

THE IMPACT OF ARTIFICIAL INTELLIGENCE AND INNOVATION ON EMPLOYEE WELL-BEING

Dr Shivaji D Mundhe, Director, Yashaswi's IIMS, Chinchwad

Mr. Ashish A. Waghe, Sr.Manager Kayani Maxion Wheels Pvt.Ltd,Research Scholar Yashaswi's IIMS, Chinchwad

Abstract

Considering the current trend of Artificial Intelligence and Innovation, maximum industries are moving toward A.I. and Innovation due to meet the competitive business requirement, which mainly focuses on adopting the new cost-effective technology that will result in cost reduction with higher production with minimum employee requirement, which resulted in Demand of skill employee increase compare the low skilled and routine job and impacted on employee well-being. This study examines the challenges of A.I. implementation and its impact on various aspects of employee well-being, such as employment opportunity, leadership drive, Training system, Performance management system, Performance Management, Employee Bargaining power, Skilled Demand, Health and Safety, and lastly the impact of A.I. on Employee Well- being. We analyze the AI-related impact through a thematic literature review. We critically argue a novel perspective on how A.I. and Innovation can positively and negatively impact employee well-being in the above areas. We address the crucial literature gap. Our findings reveal numerous employee-related barriers to employee well-being, including change resistance, digital skill, knowledge transformation, employment threats, socio-economic inequalities, lack of collaboration and teamwork, leadership, and organizational challenges. We show how HRM can contribute to creating a sustainable culture for A.I. and Innovation. The limitations, needed future research, and practical implications conclude the article.

Keywords:

Artificial Intelligence. & Innovation, Employment opportunity, leadership Drive, Training & Development ,Employee Satisfaction, Bargaining Power, Skilled Demand, Health and Safety, and Employee Well-being.

Introduction.

Artificial and Innovation is modern need of every organization. We can see that the current Government is also focusing on the " Make in India " drive, which is based on A.I. & Innovation. If we go through the current trend of India on A.I. and Innovation, the revenue in India will stand at USD 12.3 billion in 2022. Over the past few years, AI has become the critical driver of Industrial Revolution 4.0. India has a significant stake in the Development of A.I., and we have gone through the global data trend on A.I. and Innovation. Some of the current status of A.I. & Innovation investment • The private investment in A.I. in 2021 totaled around \$93.5 billion—more than double the total private investment in 2020, while the number of newly funded A.I. companies continues to drop from 1051 companies in 2019 and 762 companies in 2020 to 746 companies in 2021. In 2020, there were four funding rounds worth \$500 million or more; in 2021, A.I. will become more affordable and higher performing:• Since 2018, the cost of training an image classification system has decreased by 63.6%, while training times have improved by 94.4%. The trend of lower training cost but faster training time appears across other M L Perf task categories, such as recommendation, object detection, and language processing, and favors the more widespread commercial adoption of A.I. technologies,

We have seen how Artificial Intelligence and Innovation Globally increase in several fields, and there are positive and adverse effects on employee well-being.

The transmission channel of A.I. is a significant factor in job growth and increased subjective well-being, explained by positive leadership between A.I. jobs and economic growth.[1]. The employee learning model moderates the relationship between innovation and employee psychological well-

being[2]. Employee well-being plays a significant role. It helps to mediate the relationship between technostress and performance and organizational learning countervailing moderating impact EWB and performance. [3].The mediating effect of Employee Well-being and hedonic Well being and distributed leadership. [4].Design of new technologies with sufficient Job resources to create and maintain a healthy and motivated workforce during and after implementing A.I. and Innovation in the workplace[5]. Work organization and Innovation are essential in improving firm performance and well-being[6]

Methodology:

The literature review is a systematic and retrieval source for ascertaining and interpreting the group of traced literature, journal, and relevant artificial pertain to this research topic. The objective of this methodology analysis the existing documents as mentioned above so that related topics and keywords can be studied. In this paper, the Author illustrated the literature in terms of suggestions and tried to shape it into a conceptual framework. In this regard, a study can be done by implementing content analysis. Content analysis helps elaborate details information on past studies. In this paper, the authors have studied 55 research papers and found 45 papers relative to the concerns.

This paper has studied the following sources to understand past studies.

Research Gate, Google Scholar, Emerald full Text, JSTOR, and other Authorise Government official Sites.

Literature Review

I-Leadership-driven AI and Innovation and its Impact on Employee Well Bing



The Author focus on the management style of a leader prerequisite for creating an excellent work environment related to A.I. and innovation culture in an employee , it is the study of leadership style about the employee commitment towards Innovation and employee well-being, the sample of 349 respondent the workplace, the method used in this study based on theoretical as well as hypothetical investigation and study the transformer and transactional leadership increases the employee well being and Innovation, the study also focuses on leadership style,employee well-being and organizational commitment towards the Innovation, the trans formal and exchange are a crucial element of an organizational climate which is a most essential part of employee well being and Innovation and employee well-being significant positive impact towards Innovation ***the limitation and gap found in this study of the sample size is only 239 respondent which can not indicate the impact of the leadership style of the surrounding area [7]***

Fleck, L., Graus, E., Klinger, M 12/2022 he has assessed the insight into how employees are indirectly affected by the implementation of A.I., the sample size of 25 employees of two multinational companies and qualitative research methodology, the effect of A.I. & Innovation remarkably, some area employees are aware of threats as the technological replacement and some area work technology

induced increase in work and production speed, the perception of employees about the employment security, due to A.I. adoption it changed employees task and skilled Demand there is an absence of skilled. However, in the short-run Demand on employee well-being and job satisfaction, the employee is still worried about their workload and employment security in the future. It must be addressed transparently to inform the employees of the potential effect of opportunities for their professional features. ***The limitations observed in this literature are the sample size of 25 employees of only two multinational companies, which needs to provide robust evidence of A.I. & Innovation's impact on employee well-being.***[8]

