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Challenges & the Imperatives: AI, Automation, Future of Gig Economy & Contemporary Business Practices

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DOI: 10.62823/MGM/9789349468719/15

Abstract

The dynamic nature of business makes it necessary for every organization to ensure its sustenance by coping up with latest trends & thriving in their adaptations otherwise they will be unable to ensure success in future. The gig economy has revolutionized the world of manpower. The increase in automation has revolutionized the quality as well as quantity of work. The latest trends of artificial intelligence (AI), etc. have broaden the horizons of matching the job & worker at the most basic as well as at advanced level simultaneously along with creating new jobs, profiles & opportunities to be exploited by the worker & the organization across various platforms to generate improved performance & revenue to ensure growth & development. This chapter explores all these aspects & their interaction with technology & business to provide insight into them. It also discusses their impact on the social trends, business trends, challenges & business practices, especially those that can assist the businessmen in achieving & assuring the success for workers & organizations along with redesigning jobs, workplace & workflow to assure successful business practices.

Keywords: *Gig Economy, Automation, Job Redesigning, Artificial Intelligence (AI), Market Trends.*

Introduction

Artificial intelligence & automation are transforming the business in the industry as the gig economy is transforming the manpower in any industry. All three of them are contributing to the ongoing transformations in the nature of the work & workplace itself. The machines are able to carry out various types of work in terms of quantity & quality, i.e., more work & tasks than the human beings. Technology

indicates a threat which can easily replace the work of a human being, any day. With the incorporation of the AI looking for work becomes far more easier & the process of matching the requirements with the skills & competence of the people, along with fulfilling the demand becomes far more easier the people can identify & locate the jobs available far more easily & thus, it becomes easier for people to move on from declining occupations & growing into new ones. But, it also comes with several pros & cons. This chapter explores all these facets.

Adaptation: The Future Work

A recent technological progress has pushed the frontiers of the business & it has identified what machines can do. It has also contributed to the economic growth & societal changes associated with the business. Thus, ultimately it will lead to advancement & unimaginable success. The evolution of machine learning has sophisticated the computing power of the algorithms & it has also created spectacular breakthroughs which may be beyond human capabilities. It has potentially transformed the business & contributed to economic growth. The deep learning techniques associated with AI have deployed several artificial networks & contributed to growth in business in different countries.

AI & Transformation of Business

Deployment of AI & technological automation has uplifted the global economy & increased the prosperity worldwide. Labor productivity is considered as the key driver of economic growth, but it varies from countries to countries. Along with the technological growth it has been observed & predicted that a significant decline is found to be expected in some occupations due to automation from a period of 2016 to 2030. It is affected by a wide array of multiple factors, but, the technological feasibility of the automation has turned out to be the most influencing one.

The other prominent factors include- labor market dynamics (i.e., quality, supply quantity, associated wages, adoption, social norms, acceptance, etc.), environment, technological aspects, societal aspects, etc. but, it varies from country to country. It is also believed that the additional economic growth will contribute to business dynamism & it will increase productivity & growth, which will create more jobs.

It is also believed that in several other fields jobs with repetitive tasks could shift towards a model of managing & troubleshooting automated systems, such an approach is used by many other companies in different countries, i.e., it most popularly explored by Amazon. The mix of occupations includes a variety of skills & educational requirements which are to be redesigned to ensure that humans & machines could work alongside without compromising the performance of the company. It has entrenched working ways & the social systems in many countries. It will be drawing people in formal as well as informal employment.

These platforms will influence the labour-force participation. It will in the digital platform provide availability & deletion of job options as well as the independent work span of the different demographic groups ranging from seniors to youth across a variety of jobs.

It is also observed that the people who pursue independent work (digitally enabled) mostly are out of preference & are found to be generally satisfied but those who are facing income variability & lack of benefits typically associated with the traditional work are found to be unsatisfied. Thus, it becomes the responsibility of the policy-makers & innovators to ensure that the needs are grappled with the solutions & these challenges must be addressed properly. There are several new things which a person needs to focus on, i.e., technologies & gig economy, etc. It can be further simplified under these three categories-

