Research Article

Artificial Intelligence and Organizational Change

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This article explores some issues close to what may be considered the implications of AI, both preliminary at a society level but mostly its effects on organizational change. What is AI's purpose, its scope, and its lasting effects on the dynamics of organizational change, cultural values, and organization management?

The AI culture arises from making technology a joint venture with human abilities, allowing human and technology to become almost all in one: either human thinking through a machine or the human self-image in front of himself. The risk about AI does not arise by itself but from its designers and purpose, more so when it is the government that comes to be the "Big Thinker". Businesses instead may follow a self-regulation policy following their principles and corporate values.

The article has four sections: introduction, the speed of technological transformation: a brief time span: 2022-2023, organizational culture and artificial intelligence, case studies, and concluding remarks. The preliminary conclusion is that AI has strengths and weaknesses. AI tools learn to achieve higher efficiency faster than people in charge of any specific task to be assisted by AI, leading to productivity increases and cost reductions quicker than the standard framework for management decisions. Empirical evidence suggests that the productivity gains are focused on low-skill and less experienced agents. This outcome arises from generative AI's ability to "think properly" to capture the best patterns of behavior as a benchmark from the most productive individuals. But there are relevant risks of work displacement.

I. Introduction

The article sets the argument about the proper approach to artificial intelligence from the standpoint of organizational change. It proposes some questions about the nature of intelligence, whether it is

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artificial, and suggests that there is no real intelligence.

Natural intelligence is assumed to be linked to curiosity as a first step before getting into the situation to solve problems. This is for sure a restricted approach to intelligence, but it fits with the intention of moving the intelligence frontier from the real to the artificial one.

Therefore, AI may be considered to be artificial curiosity (AC) to move upward to higher levels of knowledge. Curiosity is the first step of knowledge; it is everywhere in every person, but intelligence is far from homogeneity among individuals (Gardner, 1983). What is the type of intelligence AI deals with? It probably considers all at once, but as it depends upon the ability of the programmer, it gets a fraction of them all, unlike humans, who have a segmented one, making it a more homogeneous profile of intelligence and improving its potential for more efficiency and productivity.

Leaving aside the discussion about the independence or the interdependence of each type of intelligence, artificial intelligence becomes a sample of what the full scope of human intelligence may be about, with the limitation that it lacks the emotional or relational side of human interaction to develop expectations based on hope, because it takes only a fraction of our intelligence capabilities (Acemoglu and Johnson, 2023). But with that small fraction of the intelligence humans have, it may do a lot more than we do.

Artificial intelligence will set a new culture for organizations and society as it changes the complexities of the power dynamics between different groups, just like the previous technology revolution did in the past (Meyes, 2015). In this case, these groups are the new dominant (AI), the marginalized ones (those outplaced by AI), and those in between (remaining high-skilled groups as input of AI). In the game theory situation, the high-skilled become the principals who set a creative destruction path to decide what comes next, what is the best and most efficient way to go along on the path of expected innovation. The agent considers AI as the one who looks for the optimal performance, all leading to a cooperative game within the framework of the so-called management of meaning. Beware, it could be the other way around; human-like agents following AI guidelines unless clear self-regulation policies apply.

The underlying risk about AI

There are two kinds of AI applications. The so-called "Closed Source" (Open AI`s Chat GPT-4), which keeps the software under control of the maker and a few selected partners, and the "Open Source AI," which initially was thought to be of wide, unrestricted access. In 2019, it was restricted due to the risks

involved in its unregulated application. The text it generates may lead to harmful consequences. Some limited exemptions have been set in the European Union`s AI policy, as well as the USA Government`s AI executive order (Harris, 2024).

Concerning the unsecure AI applications, there are some guidelines already in place to regulate their use within society, including regular users, AI systems, distribution channels, and government actions (Bletchley Declaration, 2023). Harris (2024) notes this as well. On the other side, organizations can set AI policies to reward functions which prioritize desirable results (Brynjolfsson, Li, Raymond, 2023). From a macroeconomic policy standpoint, a new set of policies is needed to cope with the vast effects of AI, such as to be positive for humanity (IMF Blog, 2024).