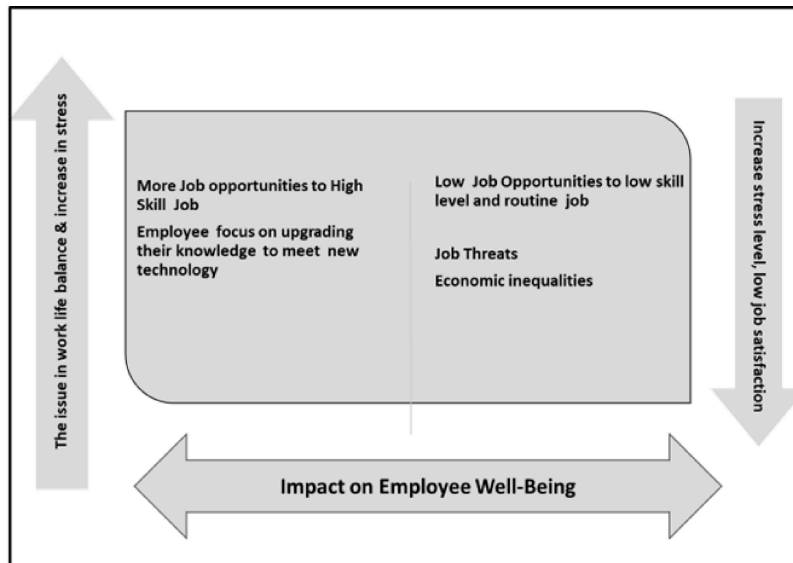
The researcher focuses in his study on the adverse effect on an employee of an organization downsizing and restructuring through A.I. & Innovation, the fear of job security increases knowledge-hiding behavior, and tries to find out the boundary condition to reduce the adverse effect of job security, the sample size of 346 Korean employees, this study is demonstrated that coaching leadership operates as boundary condition which impacted the negative influence of job security.

The reason for increased job security due to knowledge-hiding behavior moreover coaching leadership. This limitation showed that only job security with subjective indicators was studied. They have not focused on indicators such as unemployment and turnover rates. ***This study was conducted only amongst Korean employees, so generalizing the result is limited.***[9]

This research focuses on leadership transforming into digital leadership, which is related to organization performance, sustainability management, and the digital culture of employees. The sample size of 149 employees focuses on digital leadership and employee digital capabilities. It shows that the positive direction towards digitalization and indirect effect of organizational performance and employee digital capabilities mediate in between leadership and organizational performance, the methodology used in this research sample and data collection shows that there is a direct effect of leadership and organizational performance and employee digital culture partial mediating effect on the relationship in digital leadership and organizational performance. Still, employee digital capabilities significantly impact organizational performance, so digital capabilities have crucial roles in organizational performance and sustainability. The limitations observed in this research are that it studied only manufacturing industries, human resource, and service industries in South Korea, it is not applicable to generalize all industries, ***the analysis sample size is only 149 respondents, they have focuses only on two mediating variables to find out the relationship in between digital leadership and organizational performance, their other variables also related to digital leadership, and it also affects the digital leadership***[10]

Chen M, Zada M, Khan J, Saba NU. H 2022 Jul This research in focus on investigating the influence leadership on employee creativity on innovation and artificial intelligence the data collected from 242 employees and 52 managers in chines listed companies , the research focused in two parts the rate servant leadership and their creative engagement creative behaviour of employee which is indirectly impacted on employee well -being and it has been observed from this study the creative engagement behaviour mediate the leadership and employee creativity , this highlight the significant leadership of work engagement and knowledge sharing in forecasting the employee creativity in the Asian environment, the methodology use on the questioner the total 332 questioner were distributed among the all respondent and the data analysis through SPSS module also the research loading all item ranging in between 0.74 and 0. 86 and 0.7 range indicating the high reliability, the leader should prioritizing the employee needs to lighting the employee maximum potential , the employees are more interested collective collaboration and sharing the knowledge and it create indirectly the employee intrinsic motivation and improve the level of Risk taking ability , it create the atmosphere for out of box thinking, ***the limitation of this study the data collected of 242 employees and 52 Managers of chines listed companies which can not generalise data for all industries, they have considered the variables, i.e., servant leadership, knowledge sharing, and creative process engagement their are other variable also impacted leadership style on employee well-being***[11]

Employment opportunities have a positive and negative impact on employee well-being:



Due to fast-developing technology with great opportunities to make workers more creative and origination more efficient, A.I. and Innovation are also used to mechanize existing jobs and intensify unfairness. It will help to reduce the unfairness against the employees.

There is a positive impact on an employee of A.I. & Innovation work-life balance, work-related flexibility, and independence, and it will help employees with creative and innovative thinking; due to A.I. & Innovation, employees' physical work has been drastically reduced, and A.I. is helpful in the measurement of unbiased work performance.

But there is a negative impact observed in A.I. & Innovation on employees. A sense of job insecurity and extra workload is due to A.I. & innovation management expecting more advanced knowledge from the employees, increasing employees' stress levels. The major drawback of A.I. & Innovation is data security [12].

A.I. and Innovation in the developed organization and impact on changing nature of job and job market, the paper intends to show A.I. shall affect human knowledge or labor. This research on implementing A.I. in different industries and its impact on job opportunities is developing, followed by a qualitative approach by interview and sampling techniques. Fourteen senior professionals from various sectors were approached for an interview to collect information about their views on A.I. implementation and secondary data from the journal, literature, and its result from this paper 1. A.I. improves productivity 2. Its impact on production cost 3. A.I. increases the compensation amount in the labor market 4. Ai improve job opportunity, but it applies to skilled employees only. Routine job employees have the adverse effect of A.I. ***While doing this research. The data was collected only from 14 senior respondents, which is not a sufficient sample size for any research. The findings can not apply to overall industries in India[13].***

As per the study of the US-EU trade and technology council, due to A.I. and Innovation have the potential gain for society. A.I. & Innovation create the potential environment to increase productivity, helps in creating new jobs, and indirectly helps increase living standard. A.I. and Innovation were helping an organization to develop its ability to monitor employee performance.

