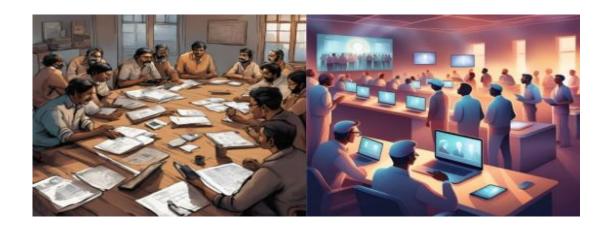
### **Research Paper on**

# "Impact of Technology on Union Strategies: Navigating Changes in Digital Age"

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#### **Abstract**

Technological advancement, as seen in the use of AI, automation, and especially digital platforms, has changed the dynamics at workplaces in ways that greatly challenge the labor unions. These technological changes require unions to rethink their strategies on protecting workers' rights and interests. This paper therefore discusses the myriad impacts of technological innovation on union strategies; it presents theoretical frameworks and practical approaches unions can take in navigating the complexity of the digital age. Herein, it underlines the need to embrace cutting-edge technological tools and policy-making aimed at augmenting engagement, openness, and mobilizing efforts. The findings identify that, on the one hand, technology offers challenges such as employment displacement and resistance to change among employees, while on the other hand, it presents opportunities for a better partnership with companies and the provision of trainings such that workers are better prepared for the future. Through embracing innovative strategies and tools, unions will be relevant and effective in keeping the workforce out and off technological transformation.

#### Introduction

Changes in technologies within the last few years have dramatically changed sectors in the world as interaction among employers, employees, and labor unions operates. Use of artificial intelligence, automation, and digital platforms by companies poses serious challenges to the labor unions, which call for finding their ways through this new landscape to protect workers' rights and interests. Considering the impact of such technological shifts on union strategies is of paramount importance for modern change management and collective bargaining in the workplace.

The impact of technology on union strategies is multi-faceted, and it requires a nuanced understanding of various theoretical models. By adopting strategies and methods, unions can navigate the complexities of the digital age, enhancing their ability to advocate for workers' rights and adapt to technological advancements. These models provide valuable insights into how unions can strategically adopt and integrate new technologies to remain effective and relevant in an ever-changing landscape.

#### **Theoretical Background**

Unions can be defined as a labor union or a trade union-organized group of workers coming together to talk about and speak for their rights and interests in the workplace. Their ultimate goal is fighting for better conditions at work, better wages, more benefits, job security, and fair treatment of employees. Unions bargain collectively with employers over labor contracts that discuss these issues.

Historically, unions came into existence due to challenges presented by industrialists to workers during the Industrial Revolution when serious industrialization and severe working conditions were common. Today, unions have been instrumental in influencing labor laws and workers' rights in almost all continents. These achievements include setting a standard 8-hour working day, minimum wages, and more improved rules on safety aspects in the workplace.

#### **Union Strategies**

Unions pursue their goals in many ways that fall into one of these broad categories:

- ➤ Collective Bargaining: This is one of the key functions of unions that involves the representatives negotiating with employers on behalf of the employees. Issues include wages, work hours, health insurance, and terms and conditions of work.
- > Strikes: Strikes consist of the suspension of work for some time in order to influence the employer into submitting to their demands. A strike can be an inconvenient action, but a strike can also bring out your grievances if the works seem to have been unsatisfied.
- ➤ Workplace Action: Other than the strike, unions may stage demonstrations, protests, or work-to-rule working strictly to the rules, slowing productivity. All these actions are aimed at making known labor issues while still carrying out some form of continued work.

- ➤ Lobbying and Advocacy: The unions engage in political activities, trying to influence labor laws and policies at local, national, and international levels. In this perspective, they lobby the lawmakers, raise funds for political campaigns, and align themselves with parties elected on a plank of labour rights.
- ➤ **Legal Action:** In some cases, unions file a case in court or lodge grievances with labour boards or regulatory agencies against employer practices.
- ➤ **Member Services:** Many unions also offer services that enhance the benefit to members: legal counseling, training programs and workplace issues. Some of these can enhance union solidarity and activism.
- > Technology and Evolving Union Strategies: Innovating Through Change in the Digital Age

With the fast approach of the world into the digital age, significant changes have taken place within industries, workplaces, and labor dynamics. Unions have been compelled to rethink their age-old strategies to adapt to new challenges, which affect key areas such as:

#### > Automation and Job Loss:

The development of artificial intelligence and robotics will replace millions of jobs in manufacturing and other routine industries. Labor unions must advocate retraining programs for employees and reskilling for new careers as well as job protection for those sectors that are likely to be significantly impacted.

### **➢** Gig Economy and Freelance Work:

The emergence of digital platforms like Uber, TaskRabbit, and Fiverr has spawned a mushrooming gig economy - workers whose primary relationship to work is as independent contractors rather than employees. This definition is a challenge to the unions because the rights of the labor protections afforded to this new world of freelance laborers in the shape of this society are generally not comparable to those of the mainstream employee workers. Now, unions are fighting to bring these workers into the collective bargaining and labor protection fold.

#### > Remote Work:

The COVID-19 pandemic has forced unions to convert to the new working landscape. Issues of rights to disconnect, mental health concerns, home workplace safety concerns, and fair compensation for remote workers have shaped new central concerns. Unions are increasingly negotiating flexible working conditions with equal rights to all workers, whether on-site or remote workers.

