

New Professions and Identities in Context of Future of Work Studies in the Age of AI

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Abstract

The study focussed on Future of work in the age of AI and its impact on the emerging skills and professions in the global workforce and creating professional identities irrespective of the educational degrees or conventional roles. Many of these new roles are driven by advances in digital technology, sustainability needs, and cultural shifts. Conventional career trajectories, in which workers advance through the ranks and retire at the height of their abilities, are becoming obsolete. Some workers choose to retire following a career change or pause, such as taking on alternative or less profitable work, or they choose to retire entirely. For instance, Mike Ulica from the National Geographic Society examines the significance of geographic and cultural diversity in today's workplace. It's evident that forming successful teams involves more than just having a variety of technical skills; it also requires diversity in backgrounds and perspectives, as well as an understanding of the distinct challenges involved in deploying a product across various regions. At some point in their careers, more workers are leaving the workforce in the middle of their careers, changing industries, or adopting contingent labor and other nontraditional employment arrangements. According to a 2022 LinkedIn study of 23,000 employees, 35% of respondents said they could take a professional break in the future, while 62% said they had already done so. Additionally, employees face involuntary disruptions due to demands of caregiving, economic changes, technological disruptions and natural disasters. Jonathan Grudin, principal researcher at Microsoft, commented, "People will create the jobs of the future, not simply train for them, and technology is already central. It will undoubtedly play a greater role in the years ahead

Key Words: Future of Work, Disruption, Skills, Gig, Smart Education, Industry 5.0

Introduction

As the world transitions into an era characterized by human-machine collaboration; The need for talented workers with transdisciplinary experience and competency in new technologies is growing as leading to new professions and identities that were unheard of historically.

The workforce must adjust to the changing nature of traditional professions as well as the emergence of completely new roles. In order to meet these demands and ensure that people can prosper in the changing industrial landscape of Industry 5.0, smart education is therefore essential to upskilling and reskilling the workforce.

The practice of giving people the instruction and training they need to improve their current abilities and pick up new competences pertinent to their current positions is known as upskilling. Conversely, reskilling entails retraining people for new positions or sectors in reaction to changes in the labour market brought about by economic or technical improvements. Furthermore, the post-COVID era is expected to bring about growing demands for new social contracts and institutional frameworks.

One's capacity to rethink employment in ways that generate new kinds of value and purpose is constrained by the zero-sum idea of jobs as set bundles of tasks, many of which will increasingly be carried out by machines. However, roles will demand creativity and the use of technology in monetising the professions. Example of an Indian vlogger Rajesh Rawani from being a Truck driver to a social media star.

Another important aspect is that the introduction of new technologies can lead to the creation of entirely new job roles. For example, in call centres, chatbot designers are responsible for writing and regularly updating the scripts that chatbots use to manage routine customer interactions.

Some subjects in Liberal Arts; especially like understanding Geography and its importance will be crucial. Geography paradoxically has become an active subject that goes beyond passive learning or memorization. A geographic education is an essential component of a well-rounded education. This is increasingly clear as geospatial technologies, such as remote sensing and mapping tools, have become vital to our economic prosperity and governance in fields like natural resource management, international trade, transportation, risk management, and national defence and security.

Geography and its impact on Geo-literacy

Choosing a Site: Businesses often rely on geographical data to determine the most suitable location for their operations. This could involve factors like proximity to suppliers, access to transportation, or demographic trends.

Targeting a Market Segment: Companies analyze geographic data to understand where their target audience is located. This helps in tailoring marketing efforts and resource allocation to specific neighborhoods or regions.

Planning a Distribution Network: Geography is key to determining the most efficient routes and locations for warehouses, delivery centers, and retail outlets.

Zoning a Neighbourhood: City planners and governments use geographic information systems (GIS) to divide urban areas into zones for residential, commercial, industrial, and recreational uses.

