DEMOLA PROJECT

# CO-WORKING WITH AI

# **FUTURE REPORT**



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# OUR CONCEPT - CURRENT STATE

The current state of co-working with AI is quite diverse and rapidly evolving, as technological advancements are impacting today's society. The implementation of AI tools varies across different industry and organizations, in which the adoption and acceptance is higher.

It has been driven by the increase of available data and advancements in machine learning algorithms. Businesses are approaching AI and automation to optimize their operations in a more effective and efficient manner, improve the decision-making for more accurate and objective inputs, and enhance productivity, enabling employees to focus on more complex and value adding tasks.

Yet, as still in early stages of adoption, the concerns about the challenges that comes along with AI has risen. Concerns of potential job loss and displacement with the implementation of AI tools, privacy and data security, ethical, bias, and legal aspects. These needs to be address in a proper manner, so that it ensures a smooth transition in the revolution that we are experiencing it.



# CURRENT STATE

Regardless of the challenges, it is important for organizations to adjust and embrace AI, by investing in AI technologies, investing on their employees' capabilities to use AI, provide a safe environment for its employees concerns and appropriate tools aiming to soften the transition of traditional methods to AI-driven ones, to obtain a competitive advantage. Additionally, awareness to this ever-growing evolution of AI is happening at a rapid pace, that the world and future of working will be renovated, playing a key role in shaping the future of work and the way we live.

Overall, co-working with AI has been considered to have both positively and negatively impact on industries. While it seeks to provide support and the right resources to ensure a productive and efficient growth, potential risks of rapid evolution are still associated making it challenging to embrace. It is difficult to embrace what is difficult to understand, therefore organizations should approach AI as a bridge to optimize their workload and not as a replacement of human intervention, as the process of identifying and develop proper solutions and practices to guarantee an ethical and responsible use of AI tools is still being improved.

AI aims for a relieve of unnecessary pressures, mitigate risks and above all facilitates oneself life. Therefore, it is very important to understand how business are implementing AI, embracing cooperation and acceptance between human and robot, benefiting from the competitive advantage this is brings.

# **CURRENT STATE**

AI algorithms can assist on the personalization of user experience by analyzing user preferences and behaviors. It can also provide recommendation based on past preferences and behaviors. These algorithms can also be of great assistance of space utilization as it helps to analyze occupancy patterns and thus, identify areas of underutilization. Additionally, it contributes for energy efficiency by analyzing the use patterns and identifying opportunities for optimization. Finally, AI can be used to monitor the access of systems as well as to detect unauthorized access attempts and therefore, improving the security of co-working spaces.



# CO-WORKING WITH AI WEAK SIGNALS

### **1 SELF DISTRUCTION OF AI**

The phase of evolving AI is very rapid and the capabilities of AI is sometimes exploited. Therefore we would require a governance framework to stop the exploitation of AI capabilities to avoid self distruction of AI. For e.g. chat gpt can be used to do university assignments. To avoid this chat gpt will introduce plagarism checking capabilities. But what if someone use chat gpt to break his own plagarism check programs. There needs to be a limit and a governance framework to avoid this self distruction.

Type: Warning | Context: Technology | Origin: Personal insight

#### 2 LABOUR SHORTAGES

Developed and developing economies are facing labour shortages, as population is aging and moving into retirement. Due to the declining of birth rate in the last decade, it has been observed a decrease on the number of people from new generations to fill the vacancies as well as lack of workers on specific skills jobs. Therefore, with the implementation of AI and automation, business may leverage on this, to amplificate its workforce, relieving unnecessary pressures, focusing on empowering and upskilling its employees.

Type: Problem | Context: Society/Culture | Origin: Publications

# CO-WORKING WITH AI WEAK SIGNALS

### **3 SCHALLENGING THE TRADITIONAL HIRING**

With the speed of which innovation is taking place, the market dynamics have changed rapidly and a way of maintain competitive advantage is responding to this change a fast as possible. As a result, the trends seem to have led to an increase of freelancing jobs, desired by people as a way of having more flexibility and choosing their workload. From a company's perspective this leads to having talent on demand while being cost-efficient. With the support of AI, tasks can easily be automated and free freelancers ( and employees) to more creative and tailored customer experience according to the industry. AI will not only revolutionise the traditional hiring but also the way up-skilling is offered, enabling economies to perform on efficiency.

Type: Opportunity | Context: Business | Origin: Personal insight

## 4 "4 DAYS A WEEK" WORK CULTURE

Well-being culture is being more and more valued and adopted by companies, providing a competitive advantage for potential talents. With the introduction of AI to ease the workforce tasks and boost productivity, this can easily enable companies to move to a four days a week work culture, without risking its businesses operations.

Type: Opportunity | Context: Business | Origin: Publication

# CO-WORKING WITH AI WEAK SIGNALS

### 5 AI GENERATED FILMS

The film industry is starting to dive into AI, generating a combination of images and videos. This could help movie producers to idealize and implement their creativity, preventing any risk of injuries on set.