A.I. & Innovation is likely to interrupt many jobs and tasks, leading to increased employee stress because the job is redesigned and demands new skills. A.I. and Innovation lead to an increase in unemployment because machine replaces human work. ***Incremental economic inequality exists because the wealthy can afford the new technology and grow faster. There is another downside of A.I. & Innovation is the security risk of data, and another potential downside is an increase in ethical concern and its impact on human lives, which is not comfortable[14]***

This research examines the effect of technological Innovation in the field of A.I. and robotics unemployment level in Sweden, the research collected 1350 AI and Robotic patents from 2010 to 2020

to analyze the relationship between unemployment and required technologies, and it has been observed that there is a negative association between unemployment level and Ai innovation, the research use Polled OLS model and Fixed effect model for comparison the OLS model runs ordinary least squares regression and in fixed control for a fixed omitted variable by conserving time regional fixed effects. ***The data is collected in innovation activities in A.I. not concentrated in the metropolitan area and A.I. activities diffused outside of metropolitan areas.[15]***

Artificial intelligence and Innovation impact employment and the workforce. A.I. and Innovation replacing the job and industries will be most impacted because repetitive tasks can be easily automated. It resulted from specific roles, task activities related to customer care /call center operation, document cataloging, Innovation and recovery, and content self-control based on Ai and Innovation. It resulted in replacing the role with an intelligent robot and its impact on job security and unemployment. And roles related to the operation, support, and production line in industries have been replaced by robots and automation, such as assembling production parts and tools. For example, the sector that will be impacted due to A.I. & Innovation is. Transportation is entirely revolution mode and fully autonomous. It is more efficient and effective, resulting in a demand for skilled drivers, and those with no skills face the problem of job security. ***The legal professional is also impacted due to A.I. & Innovation because A.I. agents do their job systematically. Financial services are also impacted because A.I. and Innovation efficiently process the data with minimum contradiction, and there is no need for experts in this area[16]***

The Author of this paper focuses on negative Development in employment. Government attitude toward Artificial intelligence the two methods used in this paper to find out the negative impact of A.I. on employment in terms of industrial relocation and refraining from the education system, the Author focuses on the government attitude towards A.I. Earlier, Government was not in favor of A.I. because they felt that there was a negative impact of A.I. & Innovation on employment. Still, now the Government should understand the importance of A.I., and they should understand that important and invest more time in A.I. The Government requires the Development of A.I. against any algorithm bias and other side support to solve the issue. Due to A.I. & and Innovation there negative impact of employment , the yang Shan port Shanghai is largest container ship the 10% global capacity it is operated by 9 operators only due A.I. & Innovation and south Korea and Singapore earlier they were operated by 1000 employee and now operated by 1% of employee and 99% employee are facing the Risk of unemployment and same case USA earlier 13 million job was their now by June -2022 there 5.912 million employee were loose their jobs and in USA total unemployment rate would ne tripled due to A.I. and Innovation and U.K. in the year 2021 Business , Energy and industrial sector 7% employee have face the job security problem, the authors use two method in this research one is Industrial Relocation means transfer the employee but it is short term solution he found and second method he suggested is Reframing the education system the Government has to change their education system by revolving method as per need of current requirement of A.I. and Innovation . A.I. & Innovation brought huge incremental in productivity, ***but it is still deeply concerned about its negative impact on the labor market. Employment and income can be the substantial cause because those who are already stronger are making stronger, and those who are already weak are making weak. It has a significant impact on society. The data sample is small. It is only related to a port shipyard and can be more escalated [17].***

The work is this paper in this paper focusing on Artificial intelligence & automation, machine learning, job displacement, employment opportunities, and impact on the economy. This research examines how A.I. and Innovation may lead to job displacement in specific industries and potential new opportunities in other areas. The Government and industries can mitigate the negative effect of job displacement and promote new employment opportunities. This paper screens the database on a literature review of a comprehensive search of various academic databases and articles published in the last ten years that are helpful to address the significant impact of A.I. on Job displacement and employment opportunities, the job displacement, particularly for a low-skilled and routine job, it is suggested that

they adopt the new technologies and increase the ability of the employee, *there are limitation in a study the is they have not covered latest research and need to focus the Impact of A.I. & Innovation on a long term and short term impact, consider the developing counties, sectors, and occupation[18]* Training on A.I. and Innovation & its impact on employee well-being.



The researcher focuses on establishing the link between technology, Innovation, and learning performance and its impact on employee well-being. It also tries to establish the influence relationship between corporate trust, self-efficacy, and well-being and how it affects employee learning performance. The study used a purposive sample approach and collected a sample of 516 respondents from 10 logistics companies in China. The data were analyzed by AQMS software, and it has been observed in this research that the successes of A.I. and Innovation depend on data availability and employee access. It indicates an increase in their trust in the management and directly impacts employee well-being. The management should encourage the employees to participate in learning efforts and the technology policy stated to all employees. *The limitation of this research is the data collected only from 10 logistic companies can not be the complete statement of all areas. They have studied only innovative technologies and learning because they are multidimensional and composed of various technology. In recent years, they have not studied the subsequent variable, especially concerning the mediator effect[19]*

The employee's expectations towards the changes due to industry 4.0 the study was conducted among factory shopfloor employees in Finland. When the industry introduced industry 4.0 related to artificial intelligence and Innovation, they should think about the individual job role, teamwork, and support in employee well-being at work, the employee should engage and collaborate by designing new solutions with the new role, training, and on the job support and it is impacted on employee well-being, during this research the researcher has done the conclusion on the basis on shopfloor employee. Still, other employees are also impacted due to industry 4.0. *The Author focuses only on individual job roles, support for well-being, and training, but other variables are also impacted, like compensation, reward recognition, etc.[20]*

This literature focus on effective partnership between Artificial Intelligence system and employee to achieve an organizational outcome, the bridge the gap between A.I. and knowledge gap, and the relationship between knowledge sharing toward A.I. skills, trust, and role clarity in a collaborative working environment to improve the business performance, the sample 164 employees in U.K. creative industries on survey-based sampling method with KMO sampling method study, and observed that A.I. communities and proper strategies would help to develop the intelligence capabilities within organization's limitation observed in this study the sample size is only for 164 employees which can lead the result of overall industries, *the researchers study only last three year years research, which*

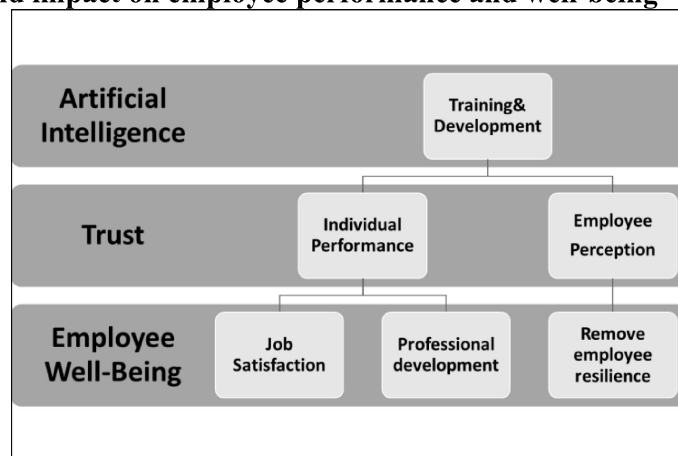
is less input for current business and management, how it A.I. training affected on organization performance[21].