The basic approach of AI means that the higher risk is to be unaware of its consequences. The language skills of the programming agent, either a man or a woman, as well as their ability of critical thinking to set guidelines for collateral damage proof, are critical. The premise would be that while the AI setting is without any firewall, the higher the risk about its consequences, but as long as AI gets more sophisticated and closer to human intelligence, it would be capable of taking better control of the risks of its consequences as much as the firewall becomes more effective and precise. So AI does not mean a risk-free technology, but a different risk scale level from high to low as long as the AI boundaries are within management´s control.

The situation looks like a child on his/her way to become an adult. Leave them free in the living room. Leave the adult without rules on the busy traffic street. In both cases, the self-control ability is different, lower in the former, higher in the latter, as the conscious status (rules to be respected) differs between both groups. Thus, AI public regulations should be more flexible as it moves upward the life cycle curve, such that once it gets closer to the inflection point, AI would reach a maturity point and global regulations would get into the stationary mode. Businesses should apply self-regulation policies as a key factor of their corporate principles and values.

Mixing thinking ability, language, and quality data as the input drivers for artificial intelligence creates a new organizational setting for human diversity to which organizations must adapt. It is not only a matter of people's relationships in organizations, but also a matter of human-machine (AI) relationships - with the ability to learn - within organizations.

The purpose of AI depends on those interested in it, whether they are philosophers, psychologists, scientists, engineers, or economists. The former deal with understanding intelligence and ourselves. Ethical questions and their implications are the primary issues to deal with: Is AI inevitable? What is

the real meaning of AI? Scientists and engineers worry about the brain and how it works, slow but very good at some tasks. Their aim is to identify a specific form of computation such that it allows the construction of intelligent systems. For economists, the main problem deals with rationality and AI regulations: Sometimes it is rational to act randomly (game theory), or to follow decision theory (Probability + Utility). Concerning labor regulations, AI represents a tool capable of putting at risk the traditional welfare setting as it speeds up the process of people looking for new jobs.

II. The Speed of Technological Transformation: A Brief Time Span: 2022-2023

The problem is not only the organizational transformation and its values and changes, but also the speed of technological change, which creates additional pressure for organizations to have a faster pace of change. In fact, while in the XIX century organizations needed thirty years to fit to the new technology, the XX century required twenty years of technological adaptation, but now the available time to make organizational adjustments is less than ten years (DW Forum, 2023).

The time span to fit the organization with new AI technologies is shorter than before, which means higher organizational transformation costs to get its net benefit before competitors do so. In fact, there are leading organizations focused on the value arising from Generative AI which already get up to 20% of their EBIT (earnings before income taxes). McKinsey (2023).

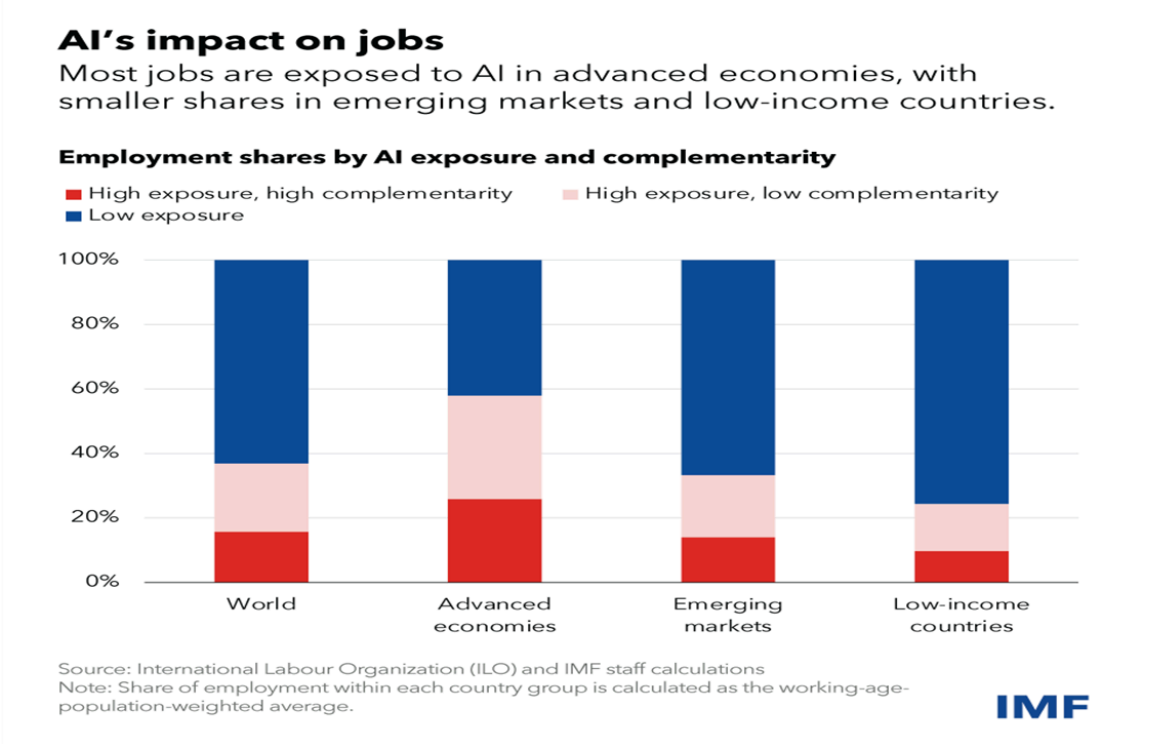
Besides, 35% of businesses worldwide are using AI support, 43% of businesses are investing in AI, and 44% are planning to do so within the next five years. Pegg, J. (2023). Recent research suggests that up to 90% of AI decision makers plan to increment automation in 2025, with 56% expecting to make significant progress within the next six months. Sammuels (2024). But as AI is expected to be a complement to human work, it will also require a job evaluation from its current functional setting to another with a higher innovation share.