Type: Change | Context: Technology | Origin: Personal insight

### **6 IMPLICATIONS OF AI ON COPYRIGHTS**

Piece of work in music, journalism and gaming are already being generated by AI. This may constitute an issue in terms of investment and revenue to the companies if these are deemed free of copyrights as they were not created by humans. Therefore, new legal options have to be considered in order to keep the incentive of creation alive. IP plays an important role in the economic growth

Type: Problem | Context: Business | Origin: Publication

### 7 THEORY OF RELATIVITY

#### Disabled to super-abled with the help of AI.

Type: Change | Context: Environment | Origin: Publication

# POLITICAL

# **Government and Regulations**

Organizations that use AI systems needs to comply with government regulations related to data privacy, security, and AI ethics. Governments around the world are developing policies and regulations to govern the use of AI, and co-working spaces need to be aware of these developments and ensure that they comply with the relevant regulations.

# **Public Perception**

The public perception of AI can impact the demand for businesses that use the technology. Negative perceptions of AI, such as concerns around job displacement and loss of privacy, can make it more difficult for co-working organization to attract customers and investors. It is necessary to be aware of these concerns and develop strategies to address them, such as being transparent about their use of AI and addressing concerns around data privacy and security.

## **Prevention of Governmental Fraud**

AI can be used to monitor government's data usage to increase transparency and ensure the right accountability in case of fraud. With the use of AI tools, it is possible to identify sensitive data and identify suspicious behavior, notifying security workforce afterwards.

# POLITICAL

### **Government Investment**

Organizations that use AI technology may seek to secure government funding or investment to support their development and growth. Governments around the world are investing in AI research and development, and businesses that can demonstrate the potential benefits of AI may be more likely to secure government support.

### **International Relations**

Importance of an organization awareness of political and regulatory environments in different countries. Differences in data privacy regulations and AI policies can impact the use of AI in different countries, and co-working spaces need to ensure that they comply with the relevant regulations in each country where they operate.

### Seen as a threat to some democratic institutions

Some governments might see AI as a threat, in terms of accessing data-surveillance, privacy breaches, election hacking, among many others.

# ECONOMIC

# **Costly implementation**

Investment in hardware, software, machine learning and workforce to develop and maintain AI technology is necessary. Thereby, a high investment is necessary. Organizations need to consider the return on investment and analyze the potential benefits of the AI technologies, to implement the right type of systems.

## Efficiency leads to economic growth

The use of AI tools aims to improve efficiency and labor productivity of a business' operations, by implementing innovative technologies that enables a more resourceful workforce-related time management, such as automating tasks and optimizing resource allocating. With, it results in cost saving and increased revenue for companies.

## **Demand for AI-driven services**

Consumers behaviors are shifting accordingly to the pace of new innovative technologies advancements. Thereby, business who invest and implement AI systems into their business model, might attract and retain a broader wallet of customers, by offering new and innovative services that aims to improve and provide a satisfying user experience.

# ECONOMIC

# Competitive advantage

In a world that becomes more competitive, improving services and processed has become vital. Organizations that do not adopt AI technology might fall behind its competitors in terms of efficiency and innovation. Implementing AI technology enables organizations to leverage their businesses, facilitating obtaining a competitive advantage over their competitors.

# Economic turndowns impact on investment of AI technologies

Possible recession and economic turndowns affect organization willingness to invest in AI technology, in which might influence their market position.

### Innovation creates a new stream of revenue

AI technology innovation attract new consumers, thereby organizations benefit from a new stream of revenue.

## Employment

The adoption of AI technology may impact employment by automating tasks that were previously performed by human employees. It is important to consider the potential impact of AI on their workforce and develop strategies to retrain or redeploy employees who are impacted by automation.

# SOCIAL

# Impact on Job Displacement

AI is capable of performing many routine and repetitive tasks, which can lead to the displacement of human workers. This can have a significant impact on the employment opportunities and livelihoods of workers, especially those in industries where AI is being rapidly adopted.

# Workplace culture and Social Interactions

The integration of AI into the workplace can change the way workers collaborate and communicate with each other. It can also lead to a shift in traditional workplace practices and norms, which can have an impact on the social dynamics of the workplace.

The introduction of AI can lead to a shift in job responsibilities and reporting structures. It is important for companies to manage these changes effectively to ensure a positive work environment.

# SOCIAL

# **Bias and discrimination**

AI systems can be biased if they are trained on data that is not representative of the population, leading to discrimination and unfair treatment of certain groups.

This can lead to discriminatory outcomes in areas such as hiring, promotions, and customer service. It is important for companies to be aware of bias in AI systems and take steps to mitigate it.

# **Digital division**

AI systems can aggravate the digital division between those who have access to AI technology and those who do not. This can have implications for education, employment, and economic opportunities. It is important for organizations and policymakers to consider how AI can be made accessible to everyone and not just a privileged few.