According to A. Claudio Garavelli, Michele Gorgoglione, and Barbara Scozzi,2022 try to investigate the characterized knowledge technology support to knowledge management, focusing on knowledge transfer by two cognitive processes confidence and interpretation. Define the properties of knowledge transferring with the proper properties of the K.T. The knowledge technologies need to identify the existing knowledge available to employees. ***The limitation observed in this study is that the properties of knowledge sharing could be more precise in this research, and it is not a significant success in applying for knowledge transfer[22].***

This article focused on the role of Human Resource Management during the transition to business 4.0 and attributes of HRM distinct traits, skills, and competencies. In contrast, in the transition to Business 4.), the value of HRM in Business 4.0 is very high. They need to reconsider their role from services to active participation by using the creative process of digital competencies. They need to focus on an innovative approach while transitioning to Business 4.0, the various literature review during this research, and multivariate regression analysis for testing the hypothesis and setting the equations of influence factors like new skills, competencies, and individual characteristics percentage in the business about knowledge-intensive employment and innovative talent among the employee, ***while reviewing this literature the researcher not clear what is required to HRM to facilitate during the transitioning to Business 4.0 which is found a significant research gap[23]***

This article introduces an overview of how to propose the actual training qualities and topics during the driving force of industry 4.0 in industries as well as learners, with the Development of three tools that are diagnostic tools to identify the maturity level of industries to adopted learning path and the second set of grids to design for the adapted learning path in different work and third learning factory allow by doing way. The researcher uses the methodology to link the organization's strategies on transformation objectives, employee training and skills development needs, and the organization's value chain. ***This article mainly focuses on matured industries. They have yet to focus on start-up industries, which is an essential requirement of start-up industries[24]***

A.I. & Innovation and impact on employee performance and well-being



This research focus to study on explore the impact of impolite management and self-efficiency on organisational as well as employee performance and indirectly impact of employee well-being in the context of artificial intelligence , the survey was conducted of 578 respondent in selected international companies in Turkey, Taiwan , Japan & China , due not sufficient feedback from 85 resonance they have consider only 493 respondent feedback, they studied the employee satisfaction based on natural work discover the appearance and impact of abusive management and individual performance and result shows that age and education level variable employee perceptions of management leader ,abusive management and individual performance significantly different from their job performance ,

AI-based technology ,malicious management and individual efficiency directly affect on organisational performance and employee satisfaction and indirectly affect on employee well-being, ***the study is conducted only selected multinational industries from specific countries only, he was not analysis the both positive and negative impact on abusive management and their correlation with productivity and organisation , team performance which may help to empirical impact on employee satisfaction and well-being of employees[25]***

There is significant collaboration between A.I. and employees to achieve the organizational result, the factor affecting A.I. on employees, and its impact on organizational performance. To find and bridge the gap, they approach the knowledge-based views, social-technical system, and organizational socialization framework, the relationship between knowledge sharing, Ai skill trust, and job clarity in a collaborative work environment to improve the organization as well as employee performance, 164 respondent were selected from U.K. creative industries by using analyzing techniques structural equation modeling technique and resulted that A.I. and employee collaboration to help in improve in Intelligence capabilities of employees and its direct effect on employee satisfaction and well-being, ***the sample size is not sufficient to confirm the statement A.I. collaboration impacted on employee performance and job satisfaction. The KBV and STS model give different results[26]***

The A.I. and Innovation in organisation have generated attention in recent year , most of the industries focuses on A.I. and Innovations but there they have not imposed the implication of A.I. and Innovation on the employee well being and their performance , the study was to shed light on the effect of A.I. and Innovation and its associated variable on job performance which are mainly privacy security , and impact on the employee performance , the study was focused on Small and Medium enterprises in China , the data was collected through random sample and 220 respondent were considered and data was analysed by SPSS and it has been observed that A.I. is significant impact on employment which resulted in low employee performance and work experience significant impact on work performance, ***the researcher was study in limited SMEs in China , as result findings may not directly applicable to other all industries , he have not consider the commercial sector such as hotel , banking , insurance and other sectors[27].***

This article focuses on Artificial Intelligence and its impact on the performance of accounting operations among accounting in South East Nigeria, and the research was conducted in the area of A.I. in accounting and auditing, which was expected more significantly benefit efficiency, productivity, and accuracy, with the challenges of income and wealth inequality and continuation with a traditional job and unskilled workforce, and the result shows that management should redesign the professional development program in relation with A.I., and they have a thing about their training process which will result in the betterment of the employee performance, ***while reviewing this research it observed that the study was conducted only in Nigeria it is not focusing on developed countries like U.S., U.K., and Europe[28]***

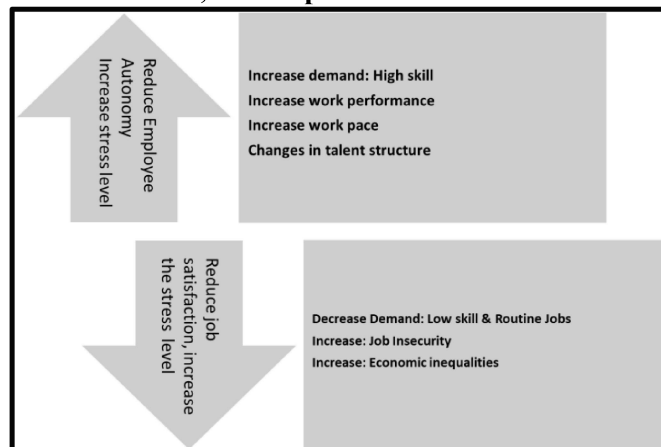
A.I.'s multidimensional talent management aspect in the HRM process increases employee engagement and performance. The research was implemented with the respondent of 317 managers and owners in Slovenian enterprises, which is related to talent management which directly impacted employee performance and well-being. The result shows that AI-supported acquiring and retaining talented employees, AI-supported T & D and organizational culture, leadership, and reducing workload positively impacted employee performance. While doing the efficient implementation of A.I. in ton the organization, top management should consider the broad insight into the various aspects to increase employee engagement which is helpful to increase employee well-being in the organization. ***This research is limited to the sample of manger and owners in Slovenian enterprises. It focuses on a medium and large scale, not on a small scale, especially since A.I. is more suitable for small-scale industries[29].***

