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The Impact of Artificial Intelligence on Global Trends

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Abstract

Global trends are shaped through disruptive innovation and the new technology of Artificial Intelligence (A.I.) represents a big part of it. The aim of the research paper is to assess the impact of A.I. on global trends, by offering a macro-perspective upon the industry environment, economy and employment and a micro-perspective upon finance, marketing and management. The practical approach is conducted through qualitative methods of research, based on purposive sampling. The effects of A.I. in a company once it is deployed will be explored in-depth, i.e. the different make-up of the workforce population, a flattened hierarchy and the need for employee democracy etc. The research paper will conclude by emphasizing how machines can help people thrive by creating an A.I.-friendly environment for people and a people-friendly environment for A.I.

Keywords: *artificial intelligence, economy, business, employment shift, global trends*

1. INTRODUCTION

The interest for A.I. sparked once the technology managed to transpire its original form as a lab curiosity and meet the consumers' needs. In its early stages, the funding A.I. received was withdrawn several times causing two A.I. winters. Yet, it managed to rebound twice with the ceaseless work and dedication of computer scientists. The current private investments made during the last five years surpassed what the entire world-wide government spent on the A.I. research since its beginnings (WEF, 2015).

The technological advancements propel and mould the industry through disruptive systems. A.I. has as objective to simulate and duplicate intelligence. Point often overlooked is that intelligence will continue to be redefined by people beyond the current capabilities of a machine (Coats, 1987). Hence, the spectrum of definitions expands. Luger and Stubblefield (1993) describe A.I. as the "automation of intelligent behaviour" created with the help of computer science. Rich (1985) illustrates A.I. as an aggregate of thoughts, deeds and interactions in as many fields as a human being can be good at. More recent opinions gravitate

towards "independent problem solving inspired by biological intelligence" (Hodjat, 2015), or "accelerated intelligence" (Kurzweil, 2012).

A.I. is defined by novelty, versatility and enchantment. Disruptive innovation and disruptive systems are the elements of novelty which open new markets or disrupt already established markets or products (Christensen, 1997). A.I. had a massive effect as a disruptive factor in business and also in several different fields like medicine, automotive, robotics etc. A.I. can be perceived as the new fuel for business models and strategies that can be used in diagnosing numerous business situations, forecast new conditions and even take smart business decisions that would raise the profitability in a company (Coats, 1987).

The research paper has as an objective to offer a complete perspective upon the impact of Artificial Intelligence on global trends. The state of art presents the implications of A.I. at a macroscopic level in broader fields, such as the industry environment, economics, employment. The focus is then brought at a microscopic level by illustrating the role of A.I. within the company and also in the fields of finance and marketing. The management and corporate culture will be examined according to different parameters: productivity, adaptability, reluctance to change, diversity etc. The practical approach follows, resulted from the use of qualitative methods of research and purposive sampling. The methodology consists in 10 interviews addressed to subordinates and managers working in A.I.-centric companies or organizations that have already implemented A.I. technology to a bigger extent. The conclusion is drawn from the both, the theoretical and practical approach and will consist in finding a common denominator resulted from the analysis.

2. A.I. IN ECONOMY

Economy develops in cycles. With the “burst” of the internet bubble, new business models emerged, marketing developed in the online field and e-commerce flourished. Financial services extended in the online realm with e-payments, online banking, by optimizing processes and operations, increasing the speed of transactions etc. Substantial changes occur with every cycle. One of them, brought by the next industrial era of the rise of the machines is the employment shift.

As the returns to capital increase continuously, the returns to labour point to an all-time low. Selling a high volume needs a prosperous middle class. Lately, the median income decreased substantially in all parts of the world, while inequality went high up. Therefore, the gap got bigger and bigger. Economy should generate opportunity, which will no longer be

possible in a capitalist society where the supply-demand cannot function without a middle class. Automation will lead to a society rich in technology and low on labour (Howard, 2014). It will not lead to job replacement, but to skills replacement, that will still contribute to job shortage even if machines will complement people and not substitute their jobs entirely.

The economist McAfee (2013) proposes a radical intervention, by introducing the asset-based model fit for the employment shift. Its main focus lies on the collective approach based on socialism, by distributing future government assets equally. Basic income is introduced in the model as an alternative that creates a new working paradigm. Once people will no longer need to engage in time-consuming, administrative, tedious tasks and will be liberated from drudgery and toil, self-worth will be redefined. People will start working for pleasure, not for gaining financial stability or they will be able to choose not to work at all.