# TECHNOLOGICAL

# **Computing Power**

One of the most important technological factors impacting the AI industry is the availability of computing power. AI algorithms rely heavily on computational power to train and make predictions, and recent advancements in hardware, such as GPUs and TPUs, have greatly improved the speed and efficiency of AI training. The continued development of faster and more powerful processors will likely continue to improve AI performance and enable the development of more complex and sophisticated AI systems.

# **Data Storage and Processing**

AI algorithms rely on large volumes of data for training and inference. The development of new technologies for storing and processing data, such as cloud computing and distributed computing systems, has greatly expanded the ability of AI systems to analyze and learn from large datasets. This has enabled the development of more accurate and reliable AI models.

## Natural Language Processing

Natural language processing (NLP) is a rapidly growing field within AI that is enabled by advancements in deep learning algorithms, computing power, and data processing techniques. NLP is used in a wide range of applications, including chatbots, virtual assistants, and sentiment analysis. As the technology continues to improve, it is expected to revolutionize the way we interact with computers and machines.

# TECHNOLOGICAL

# **Robotics**

Robotics and AI are closely intertwined, and advancements in one field often drive progress in the other. Recent advancements in robotics technology, such as sensors, actuators, and control systems, have greatly improved the ability of robots to interact with their environment and perform complex tasks. AI algorithms are also being used to improve the autonomy and decision-making capabilities of robots, enabling them to operate more effectively in unstructured environments.

## **Ethics and Bias**

As AI becomes increasingly integrated into our daily lives, there is growing concern about the ethical and societal implications of the technology. Technological advancements in areas such as explain ability, fairness, and accountability are critical for ensuring that AI is developed and used in a responsible and ethical manner. The development of tools and frameworks to detect and mitigate bias in AI systems is also a key area of research.

# LEGAL

# Data privacy laws

The implementation of AI technology within operations of a business must correctly comply according to data protection and privacy laws, as this has become a crucial concern for consumers. Regulations, such as European Union's General Data Protection Regulation (GDPR) in European Union and the California Consumer Privacy Act (CCPA) in the US laws serve as protection of individual rights, in which is possible to, with the obtained consent, collect, store, manage and use of the personal data for intended purposes, in a secure way.

Data privacy has become a global public issue, as the volume, variety and velocity of data increased at an exponential pace. It is important than companies have the ability handle such sensitive information, by implementing appropriate technical and organizational measures providing protection of personal data, such as firewalls, software's, and antivirus, to endure no data breach and/or leaks.

Also, individuals have a sense of responsibility for the data they are providing and right to imply for the collection of their own data.

Such laws are strictly more regulated in the last decade, as privacy legislation aims to protect individuals against any harmful effect of providing sensitive data in AI. However, there is still a debate whereas the limitations and failures of AI systems could affect oneself. This weights on the progress of co-working with AI.

# LEGAL

# Intellectual property laws

As AI tools are being more and more embraced and used on a wide range of businesses, many are improving and developing their own AI technology. With, it became essential to protect their intellectual property through patents, trademarks, and copyrights. With, it is important to provide the necessary timely, transparent, and accessible standards for patent granting that competitors can fully rely on. There are still uncertainties encountered by innovators and IP offices in considering and providing the best support for AI innovation, as it is relatively new. Questions are raised like "How autonomous is AI actually? What role does it play either as part of the inventive process or as part of an invention? What questions does this raise for the IP system? "(WIPO, n.d.) It is important to note that companies that use AI should ensure that no intellectual property rights are violated when making use of third-party AI technology.

Also, there is a unclear risk of AI creating valuable data, in terms of, if the adequate IP provisions are not placed correctly, it might be difficult to know who legally owns the data. Thus, the use of strong user agreements between employer and AI provider is considered a strategic approach to mitigate these risks.

# LEGAL

# Liability

The awareness of potential liability for any harm caused by the AI technology used by business is crucial. It can provide incorrect or harmful information, in which can result in damages for users. Therefore, the importance of having the appropriate insurance coverage and contractual protection to mitigate the risk of general litigation. These might have increased due to the proposed "AI Liability Directive". The European Commission is supporting the introduction of AI, aiming to build a resilient Europe for digital decade, where it is possible to appreciate the benefits of AI. Yet, through a set of rules of fundamental right and safety. The AILD addresses the risks generated by specific uses of AI, as well as ensure security for individuals harmed by AI systems. This factor might delay the full embracement of AI tools.

# International governance

It is important that companies ensure their awareness of international laws and regulations related to the used AI systems and comply with them. It has been raised question regarding how borderless AI is. Hence, governments need to ensure a consistent and coordinated management across borders.

# LEGAL

# Oblige by employment laws

It is important that employers ensure that they comply with employment laws and regulations, when operating through AI technology, making tasks performed by humans automated and replace by AI. This may include providing notice and consultation affected employees, offering training to or retraining opportunities, and complying with minimum wage and overtime requirements. While redundancy legislation is designed to protect, engage, and compensate employees when their role is no longer required, it will be optically challenging for any employer to announce layings-off where AI will carry out the work in the future. With, employers need to effective strategies in adopting AI technologies and protection from potential challenges.