A.I. and Innovation and Employee Bargaining power its impact on EWB

Due to the introduction of new technologies in the organization's workplace and future of work, the consequences of new technologies resulted in losses of jobs and quality in the market's future. It affected employees awarding legal capacity and rights obligations to robots. A.I. manages the workforce. This human interference at a minimum level resulted in low Demand for the workforce. It reduced their bargaining power and stressed that collective dismissal regulation and worker's representatives are all more busy managing and preventing job losses other than bargaining for a wage rise. Data are collected from companies, humanized, reported on the website, and collected from emails and calls. This article explores how collective regulation is essential to secure labor protection during automation and new technology. *This article is studied based on collected data from reports, websites, emails, and calls. Still, it will only help a little because most of the accurate data can not be disclosed, and the organizations may need to give a clearer picture of the actual effect of A.I. & Innovation on employee bargaining power[30].*

Due to A.I. and Innovation indicate the elasticity of labor demand and supply and requirement in the market, the employee getting more salary those have new skills related to new technology, it is observed that the Demand for skilled employee elasticity increases and the supply for skilled employee elasticity decrease, the Demand of AI-related employee increase from 1.4% to 4.1 % and supply about A.I. decrease from -6.8% to -1.6%.The researchers collected the database for this study from 5 top ten companies in the online market business in Europe and collected information from employers and workers. He also collected data on wage proposals, *but the research focuses on line market business companies, and it is a reality that due to A.I. and Innovation, the online market is growing faster, and Demand of drastically increased, but he has not focused on those are already working in online marketing industries with insufficient A.I. skilled[31]*

A.I. and Innovation, Demand of skill, and impact of EWB



The heterogeneous impact of A.I. adoption upon different skilled demands across the three dimensions of geographical, organization type, and length of time since the adoption of A.I. It has been observed that low-skill Demand relatively reduces across all regions of China and increases skilled Demand for high-skilled employees. It depends upon the firm level of technological intensity. It further observed that A.I. would have a more significant impact on increasing the Demand for highly skilled employees. For this study, they collected data from the China stock market and account research from 2011 to 2018 and 7902 Chinese manufacturing industries listed on Shanghai Stock Exchange. *This Author is focusing on the Demand for highly skilled and, but he has yet to study the adverse effect on low-skilled Demand, which may significantly impact job security and result in too low a level of employee well-being[32]*

Research focuses on the A.I. among employees in Denmark, investigating the job relationship between A.I. and skilled requirements. It shows that Ai is varied and depends on the information provided to employees about A.I. A.I. enhances skills and increases work performance and practices. It may

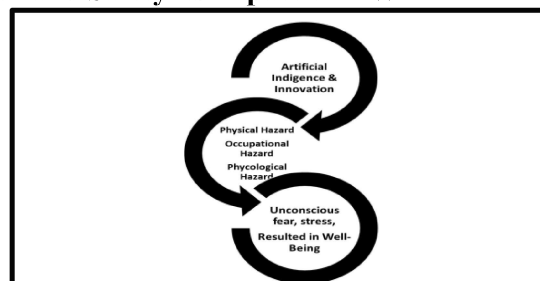
increase work pace and reduce employee autonomy, A I can increase inequalities in the labor market mostly related to skills Demand. There is always a high demand for high skills and an adverse effect on a low-skilled or routine job. In this research, *the researchers focus only on the skilled Demand to find the direction of causality about the A.U. uses to skilled requirement and effect on employee well-being. Still, other variables, like compensation, recognition, etc., affect skilled Demand and employee well-being[33].*

According to Huaping, G., & Binhua, G. (2022). The digital economy is vastly growing and is a trend of future Development. Demand for technology increases and talent structure also changes. The impact of digital economic Development on labor structure is also changing. The micro equilibrium model used for the analysis of the different professional levels, analysis done by provincial panel data and regression method, the result shows that the digital economy can promote advanced skilled talent and the proportion of high skill talents gradually increase, economic policies can promote the diffusion of D.T. and it help to upgrade the skilled talents, the research focuses on investigating the positive impact of Demand of highly skilled, he suggested how economic policies can upgrade the skill. Still, *he has yet to suggest what kind of treatment should be given to low-skilled because most people are in this category, which may have a cognitive effect on employee well-being[34].*

Due to the fourth Industrial Revolution, there has been a radical improvement in productivity and efficiency through automation and A.I. The fourth revolution deploys intelligent sensors. Cyber physical system , IOT , internet of services , autonomous robots , 3dr printing and cloud computing optimization process ,this impact brought various changes in Demand of human skills , mainly in working employees ,there new need generated which called knowledge management tools which assist to contribute in growth of organisation's researcher focuses on the impact on knowledge management ,ethical issues , method of digital transformation and digital skill demands, and it has been observed that there is always concern about new technology it substitute the employees, the organisation should give different treatment an individual basis , because it is different medium at individual basis, there is need that organisation should upgrade and expand the extension the skill to meet the requirement of 4IR, there is need to build the competence model and establish the change agent for smooth transition of digital revolution, the research give his findings on the basis of literature review , *he just focus on knowledge management ,ethical issue and transformation mode , but there are other variable which need focused such as engagement , empowerment and autonomy, reward, recognitions, performance pay etc. These are more significant factors that result in good employee well-being[35]*

Due to new technology, there is a need to counterbalance labor demand and new skills, where it comes from, and its effect on the analysis of labor demand. This research has constructed a database of eight decades and linked it with new job titles. The data used for measures of occupational exposure to labor augmenting and labor skill automation showed that skilled Demand increased and was also reflected in compensation. Augmentation and automation innovations have distinct, asymmetric relationships to the creation of new work, and the creation of new technology elastically shifts to skilled Demand. *The research is done on the data from the past eight decades, from 1940 to 1980. there are a lot of changes in K.M. and Innovation, and researchers focus only on skill demand. They have not focused on human behavior patterns, a significant contributing factor to employee well-being[36]*