In advanced economies, half of the jobs are expected to be affected by AI, but there is also an expected productivity increase in current jobs. On the other side, in emerging economies, the exposure to AI is lower (40%), while in LDC economies, it is 26%, which, although it means lower risk, also implies that those economies will not get the full benefit of AI. One reason for this outcome in LDC economies is the lacking necessary infrastructure. IMF Blog (2024)

A recent survey done in 2022-2023, with 2778 expert answers (McKebdrick, 2024), predicted a 50% chance of high-level machine intelligence by 2047, a decade earlier than anticipated in a previous 2022 survey. Moreover, generative AI also means new risks to be solved by management. Furthermore, 34% of organizations already in the generative AI setting consider workforce/labor displacement as a risk, and so do 31% with equity and fairness. McKinsey (2023).

The chance of all human labor being displaced by machines is expected to be 10% by 2037, at an increasing rate in the years ahead. Within the digital business field, that rate is expected to be 17%. Moreover, 31% of USA executives fear that people losing their jobs to AI will take place in the next two to five years. Samuels (2024), WEF (2024)

Generative AI can increase productivity, although not in a homogeneous way across workers. It is higher in low-skilled workers and lower, if not negative, in those higher-skilled workers who are the ones to provide the input setting. Brynjolfsson, Li & Raymond (2023). There are more jobs in advanced economies that are vulnerable to AI implementation than in emerging economies and low-income countries.



Thus, with different AI models moving forward fast, there will come a new development in organizations that champions diversity, dealing with innovation, creativity, strategic thinking, and

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prospective analysis, coupled with new values about employees' relationships at work.

However, the new models, known as the "foundation models," can be reassigned to different problems throughout fine-tuning. Actually, 80% of AI research is focused on these models to make them general-purpose technology models (GPT), with an effect on long-term productivity growth. The key attributes of these GPT models are fast improvement in the core technology, broader applicability across sectors, and innovations in associated products, services, and business practices. Microsoft, Tesla, Meta, & Alphabet are working with this AI GPT model to improve its standard of superlative quality and efficiency. The Economist (2022).

GPT-4 is part of the sequence of GPT developments. This means it has a path of permanent improvement over time. It has many advantages, such as the wide field of application, as well as the amount of text (25,000 words), while GPT-3 has just 3,000 words of text. Moreover, GPT-4 is 82% less likely to respond to requests for disallowed content and 40% more likely to produce factual responses than GPT-3.5. Thus, GPT-4 is an alternative to scale up deep learning as a large multimodal model (accepting image and text inputs, emitting text outputs) that exhibits human-level performance on various professional and academic benchmarks. Sooner than later, it will be improved further into a more advanced GPT-5 version.

