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# The demise of industrialism and what it means to business education



The end of the XXth century, with its digital technologies, has greatly hastened the pace, at which the industrial system of organizing work and life around factory mass production (referred to further as industrialism), was losing its importance in economic activity and our everyday life. At the height of its day it was the mainstream of people's life and work, now in OECD countries it is increasingly being marginalized.

Between 1980 and 2006 the United States economy added some 20 million jobs in the creative, professional, and knowledge sectors of the economy<sup>9)</sup>. Wages from these jobs amount to half of all US wages<sup>9)</sup>. The same trend can be found in the economies of other OECD countries, where "creatives" (i.e. those working in and for the creative economy) make up to 40% of the workforce<sup>32)</sup>. This is a reflection of a wider shift, which takes place from an economy based on making things to one that revolves around creativity and knowledge, access<sup>22)</sup> and experiences<sup>20)</sup>.

This shifting pattern of employment prompted studies and theorization about the importance of the creative class, and its role in economic development. We will here focus on just two paramount aspects of these historical processes, which change the way we live: on its temporal and spatial dimension. In social sciences, whenever the temporal order of the social mainstream is drastically changed,

this suggests a revolutionary change in the organization of production and social life. Such was the case of transition from hunters/gatherers' economy and society to agriculture, from agricultural era to medieval times, and the transition from medieval times to the industrial economy.

What does it look like in practice? There is growing evidence from cultural anthropology, sociology of work, economics of work and leisure sciences pointing to far-reaching changes in the availability and management of time. The society of hunters<sup>25)</sup> and gatherers worked on the average 60-80 days a year. In the days of the Roman Empire an important number of days-off, such as holidays of local deities and gentry, were seen as a hindrance to many activities including the conduct of war, marriages and celebrations. This tendency reached its peak in the medieval days, when the number of religious holidays and feasts of local patrons surpassed the number of working days4). This was seen as one of the main obstacles to increasing the output of guilds, which were than the dominant force of production. In short, the number of holidays and leisure associated with it became a barrier to production and to economic growth in general. The medieval temporal order had to be abolished to make time for increased industrial output.

This industrial production required all production factors to be gathered in one

place at the same time, hence what was at this time required was strict observance of mechanical linear clock time (as opposed to cyclical time of agriculture or religious cycles of the Middle Ages), with the stress on punctuality and time discipline, a message still firmly rooted in "Western" business education and practice. The system of mass industrial production was not flexible; it had to follow a strict technological regime of manufacturing within a rigid timeframe. With the coming of the Industrial Revolution, someone born in the middle of 19th century on the average would spend one third of his life in work. However, over the last 150 years the annual average time of work in industrialized economies fell from 3000 hours to 1700 hours, but this time of work has become much more productive<sup>2)</sup>.

In the middle of the 20<sup>th</sup> century jobs in the manufacturing sector were among the most desired. While often backbreaking and tedious they carried a promise of high reward: decent wages, protection from the trade unions, generous benefits and unimaginable security. In the golden industrial era millions of industrial workers were able to put in their time and then retire on their pensions.

The number of industrial factory jobs has been decreasing since the 1950°. Many of the jobs have been automated or outsourced, and are not ever coming back. The recent economic crisis in the US alone has eliminated more than 7 million jobs.

Under the pressure of growing productivity, trade unions and labor regulation, the duration of the working week continued to fall until late 1980s. As development of trade unions, better organization of work and technological innovation civilized industrialism, gains in productivity earned through technological and management advances were expected to lead to a situation, in which productivity levels would reach such heights that nearly the

whole industrial labor force could afford to work on a part-time basis (this was the essence of the debate on post-industrial societies characteristic of the 1960s and 1970s)1,7). Thus, the availability of time coupled together with higher incomes would allow for increased consumption. This consumption was becoming more personalized (de-massification of industrial economies and societies), and directed to the growing sector of personal services which would free us from the part of everyday obligations and chores, such as cooking meals, cleaning and child-care, family and other household obligations. The coming of the 'leisure society' seemed unstoppable.