One potential issue with the basic income is that it may not to be proportionally and equally distributed. Automation will not happen evenly, or to the same extent in all parts of the world, nor for every company. Consequently, job shortage will happen unevenly. Law implementation does not have the same pace as the technological advancements. In order for the asset-based model to work and job shortage to lead to talent harness, innovation, entrepreneurship and an abundant economy, the whole industry environment needs to change. A new set of values and a shared context need to be created in order for machines to be able to complement people successfully.

2.1 THE EMPLOYMENT SHIFT

What are the variables that fall into the employment shift equation? Status, earned income, job recognition will not be the factors that determine whether automation can replace the skills needed for fulfilling a job or not. According to a study published by Oxford University and adapted by Kaplan (2016), 47% jobs in the U.S. would be susceptible to automation. The most prone jobs to automation from the white-collar sector are the following – accountants, auditing officers, budget analysts, loan officers; while the hardest replaceable jobs are – **surgeons**, therapists, CEOs. From the blue-collar sector, the most susceptible ones to automation are the high-labour jobs, **cashiers**, drivers and **gaming dealers**, while the last susceptible ones are computer scientists, **lawyers**, writers, editors, designers.

The pink collar jobs are represented by the service industry. There will be no automation in this sector, as the human factor is required. Creativity, empathy, social interaction and all the other skills that make people humane are not at all susceptible to automation. In this case, cashiers and gaming dealer jobs will not be substituted by machines due to the social interaction required.

Surgeons and lawyers are not the hardest replaceable because of the earned income, status or job recognition variables. Several surgeon skills can be automated. The speed, precision and accuracy increase with the help of machines and also a better diagnosis can be given. The lawyer profession cannot be fully automated due to ethical issues. A.I. cannot be given the option to participate at the decision-making process and have the last judgement call that can affect human lives. It can be only in the supporting role, not in the leading one.

As previously mentioned, law is not implemented at the same pace with the technological advancements. Therefore, the employment shift needs to happen gradually, in order for the new make-up of the work force population to establish, while the substituted human work force will have the opportunity of going through a career-change or be allocated a spot in a training program for gaining new competences needed to fulfil another job.

2.2 A.I. IN MARKETING

A.I. has already started carving its path in marketing with its advanced virtual assistants, consumer trend predictions and tailored recommendations. Alexa, Amazon's VA can now recognize speech. Siri will no longer operate over a default set of questions; Google's Assistant will be able to perform different tasks like booking a hotel, buying a present etc. IBM's Watson computer managed to read 200 million pages of data in seconds, managing to ascertain predict the consumer trends (Hoanca, 2014). Facebook uses the data from the browsed content in order to create recommendations and redirect the advertising according to the person's interests. Even the time spent looking at a post, without clicking on it, influences the content it will provide the user with. Linkedin uses machine learning to find talent in order to match the employer with the employee. It takes in account all the people in the user's network and also its preferences. Real-time tailored recommendations are being developed through visual learning and deep learning techniques.

Another novel, disruptive factor that leads to value creation is that A.I. has a layered computational architecture which allows products to be more customizable in terms of algorithm. In basic software and hardware, customization is available only for the product

outer look, for the interface, not in the interior. A.I. takes customization of software to the next level, by designing a product according to the consumer's preferences on all layers.

2.3 A.I. IN FINANCE

Finance is another domain where A.I. started leaving digital footprints. Tailored offers and recommendations were created by tracking customers' habits based on their purchases and the frequency of buying, their activities, earned income and how it is managed etc. Customers are recommended different financial investments in real-time.

Other A.I. applications in finance include fraud minimization, predicting system failures, better anomaly detection that would lead to cost saving especially in the trading sector. A.I. can be deployed to manage risk and profitability more efficiently with an increased security.

As an illustration, Sentient Technology, a leading company in the trading sector developed an algorithm that buys and sells stocks without human intervention on more than 1.5 million CPUs. The A.I. traders start by using “fake money” and take trillions of decisions before using real currency. The codes trade at a high frequency, on a 24/7 basis. They are given challenges or are already programmed with counterproductive parameters, which they need to cleverly avoid using in order to take the right decision. The results of the best human trader in the world cannot equal the experience and acquired skills of the A.I. traders of Sentient Technology.