A.I. and Innovation, Health and Safety its impact on EWB



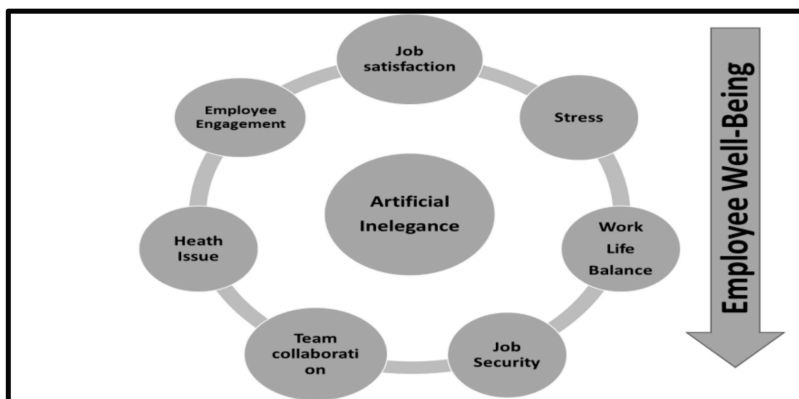
This paper argues on sandbox approach to regulating A.I. to complement a strict liability regime and the need to maintain the balance between the regulatory approach, which aims to protect employees on the one hand to foster Innovation, there is a need to develop regulation on Safety in the A.I. sector, and A.I. product and services tested within safeguards. This article focuses on A.I., regulation, strict liability, and fault-based liability. The Risk was classified as high Risk based on A.I. The system, classified in fundamental rights, includes Risk concerning high Risk with A.I., listed in lack of transparency, accountability, and decision-making process. ***It is observed that the authors only focus on liability and regulation. Still, he had never focused on employee expectations. The data is collected on a trend of A.I. and regulation. Employee expectations play a significant part because we need to understand what they feel about their Safety due to A.I. and its contribution to employee well-being[37].***

According to Zorzenon, Rafael, Fabiane L. Lizarelli, and B.A. de A. Daniel.2022, the new production pattern has been changed towards A.I. and Innovation. However, regarding the impact of A.I. and Innovation on occupational health and Safety, the researcher identifies the association between A.I. and their influences on OHS. The data was collected from a literature review. It is identified that the direct positive impact of A.I. on OHS (e.g., safe work environment and mitigation of occupational Risk) and adverse effects which evidenced by to increase in stress, fatigue, diseases, and psychological Risk. This *study focuses only on risk analysis. They did not focus on management planning, designing, application, and integrating A.I. with a safe work environment because it is the guideline to management thinking from an employee perspective which may help increase employee well-being[38].*

The inception of advanced technologies resulted from a drastic increase in competition. There is extensive literature on A.I. implementation but not on human factors and ergonomics, which needs to be investigated. The data was from 472 manufacturing industries and tested through AMOS and tested the hypothesis. It found that all factors, including production and operation management, organization, and procedure, are affected by the due implementation of A.I. Human factors and ergonomics are found in the relationship between A.I. implementation and opex. ***The researcher study only human factors and ergonomics. He has not studied the other psychological factors that may lead to increased stress levels and lead behavioral impacts on the working environment, which may result in poor employee well-being[39].***

A.I. and Innovation there is drastic changes in operational process which is resulted in high health and safety risk , this research focus on to consider the effect of A.I. on the OSH domain on positive and negative aspects, because the expectation of employee during transition of A.I. has been changes , employee those are doing technical work they should different discipline knowledge, the new era of A.I. contributed to generate the new OHS risk, the researchers studied several literature and collect the data on A.I. and found that OHS is multidisciplinary field and its take te preventive measure work against accident and occupational diseases, required labour laws ,the need to continues training on OHS, ***this study is only focuses on OHS risk they have not giving the transition of A.I. because it is most crucial factor which affecting on employee behaviour , the focuses on technical training not psychological training because there unconscious fear factor when Human are going for any change and reflected in employee well-being, that significant part is missing in this study[40].***

A.I. and Innovation and Its Impact on Employee Well-being



Considering the current Innovation trend among the manufacturing industry intent to reduce the cost and sustain in competitive work environment , well-being is paramount which should kept in centre of manufacturing system ,so employee can achieve their goal beyond employment and provide the platform for their sustainable Development, this paper focuses on Industry 4 .0 . 5.0,society 5.0 , operator 5.0 , human centric , human-robot collaboration and resilient manufacturing, and found that Human is most signification factor there is strong corelation in between employee and A.I. and it how it impacted on employee well-being, during this research review the various literature and 3885 publication, and outline it on evolutionary trends between 4.0 and industry 5.0 to ***study comparison on various perspectivists research studied considering the employee well-being, and try to focuses various factor affecting on EWB , but not focus on Age and Gender wise ,because there different expectation , youth are more focuses on creativity and growth ,female are more concern of psychological need[41].***

A.I. is potentially adopted with Human Resources Management (HRM) due to the need to create value for customers, employees, and organizations. Most studies prove how A.I. antedate the organization's advantage and impacts employee behavior, job satisfaction, and well-being. International Management, Operations Management, General Management, and HRM provide the wide-ranging and objective sympathetic to the organization required to develop the A.I. competencies among the employees, need to look beyond technical resources and put the emphasis on developing non-technical such as employee skills and competencies, leadership, team coordination, organizational culture, innovation mindset, and integration strategies. Organizational resources are necessary to achieve the business goal with the view and knowledge base theories. ***This study mainly focuses on improving the competencies of an employee. Still, there are adverse effects such as job security, extensive workload due to A.I., incremental levels of stress, and work-life balance issues [42].***

Employee skills and competencies significantly impact the Development of the employees' occupational profile, resulting in the Development of employee well-being. Skill and competencies development is an ongoing process in the current industrial revolution. The Author emphasizes this study on developing the framework for the profile of an employee working in A.I. industries. The study was conducted in Poland in meteorological industries through a survey questionnaire and hypothesis done through various statistics tools and support from literature review data.it is observed that the learning pattern of thinking and using the knowledge held to generate new ideas is helping to improve employee well-being, and the organization gets benefits to improve the productivity and profit ratio. ***The data analysis in the case of intelligent worker recruitment only included case studies of recruitment offers from Polish steel companies, and the sample size was limited. A study of a group of metallurgy graduates only it is not given an extensive view of all employees and their well-being[43].***

