. It is a society in which everyone is completely active in creating, collecting, or storing information. A civilization in which universal communication is made available in sufficient and varied quantities, with the goal of influencing the economy. This type of civilization is fundamentally founded on knowledge, which is produced and implemented effectively in all domains of social activities, including the economy, civilian society, politics, and private life, in order to enhance the human condition.

The economic and social environment that best makes use of information and communication technologies, such as the internet, will provide individuals with comfort and pleasure at all stages of their lives. The idea of information society encompasses all actions and measurements linked to creating, publishing, organising, and investing information, including research, innovation, authorship, and tasks aimed at serving instructional and cultural aims.

Several academics regarded information society as the optimal social framework for information. It appears to be a capitalist society, as information is treated as a commodity rather than a communal resource. Because knowledge previously provided for free from public libraries has become more expensive as it can now only be obtained through computers. In most cases, these computers are connected to private systems. The proprietors of these systems treat information commercially, seeking benefits.

Information society has also been defined as a unified circuit that is concerned with controlling general conditions, masses, relations, and various resources between individuals or institutions in order to care for their needs and exchange information and useful knowledge with the ultimate goal of rapidly acquiring and increasing knowledge. The majority of researchers believe the notion of information society has not yet been fully established, despite the fact that they think it is a difficult labour that humanity continues to challenge.

The information literacy and the digitally intellectual

Information literacy has evolved as one of the most significant concepts in specialised intellectual production in recent years. The term was given various definitions. It refers to the set of information that allows individuals to define their knowledge needs at the appropriate moment, gain access to such knowledge, appraise it, and use it effectively. The necessity of information literacy has grown in light of the current huge technology transformation. The modern information context is highly complicated; as a result, individuals are confronted with a plethora of options and alternatives for receiving information at all levels of education, training, job, and even in their personal lives. According to UNESCO, information literacy "enables people from all walks of life to seek, evaluate, use, and create information effectively to achieve their personal, social, occupational, and educational goals." People who are information literate can access information about their health, environment, education, and work, as well as make key life decisions (UNESCO, 2024). Information literacy is a fundamental requirement for learning that should never be overlooked throughout an individual's life. It is critical at all stages of education. A person with information literacy can be described as:

- A person that can recognise needed information;
- A person who can acquire quickly and adequately needed information;
- A person who can evaluate information and resources;
- A person who is able to skilfully use information to perform required tasks;
- A person able to recognise all economic, legal and social issues related to using information and their resources;
- A person able to ethically and lawfully use information;
- A person able to deducing and innovating via the use of information technology.

The concept of information literacy is related to a number of different topics, including information technology and library skills. Several researches have demonstrated that the idea of information literacy is the most comprehensive.

Despite its primary association with information technology, information literacy has broader implications. The first approach focuses on teaching individuals the fundamental skills required to operate hardware, software, and communication networks, whereas the latter emphasises the identity, structure, and social, economic, and philosophical implications of information and knowledge.

According to the SCONUl (British Society of College, National, and University Libraries), a society concerned with promoting and publishing information literacy in Britain and Ireland, information skills are fundamentally linked to defining information sources, evaluating, and analysing them regardless of the form of the sources used (Shukla, 2021). As a result, it is correct to argue that information literacy focuses on the reasons for information demands and their sources rather than understanding how to handle information.

Information Literacy is now highly valued, particularly in education, to the point where it plays a critical role in orienting people's everyday lives. Furthermore, the modern knowledge society necessitates that the average person be well-versed in fundamental information skills in order to deal with daily concerns and keep up with the majority of political, economic, and cultural developments taking place in his immediate surroundings.

The context of digitised information emphasised the significance of information literacy. Individuals must be trained in the use of new information and communication strategies in order to produce and obtain information in this new context. The most notable example of such a demand is the ability to handle the computing cloud as a tool for exploring websites, obtaining and using various types of documents. Such procedures necessitate learning internet research abilities such as comprehending and assessing data. The information society now requires not only cultural institutions, but also economic institutions that must demonstrate flexibility and speed in adaptation and decision making, as well as mastery of new information and communication technologies in order to transform plans into practical concrete performances that can be observed, quantitatively measured, and qualitatively improved to define its direct and indirect productivity.