- **Policies & Regulations:** In different countries the governments & businesses have a very important role in establishing ethical AI & the use of automation in any industry. In order to ensure the ethical aspects of the business & along with that ensuring fairness, transparency & a proper management in the work force, there are several challenges that are required to be addressed prior to going through the policies. The things are required to protect the people, improve different sections of the business for the sake of organization (employment) as well as employees.
- **Focusing on Human Centric Skills:** It is very important to understand the demand of your business the skills & competencies which are required in the people in order to deliver the kind & the quality of the work, which is required. In the world of technology & AI, we cannot neglect the kind of skills & competence required. But, one also needs to think on or about emphasizing on what is important & what is irreplaceable. Thus, one needs to ensure that the humans should be able to grow along with the requirements of the job & one should be able to develop with time. But, another orientation focuses on the creative & the strategic part of the business, that is, its irreplaceable aspects, which mainly focuses on strategic thinking, problem solving & creativity kind of aspects.
- **Upskilling & Reskilling:** Along with the development of the technological aspects of the business certain new kind of skills are also required by the people. So, the gig workers also need to adapt accordingly. There are several types of demands from regular workers & several other kinds of the skills as required from gig workers.

The automation will accelerate the skills which are required by the workforce based on this several aspects, i.e., social, emotional & higher cognitive skills, such as-creativity, complex information processing, critical thinking, etc. It will influence the

increase in demand & also the decline in certain skills. Thus, it might influence the basic platform to which a workforce is exposed too.

But, it will also put additional stress on the existing work especially concerned with the skills & it will create several changes & challenges for credentialing systems also. The innovative solutions will also scale up the challenges that are required to be addressed. These shifts will happen in certain companies & certain countries more than the others; it will also influence different sectors differently.

But, apart from geography, the growing occupations will be difficult to handle due to the unpredictable physical environments & the changing requirements of the professions. The contribution of various platforms in gig economy cannot be neglected. The most popular trends followed across the various platforms focus on-

- AI & algorithms are providing the workers the facility to match themselves with the suitable projects available to them. Which can be further assorted on the basis of their experience, availability of their schedules, their areas of expertise, etc. since all of these parameters are taken into account. Thus, job openings can be evaluated against multiple parameters & it also provides the additional facilities, i.e., options of invoice & payment handling systems, etc.
- AI is also creating new roles & jobs. It is prolonging certain jobs & enabling certain fields by automating repetitive tasks. It also provides instant feedbacks which can help the workers to improve their performance & gain access to better paying opportunities in future. It can also create referrals & several other benefits which will provide access to better-paying opportunities.
- AI has driven inside which can help the platforms to offer different kind of career development resources along with training & development to the concerned people based on their specific requirements. Thus, it can assist the workers in adapting to facilitate the developing landscape of current business.

AI & Transformation of Business: India

India is a developing country, which is trying to boost its economy. However, things become more complicated in India due to the public & private sector kind of categorization. The things get further complicated when workforce, work flow & workplace are taken into account due to the involvement of societal aspects, i.e., social relations of gender, caste, ethnicity, & religion intersect with material relations, all of this further reinforces the existing inequalities in our labor market & at the workplace.

In certain sections, the informal economy dominates, which leads to strengthening the informal labor market. This creates a serious issue concerned with policy, regulations & most importantly wages. Since, significant section of our GDP is contributed by agriculture, as we are an agriculture-based country. The lack of

education & skill, domination of informal nature & practices, which the Government is trying to streamline also, plays a critical & crucial role in the actual growth & development of the practices. The unequal distribution & usage of technology in this sector also accumulates several parallel challenges & demands stress upon bring sophistication, education & technology into play to achieve excellence.

Challenges

In case of AI, there are several potential biases in training data & algorithms including- security, data privacy & malicious uses, etc. The adoption of technology is uneven across the sector & the countries. Their major concerns are summarized as follows:

- It was a very big problem to provide same kind of salaries to people for same kind of work. But, the combination of AI & automation has divided the employees among high-skilled & low-skilled workers. Thus, enabling companies across different nations to adapt based on those changes & provide the right opportunities as well as the right amount of salaries to people based on the work delivered by them. But, sometimes the over-dependence on the reputation systems & algorithms for the allocation of people & jobs makes it difficult to avoid business because sometimes a systematic biasness or a marginalized biasness might be created based on the practices offered by the different platforms which connect freelancer & client matching.
- In some cases, the companies use gig labor as a temporary replacement because they are trying to save money, which will be later invested in automation. These kinds of practices create an unstable environment for workers & machines as it indicates that eventually machines will replace humans in their job. This kind of approach stresses upon the development of new skills from the end of gig workers to ensure that they stay competitive & relevant in today's tech-driven environment otherwise they will lose the opportunities to work & earn. The demand for advanced technological skills has influenced the various trends that influence the job requirements. It influences the demand for physical & manual skills. It also puts additional stress on the workforce skill requirements.
- The highly structured organizations & their environments have a certain specific requirement, which is influenced by the gig workers but the importance of work place & their work flow can never be neglected. Although along with time the people have learnt to work alongside with machines. Thus, the requirement of system level solutions to properly rethink the work & its design is also required to assist in safe human machine interaction.