## Operate with transparency and explain ability

Companies need to ensure transparency and concise explanations on the decisions made by the used AI systems, in which sometimes users have difficulties to understand how certain decisions are made and be able to provide the necessary evidence of its systems accuracy and objectivity.

# ENVIRONMENTAL

# **Improve Energy Management**

AI can be used to optimize energy consumption in buildings, factories, and other facilities, reducing energy waste and lowering greenhouse gas emissions. However, AI systems requires a lot of computing power, which in turn requires a lot of energy. This can lead to increased energy consumption and greenhouse gas emissions. However, companies are adopting methods to reduce their energy use, such as using more energy-efficient hardware and optimizing their algorithms to use less computing power.

# Sustainable development

AI driven technologies can be used to support sustainable development, such as in the areas of renewable energy, waste management, and sustainable agriculture. By using AI to optimize these processes, companies can reduce their environmental impact and contribute to a more sustainable future.

## **Climate modelling**

AI can be used to create models that simulate climate change and its potential impacts, helping researchers to better understand the problem and to develop more effective mitigation strategies in coming future.

# ENVIRONMENTAL

### Waste Management and E-Waste

Waste management using AI ensures businesses full optimization in their waste management processes. For example, food waste is a big issue for the world. It is observed that 1.3 billion tons of food waste is generated even before taking place in the consumer's refrigerators. AI based technologies help businesses to prevent these huge amounts of waste generation by identifying and weighting the amount of food waste AI based technologies provide solutions for waste management to integrate companies to the most efficient circular economy model. In terms of E-waste, when companies upgrade their AI systems, older equipment may become obsolete and end up in landfills. This can contribute to e-waste, which can be harmful to the environment. To mitigate this, companies can recycle their old equipment or donate it to organizations that can put it to use.

### Data center location

The location of data centers can have an impact on the environment. For instance, if data centers are located in areas with high carbon intensity electricity, they can contribute to higher greenhouse gas emissions. Companies can consider locating their data centers in areas with renewable energy sources to reduce their environmental impact.

# **ENVIRONMENTAL**

# AI as future of renewal energies

With Net-Zero objectives fast approaching and a global energy crisis unfolding, the transition away from fossil fuels has never been so critical. As a result, there is greater pressure than ever before on the renewable energy industry to transform practices for maximized efficiency – and new technologies such as AI are leading the way.

By conducting this analysis, it was possible to gain a comprehensive understanding of the external factors influencing our project - *Co-Working with AI*. Moreover, it provided valuable insights that helped us moving into a future state analysis, with a more clear and informed information of the current state, that allowed us to identified opportunities and challenges more easily. The future analysis is essential to align our strategic planning, anticipate potential changes, mitigate risks, allocate and plan necessary resources, and foster innovation and continuous improvement. It helped us to have a new perspective of the future, its opportunities and challenges.

# WHAT IF?

The future of AI is a topic of much speculation and debate. Some experts believe that AI will eventually surpass human intelligence, while others believe that AI will always be limited by its programming. However, there is no doubt that AI is already having a significant impact on our world, and this impact is only going to grow in the years to come.

AI is likely to change our future, in terms of, AI-powered devices, such as self-driving cars and virtual assistants, will become more common and affordable. Moreover, it is assumed that AI will improve healthcare, as is already being used to diagnose diseases, develop new treatments, and personalize care for patients. With the continuous technological development, it is likely that AI will automate even more tasks, freeing up humans to focus on more creative and strategic work.

It is possible to note already that AI is changing the way we live, work and even how business operates. Many are even using this powerful tool to create new products and services.

The future of AI is full of possibilities, both good and bad. It is important to be aware of the potential risks of AI, yet be optimistic about the potential benefits of AI. And be aware that every one of us can be driving the development and embracement of AI and Co-Working with AI.

The future of AI is up to us. We can choose to use AI for good or for evil. It is our responsibility to ensure that AI is used for the benefit of humanity.

The change we see in the world.

## FUTURE STATE 1

Time scale: 5 years

### The Rise of Freelancing

The demand for freelancing jobs has increased exponentially, resulting in an increase of remote jobs. This has improved the worklife balance, in which the 4-days working culture is embraced by societies. Freelancing is also seen as a better matching between companies and job seekers. As a result, entrepreneurship is also a growing trends.

#### Change

With the increase of remote jobs, companies have invested in virtual offices. This led to sustainability in metropolitan cities, as pollution and noise was reduced. With the AI and automation, human intervention became a support rather than a necessity in some industries, therefore it is possible to offer this support remotely. In the view of this, economies became more decentralized and thus distribution of population both in cities and rural areas is improved. In general, people have more options when it comes to the place they choose to live, not having necessarily to live in the cities. This enables a better quality of life.