Information labour

The use of information technology has changed the perceptions of work and workers, as well as the ways and styles of completing tasks in the economic, professional, and trade union domains. At the same time, new concepts and thoughts emerged, resulting in a variety of trade union problems claiming changes in labour regulations, work time, and even the nature of work itself. As a result, we are required to make significant adjustments in the way we describe work and labour. This situation will bring up delicate concerns. It is therefore vital to uncover and explain a future viewpoint on what will happen in such a scenario. The Davos World Economic Forum sparked protests in Switzerland and other nations, demonstrating people's concerns about such changes and alterations in the concept of employment. Here, we attempt to demonstrate this concept in light of the International Labour Organization's perspective on working in capitalist economies.

“Labour is tied to your ability to compete in markets, learn new technical skills, and stay healthy. The goal of labour is to enhance your talents so that you may lead others at work. Labour indicates that you receive your fair share of the wealth you helped to build; labour implies that you are not enslaved and that you have a voice at work and in your community. Sumavia stated that in most extreme circumstances, labour is a transition from a scenario in which a person

attempts to survive to an attempt to impose one's own existence. Nonetheless, for many people, work is the only road out of poverty. This is a discouraging notion; employment is instead a means of realising own daily goals and demonstrating solidarity with others. Labour is also a development strategy; it is more than just a personal aim for individuals and families; it reflects the advancement and evolution of the entire country (Sumavia 2001).

Andre Gorrits commented, "I could not distinguish the history that may explain such intention or to highlight how the humanist movement and union trades may benefit from the technological revolution." However, events are unfolding in such a way that the full benefit of this technological revolution is being lost. If this occurs, I cannot see any other value for such a revolution since our society will continue to disintegrate, become more fragmented, and confront more violence, injustice, and fear" (Gorrits, 1998/1999, pp. 45-63).

Gorrits distinguishes between working for economic reasons (defining work in the context of capitalism/authority), familial work, and working for oneself. Gorrits advocates for a change from the first to the third type, as well as for establishing harmony between the second and third rather than submitting to the first. He concluded that with technology, it is conceivable in capitalist and industrialised countries to reduce typical working hours from 1600 to 1000 per year without lowering living conditions.

If we believe that striving against paid labour is a privilege for labour aristocracy in industrialised and capitalist states, we are obliged to mention and remind what was really a battle for workers who had to work eight hours per day, a situation that led to the emergence of international union trades during the nineteenth of the nineteenth century, and the similar nationalist and universal strategies that were proposed in Latin America (Welmont, 1998), and in the United States(Brush & Costello, 1994). The legal reduction in working hours occurred in France and is still recognised as such in the constitution, despite many attempts to repeal it. Gorrits' significance and logic are based on the accuracy and depth of his knowledge of the history of universal labour movements and recent union trades concerns, as well as the explicit links they establish with alternative social movements carried out by workers today despite being ignored by current union trades and attempts by such unions to submit or oppress them.

Cybertaria, or the information technology employees

The emergence of a common class awareness among information technology administration employees, as well as the appearance of associate employers and common relations with capital, have generated a powerful influencing counterforce that appears to be capable of halting such evolution; this part is most likely organic. There is clear evidence of emergent organisation of new information technology employees, and despite the limited number of universal organisations, the current ones are still confined and incomplete. Such workers' efforts manifest as sudden seizures, viruses, or other forms of subversion. It appears that the cybertaria' class is on its way to becoming a reality, whether intentionally or unwittingly. (Orsulla Huz, 2000, Pp. 19-20).

Labour context features within information technology

Positive features:

- The important quantity of information and their sources and the mechanisms of managing them.

- The need to obtaining accurate and universal information with less efforts and in short time.
- The great evolutions in the field of information and communication technology that are being invested widely in the domain of labour, professions and crafts.
- Information are being considered as important economic merchandise.
- The speed and great movement to information society.
- The emergence of artificial intelligence that is meant to replace man in various fields implying thus new measures to avoid injustice and oppression among the substituted employees.
- The wide use of information system in most countries.
- The important quantity of merchandise and goods being managed and distributed on the basis of such technology.