## The decomposition of industrialism's temporal order

The economic downturn of the 1980s has again reversed this trend and challenged the leisure society concept. While a growing army of the unemployed had much idle time available, in the UK the workweek of the management was clearly extended (41% of the managers worked over 50 hours a week, 13% worked over 60 hours, and 53% of them once or twice a month worked over the weekends). On the whole, the number of work hours of management staff in the OECD countries grew by 20%.

This growth in work time has had its price. According to the ILO in the UK stress at work is alone responsible for losses equal to 10% of the British GNP. By early 1990s sick leave for diseases related to stress compared to the 1950s grew by 500%. On the average (by1989/1990) 18 million of workdays were lost due to nervous breakdowns caused by stress. Every year in Japan some 10 thousand people die from overexhaustion caused by work. Total annual cost of accidents caused by overexhaustion in the United States was equal to 60 billion USD, and on the world scale — to 80 billion USD. The scope of

shift work, or crude system of work flexibilization in industrialism, also has its tangible social consequences – the rate of divorce is 2 to 8 times higher than for those who work without shifts<sup>2)</sup>.

This hasty work schedule is also eating into our sleep time. In the 1980s on the average time spent on sleeping and eating was half an hour less than in the 1960s. In the UK leisure time of men working full-time fell by 4% in the years 1985-93, for women it was even more -10%. Leisure time has also become much more a consumption time with a notable growth of time spent on shopping. From the early 1960s the amount of time spent on shopping and travelling to shopping increased from 40 min. to 70 min. per day or on the average - three hours per week<sup>23)</sup>. Shopping and engaging in various activities also spilled into the weekends. Even though a number of time-saving inventions became a standard household good, i.e. mobile phones, Internet shopping etc., in practice the amount of time spent on these activities proved to be yet another drain on our valuable time resources. According to Jupiter research survey conducted in 2006, mean weekly time for Internet use (14 hours) was comparable to time of TV viewing, hitherto the single most important element of leisure time, and was much more than time devoted to reading magazines, newspapers or listing to the radio16).

Thus, in the late 80° a new trend began to emerge in the world's leading economies. After nearly a century of uninterrupted decrease in the duration of work time (with the exception of the two world wars), leisure time started to shrink and work-time was increasing again, like in the early days of the industrial revolution. There also emerged new forms of work which were quickly gaining popularity: a fusion of production and consumption known as Toffler's prosumption<sup>35)</sup> and highly committed and intense serious

leisure (hobbies) activities, as described by Stebbins<sup>28)</sup>. It was good three decades before the explosion of voluntary and non-remunerated activity and creativity, now associated with Web 2.0 era, where billions of people are actively contributing to the resources of the Internet by producing what is known as "user-generated content" (UGC)<sup>15)</sup>.

In the first decade of the new millennium, these changes crystalized in new modes of production and new lifestyles. These modes of production are broadly referred to as 'wikinomics', or a system of networked collaborative production by peers and driven mainly by intrinsic motivation<sup>31)</sup>. Another development has been the conceptualization and analysis of the so-called 'creative economy' and 'creative class', which embody and epitomize new ways of work largely free from legacy of the industrial era<sup>10, 14)</sup>. The requirements of creative work are very disruptive to the industrial work model and modern information companies, such as Google when starting anew are faced with the challenge of redefining work expected from their employees. The consequence of this change go much deeper because in the OECD countries by the first decade of the third millennium nearly 1/3 of the labor force was in creative jobs and this part of labor force continues to grow, being largely insensitive to downturns of the world economy<sup>19)</sup>. When seen together with the emergence of new business models arising from the digital economy, this development of the creative economy calls for a new set of skills to be developed through the educational system, which is still, by virtue of its enlightenment heritage, deeply entrenched in industrialism. The creative economy needs non-conformism and individuality usually suppressed by schools<sup>24)</sup>. What seems to be needed for the third millennium is non-standardized artistic and flexible minds, capable of unique problem-solving and not routine

jobs, the number of which is shrinking fast. The work of these creative people is task-based, not presence based. This work doesn't have any fixed time frames other than meeting the deadlines for projects.