Based on OECD, most of the countries are facing a huge challenge providing education, skills & training to their workers to meet the requirement of the workforce.

Globalization has benefited economic growth, but, there are certain things which are still required to be addressed & any delay in this might affect the transition of the large-scale work force. It could impact the business in & across different countries at various levels. Thus, it becomes pivotal to systematically address the concerns & issues.

Unlocking Solutions

In order to resolve the issues that are created & faced during these challenges successfully, there are several actionable & scalable solutions, which can be applied in different key areas to resolve any issues in future. They may include several steps, which may be summarized as-

- Productivity & growth are the key contributors to economic growth. Therefore, unlocking the investment & demand as well as embracing automation to maintain the productivity is a critical demand of any organization. So, in order to ensure the successful working of that organization they must ensure that they establish equilibrium between this robust economic growth & productivity in their organization.
- Business has dynamic nature, which in combination with the vibrant nature of the international environment makes it important for the large business organization to focus carefully on fostering dynamism, competitiveness & job growth. Especially focusing on regulations associated with tax & incentives, etc.
- It also stresses on the training & development of the manpower to ensure that they are capable to work under the revising trends of the workflow & workplace. It focuses mainly on investing in human capital, job creation, worker's learning, worker's capacity building, wage growth & workers incentives.
- The policymakers must also stress on the traditional as well as non-traditional aspects of education. They should focus on stem skills to keep the workers relevant & competent according to the requirements of their work & its nature.
- Some of the works are redesigned in the organization according to the needs & demands of the new era. In today's technologically advanced world, it is vital for an organization to be updated to face the opportunities as well as challenges in the productive environment of the work, so that the organizations may change & collaborate to increase & handle the agile and, hierarchical & non-hierarchical aspects of work.
- The labor market is also improving. It has a dynamic nature which is reformed based on the digital platforms that are available. Now-a-days along with the

redesigning of the organizational hierarchy & the workforce & the workplace requirements several other parameters are to be taken into account.

- In order to find the key to finding solutions for maintaining economic viability & growth, & also incorporate the redesigning of the salary structure of the organization is very important, albeit difficult. There are some ideas, i.e., - conditional transfers, universal basic incomes, adoption of social safety nets, & providing income-based on purpose, meaning & dignity of the job, etc that can help to assist us in streamlining the approach to deal with the issues.
- Since the gig workers work in different organizations, so their salaries revolve around different aspects- sectors, locations, activities, skills, requirements of job, assistance offered, adjustments made within the organization, successful transitions, etc.
- Incorporating technological advancement or to integrate AI in the business can provide a risk & an opportunity to business. But, the risks are required to be accounted & must be mitigated to avoid any kind of dangers in the future, safety & earning of the organization. So, the organizations should always focus on addressing the concerns, i.e., - accounts, data security, privacy, malicious use, potential issues by policy making, technological & protocols of other firms, etc. must be effectively explored to address this areas.

Conclusion

Different countries have different types of systems i.e., - it has government sectors, private sectors, it has small businesses, large business organizations, it has different types or kind of workers i.e., - small workers, mid career workers & new generations. So, it becomes important to gain insight & resolve the concerned issues. It is also vital to address their conscience & if any kind of neglect is present. It could impact the business via, influencing its workplace demands & work flow.

Thus, the true success of business now-a-days lies on establishing equilibrium, maintaining equity & considering the dynamics of the overall work environment. Thus, for the success of AI, automation, gig economy & business a comprehensive & global approach & streamlining the practices accordingly has to be considered & accepted to achieve the success in the future.

References

Bughin, J. et. al. (2018, May 23). *Skill shift: Automation and the future of the workforce*. McKinsey & Company. <https://www.mckinsey.com/featured-insights/future-of-work/skill-shift-automation-and-the-future-of-the-workforce>

Cameron, L. D., Thomason, B., & Conzon, V. M. (2021). Risky business: Gig workers & the navigation of ideal worker expectations during the COVID-19 pandemic. *Journal of Applied Psychology*, 106, 1821-1833.