Risks and Mitigation Actions

GPT-4 poses similar risks to previous models, such as generating harmful advice, buggy code, or inaccurate information. Besides, the additional capabilities of GPT-4 lead to new risks, as will be the case for AI as it expands its scope. But it incorporates an additional safety reward signal during "reinforce learning with human feedback" (RLHF) training to reduce harmful outputs by setting the model to refuse requests for such content. The model's tendency to respond to requests for disallowed content has dropped by 82% compared to GPT-3.5 (http://www.opeain.com).

The XAI Model

An alternative setting is the one called XAI (Explanatory Artificial Intelligence) (Gunning, 2019). This model closes the weaknesses of traditional AI models, which lack explanatory space that is critical for fields like medicine, finance, and legal matters. As a research discipline, it considers that every aspect of learning can be described so precisely that a machine can simulate it properly (McCarthy, Minsky, Rochester, and Shannon, 1955). AI has also been considered as a powerful representation of what is

expected to be human (Schuman, 2006). But in such a case, the most powerful artificial intelligences, as machine learning, have a limited range of intelligent behavior, as long as they are focused on specific uses like making precise predictions, which is the field of data processing, rather than reasoning about the data meaning.

Despite the lack of reasoning about data meaning, there are a variety of branches and applications of AI, such as "logical one," which is based on general facts concerning a specific situation to decide what to do by inferring what actions are necessary to achieve some goals. Brynjolfsson, et al. (2023). Other branches are "Search AI" programs, inference from some fact, planning programs, epistemology linked to the knowledge requirement to solve problems, heuristics mode, theorem proving, literature and music, logical reasoning, and perception. Holden (2021).

The applications of AI also consider "game playing," understanding language, and carrying out some tasks such as diagnosis but are constrained to the human capital endowment to be up to the AI requirement.

The scope of AI and its implications

However, beyond all of these promising outlooks dealing with computer performance, and how it gets close to the human brain's neural network, there is concern about AI implications at the macroeconomic level, and society as a whole, especially the welfare status following the job losses arising from a massive application of AI models in a variety of operational processes across different industries. In a ten-year time span, the WEF global risk report set a higher risk (27%) for AI effects on individuals, businesses, economies than in a shorter period of time like the next two years (2%), as uncertainty about its future impact increases over time. WEF (2024)

Actually, 38% of employees expect changes in their job specifications due to automation, and 13% think they will lose their job because of it. However, it is also possible that almost 100 million new jobs will be generated by 2025. While at the same time, 85 million jobs may be replaced. Therefore, AI is expected to add 12 million more jobs than those to be replaced. Pegg (2023)

More so when there is not anything yet close to a regulatory framework to deal with the whole implications of AI for economic policies and political power, making the risk of leading to a new elitism away from the principles of the welfare state and its regulations. Piasecki, et al. (2021). WEF (2024).

III. Organizational culture and Artificial Intelligence

Organizational culture sets the way things are done within the organization, given its people's beliefs and values. It is a set of possibilities for keeping stability while organizational change is taking place over time. Organizations must assume change as the regular input of their performance. The impact of AI on this issue goes on the line of making symbolism and values the drivers of organizational changes both on learning and power interaction. Thus, a set of rules, mixing thinking skills, language ability, and quality data, becomes the inputs driver for artificial intelligence to create a new organizational setting to which organizations must adapt to have a more flexible organizational structure.

It is usual to argue about losing jobs because of AI, but that assessment skips over the other side of the problem. The oversized organizational structure of many organizations creates artificial complexity to adapt quickly to the demand for changes arising from external forces.

Since the second half of the XX century, business complexity increased by a factor of six, but in the same period, organizational complexities increased by a factor of thirty-six (Morieux, 2011). Therefore, AI may be aimed to provide simplicity (efficiency) to confront self-generated organizational complexity (redundancy), acting like a business Darwinism force such that only those organizations able to adapt to AI will survive. Job losses have two factors reinforcing negatively to each other: the rigid organizational structure and the efficiency profile (higher productivity) of AI to replace jobs.

The productivity effect of information technology changes is higher when it is matched by meaningful organizational changes (Zand, F.; Van Beers, C.; Leeuwen, G., 2011; Canessa-Terrazas, Morales-Flores, & Maldifashi-Pohlhammer, 2017). Information technology has a dual impact on change. On the one side, it generates changes, very important in manufacturing, and on the other, it supports changes, quite necessary in the services sector, where AI has a path of faster implementation (Zand, et al., 2011; Brynjolfsson, Li, & Raymond, 2023).