A yet another work paradox came from further flexibilization of work and work schedules, particularly in urban areas. The concept of the "24-hour economy" and "24 hour city" in practice meant, that more and more people worked during weekends and at nights2). According to the data from the British labor market, 60% of employed men and 45% of employed women usually occasionally worked at nights, also 28% of working men work for more than 48 hours per week, against 22% in 1982. The percentage of people working on night shifts also increased in the years 1981-91. Even though in the United States 1.8 million job posts in the industrial inflexible working schedules was suppressed, the percentage of Americans complaining about living in a hurry increased from 24% in 1965 to 37% in 1992. Work time has also spilled into holidays: 44% of those employed in the UK report that they take less holidays and 77% reports that they contact with the employer while on holiday. Holiday time is also increasingly harried and subject to tight planning.

S. Lindner was one of the first economists to draw attention to time deficit being a barrier to consumption in a developed market economy<sup>18)</sup>. He wrote about three possible forms of accelerating consumption to overcome this barrier of time: (1) consumption of more expensive goods, (2) simultaneous consumption, and (3) successive consumption or consumption of goods and services one after the other, but more rapidly. In 1972 a German sociologist E. Scheuch used the term "timedeepening" by analogy to deepening the capital. He noticed that if a consumer could do several things at once, he would be able to fit more things into his daily schedule. J. Robinson and G. Godbey developed the concept of "time-deepening" with relation to leisure<sup>23)</sup>. They wrote about the quickened pace of conducting activities (i.e. about sightseeing without leaving the car), switching to time-saving substitutes (ordering a take away meal instead of cooking at home), associating primary activities with a growing number of secondary activities (such as eating a meal while watching television and listening to the music), and applying a much more disciplined approach to time use even in relation to pleasures of life (more detailed planning).

This harried consumption was also described by O. Sullivan and J. Gershuny, who were pointing to some prestigious consumption items related to lifestyle, such as the purchase of holiday home in faraway places or a new pair of skis and ski outfits, while in their owners' lives there was no time to enjoy them<sup>29)</sup>.

J. Schor explained the causes behind more work and professional commitments undertaken by American households to gain additional incomes, to pay for expanding consumption expenditures and purchases of more household belongings after World War II. The average American home is now twice as big as at the end of the 1940s, with twice the space per person, while 10 million Americans have two or more homes. Consumption expenditures from personal incomes also doubled in the real terms. In the 1990s the price for this was growing stress and hurry, chronic lack of time, especially of leisure time<sup>26, 27)</sup>.

As life of the creative class becomes better researched and documented, it appears those typical weekly work times of 60-70 hours are a norm, rather than an exception. Furthermore, the creative class is reported to devote as much as one third of their leisure time to various forms of training and upgrading/updating their knowledge and competences<sup>10)</sup>.

## Some aspects of the spatial compression

This line of thinking is debated by postmodern social theory and its contribution to the perception of time/space compression characteristic of modern times. Sticking to the world of work and economics, jobs became dislocated from companies that created them. This was partly due to the processes of globalization, outsourcing and offshoring, but also because of the feasibility of distance work, as enabled by modern communication technologies. Overall the consequences of distance work were evaluated as being very positive both for the employers and for the employed, not to mention environmental effects<sup>5)</sup>. The flexibility of this form of work allowed to employ people, who in the industrial system were not employable due to the long commuting time, and their need to be home-based because of disability or family obligations. It was feared that these people could not be sufficiently disciplined and controlled at work. The results of the CISCO study led to opposite conclusions.

With the appearance of new types of economic activity, the scope of knowledge and creative economy increased to the point of making a difference in the organization of work. This postindustrial work needs to be very flexible in terms of working hours and working conditions, levels of work discipline and degree of supervision, coordination and face-to-face contact with other employees and management.

The initial worry was whether the shift to distance working would make work from home to be uncontrollable and distracted, therefore less productive. The data, which is flowing from research on work in the creative economy, shows that the contrary is true: typical workweeks of 60 to 70 hours and a great degree of intrinsic motivation are being observed. We may thus generalize that this flexibiliza-

tion of work has had a one-sided effect: longer working hours, work at odd hours of the day and night, depending on individual preferences and capabilities.