<https://psycnet.apa.org/doi/10.1037/apl0000993>

Challoumis, C. (2024). Revolutionizing Wealth-The Intersection of AI & Economic Transactions. In XIX International Scientific Conference. London. Great Britain (Pg. 967-1002).

Challoumis, C. (2024). The Future of Work-Navigating The Intersection of AI, Money, & Employment. In XIX International Scientific Conference. London. Great Britain (Pg. 315-350).

Chui, M., Manyika, J., and Miremadi, M. (2018). What AI can and can't do for your business. *McKinsey Quarterly*, 118-202.

Cram, W. A., Wiener, M., Tarafdar, M., & Benlian, A. (2022). Examining the impact of algorithmic control on Uber drivers' technostress. *Journal of Management Information Systems*, 39, Pg. 426–453. <https://doi.org/10.1080/07421222.2022.2063556>

Duggan, J., Carbery, R., McDonnell, A., & Sherman, U. (2023). Algorithmic HRM control in the gig economy: The app-worker perspective. *Human Resource Management*, 62, Pg. 883–899. <https://doi.org/10.1002/hrm.22168>

Duggan, J., Sherman, U., Carbery, R., & McDonnell, A. (2020). Algorithmic management & app-work in the gig economy: A research agenda for employment relations & HRM. *Human Resource Management Journal*, 30, Pg. 114–132. <https://doi.org/10.1111/1748-8583.12258>

Duggan, J., Sherman, U., Carbery, R., & McDonnell, A. (2022). Boundaryless careers & algorithmic constraints in the gig economy. The 20 KADOLKAR ET AL. 10991379, 0, Downloaded from <https://onlinelibrary.wiley.com/doi/10.1002/job.2831> , Wiley Online Library on [19/03/2025].

Jadhav, B., Kulkarni, A., Kulkarni, P., and Kulkarni, S.(2023). Artificial Intelligence and Big Data Analytics in Digital Gig Finance. In Synergy of AI and Fintech in the Digital Gig Economy. *CRC Press.*, 96-108.

Jones, N. (2017). How machine learning could help to improve climate forecasts. *Nature*, 203- 217.

Journal Global Values, Vol. XVI, Sp.I Issue July 2025 ISSN: (P)0976-9447, (e)2454-8391, Impact Factor 8.888(SJIF)<https://doi.org/10.31995/jgv.2025.v16iSI7.029>

Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at work: The new contested terrain of control. *Academy of Management Annals*, 14, Pg. 366–410. <https://doi.org/10.5465/annals.2018.0174>

McKinsey Global Institute (2018). Solving the Productivity Puzzle The Role of Demand and the Promise of Digitization. McKinsey & Company.

Mohammad R. A. (2018). Advanced machine learning in action: identification of intracranial hemorrhage on computed tomography scans of the head with clinical workflow integration. *Digital Medicine*, 1, 90-98.

Möhlmann, M., Zalmanson, L., Henfridsson, O., & Gregory, R. W. (2021). Algorithmic management of work on online labor platforms: When matching meets control. *MIS Quarterly*, 45, 1999–2022.

<https://doi.org/10.25300/MISQ/2021/15333>

Nimmagadda, B., Vangaveti, Y., Aaluri, S., Rao, C. M., and Singh, B. (2024). An Analytical study on Navigating Sustainability Challenges and Opportunities in the era of AI and the Gig Economy. *MATEC Web of Conferences*, 392, 1044-1058).

Nosengo, N. (2016). Can artificial intelligence create the next wonder material? *Nature*, 200-216.

Parent-Rocheleau, X., Parker, S. K., Bujold, A., and Gaudet, M.C. (2024). Creation of the algorithmic management questionnaire: A six- phase scale development process. *Human Resource Management*, 63, 25–44. <https://doi.org/10.1002/hrm.22185>

Pei, J., Liu, S., and Cui, X. (2021). Perceived algorithmic management of gig workers: conceptualization, measurement and verification of the impact on service performance. *Nankai Management Review*, 24, 14–27. *Quarterly*, 45, 1999–2022. <https://doi.org/10.25300/MISQ/2021/15333>

Wingfield, N. (2017). As Amazon pushes forward with robots, workers find new roles. *The New York Times*, 222-232.

Zhang, L., Yang, J., Zhang, Y., & Xu, G. (2023). Gig worker's perceived algorithmic management, stress appraisal, & destructive deviant behavior. *PLoS ONE*, 18, e0294074. <https://doi.org/10.1371/journal.pone.0294074>.