Another competitive edge can be gained in finance if all A.I.-driven operations will be executed especially in the capital markets, but not exclusively, being open to most of the other financial departments as well. The internet time, where the time zone does not exist, will replace the traditional time frame and would lead to a great increase in revenue, by extending the working hours to the 24/7 lapse of time. According to Porter (1985), maximizing the sale points leads to value creation by increasing productivity and efficiency. The transactions needed for fulfilling the stop-loss and -gain operations in the financial markets will happen on a 24/7 basis if the portfolio manager is enhanced with A.I. properties and has more experience than a human. Software like RAROC – risk-adjusted return on capital, VAR – value at risk, MACD – moving average convergence/ divergence, for instance, which calculate the risk of the investment portfolio more precisely are already running continuously.

Another advantage that would lead to a better accuracy and speed and a substantial cost reduction is RPA (robotic process automation). The robots capabilities extend to going through the thousand invoices processed daily by the subordinates and extracting different attributes from them, enter the data into the ERP (enterprise resource planning), convert it through the workflow and allocate it to a manager to have it approved.

2.4 A.I. IN MANAGEMENT

Organizational Behaviour - Corporate Culture

The values and practices of a company will be affected once A.I. technology is deployed. The way subordinates work, the fulfilment of tasks and goal accomplishments will take another shape. The performance which leads to productivity, workforce training and strategic management will change. The company will be affected in two ways: (1) the distribution of power will be reassessed due to the effect of the new technology on the hierarchical ladder and the changes that need to be made by replacing the human work force with A.I. where it is necessary. (2) The cognitive literacy of all relevant stakeholders will need to be improved, as A.I. will fundamentally transform the way people relate to knowledge and to the way they perceive a potential threat for their job (Holtel, 2015). The challenges will begin simultaneously, given the societal and psychological impact the new technology will have upon the organization once A.I. is deployed.

Due to the different makeup of the population workforce, the distribution of power needs to be reassessed. The middle-management level will need to take decision in a different manner, as well as the top management. They would need to know how to react and what decision to take is there is any conflict with machine reasoning. The hierarchy will be flattened and there will be a need for employee democracy. Henceforth, the decision-making process changes, new ways of collaboration appear and employee participation evolves.

Managers should already have a plan in order to deal with A.I., especially if they arrive to conflicting results and machines do not agree with their decisions. Wile (2014) pointed out how Vital software was given the function of a member of the board in a venture capital company in Hong Kong. The A.I. system ended by changing the balance of power and had a detrimental impact on the company.

Implementing A.I.

Each A.I. technology needs to be tailored to each company. Once its end-goal is unveiled, it must be adjusted with the value system and practices of the organization. By contrast, not achieving a shared context can lead to a lack of understanding and the A.I. might destroy the values that do not create the self-belonging attribute of the subordinates (Weick, 2000). Therefore, involving all the subordinates and creating an employee democracy is the first step of gaining a shared meaning and commitment. The unity can lead to a compact vision and mission statement which can be reinforced once the A.I. is deployed. Focus groups, 360 degree-feedback, brainstorming and all other methods that facilitate open-communication are encouraged and supported in order to gain insight of how new practices form, what corporate culture shapes into, and how the new environment impacts the employees.

Furthermore, until the cognitive functions are fully understood, the company will need to run tests, create prototypes and continue to adjust the A.I. system until it is completely embedded in the company fabric. The business model will remain a canvas running of try-fail algorithm until the perfect formula is discovered. Strategies cannot be implemented without a great risk taken, which could be an opportunity in disguise. Adaptability and continuous improvement are two key components of the formula. According to Davenport (2009), the data stream will create relevant business models in the future. Data-driven organizations will surpass the ones that do not use data (McAfee, Brynjolfsson, 2016), therefore the objective should be to turn the organization into a cognitive enterprise (Lewis, Lee, 2015).

In order to implement any A.I. driven automation system in the company, it is recommended to create a centre of excellence (COE) led by an automation team. This would insure the smooth process of adapting to the corporate culture of the new type of work force. The following steps would be to make an automation plan ready to be implemented gradually in different departments of the company. The further alignment strategies have to be discussed with the strategic management department at a higher hierarchical level and make sure there is a two-way communication with the subordinates. Reluctance to change might be often faced, especially in companies dominated by risk-averse corporate cultures. The benefits of automation need to be prioritized accordingly while following the end-goal of the company (Mont, Joe, 2016).

Learning and problem-solving would need to go hand in hand. The shared sense of belongingness, the shared sense and definition of the corporate culture would soften the impact of new technology to come and would bring both men and machines on the same page.