The change we see in the world.

# FUTURE STATE 1

## The Rise of Freelancing

### **Interesting Points**

In search of greater job satisfaction and work life balance, freelancing increased in popularity.

This enabled companies to have quick access to expertise, leading an increase of productivity and cost-efficient hirings. Economies are benefiting from innovation and entrepreneurial workforce, that is increasing countries wealth and competitive advantage.

Consequently, there is a shift in society how education is perceived. More and more people are becoming lifelong learners, and displaying long life motivation, to be active for longer in the workforce.

The change we see in the world.

### FUTURE STATE 2

Time scale: 5 years

### Personalized Healthcare

In this future state, healthcare is individualized, preventive, and patient centered. AI-powered diagnostics, genetic profiling, and advanced medical technology offer personalized treatment plans, early disease identification, and precision medicine.

#### Change

Advances in genetics, artificial intelligence algorithms, and healthcare data integration have changed healthcare into a proactive and personalized sector. The emphasis shifts from illness treatment to promoting well-being, disease prevention, and addressing individual health needs.

#### **Interesting Points**

This future condition is envisioned in order to improve patient outcomes, increase preventive care, and minimize healthcare expenditures. It opens the door to groundbreaking discoveries, individualized therapies, and empowered individuals actively engaged in their own health care.

The change we see in the world.

### FUTURE STATE 3

Time scale: 5 years

#### AI enabled Creative Industries

AI has the potential to revolutionize the creative industries by enabling the generation of art, music, and other creative content that is either wholly or partly created by machine learning algorithms. This development has the potential to transform the creative industries by making it possible to generate content more quickly and cheaply than ever before, and to create entirely new forms of art and media that were previously unimaginable. In the realm of visual art, AI-powered systems are already being used to generate original artwork, alter existing works of art, and create photorealistic renderings of virtual environments. For example, AI systems can analyse large datasets of visual images to learn and mimic the style and techniques of a particular artist or art movement. This technology could enable artists to quickly create new pieces or experiment with new techniques without spending years honing their craft

The change we see in the world.

## FUTURE STATE 3

#### Dependency on Robots

#### Change

In the music industry, AI systems are being developed that can compose original music and even improvise in real-time. These systems analyse vast libraries of existing music to learn and mimic the styles of particular artists or genres. AI-generated music could have a profound impact on the music industry by enabling the creation of entirely new genres of music that were previously impossible to create.

**Interesting Points** 

However, there are also concerns that AI generated art and music may lack the emotional depth and meaning that is often associated with human-created content. Additionally, there is a debate over whether AI-generated content can truly be considered "creative," as it is ultimately produced by machines rather than human artists. Nonetheless, it is clear that AI has the potential to transform the creative industries in profound ways, and it will be interesting to see how this technology continues to develop in the years to come.

The change we see in the world.

## FUTURE STATE 4

Time scale: 5 years

### AI enhance Agriculture

AI has the potential to revolutionize agriculture by enabling farmers to make more informed and precise decisions about crop management, yield prediction, and water usage. This development has the potential to improve the efficiency and sustainability of agricultural practices, which is particularly important in the face of a growing global population and the increasing impact of climate change on food production. One way in which AI can enhance agriculture is through the use of precision agriculture techniques, which involve the use of sensors, drones, and other technology to collect data about soil conditions, weather patterns, and crop growth. This data can then be analysed by AI algorithms to identify patterns and make recommendations for more precise planting, fertilization, and irrigation.

#### Change

AI systems can identify which areas of a field require more or less water, fertilizer, or other inputs, and can make recommendations for how to optimize the use of these resources. AI can also help farmers predict crop yields more accurately, which is particularly important for planning and logistics.

The change we see in the world.

# FUTURE STATE 4

### AI enhance Agriculture

#### Change

By analysing historical data on crop yields, weather patterns, and other factors, AI algorithms can provide more accurate predictions of crop yields, allowing farmers to plan for optimal harvest times, storage needs, and transportation logistics. Finally, AI can also help farmers manage the impacts of climate change on their crops. By analysing weather patterns and soil conditions, AI systems can identify areas of a field that may be more susceptible to drought, flooding, or other weather-related hazards. This information can then be used to make recommendations for planting crops that are more resilient to these conditions, or to adjust irrigation and other practices to mitigate the effects of climate change

#### **Interesting Points**

AI has the potential to help farmers make more informed decisions about crop management, yield prediction, and water usage, which can improve the efficiency, sustainability, and profitability of agriculture. While there are still challenges to be overcome in terms of data collection, algorithm development, and implementation, the future of AI in agriculture looks promising

The change we see in the world.

### FUTURE STATE 5

Time scale: 7 years

### AI tools preventing burnout

Personal AI assistants work as a great way of assisting humans in their working routines. Through it, robots are proactively accomplishing more.

They also have the functionality of detecting feelings of burnout, reasons for it and providing recommendations for a healthier lifestyle. This is now the new "work medicine" approach.