Thus, both technology and organizational changes are the two sides of the same coin such that the positive outcome of technology change depends upon complementarities with cultural values (Attaran et al., 2020).

What counts for organizational change with higher diversity, it is not only a matter of people relationships but also about machines (AI)--human relationships both within and with organizations. More so when there is increasing women involvement in management positions. The available data

show that 12% of women in organizations use AI regularly while only 8% of men do so. Besides, 46% of women have tried Generative Artificial Intelligence tools at least once, while only 37% of men have done so. McKinsey (2023). OECD (2023) reports that when surveyed, firms are asked directly, 57% of employers in finance and 63% in manufacturing reported that AI positively impacted productivity, and 80% of surveyed workers who work with AI report higher job performance. IMF Blog (2024)

Management of Meaning

The new organizational setting for management means a shifting of the balance of power from production operations and services, most of which will be automatized, to people's minds. The power dynamic arising from AI has new and more complex symbolic variables which managers need to be aware of. Expert power does not seem to be well suited for unpredictable scenarios like the one coming out of Artificial Intelligence. Bradshaw and Boonstra (2008)

Management of meaning (Pettigrew 1977) became the driver of symbolic values like ideas, holistic profile decisions, values, creativity, innovation, critical thinking, and expectations, to give them all legitimacy. The focus of management power is on those who have the knowledge, strategic thinking, and prospective view about change based on the data-information rationality of doing more with less.

The faster pace of Generative Artificial Intelligence has made it an agent of change able to provide useful assistance to the principal's organization in their task of transforming it into a learning organization. By May 2023, Anthropic's Generative AI, Claude (www.anthropic.com), suitable for the services area, was able to process 75,000 words in 60 seconds, compared with roughly 6,800 words when it started in March of this year. McKinsey (2023). Brynjolfsson, et al. (2023)

Based on AI deployment and its increasing scope, McKinsey Consulting suggests that the technology performance by AI tools is expected to surpass the performance of top quartile jobs (creativity, logical reasoning and problem solving, multiple coordination abilities, social and emotional sensing and reasoning) earlier than previously expected (2027) (McKinsey, 2023). The total hours to be automated would change from 50% to 60-70%. This will mean job losses; 40% of global jobs are at risk because of AI applications (IMF, Blog 2024), but as AI is expected to be a complement to human work, it will also force a job upgrade from its current functional setting to another with a higher innovation share.

Therefore, it is not a risky assessment to say that artificial intelligence has already boosted the organizational change, making behavioral sciences a complement for management decisions to achieve its goals with efficiency within the new technological setting. The implication of AI within the

4th industrial revolution and its potential to fit with the advanced technology framework (3D printing, autonomous vehicles, biotechnology, nanotechnology, quantum computing, robotics, and the Internet of things) has implications that require a system-wide response, which leads to a strong push for AI to be a key factor both for undergraduate and graduate programs (UNESCO, 2021).

Learning Organization

So, how does AI fit within the learning organization (LO)? Previously, it was the issue of organizational learning (OL) as the first input for organizations to become a "LO."

Concerning "OL," there are two lines of development and empirical evidence about learning, either vertical (exploitation) or horizontal (exploration). "Vertical learning" means implementation, efficiency, and current knowledge as the driver, while "horizontal learning" means a three-loops status dealing with exploration, search, the replacement of current knowledge, and adaptability to new scenarios within a strategic setting (Canessa-Terrazas, et al., 2017). Most organizations prefer vertical learning to the horizontal one given the higher risk and uncertainty of the latter. Rigid organizational structures focused on performance make it easier to go on vertical learning.

The empirical evidence for Chilean companies suggests that vertical learning has a positive impact on organizational performance, while horizontal learning does so for organizational change. So, management needs to find the proper balance between learning alternatives as the main purpose of strategic management. Canessa-Terrazas et al (2017) state, "It is intuitive to realize that concerning the learning organization, AI deals more with strategic thinking (horizontal learning), to get the best match between organizational performance and organizational changes."

Senge (1990) made "LO" a key requirement for systemic thinking, but the question about how to make learning an interdisciplinary experience to get the status of strategic thinking remains unsolved. Flood and Romm (2018) note, "Beyond the description of each 'discipline,' it is not clear how they relate to each other in order to get an integrated dynamic learning flow for competitiveness purposes."