Unity, open-mindedness, diversity and communication could bring the solution to the management problem that varies with each company A.I. is deployed in.

According to Brynjolfsson and McAfee (2014), data driven companies will surpass the ones that do not handle data. Therefore in the future, cognitive enterprises might have the right business model to follow (Lewis and Lee, 2015).

Global trends are shaped through disruptive innovation and the new technology of A.I. represents a big part of it. A.I. could be considered the fuel for the next business models. It will definitely shape the industry environment in various ways that remain to be seen.

3. METHODOLOGY

The practical approach will take place by taking the concept of A.I. out of the academic context and bringing it to the industry environment. The study conducted is based on qualitative methods of research. The choice for this type of methodology can be justified from the broadness of the field and its consequences seen from different interdisciplinary subsets in the theoretical approach which would lead to a better and more compact understanding of the reader through 10 in-depth interviews, rather than through the means of segmented fragments of data given by a quantitative methodology. Qualitative methods of research are therefore more appropriate and fit to tackle the impact of A.I. on global trends than quantitative ones.

The research conducted is exploratory. It is not based on the previous studies mentioned and the drawn forecasts, but on the unanticipated answers of the respondents which may or may not be congruent with the studies explored in the literature review. The research uses primary data obtained by interviewing 10 respondents and using purposive sampling. The questions are open-ended. The participants interviewed were chosen according to their profession and level of expertise in their domain. All interviewees are employees of A.I.-centred companies or companies that incorporate and deploy A.I. in their company. The study made is anonymous. The interviews were taken in three languages: English, French and Romanian, due to the different nationality, location and spoken language of the interviewees.

The following questions were addressed in the interview as follows:

1. How do you perceive A.I. and the impact it will have on business, especially on your sector of activity?

2. Does A.I. bring a competitive edge to the company you work in?

3. How can A.I. produce or contribute to value creation in your department?

4. What is the interaction between the A.I. system and the human workforce at the workplace (if this is the case)? Is motivation, productivity, performance or leadership affected? How?

5. How is/ was A.I. received in the company? Did it create any change at the level of management, corporate culture or organizational behaviour?

6. Are there any negative side-effects to A.I. deployment in the company?

7. How do you regard the employment shift? Should people be concerned for losing their jobs?

8. What is your opinion on the ethics of A.I.? Do you have any concerns related to it?

9. How will A.I. shape the future according to your perspective?

3.1 RESULTS

The data gathered from the open-ended interviews was analysed on two levels – the descriptive one and the interpretative one. The results can be seen below:

A.I. will transform the way users consume information, the way customers interact with business on a B2C basis and the way people work together. It brings all users more ease when it comes to trivial parts of work and daily life. Delegating tasks might not be an easy step, notably for a manager who needs to feel in control at all times, but A.I. has proved to be a reliable assistant.

The findings show A.I. is comprised of three components – (1) source learning/ machine learning, (2) advanced products and (3) provision for research through gathered data. The value attributed to them by the consumer world is 60% on advanced products, 30% on source learning and 10% on research, which also determines what business will focus on more. However, the flow is set by the source learning and the approach business took, might not be exactly counter-productive on the long run, but would definitely lack in benefits long-term. Learning about the source, understanding machines more wisely and performing actions to avoid any unplanned downtime and increase machine effectiveness would help both advanced products and the research and would increase productivity in business.

New products emerge as a result of discrete applications like Face Recognition, Digital Assistance and encourage innovation through disruptive systems to develop. Entrepreneurship

is largely encouraged by having this new means of technology more accessible.

One common element noticed by all the people working in the A.I. field, was that most of the start-ups created recently, have A.I. at their core. As a result, in the following years, there will be no room in the market unless the companies become more A.I.-friendly and take advantage of the growing domain.

All the interviewees agreed to have a competitive advantage in the industry. The tech titans that are able to allocate substantial budgets to their R&D departments collaborate and have an inner, healthy competition. This form of collaboration maintains a balance in the human versus machine aggregate and allows people to reason together in a shared context, before taking any risky step in deploying A.I. at another level. Therefore, competition cannot fully evolve in an environment which is not yet prepared to compete, but the technological advancements are supported by the whole business industry.