#### Change

With the assistance of personal AI, working conditions have improved. Wellbeing is the new norm and companies have proactively added this as their working environment policies.

With this increased of connectivity and dependability, there is also a development in terms of diversity, as AI systems have help overcome barriers, such as linguistics. Diversity in workplace means being able to do a job in a different language, without being fluent but rather having the assistance of AI.

The change we see in the world.

# FUTURE STATE 5

### AI tools preventing burnout

**Interesting Points** 

Co-working with AI has brought many benefits to society and assistance in many societal issues. With this, interdependency and unity has increased, enhancing diverse relationships and high levels of productivity.

AI can assist individuals with disabilities, by allowing them through technology as natural language. By automating mundane tasks, we can focus on more important work and enjoy leisure time.

The change we see in the world.

# FUTURE STATE 6

Time scale: 10 years

### **Shortening Educational Programs**

With technological advancements and living in an AI driven world, shorting the academic path in areas such as medicine, engineering, law, among others, is possible. As a result of the durability of academic path being shortened, the information and practice are up to date, increasing our adaptability to an ever-growing world. Education has been disrupted by the implementation of AI courses in early stages, e.g., the maneuver of machines, the understanding of AI. Additionally, AI teachers serve as a support on tutoring matters.

#### Change

Since educational programs are quite extensive and long, this has led to labour shortages and precariat working conditions. With the reduction in years of studying, the industries are more attractive to students, and therefore more applications are submitted. This has led to a broader talent pool, sustainable practices and facilitated decision-making through technology that allows preventative methods. Additionally, with the implementation of AI, many of the procedures are conducted more independently freeing professionals from heavy workload. This allows for a balance life-style.

The change we see in the world.

# FUTURE STATE 6

### Shortening Educational Programs

#### **Interesting Points**

With an increase of qualified professionals, sectors are constantly benefiting from an up-to-date information load and upskilled workforce. This enables a facilitated and simpler life, with more focus on development and less time on mundane tasks.

# FUTURE STATE

The change we see in the world.

#### FUTURE STATE 7

Time scale: 15 years

#### Dependency on Robots

In an AI driven world, the rise of robots with improved emotional intelligence, has led to a society where robots are given citizenship. As a society, we became over reliant on AI to make decisions and perform tasks, to the point of creating a hyper dependency on it. Consequently, there is a lack of motivation for personal and professional development.

In the eventuality of stop development of AI, humans will struggle to maintain the lifestyle.

#### Change

Setting and working towards goals, is part of human psychology. This help us to live fulfilling lives. Because of the dependency of AI, learning processes have shifted to AI assisted, in which less goals and life objectives are set.

Additionally, there is lesser human interactions, and an additional deep layer of complexity towards interpersonal relationships.

Societies are facing now issues regarding loneliness and isolation.

# FUTURE STATE

The change we see in the world.

#### FUTURE STATE 7

#### Dependency on Robots

**Interesting Points** 

The development of AI brought negative consequences to society. An example of it is our overly reliance on AI for decision making, resulting in a lack of critical thinking and a decreased of human judgement.

Also, there is a decrease in real world human connection and emotional intelligence.

The change in co-working with AI will be driven by a combination of various stakeholders involved in the co-working ecosystem. Coworking space operators will play a significant role in driving the change. They are starting to invest in and adopting AI technologies that is enhancing the overall co-working experience and improve operational efficiency.

AI developers and technology providers will drive the change by being part of the development, by offering innovative AI solutions specifically tailored for facilitating human live. These solutions may include AI-powered virtual assistants, smart space management systems, collaboration tools, and personalized learning platforms.

Moreover, co-workers, freelancers, and remote workers, will also drive the change, as they become more familiar with AI technologies and experience the benefits first-hand, demanding and seeking out co-working spaces that leverage AI to enhance productivity, collaboration, and the overall work experience. The expectations and preferences are and will continuously influencing the adoption of AI in co-working environments.

On an industry level, networks focus on flexible workspace, which is playing a crucial role in driving the change. These organizations can facilitate knowledge sharing, promote best practices, and foster collaboration among co-working space operators, AI developers, and co-workers, to support this. Governments and regulatory bodies also might drive the change by support the development and adoption of AI technologies, promoting research and innovation, and offering incentives to co-working spaces and AI developers.

Additionally, they can ensure that ethical considerations, data privacy, and security are addressed through appropriate regulations and policies.

It is important to note that while AI technologies are driving changes, and will continue to do so, in co-working spaces, human interaction, creativity, and collaboration. AI should be seen as a tool to enhance human capabilities and enable more efficient and effective work, rather than replacing human involvement entirely. The successful integration of AI in co-working spaces will require collaboration and active participation from all stakeholders involved.