The restricted systemic thinking does not adequately address the processes of neither power dynamics in organizational settings, nor their links to society, where dominant language constructions and bias (discrimination, exclusion, cancellation) could easily become "real" inside the organizations. Flood et al (2018) state, "In this situation, an AI framework would generate a gap between the natural pace of both change and adaptation done in the past, which are the input for AI, and the one which is required for the future."

Artificial intelligence tears this approach up to make a wider scope of systemic thinking, such as to become more inclusive of inside organizations networks and emotions. Vince and Saleem (2004) note, "Organizations get the status of TLL (three-loop learning), which means that learning is deeply rooted in power dynamics, purposes, values, and emotions, all leading to the strategic view about what the organization should be once the AI is inside its hardware´s decisions. The "loop learning process" is just one of many loops induced by AI in different stages of organizational changes, as a nonlinear sequence of creating and co-creating new innovation flows based on the experience of "lessons learned" about the AI creative destruction pattern to provide strategies of thoughts and structures for learning leading to innovation not only for organization management, but also for its purposes and values.

Organizations must develop the ability of "learning how to learn." Barbat, Boigey, Jehan (2011), Flood, et al (2018), Aston (2020). This makes the learning organization (LO) a circular networks management process to replace the traditional one of "vertical complexity," which assumes that current events have a regular, predictable, uncorrelated pattern that makes it possible to anticipate its behaviour over time. Wulf (2018). Instead, AI will make such events' correlations higher, implying a strong stress on structure and individuals' behaviour and performance within organizations. Brynjolfsson, et al (2023).

How would AI impact some organizations in three areas?

Educational organizations

The framework proposed by UNESCO (2021) is focused on the risks and benefits of introducing AI in the education process. It provides useful guidelines for researchers as well as managers and policymakers in charge of educational institutions and their policy guidelines responsible for facing the consequences of changing key paradigms from constructivism (Serrano, 2011) to conectivism (Voskoglou, 2023) as the driver of learning.

This change makes AI a key player in what may be called the next education revolution, based upon the modification of the nature of learning and teaching.

Traditional models are focused on the assumption that students lack the abilities to learn on their own, which is supposed to be solved by teachers' abilities to work with pedagogy models designed for that purpose.

However, the current generation of youngsters develops from early stages abilities to stay connected every time, all the time. Technological tools at their disposal in the early stages of their learning make them more suitable to be connected as their "way of life." They "learn" early in their lives to be autonomous, making conectivism their way of learning about what they think is useful, following their own experience and abilities to learn based upon their wide connectivity tools available, instead of that of others (the teachers, school) as the unique reference. In other words, the notion that learning is a scarce resource with a relatively inelastic supply is replaced by AI to become a flat supply. Learning, and for this matter training, is available anytime, anywhere for anyone to become the key input to compensate those whose jobs will be replaced by AI, providing them new tools and opportunities to catch up with different skills.

Teachers must have different competences to be capable of working with AI applications, and the educational environment should be set by connectivism. By the same reasoning, the institutions must also adapt themselves, making organizational changes in their management purposes, principles, as well as their educational models, and supporting the assembly of undergraduate (shorter than usual) with graduate programs (more focused on symbolic issues) to prepare professionals with competences for the expected technology-driven society.

The implications of this outcome go beyond AI itself. It means that education institutions must review and change the management framework of their educational model from "teacher intensive" to "technology intensive." It does not mean that AI use in education deals only with positive effects. There are important risks and costs to be addressed at the highest level of educational design policies, as well as in teacher-student interaction.

One important risk is that students lose the ability to engage in relational behaviors with the teacher as a source of learning, to make of education more than learning skills for a job, but also to be a provider of values for living within a society like the one arising from the 4th industrial revolution. Therefore, it is an open question how the substitution of human skills by AI will set additional pressure on educational organizations to make faster curricula changes.

Universities have to make changes in their educational model toward a shorter period of time for getting undergraduate skills, at the same time making narrower the gap with graduate programs to become an all-in-one process. All of these changes should lead universities to focus management on values.

Public health organizations

These organizations make the case for technology management, which is the emerging area in the field of organizational change. Technology is assumed to be the outcome of both qualitative and quantitative inputs coupled with social variables, whether internal or external, leading all to regular organizational transformation over time as new events come along the strategic path (Tabares, Herrera, and Correa, 2020).