Negative features:

- The weakness of technological infrastructures that may lead information illiteracy among future workers and to a bad investment of such technologies.
- The inadequate geographical distribution of information.
- The control over information and networks and emergence of hijacking information in spite of existing cybersecurity.
- The insufficient legal texts related to future employees' rights.
- The lack of adequately qualified employees in the field of information technology.
- The sever digital gap between countries and societies.

The occurring mutations in the labour's basics:

- Continuous learning and training.
- Continuous changing in labour's nature.
- Changing work place.
- Emergence of on-line employment.
- Reducing working hours.
- Technological comfort for workers.
- We can mention here that the institution's culture is based on five elements:
- Remote-sensing process which is based on discovering information related to social and political mutations and to the process of requests by related parts to institutions in terms of services and goods.
- The process of compiling information which is methodological to select fruitful knowledge as a preparation to integrate common knowledge.
- The process of structuring, indexing and linking information and setting data bases.
- The processes of treating such information to transform them into knowledge.
- The previous processes all contribute to updating information.

When we talk about information literacy, we are consciously referring to an issue that is fundamentally related to fairness and honesty, which prevents information manipulation, and which implies that all participants accept the principle of exchanging information, dealing positively with official information, ensuring transparency in terms of transmitted information, and implementing the entrepreneurial spirit.

The knowledge economy and its role in labour literacy

Talking about labour literacy unavoidably leads to discussion of the knowledge economy, which has a distinct trend towards labour literacy. Defining knowledge economy allows us to distinguish between two types of such economies: the first is the one we are concerned with; it is an economy wholly based on information to control the manufacturing process, with information as the sole product. Information technology determines production modes as well as marketing opportunities and domains. In this context, information refers to ideas and facts, but it can also include scientific research, expertise, and abilities. Such an economy is rightly called the information economy, or the post-industrialization economy. The second is a knowledge-based economy, which plays an important role in generating wealth. This concept is not new, as knowledge has always been a vital role in the economy. However, the standing of knowledge in the economy is innovative. The modern economy places a greater emphasis on information and its depth. Previously, the role of knowledge was limited to knowing how to transform available raw materials and manage services and things in a fairly specific environment. Modern economies, on the other hand, recognise no boundaries for knowledge in terms of changing such elements. Knowledge's roles are being widened and extended in order to generate new resources rather than transform current ones.

Despite their differences, both types of economies have one thing in common: the need to provide human capital, which includes employee expertise and skills. Both agree on the importance of a certain type of culture that is mostly made up of information or the values required to deal with the information age. In addition to other factors like as culture, instruction, and electronic structure, widely utilised concepts such as hyper technology, research, and development of intelligent human intellect serve as the foundation of such an economy.

Another shared aspect of these two economies is the ability to reflect the nature of the cognitive component, albeit at varying levels, since it is more apparent in the information economy and less so in the knowledge-based one. The nature of such a component is determined by its obvious impact on production relations patterns, and hence on societal structure and equilibrium. The use of information, like investing knowledge, is intended to generate new information. Furthermore, this component in both types is seen as capable of escaping all kinds of restraints such as taxes, tariffs, and place. These economies are therefore less limited.

The knowledge economy fundamentally and fully transforms society's engineering, yet it is confined in industrialised countries. While the second one promotes societal progress and cannot be monopolised by a single state. Culture is a general concern and the most important product of the information age, as proven by its significant impact on the development process. Questions that had gone unaddressed in the twentieth century due to specialisation and separation of sciences, disciplines, and culture are being raised again, bringing to light the bulk of cultural and social challenges. The new cultural theorising trend is currently persuaded to dismiss the distinction between elite and popular culture. It seeks to explore culture in a flexible manner within wider social structures, using cultural maps, statistical surveys, and data bases to analyse social poverty issues and the characteristics of various social groups, both elitist and non-elitist. The evolution of the information era has also necessitated the study of comparative cultural studies, which are critical in dealing with various issues of discourse, conflict, and cultural intermingling.