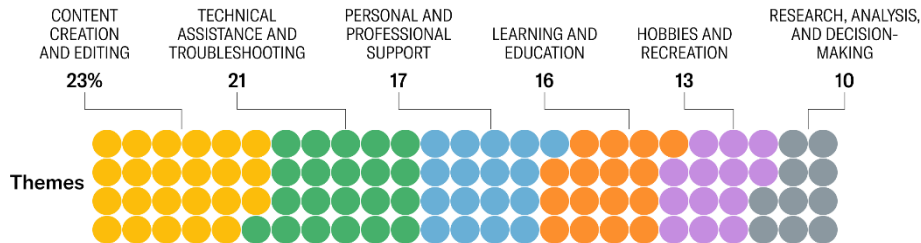
Allocating Resources: When governments or organizations allocate resources—be it for infrastructure projects, social services, or emergency responses—geography helps ensure that resources are distributed where they are needed most.

Responding to Emergencies: In crisis situations like natural disasters or public health emergencies, geography is essential for identifying affected areas and planning relief efforts.

The below chart and its conclusions provide an example of how regular people have used technology to improve their own lives and forge identities and careers. Rather than adopt a purely technological view of deploying technologies, we can cultivate a broader view of designing systems of human computer collaboration. Malone calls this approach “supermind-centered design.”

How People Are Using GenAI

Have people found ways for generative AI to help lighten their workloads, increase their productivity, or think through problems in new ways? To understand how individuals are using the technology, researchers mined web forums like Quora and Reddit, filtering through tens of thousands of posts to identify 100 different use-case categories, which they then organized into six themes.



Categories

- | | | |
|---------------------------------------|---------------------------------------|----------------------------------|
| 1 Generating ideas | 36 Critique and counterargument | 71 Using MS Office apps |
| 2 Therapy/companionship | 37 Knowledge checks | 72 Understanding movie plots |
| 3 Specific search | 38 Coding for amateurs | 73 Coding for a basic video game |
| 4 Editing text | 39 Meeting summaries | 74 Tracking medical symptoms |
| 5 Exploring topics of interest | 40 Cleaning up notes | 75 Healthier living |
| 6 Fun and nonsense | 41 Explaining legalese | 76 Preparing for meetings |
| 7 Troubleshooting | 42 Spotting logical fallacies | 77 Explaining idioms |
| 8 Enhanced learning | 43 Creating a holiday itinerary | 78 UX/user story writing |
| 9 Personalized learning | 44 Editing a legal document | 79 Suggesting code libraries |
| 10 General advice | 45 Business advice | 80 Writing poems |
| 11 Drafting emails | 46 Replying to emails | 81 Work buddy |
| 12 Simple explainers | 47 Generating code (for pros) | 82 Editing video transcript |
| 13 Writing/editing CV/résumé | 48 Getting past writer's block | 83 Motivating yourself |
| 14 Excel formulas | 49 Generating a lesson plan | 84 Packing for travel |
| 15 Adjusting tone of email | 50 Rubber duck debugging | 85 Sampling data |
| 16 Evaluating copy | 51 Negotiating a deal | 86 Technical use of software |
| 17 Enhanced decision-making | 52 Fact-checking | 87 Helping people with ADHD |
| 18 Language translation | 53 Career advice | 88 Ad/marketing copy |
| 19 Improving code (for pros) | 54 Practicing difficult conversations | 89 Special needs education |
| 20 Drafting a document | 55 Seeing blind spots | 90 Spotting anomalies |
| 21 Reconciling personal disputes | 56 Data entry | 91 Building a business plan |
| 22 Summarizing content | 57 Legal research | 92 Refining prompts |
| 23 Making a complaint | 58 Writing job postings | 93 Helping entrepreneurs |
| 24 Recommending movies, books, etc. | 59 Strengthening an argument | 94 Building a website/app |
| 25 Cooking with what you have | 60 Jumping to the useful info | 95 Writing blog posts |
| 26 Generating appraisals | 61 Generating video | 96 Writing a funding proposal |
| 27 Creativity | 62 Safe space to ask | 97 Writing a press release |
| 28 Medical advice | 63 Interpreting song lyrics | 98 Editing digital images |
| 29 Generating a legal document | 64 Dungeons & Dragons | 99 Planning workouts |
| 30 Fixing bugs in code | 65 Generating relevant images | 100 Project management |
| 31 Drafting a formal letter | 66 Data manipulation | |
| 32 Writing and editing a cover letter | 67 Homework | |
| 33 Personalized kid's story | 68 Writing social media copy | |
| 34 Explaining technical documents | 69 Translating code (for pros) | |
| 35 Preparing for interviews | 70 Writing realistic web copy | |