Considering potential hypothesis of an AI-driven future, it is possible to wonder:

- What if in the future there is only part-time jobs?
- What if robots replace humans in workplace completely?
- What if the new reality of jobs is freelancing in combination with AI?
- What if we can empower people in underserved groups with AI tools so that they can contribute to society, increasing the economic growth and reducing poverty?
- What if through AI we can bring education to places where there is no traditional system (reducing the level of poverty)?
- What if we develop AI fabrics, AI machinery to operate (with very little human intervention) in non-populated area to boost productivity and economic growth?

In order to address some issues in specific industries, such as agriculture, GreenAGRO has been developed. This is a service that helps stakeholders and users to maximize performance, time, and efficiency, through sustainable practices.

Having analysed the challenges in the industry, include climate change, limited resources, population growth, pests and diseases, market volatility, labour shortages, and the need for sustainable practices to ensure food security and environmental conservation. Thereby, the agriculture requires solutions for increasing food production, optimizing resource utilization, addressing climate change impacts, adopting sustainable practices, enhancing efficiency, and ensuring food security for a growing global population.

In the view of this, the GreenAGRO platform was generated, in which services are offered to a variety of stakeholder, including farmers, communities, investors, government and private sector. The main objective is to add value to each stakeholder, by supporting the development of the industry, by offering options to every user, for any type of field and any type of use.



AI-assisted agriculture has the potential to bring significant changes to the world by revolutionizing the way we produce food. Here are some ways in which AI can impact and transform agriculture:

- Increased efficiency and productivity: AI can analyze vast amounts of data collected from sensors, drones, satellites, and other sources to provide farmers with valuable insights. This data-driven approach enables optimized irrigation, fertilization, and pest control, leading to higher crop yields and reduced resource wastage.
- Precision farming: AI technologies like machine learning and computer vision can be used to monitor and analyze crop health, soil conditions, and weather patterns. By precisely understanding the needs of individual plants or sections of a field, farmers can apply inputs such as water, fertilizers, and pesticides only where and when necessary, minimizing environmental impact and maximizing productivity.
- Disease and pest management: AI can assist in the early detection of diseases, pests, and weeds by analyzing images or sensor data. This enables farmers to take prompt actions and apply targeted treatments, reducing crop losses and the reliance on chemical interventions.
- Autonomous farming equipment: AI-powered robots and drones can perform various agricultural tasks autonomously, such as planting seeds, applying fertilizers, monitoring crops, and harvesting. This reduces labor requirements and increases efficiency, particularly in large-scale farming operations.

- Data-driven decision-making: AI can provide farmers with valuable insights and recommendations based on real-time data analysis. This helps in making informed decisions regarding planting schedules, crop rotations, resource allocation, and market predictions, leading to better profitability and sustainability.
- Climate change adaptation: AI can assist in adapting agriculture to the challenges posed by climate change. By analyzing historical weather data and climate models, AI can help farmers optimize their practices to mitigate the impacts of extreme weather events, changing rainfall patterns, and shifting growing seasons.
- Enhanced resource management: AI can optimize the use of scarce resources like water and energy by analyzing data and providing precise recommendations. This can help reduce waste, conserve resources, and make agriculture more sustainable.
- Global food security: By improving agricultural productivity, reducing losses, and optimizing resource use, AI-assisted agriculture has the potential to enhance global food security. It can enable farmers to produce more food with fewer resources, meeting the growing demands of a rapidly increasing global population.

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While AI-assisted agriculture holds tremendous promise, it's important to note that its successful implementation requires addressing challenges like data privacy, accessibility to technology, and ensuring that the benefits reach farmers of all scales and regions. Additionally, it is crucial to strike a balance between technological advancements and the preservation of traditional farming practices and ecological diversity.



### **CAROLINA FERREIRA**

AI is revolutionizing the way we live and work. Due the current changes happening today, it is important that individuals and organizations have the ability to adjust to these changes, in terms of understanding the benefits of using AI tools as well as invest in upskill individuals to make correct and appropriate use of these systems.

It is possible to observe the AI integration in a variety of industries and workplaces, aiming to enhance productivity, effectiveness, and accuracy. The precision and detail-oriented skill of AI allows organizations identify patterns and insights more quickly, in which can help humans to improve their decision-making and operate more strategically. Yet, there is the other side of the balance, in which might have a negative effect, such as data privacy, job displacement and bias.

I believe that each person or organization can benefit from AI. However, I believe it is important to reflect that the barriers of implementing AI into a business may need to be addressed by governments, as the prediction is that in a near future, AI will be the "new reality". Since the implementation of AI requires a significant financial investment, many small sized companies might lose their competitive advantage, as they do not have the resources to innovate.

### **CAROLINA FERREIRA**

Also, the fact that governments and business are operation and adjusting to consumers demands and concerns shows their willingness to smoothen the transition from digital to automated AI-driven workplace. Companies that use AI responsibly, ethically, accountably, and thoughtfully will thrive.

AI is still relatively new, complex, and dynamic. We are living in an era of unpredictable change, in which it is becoming difficult to keep up with the pace of change. Yet, I believe if societies start embracing AI, whilst improving its negative impacts, instead of resisting to change, we will benefit from a simpler and stressless life.