Politics and the economics do not create society; rather, they change it through prevalent communication among individuals, organisations, and institutions. Information technology has

emerged as a factor in establishing such a model of society. We now have an incredible opportunity to develop a social and humanist technology capable of restoring human society's equilibrium and logic. It is acknowledged that information technology has a significant power to facilitate social rehabilitation. However, this implies a new sociological theory that regards culture as more than just a guiding factor to society's goals, as in Max Fibber's model, or that reduces culture to a subsidiary good in the dominating production cycle, as Karl Marx's model proposed. Culture's influence is not restricted to a single social institution, as Emile Durkheim's paradigm suggests. We are obligated to ask the following question: what type of human civilization will the information society produce?

Digital or virtual union trades

Ritchard Bruke remarked that, like workers in other industrialised sectors, those in the rising digital economy must defend their common interests. However, most current labour organisations fail to adapt in a timely manner to changes in workers' conditions. Furthermore, while industry union trades were established to challenge employers, they have been fashioned in the same way as Ford's factory model in terms of work organisation. Such labour organisations develop for workers in the digital economy, revealing a historical paradox. Workers require the development of new union trades in order to represent and defend their interests in the context of digital technology. In addition to the need to modify existing union trade organisations. Workers in digital technology are needed to collaborate in their own unique approaches. Because they are constantly on the internet and interconnected, they can readily organise themselves to defend and serve their interests via the network. The virtual union trade that is expected to develop from the digital economy should emphasise new principles for labour organisations that must be professional, universal, and digitally functional.

Orsulla Huze and Ritchard Bruke approached the burgeoning digital economy in a qualitative manner. of general, the bulk of information technology workers are from the working classes of industrialised and capitalist countries. The proportion of workers in developing industries who rely fully or partially on computers is increasing exponentially. Orsulla Huze appears to be aware of the presence of several working classes, among which cybertaria is prominent. However, she is sceptical that such a class is considering developing a shared self-awareness because they are considered as a qualitative category.

Future networks’ union trades

The debate surrounding the shape of future trade unions is clearly emphasised in labour studies literature. The consequences of labour movement are professional, whereas structures into universal labour networks may not be professional, despite the fact that they can be horizontally integrated feedbacks on a universal level.

New data worker should learn

Future information workers need to learn a set of data which include:

- Integrating learning activities in curricula to improve information literacy and cognitive strategies for selecting, analysing, and transmitting various types of information and curriculum content.

- Procedures to organize information acquisition and obtaining materials out of school or centre via different mechanisms such as electronic networks or collaborating with general libraries.
- Providing continuous training and teaching expertise to motivate learners to become skilful and innovative workers through an widely linked education with information and communication technology.
- Leadership and collaboration in using didactic and information technologies.
- Providing activities and references that contribute in making learning a perpetual task that coincides with a wide range of learning and teaching modes, styles, practices and concerns.
- Providing didactic activities and references to offer a diversified set of social and cultural expertise, opinions and dimensions.

Cybertaria's characteristics

Three basic domains were set to reach information literacy:

The first domain is information literacy:

- The worker is able to reach efficiently and adequately information.
- The worker is able to criticize and evaluate skilfully information.
- The worker is able to use information adequately and innovatively.

The second domain is the self-instruction

- The worker is able to explore related information to his own concerns.
- The worker evaluates and assesses scientific and literary production and the different forms of information creative expressions.
- The worker strives to reach the level of excellence in researching information and inventing knowledge.

The third domain is the social responsibility

- The worker recognizes the importance of information for the society.
- The worker adopts an authentic behaviour toward information and information technology.
- The worker contributes efficiently within the group in researching and producing information.

Anyway, the new structure known as the information society period will present a variety of challenges. The key one is that people will not be unable to obtain information, but they will be unable to locate general thinking frameworks to guide their actions and establish their values. The ease with which knowledge can be acquired, as well as its fluidity, are interpreted as an attempt to entrench the hegemony of a particular model of men. Such an attitude is related to the ability of humanist characteristics to withstand future scientific developments.

Ideas leading to creating information literacy

Before achieving information literacy, there is a collection of ideas that are intended to generate such literacy, such as:

- Promoting journalism and press by offering tools like dictionaries, encyclopaedias, maps, and guides to provide accurate information on private and public institutions.
- Promoting transparency within the institution by producing and sending information to anyone who requests it, as well as boosting institutional literacy and understanding of information.