However, there are a few factors that contribute to gaining a competitive edge, even in a collaborative environment at first sight. Firstly, the academicians and skilled data analysts, computer scientists and A.I. software developers are the ones to create the competitive edge through their talent. Nurturing relations with them is vital. Having a talented team can make the difference in the industry environment and the products developed can be far from reach for the competitors.

Secondly, there is a great gap caused by the A.I.-centric companies or the ones that have already deployed A.I. in their organization than the traditional ones. According to the A.I. experts interviewed, the traditional companies will have a lot of difficulty in organizing the data and transitioning to a more modern approach. The long-term strategies will be affected the same way, their practices and values will be affected. Implementing A.I. is not only an extension, or an add-on to the business itself.

Thirdly, novelty is what gives a competitive edge in companies where A.I. is deployed in another form than automation. People are curious by nature and the possibility of having a bot for example, which gathers data and organizes information for them, or just having a chatbot to talk to, draws a new audience that cannot be segmented, due to the fact that their consumer behaviour is driven by one instinct - curiosity.

Value creation increased considerably when A.I. became available on the market. It helped reduce risk, especially in finance. Knowledge of the future is given by having accurate prediction models. A.I. predictive applications for financial assets are not limited to one field.

Portfolio management and trading were mentioned to be the sectors that created the most value given the automatic negotiation made possible by the adaptive learning techniques and the drift detection. Pricing strategies have changed once the data began being translated using artificial, cognitive methods.

The sector of marketing benefits of value creation as well. One participant who works for a leading mobile software developer company has access to data of the top mobile phone networks in the world. Based on the data gathered from the users' activity, the company provides them with better marketing recommendations for phones, subscriptions and offers package deals. Since the company started using the methods mentioned above, its revenues grew with a third in three month time-frame.

A.I. reduces labour, reduces unplanned downtime, reduces risks and reduces cost, increases efficiency and effectiveness, increases machine life time, increases quality of life by fulfilling a great number of tasks.

Nonetheless, the opinions were divided when it came to the impact the A.I. has at work. While for all the respondents belonging to A.I.-centric companies or the ones who did not use A.I. in the automation process, the technology helped with keeping the team together, increasing subordinates' morale and motivation and having an overall positive impact. The employees' performance increased, and they became more creative in problem-solving.

The other participants mentioned the negative impact A.I. had, by automating the system and encouraging lay-offs. They argued the ex-employees were more knowledgeable than the machines, which could replace only their tasks, but not them with all the other contribution they brought to the company.

Based on the findings, A.I. became part of the corporate culture, although it was perceived as a "hiccup" initially. It needed a change of attitude, cultural alignment, re-establishment of values and practices, and subordinates needed to start trusting the A.I. with small decisions. The impact was positive based on the findings.

One advantage underlined by the data is that the management of giant information tables became easier. Finding the needle in the haystack is no longer an issue for companies when using A.I. It can tackle time-consuming problems at a computer speed that cannot be matched by any human and as long as it is used to assist and not to lead the project, nor take any final judgement calls, issues related to how power is distributed, technical problems are

not likely to appear. However, organizational behaviour will change, depending on the values and practices of each company.

Regarding the negative side-effects that A.I. brings, the only one mentioned by the interviewees was cyber security. Trusting machines and providing data to them can help with efficiency and effectiveness, but during the process, they are vulnerable for exposing the critical details to anyone if security is not taken in account and made a priority.

The employment shift did not raise any concern between the participants of the interview. Nevertheless, it was acknowledged by all respondents that the employment shift will be one of the global trends affected and stirred by A.I. There is no fear of losing their job, but there is a unanimous opinion there will be fewer workers, as the lay-offs have already started in some of the participants' workplaces.

Another difficulty might be the speed of change which is not the same for all the sectors. Technological advancements are moving rapidly, while the education and legal sectors are still behind and their rate of adaptability and responsiveness is not high either.

90% of the respondents consider the job market will still exist, even after the automation. The A.I.-centric companies will automatically create more jobs and will invest more in talent harnessing all over the world. The revival of the economy can be made by encouraging entrepreneurship to happen widely, by making available the right educational tools for everyone.

As far as ethics is concerned, the interviewees brought up values. Ethics need to be regarded differently from the duality of right and wrong. It should be based on the common values people have. Ethics must be seen from another angle that is beyond the dual concept of good and bad. If companies include all employees in the making of the end-goal, the set of values begins to be created. The corporate culture will be more dense and harder to break by any novel technology. Having a shared set of values and a shared policy and plan of deployment of A.I. are the key ingredients for allowing this technology to enter the company.