We have seen in the last decades A.I. and Innovation applications being integrated into surrounding industries and HRM approaching for managing the employees in the organization. There is a new stream for HRM, such as social presence, the effect on an employee due to A.I. adoption, and outcomes

of business results. The role of HRM and A.I. implementation is most important because while implementing A.I., there are so many issues concerning an employee, which may reflect the positive or negative result of employee well-being. A conceptual framework has to be integrated into A.I. applications. The empirical result of the literature review approach and analysis of the data and observed framework for HRM is the most critical part while integrating A.I. in industries. ***This research is based on a literature review of the last ten years and results based on limited evidence that can not give an extensive framework for HRM, which can lead to employee well-being[44].***

Sustainable Development concerning A.I. is mandatory for all industries, and now it is a crucial business priority due to exponential productivity and cost reduction increases. HRM is the most significant factor in sustainable social and employee well-being development. Need to remove the employee-related barriers such as change resistance, digital skill gap, employment threats, widening socio-economic inequalities, lack of collaboration, leadership, organizational cultural changes, holistic approach towards collaboration, talent management, knowledge transforming, innovative curriculum for upskilling and retention and rewarding. It is observed that it cannot differentiate between H.R. prerogatives for sustainable Ai development. Specifically, ***this study is relevant as a technological replacement of human processes and may considerably impact employees' livelihoods. Those are routine jobs in developing countries that may significantly impact employee well-being; however, it needs to be distinguished between large and small-scale industries, and the result can differ[45].***

Finding & Conclusion :

In this study, the literature pertains to all variables necessary to analyze the all-variable impact of Employee Well-being. It has been found that leadership style during the implementation of A.I. & Innovation is the most significant factor because it relates to employee commitment and awareness towards the A.I. & Innovation, coaching style, developing a digital culture in the organization, creative engagement environment, and its effect on Employee Well-Being. There is a positive as well negative impact on employment opportunities. Training & Development found the significant factor because it directly affects corporate trust and employee self-efficiency, teamwork, individual job role, and clarity. A.I. and Innovation found an impact on employee performance when the abusive management style was used with a drastic adverse effect on employee well-being. The organization should find the gap and bridge the gap. They approach knowledge-based and social-technical views and develop skill trust and job clarity through a collaborative work environment to improve organizational and employee performance. A.I. & Innovation directly affect employee bargaining power. High-skilled jobs have high bargaining power, and low-skill jobs always fear losing their job. And unions are primarily focused on preventing job losses other than wage demand. The Demand for skills radically impacts employee well-being because the Demand for highly skilled jobs increases and those in routine jobs are constantly under threats of job insecurity. Skilled employees are always found under stress due to continuous updating of their existing skills. Soft skills are also impacted by stress due to fear of insecurity. And Demand in skill employees tried to update themselves, resulting in high-stress levels. Health & Safety during the implementation of A.I. & Innovation were also found to be significant factors affecting employee Well-Being and the need to implement a strict liability regime and maintain a regulatory approach with aims to protect the employees and its direct positive impact on employee work behavior and resulted in good employee well-being. The organization needs to provide a sustainable platform for employee development. HRM must be played a significant role in creating value for employees and the organization. They put their effort into developing soft skills other than technical skills only. Focus on employee concern, resistance, skill Gap, employment threats, socio-economic inequalities, and team collaboration significantly affect employee well-being.

Limitations and Scope for further research

In the context of this study incorporating simple methodology selecting past literature based on the variable taken, the same possible variable can give different results in other literature. Moreover, some papers explain the variable, not at the core, and it may be the Scope for further research.

Sr.No	Reference
1	Makridis, C. A., & Mishra, S. (2022). Artificial Intelligence as a Service, Economic Growth, and Well-Being. <i>Journal of Service Research</i> . https://doi.org/10.1177_10946705221120218
2	Technological Innovation and employee psychological well-being: The moderating role of employee learning orientation and perceived organizational support. Nadia Zahoor, Francis Donbesuur, Michael Christofi, Domnan Miri
3	Wu, Weilin, Wynne Chin, and Yide Liu. "Technostress and the smart hospitality employee." <i>Journal of Hospitality and Tourism Technology</i> (2022).
4	Berries, Sarra. "Mediating effects of employees' eudaimonic and hedonic well-being between distributed leadership and ambidextrous innovation: do employees' age matter?." <i>European Journal of Innovation Management</i> (2022).
5	Peeters, Maria CW, and Judith Plomp. "For better or for worse: The impact of workplace automation on work characteristics and employee well-being." <i>Digital Transformation. IntechOpen</i> , 2022.
6	Pap, Jozsef, et al. "Modeling Organizational Performance with Machine Learning." <i>Journal of Open Innovation: Technology, Market, and Complexity</i> 8.4 (2022): 177.
7	National Taipei University of Business Taiwan Siou Hua April 2013)
8	Fleck, Lara, Evie Graus, and M. Klinger. Is artificial intelligence changing our future of work? Perceptions of affected workers. <i>ROA</i> , 2022.
9	Jeong, Jeeyoon, Byung-Jik Kim, and Min-Jik Kim. "The Impact of Job Insecurity on Knowledge-Hiding Behavior: The Mediating Role of Organizational Identification and the Buffering Role of Coaching Leadership." <i>International Journal of Environmental Research and Public Health</i> 19.23 (2022): 16017.
10	Shin, J.; Mollah, M.A.; Choi, J. Sustainability and Organizational Performance in South Korea: The Effect of Digital Leadership on Digital Culture and Employees' Digital Capabilities. <i>Sustainability</i> 2023, 15, 2027. https://doi.org/10.3390/su15032027
11	Chen, Meizhao, et al. "How does servant leadership influences creativity? Enhancing employee creativity via creative process engagement and knowledge sharing." <i>Frontiers in Psychology</i> 13 (2022): 947092.
12	Malik, Nishtha, et al. "Impact of artificial intelligence on employees working in industry 4.0 led organizations." <i>International Journal of Manpower</i> 43.2 (2022): 334-354.
13	Mukherjee, Arunava Narayan. "Application of artificial intelligence: benefits and limitations for human potential and labor-intensive economy—an empirical investigation into pandemic ridden Indian industry." <i>Management Matters ahead-of-print</i> (2022).
14	Hamilton, Daniel S. "Promoting US-EU Coordination and Cooperation on Technology Standards: Recommendations for Action."
15	Rasulov, John. "Technological Innovation and Unemployment across Sweden: An analysis based on patent counts." (2022).
16	Artificial intelligence and Innovation impact employment and the workforce. A.I. and Innovation replacing the job and industries George Krasadakis 2018
17	Zhao, Bohan. "Analysis on the Negative Impact of A.I. Development on Employment and Its Countermeasures." <i>SHS Web of Conferences</i> . Vol. 154. EDP Sciences, 2023.
18	Tiwari, Rudra. "The Impact of A.I. and Machine Learning on Job Displacement and Employment Opportunities." (2023)