The role of information technology in administering institutions is steadily increasing for numerous reasons, including:

- The role of information technology in administering institutions is steadily increasing for numerous reasons, including: The increasing influence of knowledge and information in moderns societies.
- The increasing influence of workers and managers of modern administrations that depend entirely on information technology.
- The sophisticated communication networks and the precise information processing.
- The emergence of new information systems based on using computers and communication networks.
- The high demand of information as information is becoming an important strategic resource.
- The crucial role played by information and knowledge in setting the competitive advantage which becomes essentially invented by human mind abilities.
- As a direct result of the rapid amplification of information volume, the necessity for sophisticated technological tools for investigating, assessing, and organising will expand, including the following:
- Meta research instruments which melt researching the topic and researching a given word, or a set of words withing corpora.
- Information hyper-organizers that are intended to indexing, classifying and archiving information.
- Archive crawlers that assume the role of periodically indexing network websites.

A new perspective

- With the introduction of information technology in the workplace, significant changes occurred in management and labour styles, necessitating the consideration of a number of requirements. Workers, workers, and administrators should thus have a fresh, united vision that goes beyond traditional approaches, particularly in terms of labour styles and systems, as well as data and information handling methods. As a result, the following points must be focused:
- Linking information technology to administrative needs and goals regarding information, reports, statistics, and patterns to improve decision-making for digitization adoption.
- Linking information technology use to changing workers' thinking styles and approaches to data and information management.
- Inventing new work modes on the basis of using available technology.
- Training user of technologies in all sections, departments and administrations on transmitting and exchanging information with other parts of other institutions.
- Training on applying deductive reasoning in information technology for innovative work performance.

The influence of technology on labour and culture

After successfully changing latent knowledge concealed in books into critical knowledge, information technology is currently efficiently working on completing new jobs, such as creating buildings, engines, and artworks. It is used for account management, budgeting, and decision-making. It is also used for training, missile guidance, satellite launch, and nuclear reactor management. Actually, information influences everything. It has become an important part of human society thanks to the use of technology. Information technology is desired to restore societal equilibrium, as well as to restore man's humanity and harmony with society and the environment. The ultimate goal of the information era is to suggest a new modernity. Furthermore, the ambitions of information technology makers and creators extend beyond the implementation of knowledge; after successfully granting computers the ability to solve problems and prove new theorems, artificial intelligence engineers are now attempting to lead such computers to the stage of self-instructing so that they can generate new knowledge rather than investing existing knowledge. This artificial intelligence aim is matched by another, equally exciting and bold, in the field of virtual reality technology, which seeks to immediately acquire and archive skills, in other words, pre-recruitment knowledge packaging.

The new information-based labour context

It refers to a middle ground between universal and local, public and private, governmental and non-governmental, institutional and individual. It also refers to a civilization that seeks to reject the magnified centrism of authority and administration, preferring decentralised governance, distributed production, and smaller governments. Furthermore, it is a society that refuses to deal with massifying as manifested in mass industry, mass media, and mass education. Its distinguishing aspect is a preference for dispersed production, diverse mediums, and different education. Pier Levy stated that we are confronted with an entirely new social phenomenon related to total common artificial intelligence, which is constantly increasing as a result of increased interaction, increased knowledge production, exchange, and consumption, and a high level of interaction among societal organisation members.

Conclusion

Nabil Ali stated, "Our first duty is to free Arabic culture from the shame of alphabetic illiteracy; we are also obligated to strive to erase the new information era illiteracies, which include computer and information illiteracy, forms and symbols illiteracy, and, most importantly, scientific culture illiteracy." We are challenged, so new forms of illiteracy have emerged. Our period necessitates the availability of a minimum amount of knowledge, skills, and expertise, and man must adapt to the changes and living requirements of our era. We must remember that using information necessitates that man obtain a specific level of instruction in order to avoid computers being the exclusive source of his information or competence. We must remember that culture is the lonely, eternal thing that stays after all else has vanished. Information is the one human resource that does not diminish but rather grows with increasing consumption. We, Arabs, must recognise this duality; we have our culture and our sources, and we must invest in both to produce and shape our new culture and products.

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