The relationship between technology and organizational change becomes clear in health organizations as it creates a different framework not only in terms of equipment available but also in terms of a deeper dimension of caring concerning patients' health and their medical treatments.

Therefore, organizational changes overlap over time while a new organizational setting is going underway, but the current status is already in place. So, implementation of a technological change in a health organization implies three interconnected areas: (a) the skills and training standards of employees, (b) communication flow concerning different approaches to health care, (c) checking procedures for deviations from the strategic path. Tabares et al., 2020. These could be considered the previous step to engage health organizations further with a more complex and sophisticated initiative like applying AI in medical treatment and management.

A broader perspective concerning the publishing of medical advances with AI applications is the Bletchley Declaration (2023), which suggests some aspects to be aware of: (a) identify AI safety risks, (b) build international risk policies to ensure safety, (c) support transparency in advances of frontier AI capabilities, (d) develop tools for safety testing and public sector endowment. Guzix and Stitex (2023). This declaration was signed by 29 countries and signals the path for other areas within the reach of AI and with wider risk implications involved.

Customer Services Area

This service industry has a 60% turnover rate each year, which means a training cost loss between USD $10,000 and $20,000 per individual. To get some control over this situation, the supervisor spends 20 hours per week coaching lower-performance agents. So, there is a favorable condition to look for alternatives to improve productivity and lower costs. As a consequence, the customer service business has the highest rate of AI implementation, with 22% in the survey using AI.

The implementation of a Generative AI model (the latest version of the Generative Pretrained Transformer) to provide conversational orientation for customer support in a Fortune 500 software firm showed some interesting findings at a firm level (Brynjolfsson, et al., 2023).

- Workers' productivity, measured by the number of chats successfully solved per hour, increased by 14%.
- These productivity gains are focused on low-skill and less experienced agents. This outcome arises from Generative AI's ability to "think" and capture the best patterns of behavior of the most productive individuals as a benchmark.
- Machine learning performs a task without specific instructions. It is trained to work with different patterns of people's behavior (incoming questions), to distinguish the best from the worst performance before choosing the best standard to answer a customer question. The time duration of the average chat decreased by 3.8 minutes, a 9% decline from the baseline. The outcome is expected to result in higher customer satisfaction with the service.
- Access to AI allows new workers to make faster progress along the experience curve, shifting it down. By contrast, those high-skilled ones do not get a significant impact on their productivity. They provide the benchmark (best answers).
- AI suggestions for customer service generate valuable learning to improve the quality of service.
- The turnover rate decreases, as customers do not complain about the competence of agents to solve their concerns.

IV. Concluding remarks

Generative AI means new risks for management to solve. Thirty-four percent of organizations already in the Generative AI setting consider labor displacement a risk, and so do 31% with equity and fairness. So organizational change arising from AI will take place within a dynamics of different learning loops, inducing the organization to learn how to learn to get along successfully with AI implications, given that it is possible to expect a continuous improvement of AI tools in many cases ahead of the learning organizational curve, unless it starts to prepare itself by hiring the professionals needed in the leading AI areas.

The new organizational setting for management means a shifting of the balance of power from production operations and services - most of which will be automatized - to people's minds. The dynamics of power have more complex symbolic variables which managers need to be aware of

(innovation, critical and strategic thinking, diversity). Organizations get the status of TLL (three-loop learning), which means that learning is deeply rooted in power dynamics, purposes, values, and emotions, all leading to the strategic view of what the organization should be once the AI is inside its hardware's decisions. AI tools learn to achieve higher efficiency faster than people in charge of any specific task, leading to productivity increases and cost reductions quicker than those of the standard management decision maker. Empirical evidence suggests that the productivity gains are focused on low-skill and less experienced agents. This outcome arises from generative AI's ability to "think properly" to capture the best patterns of behavior as a benchmark from the most productive individuals.

The problem is not only the organizational transformation and its purposes and values, but also the speed of technological change, which creates an additional pressure for a faster than usual pace of change that management must cope with. The argument of losing jobs because of AI skips over the oversized organizational structure of many organizations, which creates artificial complexity to adapt quickly to the demand for changes arising from external forces, making the impact on job loss higher than otherwise. In the service sector, AI implies lower turnover, higher customer satisfaction, and new workers make faster progress along the experience curve.

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