Source: Filtered

As per LinkedIn an emerging job is a skill that has shown tremendous growth in the region while there might be a large pool of talent who hold this job but increasingly the demand has increased manifold over the years

Some new roles are Artificial Intelligence Specialist, Robotic Automation Consultant, Digital marketing specialist, Solar Panel installers, wind turbine engineers We also need to consider the Generation Z and Alpha Z that is entering the workforce

Objectives:

1. The purpose of the research paper is to highlight the importance of smart education and the necessity for adoption of technology in order to monetise passions and create new professions that can be replicated with ease and ingenuity. This has been done through systematic literature review and with a special focus on the industry 5.0 and rise of professions and unique identities especially in context of multiple generations at work.

Work appears as a necessity in human life in a number of different ways. Perhaps most clearly across the literature today is the way in which work functions as an economic necessity: under capitalism, a person must earn a wage in order to survive, and therefore paid employment becomes “a social value and organising principle of modern ‘material life (Just 2017, p. 446).

2. The COVID-19 pandemic highlighted the critical role of the low-wage workforce, fluid professional identities which makes up a significant part of essential sectors. Immigration systems in developed economies are generally more welcoming to high-skilled workers, while being more restrictive toward low-skilled workers.

3. Jobs that require social and creative intelligence, as well as advanced perception and manipulation skills, will be less impacted by automation due to the limitations of technology in replicating these behaviours. Society is expected to experience a shift from low-skill jobs to those that are more knowledge-intensive. Many individuals will face unemployment, and governments will encourage companies to ease the transition by providing training for workers in new skills before fully automating their roles.

Workers will no longer be linked to traditional trade unions, as new forms of worker organizations will gain recognition from both governments and employers. These organizations will demonstrate that new technologies can not only transform the way people work but also how they advocate for their rights as workers.

4. Reiterate the future skills and roles and the competencies required for doing jobs.

A report from “The Future of Jobs” (Agler, 2016) indicates what skills would be needed in the future:

1. Solving complex problems
2. Critical thinking
3. Creativity
4. Managing people
5. Coordination
6. Emotional intelligence
7. Reasoning and decision making
8. Service orientation
9. Negotiations
10. Cognitive flexibility

Reskilling to adapt to new professions

The rapid progress in algorithms, along with a surge in computing power and data availability, is driving machine capabilities that surpass human abilities and fostering a new era of system-level innovation, ranging from self-driving cars to significant breakthroughs in medicine.

Leaders must also identify the skills required for the future roles and professions. This, a dynamic process crucial for effective strategic reskilling programs. To achieve this, they should focus on understanding the skills that the current strategy demands and the workforce possess. This requires the development of a comprehensive strategic workforce planning methodology. Numerous organizations have already embarked on this journey. For example, the European insurance company Allianz has made notable progress in this area. It consistently translates projected business growth into talent requirements, focusing on the number of people needed for various roles and the specific skills they will need. The model, which is updated annually, incorporates economic scenario planning and considers the potential impacts of digitalization on the workforce to make them future ready for the emerging jobs and professional growth.

Some interesting reports like the Cognizant 21 Hr Jobs of the future states that human network analysts are expected to emerge to better understand the “natural network” of how people come together and stay connected using artificial intelligence and data analytics. As Professor Leslie Willcocks of the London School of Economics has said, HR will help us “take the robot out of the human.”

Unconventional Roles and Professions as part of mainstream India

However, the workplace of the future will not be solely focused on technology. The arts and humanities will also play an increasingly important role. While AI excels at answering questions, humans are superior at posing them.