One of the explanations for such developments is the fact that creative work cannot be switched on and off like the production belt in a factory. What is more likely is an analogy between creative work and phases of sleep, through which we must go in order to get its full effects<sup>13)</sup>. The behavior of people who are working longer hours is difficult to predict as consumers. When they feel exhausted by their work they may seek entertainment and life's pleasures at two of three in the morning, when most of the city services are asleep. Longer working hours also mean that these people have no time to do their shopping, look after their children or elderly parents, to cook and to go through various household obligations at times compatible with "normal hours" (i.e. mainstream) under industrialism's temporal regime.

The flexibilization of postindustrial work means that the service providers have to reorganize the way they offer their services, to deal with this 24/7 economy. This gives a new sense to the term service economy. It is an economy, which has to take serve the needs of people in the knowledge and creative sector who work at unpredictable hours, dictated only by their rhythm of creativity.

However, as noted by Florida, the new companies which employ 'creatives' try to provide them with all sorts of sophisticated services, in order for their employees not to disrupt their cycles of creativity: among the new perks one finds (on company premises) fine restaurants with French chefs, laundry services, kindergartens, massages, fitness centers, health services, beds and concierge services<sup>10)</sup>. The idea is to send the following message to the company's creatives: you don't need to go home; you have here everything

you need. In places like Google you can bring your dog to the office, along with your surfing gear and favorite music. It is also interesting to note that these new companies recognize the right of creative people to work on their own projects. In Google up to 20% of work time can be devoted to own projects. Google lets its employees spend one day each work week focusing on their own projects, a practice that's delivered 50% of Google's offerings, including Gmail.

## Flexibilization of workplace, work style and dress code

Other than the flexibilization of work time, these companies also had to rethink the way they organize office space to provide best conditions for creativity. One of the developments was to make interior decoration of offices to be the matter of personal choices of people who work there. Thus, a far-reaching personalization of offices took place, instead of making them all a reflection of the corporate image. Offices began to look more like homes. The function of these offices also changed. They were not so much the place of work, as the place of contact with other co-workers. Their function was to facilitate contact and exchange of ideas, therefore offices became more like open spaces encouraging flows of people and discussions. How different it is from the days when the layout of offices reflected corporate hierarchy, and the need to supervise supposedly lazy and unruly employees!

Other consequences of shifting from presence-based to task-based work included radical liberalization, if not abolishment, of dress codes. Professional groups, such as software programmers, specifically write it down in their work contracts, that they cannot be forced to wear a suit and to go to meetings with customers (they see it as waste of time, during which they could do something they are best at – writing code). Inciden-

tally, this new type of work makes every work contract unique, because the 'creatives' are unique individuals and have different requirements / expectations from their employees. Offering unique talents and qualifications, they have a relatively strong position when bargaining for work terms of their choice<sup>17)</sup>.

This new kind of creative labor is highly individualistic, but it invests heavily in the condition of the mind and body, as these are their main assets on the job market. What matters of these groups is their reputation among their peer groups, which may mean much more to them than the numbers, which appeared on their paycheck<sup>21)</sup>.

#### Struggle to attract the creative class

With the rise of the knowledge and creative sector, international competitiveness assumes a new dimension. Its sense is in the ability to attract talent to a given city, region or country. In other words, staying competitive is being able to attract the creative class from all over the world and to provide an atmosphere of tolerance, diversity and stimulating work for these people<sup>8)</sup>. From the perspective of retaining such a creative workforce, places also have to provide a stimulating environment, with good education facilities, fine gastronomy and an interesting cultural nightlife for long working creative class. Such places were able to form clusters of creativity, which made them less vulnerable to economic downturns, unemployment and gave them overall higher growth rates.

Despite the ongoing processes of delocation and offshoring, in the creative sectors one also notes the concentration of high-paying professional work and the clustering of highly educated highly skilled workers. Cities such as Seattle, San Francisco, Austin and Boston have the concentration of college graduates

to three times higher than that of Buffalo among people with postgraduate degrees, disparities are wider still<sup>11)</sup>. The geographic sorting of people by ability and educational attainment on this scale is unprecedented. According to Florida's research, states with high levels of service jobs, adding those with large creative class concentrations, had consistently higher levels of economic output, income, and innovation. These states had lower levels of divorce, lower levels of stress and higher levels of happiness. Most service jobs, by their very nature, are less amenable to global competition or to outsourcing. These kinds of jobs are among the most firmly rooted in specific places, so both the employers and the potential employees have little choice but to make these jobs more desirable and more emotionally and financially rewarding9).