19	Ahn MJ, Chen YC.2022 the link between technology, Innovation, and learning performance
20	Kaasinen, Eija, et al. "Smooth and resilient human–machine teamwork as an industry 5.0 design challenge." <i>Sustainability</i> 14.5 (2022): 2773.
21	Chowdhury, Soumyadeb, et al. "AI-employee collaboration and business performance: Integrating knowledge-based view, socio-technical systems, and organizational socialization framework." <i>Journal of Business Research</i> 144 (2022): 31-49.
22	Belli, Simone, and Ernesto Ponsot. "Liquid Science and Digital Transformation: How Knowledge between Researchers Flows in Their Scientific Networks." <i>Social Sciences</i> 11.4 (2022): 172.
23	Sergi, Bruno S., et al. "Creative abilities and digital competencies to transitioning to Business 4.0." <i>Journal of Business Research</i> 153 (2022): 401-411.
24	Marmier, François, et al. "Towards a proactive vision of the training for the 4.0 Industry: From the required skills diagnostic to the training of employees." <i>IFAC-PapersOnLine</i> 54.1 (2021): 1144-1149.
25	Lin, Shanyu, et al. "Exploring the relationship between abusive management, self-efficacy, and organizational performance in the context of human–machine interaction technology and artificial intelligence with the effect of ergonomics." <i>Sustainability</i> 14.4 (2022): 1949.
26	Chowdhury, Soumyadeb, et al. "AI-employee collaboration and business performance: Integrating knowledge-based view, socio-technical systems, and organizational socialization framework." <i>Journal of Business Research</i> 144 (2022): 31-49.
27	Younus, Ahmed Muayad. "Effects of Artificial Intelligence, Big Data Analytics, and Business Intelligence on Digital Transformation in UAE Telecommunication Firms." (2022).
28	Chukwudi, O., Echefu, S., Boniface, U., & Victoria, C. (2018). Effect of Artificial Intelligence on the Performance of Accounting Operations among Accounting Firms in South East Nigeria. <i>Asian Journal of Economics, Business, and Accounting</i> , 7, 1-11.
29	Rožman, Maja, Dijana Oreški, and Polona Tominc. "Integrating artificial intelligence into a talent management model to increase enterprises' work engagement and performance." <i>Frontiers in Psychology</i> 13 (2022).
30	De Stefano, Valerio. "'Negotiating the algorithm': Automation, artificial intelligence, and labor protection." <i>Artificial Intelligence and Labour Protection</i> (May 16, 2018). <i>Comparative Labor Law & Policy Journal</i> 41.1 (2019).
31	Duch-Brown, Néstor, et al. "Market power and artificial intelligence work on online labor markets." <i>Research Policy</i> 51.3 (2022): 104446.
32	Xie, M., Ding, L., Xia, Y., Guo, J., Pan, J., & Wang, H. (2021). Does artificial intelligence affect the pattern of skill demand? Evidence from Chinese manufacturing firms. <i>Economic Modelling</i> , 96, 295-309.
33	Holm, Jacob Rubæk, and Edward Lorenz. "The impact of artificial intelligence on skills at work in Denmark." <i>New Technology, Work and Employment</i> 37.1 (2022): 79-101.
34	Huaping, G., & Binhua, G. (2022). Digital economy and demand structure of skilled talents — Analysis based on the perspective of vertical technological Innovation. <i>Telematics and Informatics Reports</i> , 7, 100010. https://doi.org/10.1016/j.teler.2022.100010
35	Anshari, Muhammad, Muhammad Syafrudin, and Norma Latif Fitriyani. "Fourth industrial revolution between knowledge management and digital humanities." <i>Information</i> 13.6 (2022): 292.

36	Autor, David, et al. New Frontiers: The Origins and Content of New Work, 1940–2018. No. w30389. National Bureau of Economic Research, 2022.
37	Truby, Jon, et al. "A sandbox approach to regulating high-risk artificial intelligence applications." <i>European Journal of Risk Regulation</i> 13.2 (2022): 270-294.
38	Zorzenon, Rafael, Fabiane L. Lizarelli, and BA de A. Daniel. "What is the potential impact of industry 4.0 on health and safety at work?." <i>Safety Science</i> 153 (2022): 105802.
39	Virmani, Naveen, and Urmi Ravindra Salve. "Significance of human factors and ergonomics (HFE): mediating its role between industry 4.0 implementation and operational excellence." <i>IEEE Transactions on Engineering Management</i> (2021).
40	Serap, T. E. P. E. "The impact of Industry 4.0 on occupational health and safety." <i>International Journal of Advances in Engineering and Pure Sciences</i> 33.1 (2021): 122-130.
41	Leng, Jiewu, et al. "Industry 5.0: Prospect and retrospect." <i>Journal of Manufacturing Systems</i> 65 (2022): 279-295.
42	Chowdhury, Soumyadeb, et al. "Unlocking the value of artificial intelligence in human resource management through A.I. capability framework." <i>Human Resource Management Review</i> 33.1 (2023): 100899.
43	Gajdzik, Bożena, and Radosław Wolniak. "Smart production workers in terms of creativity and innovation: The implication for open innovation." <i>Journal of Open Innovation: Technology, Market, and Complexity</i> 8.2 (2022): 68.
44	Budhwar, Pawan, et al. "Artificial intelligence—challenges and opportunities for international HRM: a review and research agenda." <i>The InTernaTional Journal of human resource management</i> 33.6 (2022): 1065-1097.
45	Mukhuty, Sumona, Arvind Upadhyay, and Holly Rothwell. "Strategic sustainable development of Industry 4.0 through the lens of social responsibility: The role of human resource practices." <i>Business Strategy and the Environment</i> 31.5 (2022): 2068-2081.