Currently, the widespread use of smart mobile devices and the development of high-speed networks and advance in information technologies, have enabled individuals to express themselves through social networks. This has led to the rise of unconventional roles and identities created by users themselves. The COVID-19 pandemic had a profound impact on the global economy, particularly on tourism sector as social media sites are used to attract tourists and create “Influencer Professionals” and content creators

For instance, Wang et al. [37] demonstrated that factors and electronic word of mouth associated with short video applications strongly influenced by users’ travel behaviour intention

Moreover, the fashion industry is undergoing a transformation, requiring new skillsets and strategies to meet the rising demand for sustainability

- 1) Saree Draping—Dolly Jain began her work as a hobby in Calcutta more than a decade ago. Since a tender age, she would dress up her dolls in the most exclusive ways. This hobby gradually paved a way for various creative contemporary silhouettes she churns out today. This facet of styling has made her work particularly relevant in the Indian fashion milieu, in present times. <https://dollyjain.com/how-to/>)
- 2) Jharkhand Truck Driver-Turned-YouTuber Earns Rs 10 Lakh A Month from Cooking Videos
- 3) Travel Vloggers- While there are no specific skill requirements, use of technology to create engaging content and travelling extensively while being well versed with social media tools. Some have defied the traditional roles that perhaps were known to be suited to Generation Z: travel vloggers are a multi-generational professional and have novel identities
 - a. Ajay Sood runs ‘Travelure’, e.g. Ajay Sood <https://www.travelure.in/>
 - b. Nikhil Sharma” <https://www.youtube.com/c/MumbikerNikhil>
- 4) Sustainability Managers - LinkedIn’s Jobs on the Rise list, published in January 2022 showed that “sustainability manager” is the second-fastest growing job role in the UK across the whole jobs market, and also features in the “top 25” lists of 13 countries, including Australia, France, Germany, India and the US

- 5) Managing Temple Ecosystem- This role enables professionals to manage temple ecosystem with an aim to digitally manage the offerings and devotee footfalls globally
- 6) Podcasters- A *Brief History of Podcasting: From the Radio to the Portable, On-Demand Format*, we can deduce the following overall definition:

A podcast is a piece of episodic, downloadable or streamable, primarily spoken audio content, distributed via the internet, playable anywhere, at any time, produced *by anyone who so wishes*. (Rime, 2022)

This new profession is imitable and does not require any specific skills. The symbiotic relationship between diverse creators and diverse audiences has not only enhanced the podcasting experience but created new Professions and identities.

Methodology & Literature review

A thorough search of scholarly databases, online repositories, and professional journals was conducted to identify relevant articles, books, reports, and conference proceedings addressing the topics like Future of work, reskilling, roles in digital economy, Gig economy and the age of AI.

To gather data for the review papers, an electronic search on various platforms, including Google Scholar, EBSCO, PROQUEST, Emerald Insights, Springer ScienceDirect, Harvard Business Publishing, Instagram, YouTube and some unstructured group discussions.

In accordance with the main issues and subtopics specified in the review paper's scope, pertinent data was taken from the chosen sources were arranged. Key findings were summarized, recurring themes and trends were found, and any inconsistencies or gaps in the body of current literature were noted as part of this process.

Conclusion

With the influx of the Alpha Generation and the existing Digital natives, who are adept with technology and swiftly incorporate new and emerging AI technologies, there is an imminent need for universities and organizations to integrate new technologies and skills into the teaching-learning process in order to meet the demands of the digital generation.

This will not only foster the growth of new Professions but also reduce the skill gap in job performance leading to greater productivity at workplace and reimagining careers and reshaping identities.

Discussions for further research

The scope of study is vast and the pace of technological change is rapid, it is difficult for a single entity like an organization, academic institutions or even governments to prepare for new emerging professions and identities. One recommendation would be to have an industry-wide skill taxonomies would serve as a valuable framework and, in some instances, assist companies in pooling the knowledge and resources necessary to invest in specific capabilities, such as advanced AI skills. These skills are so new that many organizations may lack the expertise or capacity to develop solutions independently. Additionally, industry coalitions could provide assurance to participants that their investments in learning could lead to broader opportunities in the future.

Moreover, the roles and Professions in Industry 5.0 require are more technology based, so there is a huge scope to understand the use of social media in creating new jobs without formal education.

Given all these factors, any prediction about the future of work must account for these unresolved tensions and contradictions. The nature of work in the future will likely be shaped by how these forces play out and how society, businesses, and individuals navigate these complexities.

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