Because of the size, diversity, and regional role, large North American cities which act as regional hubs seem better buffered from the recent economic crash in other regions, especially manufacturing-dependent areas and places where prosperity was based on a single factor. Hub cities are connected to the world economy and have benefited from their ability to attract and consolidate various business functions in their regions. They have also managed to attract young and highly skilled people from across the regions and even from all over the country and the world<sup>8)</sup>.

The arrival of the international creative class can be seen as a factor of gentrification for the region, as was the case with New Zealand after the international film community gathered there for and after the turning of Harry Potter movies. This class in also making an invaluable contribution to the American economy. Foreign inventors have become key players in American innovation. Foreign-born scientists make up 17% of all bachelor's degree holders, 29% of Masters degree

holders, 38% of PhD's and nearly 1/4 of all scientists and engineers in the United States. A third and a half of all Silicon Valley startups during the 1990s had a foreign-born entrepreneur or scientist on their core founding team. Foreign inventors have come to account for almost half of all the newly patented innovations in the United States in the last decade<sup>9)</sup>.

#### Lessons for business education

Over the past three decades, the US economy has added 28,000,014 service jobs and 23 million knowledge, professional, and creative jobs, compared to just one million in manufacturing. Routine service jobs still account for the single biggest area of employment: 45% of jobs (or over 60 million jobs). Creative economy jobs account for 31% and working-class jobs for 23% of the US workforce structure<sup>9)</sup>. Similar data comes from studies of the creative sector in the EU.

According to projections of the Bureau of Labor Statistics the US will add 15.3 million new jobs between 2008 in 2018. Nearly all of that growth (13.8 million jobs) will occur in creative and professional jobs and service administrators. The US economy will shed another 349,000 production jobs, the blue-collar factory jobs that were the mainstay of the industrial economy. With the visible demise of industrialism, its desired physical skills such as lifting and manual dexterity are fast disappearing, to be replaced by pattern recognition and problem solving and social intelligence skills such as situational sensitivity persuasiveness required for teambuilding.

Arts become an important component of the creative economy engine. The economy as a whole benefits from considerable spillovers, and synergy coming from the arts<sup>12, 23)</sup>.

These changes are pre-sensed by graduates. After the last financial crisis, values and career orientations of Harvard graduates are beginning to change, reflecting more post-material values. When these grads were asked in 2009 what career they would choose if finances were not a concern, the top choice was the arts, with 60% choosing it as their dream field, followed by public service (12.5%) and education (12%). Less than half of this number, just 5% of grads, named finance and consulting, which were at the top of the list only a few years earlier.

In terms of employment opportunities, there seems to be no possibility to return, as Florida puts it: "from clicks back to bricks"<sup>9)</sup>. Also from the perspective of consumer expenditures the mainstay of industrial era spending – car purchases, consumer durables – are unlikely to achieve their previous significance as much of the consumer power has been redirected toward more experiential purchases, such as travel, wellness and fitness entertainment self-expression and self improvement.

Harvard grads said that the ability to meet people and make friends was of paramount importance. These young people intuitively understand that vibrant social networks are key to finding jobs, moving forward in one's career, and securing personal happiness. They recognize what psychologists of happiness have shown – it's not money per se that makes you happy, but doing exciting work and having fulfilling personal relationships. And whereas older consumers see high-quality schools and safe streets as key, younger ones rank the availability of outstanding colleges and universities higher<sup>3)</sup>.

What's in the demise of industrialism for graduates of business schools? For one thing: it is the paramount importance of flexibility as an emergent and even dominant trait of today's world, work, temporal and spatial order, lifestyles, which needs to be reflected in practical and academic curriculum alike. Whereas the notion of efficiency, effectiveness and competitiveness seems to permeate business cultures, being exposed to more society-oriented post-materialist values and openness to artistic, creative, aesthetic and environmental values would be an additional advantage in the present era. Grads should be made more aware of the new work schedules, including their readiness to serve the 24/7 economy, mix their work and leisure in new ways, cope with stress and unpredictable task-work cycles, and still manage to be happy and live fulfilled lives, while retaining (some) control over their time.

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