Cyber-crime, on the other hand is the real concern. If all the machines in the world become connected and the security is weak, issues of national threat could be created. Even if the benefits that are to be harvested in the near future are abundant, people need not neglect the risks that may be more than a corner away.

On the short-term, in the near future there will be no competition, as A.I. is still not completely developed. At the level of business, there are already changes being implemented in organizations, new business models tested and training done for the employees.

The first areas that will change in the industry will be with medicine, where the results can be seen right away and A.I. can make one of its biggest contributions – saving lives. It will change the way sensors are used to measure health, allowing every person with a smartphone have a personal doctor and healthcare in his pocket.

Law is also a controversial field to which A.I. could bring great value if there will be less resistance. A.I. could help by making impartial decisions based on the evidence and help with all data gathering, it could search for the relevant one, identify it and compile it to a new set of data which is more concise. It could also help with the document preparation for real-estate, marriage, divorce papers etc. and facilitate most of the legal processes.

Remembering what people thought about the future one decade ago could not equal the changes and results the world morphed in. Another unrealistic world will appear and will become common for the people of today glancing through the looking-glass of tomorrow.

4. CONCLUSION

The journey taken to follow the technological advancements of A.I. managed to present the advantages and the disadvantages companies face while integrating it in its fabric. All the fields mentioned from a macro perspective – the economy and the entire industry environment, as well as from a micro perspective of different branches of business, i.e. finance, marketing, organizational behaviour, management etc., present opportunities to create value, and risks in equal measure, which need to be taken in account. The results can be seen in the following table below:

Table 1. A.I. Benefits – Risks Analysis.

Impact of A.I. on	Value Creation	Risks/ Set-backs
Finance	↓ risk ↑ predictions ↑ data management ↑ trading	

Economy	↑ automation - new definition of self-worth - working for pleasure paradigm ↑ quality of life – basic income	↑ lay-offs ↓ labour - new set of skills required
Business	↑ performance ↑ productivity ↑ efficiency ↑ problem-solving ↓ unplanned downtime ↓ risk ↓ cost	- long-term, difficult transition from traditional type of business to a cognitive enterprise - new business models need to be created
Management, corporate culture, organizational behaviour	↑ employees' morale ↑ motivation ↑ internal healthy competition	- cultural alignment - changed/ reinforced values and practices
Fast advancements of technology	↑ machine life-time ↑ storage capacity ↑ cognitive functions	- trust issue
Ethics		- cyber security → national security threats - cyber-crime

A.I. advancements work as a disrupter in most industries. The era we live in breathes through disruptive innovation, where talent, creativity and courage are the key elements to create new markets, to enhance products and to redesign the industry. Global trends are shaped through disruptive innovation and the new technology of A.I. represents a big part of it. Artificial intelligence can no longer be ignored, nor avoided.

Evolution happens through change. Whether it is a business system, or the whole traditional business in need of change, A.I. has proved its disruptive power, being able to redesign the environment according to all needs. Personalization is now taken to the next level. Consumer behaviour can change and allow customers to have their needs met entirely.

Marketing can change forever, by using tailored offers for each customer from the comfort of his own place. Economy can take another shape, where abundance can flourish in an asset-driven economy where the basic income is insured. Income will no longer contribute to the status in society, but talent, creativity, empathy and other people-skills will form status. Values will change and will bring people closer. The business environment will also change. Employees will be able to have a more participative role in the decision-making process. Negotiation, operations and other processes will be different once A.I. technology is deployed. As long as A.I. will play only a supporting role in a company and not the leading role, companies will thrive.

A.I. will bring out the human factor in people. It will create meaning through a new definition of self-worth, once it enables people to work for pleasure, instead of a steady, secure income which will insure stability. Machines will not be able to be creative, nor have the social touch that leaves people enriched after having interacted with another being. Machines will lack empathy, compassion and generally emotional intelligence which cannot yet be infused in them.

One risk humanity is facing nowadays is that the more technology is being used, the less humanity people seem to have. A.I. will be the trigger to reverse the cycle. The more machines will increase their cognitive capabilities and become more human-like, the more people will search for the exact ingredient that makes us human. Machines will never be able to surpass people at being human, despite their increased memory storage and an immense database of gathered data that is processed in real-time. Therefore, new technology will connect people to becoming humane once again, realign their values accordingly, change and enhance their ethics and behaviours in society and rethink their role at a deeper level.

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