Personally, it is possible to note that AI has been affecting every aspect of our lives, either in terms of personal life or professional, as individuals are becoming more depended on it. I believe that if we, as a society, make efforts to preserve the value of human interactions and creativity, the future of co-working with AI holds exciting possibilities, as our lives will be more facilitated.

The future is uncertain, yet exciting. Innovations in relation to AI show up every day, and it is fascinating to see the potential of such tool in transforming the way we live and work.

#### **SUSE FERREIRA**

AI is a fascinating topic that is now intersecting various aspects of our lives. With the speed of innovation, it is almost impossible to stop this from happening. Along with the benefits come the responsibility and it is crucial that AI is developed and deployed in a responsible and ethical way.

Many concerns arise specially if we consider the way the workforce is structured today. A re-structure of it will have to happen and upskilling the workforce will be mandatory for an AI-driven society.

With such revolution, we are living in a culture of innovation, where entrepreneurship is gaining popularity. I personally dreamt with this shift in society as back in the days in order to be able to take risk, we would have to pursue this totally on our own. Today, many companies are offering "Entrepreneur in residence" as a job position as well as positions of intrapreneurs. This makes me very excited about the future because I see that with implementation of AI for more mundane task, and not exclusive, we will be spending our careers in a more creative way. Experimentation backed up with the right level of risk taking is gaining so much popularity, which is fantastic. We could be heading to not only an AI-driven society but also to one of the most personal developed one.

#### **SUSE FERREIRA**

Through experimentation and exploration of new ideas, we start discovering more about ourselves and thus, make better decisions leading to a better life. Self-development benefits society as a whole. The future of AI is inherently uncertain, and while we can make informed predictions based on current trends and understanding, the actual trajectory of AI may deviate from those Technological advancements, projections. unforeseen breakthroughs, social and economic factors, and even ethical considerations can all influence the evolution of AI in ways that are difficult to predict accurately. It is expected that new discoveries and innovations may lead to entirely new applications and capabilities for AI. Moreover, societal factors such as public perception, acceptance, and regulatory frameworks will also influence the direction and adoption of AI. Ethical considerations and public discourse will certainly lead to the establishment of new guidelines and regulations that shape the development and deployment of AI technologies. Ongoing research, collaboration, and dialogue among experts, policymakers, and the general public are vital for shaping the future of AI in a way that aligns with our values and societal goals.

### **DINUSHA MUDUNKOTUWA**

Co-working with AI is becoming more prevalent and impactful across various industries. As per my current perspective on the subject of co-working with AI is still in mid maturity stage and there is lot of room for further development and optimization.

AI systems can process and analyze large volumes of data to provide valuable insights and support decision-making processes. By leveraging AI's ability to identify patterns, trends, and correlations in data, businesses can make more informed decisions and develop effective strategies.

AI technologies, such as virtual assistants and chatbots, can provide real-time support and assistance to individuals and teams. These AIpowered assistants can answer questions, offer suggestions, and help with tasks, promoting collaboration and efficiency within the workplace.

AI can complement human skills and expertise, enabling workers to perform tasks more efficiently. For example, AI-powered tools can assist in language translation, data analysis, and content creation, allowing professionals to focus on higher-level tasks that require creativity and critical thinking.

As co-working with AI becomes more prevalent, ethical considerations surrounding AI adoption and usage are gaining prominence. Issues such as data privacy, bias in AI algorithms, and the impact of AI on job displacement require careful attention and regulation. It's important to note that while AI offers numerous benefits, it also presents challenges and ethical implications. Striking the right balance between human and AI collaboration, addressing bias and fairness concerns, and ensuring transparency and accountability are crucial aspects to consider in the current state of co-working with AI.

### DINUSHA MUDUNKOTUWA

In the future, co-working with AI is expected to evolve significantly, driven by advancements in technology and the increasing integration of AI into various aspects of work.

AI systems will become more advanced in their ability to collaborate and communicate with humans. Natural Language Processing (NLP) and voice recognition technologies will improve, enabling seamless and intuitive interactions between humans and AI. This will facilitate more natural and productive collaboration in co-working scenarios.

AI will play a greater role in decision-making processes. Advanced machine learning algorithms, coupled with access to vast amounts of data, will enable AI systems to provide more accurate and sophisticated recommendations. Decision support systems will become even more advanced, assisting professionals in complex decision-making processes across various domains.

AI will increasingly augment human creativity by providing innovative suggestions, generating new ideas, and assisting in creative processes. AI-powered tools will be able to analyze vast amounts of data and generate insights and recommendations that can inspire and enhance human creativity in areas such as design, content creation, and product development.

AI systems will continue to learn and adapt through continuous learning algorithms. They will acquire new skills, stay updated with the latest knowledge, and dynamically adapt to changing work environments. This adaptability will enable AI to seamlessly integrate into evolving co-working scenarios.

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