➤ Union Organization and Communication: Technology has revolutionised the ways in which unions organize and communicate. Although face-to-face meets and door-to-door campaigns remain operative, they are complemented by online tools, social media, and online virtual meets to weave a mosaic of collective activities. Mobilizing through these tools is easier for unions, but it requires new strategies to hold people's interest in this virtual space.

#### > Data Privacy and Surveillance:

Given the increased proliferation of digital surveillance technologies, this complicates unions' relations with workers' privacy. Most organizations use monitoring tools to scan everything from keystrokes to GPS tracking. As such, unions have been demanding greater transparency and placing limits on how employers should collect and use data about their workers.

#### > Artificial Intelligence and Algorithmic Management:

AI-driven algorithms are increasingly deployed to manage workers - scheduling shifts, evaluating performance. Such systems raise problemmatic issues in terms of biased, incomprehensible, insecure employment. Labor unions are seeking fair and transparent application of such AI technologies on the shop floor and ensuring that workers have a say in the application of these technologies.

#### **Analyzing the Current Impact of Digital Technologies on Union Strategies**

New ways of working are being crafted through automation, AI, cloud computing, big data analytics, and the gig economy by digital technologies. Their impacts call forth the change of old industries and invite new dynamics by which unions and worker advocacy need to shift their strategies.

A significant theory for how technology contributes to transformations of societies is Technological Determinism. Historically, technological changes such as the Industrial Revolution had significant impacts on labor markets and were troublesome for unions at times and beneficial to others. Similarly, in the digital age, unions must change to meet new forms of employment-including remote work or freelancing through Uber and Amazon warehouses-and the ever-growing automation of jobs within sectors like manufacturing and logistics and service industries.

Traditionally, unions have played a role in securing collective bargaining agreements, workplace safety, finding protected workers' rights, and negotiating fair wages. In new digital platforms, of course, there is fragmentation of work that drains the collective strength of workers. Gig economy workers also must cope with disadvantageous conditions: most of these workers cannot benefit from full-time employment status, outside the protection of a traditional union scope. Moreover, automation has led to unemployment, and workers now have a bleak future with high probabilities of losing their jobs as the work is outsourced to machines and artificial intelligence, which can repeat duties with ease.

Critical political economy posits those new technologies favor capital over labor. Current employers use technology to cut labor costs, raise productivity, and undercut the collective power of labor by deconcentrating work. In these circumstances, unions need to transform themselves and to learn new tactics and strategies for organizing and representing workers whose jobs are being replaced or destroyed by new technologies.

Identifying Best Practices and Innovative Approaches Unions are Adopting to

#### **Navigate Technological Changes**

As work changes with the growing nature brought about by digital technologies, unions are trying new approaches on how to protect and represent workers. This includes using digital organizing tools, collaborations with tech companies, and policy advocacy towards better regulation of digital labor markets.

Digital Unionism is one of the most innovative attempts in this regard, where unions can, through online platforms, organize and mobilize workers. Communication tools such as WhatsApp, Facebook, and other social media have progressively become essential conduits for the transference and mobilization process. Online portals facilitate quick mobilization while offering unions with an opportunity to connect with gig economy workers who are otherwise scattered and unconnected. Online Petition platforms, digital campaigns, and virtual organizing dismantle the traditional constraints on organizational activities, which depend entirely on confined spaces such as workplaces.

Secondly, unions have evolved to Collective Bargaining 2.0 by embracing data analytics in gathering real-time information on workforce trends, wages, and conditions of work. With that kind of data-driven approach, unions could base their negotiation with the employers using very strong evidence for the argument. Another new practice is the setting up of Training and Upskilling Programs. Unions are now offering digital literacy programs to help workers understand changes in roles that demand greater levels of digital competencies. Training and skills updating have now become one of the most important roles European unions, with

The best practice also encompasses cooperation with the government and worldwide organizations. Trade unions have been advocating that digital workspaces receive stronger labor protections-things like rights for gig economy workers and technology's use for worker benefit rather than detriment.

employers, play in giving workers the tools needed for the jobs of tomorrow.

# Assessing the Effectiveness of These Strategies in Protecting Workers' Rightsand Interests

Institutional Theory could help to analyze the effectiveness of the digital strategies adopted by unions because this theory emphasizes the method through which organizations adapt pressures resulting from the outside environment, such as technological changes, to continue being effective. By applying such concepts, unions will have to apply these new tools and strategies into their action plan in accordance with the pressure they experience from the outside that has dramatically changed the economy as it is now classified into a gig economy.

Traditionally, this change has been difficult for unions. For example, unions such as the IWGB have seen some success in organizing workers in the gig economy; for instance, by requesting paid sick leave, minimum-wage protection, and protection against unfair dismissal. Such successes establish the feasibility of digital tools in the fight for workers' rights, even in highly decentralized industries.

In fact, how this is pursued and effective depends on national legal frameworks. Unions have gotten better deals for workers in the digital economy across countries where there are more extensive labor protections.

Stakeholder Theory is yet another framework upon which the success of union strategies may be analyzed. Unions are bound to engage with each of the stakeholders: workers, employers, governments, and society at large in order to implement the rights of workers. The mass support that unions leverage through social media platforms and the internet to bring about support transcends the ability of unions to hold employers and governments accountable for observing workers' rights.

On the other hand, Power Resources Theory opines that unions wield power over workers, which they can use to pressure employers. In a digitalised world, unions are now equipped with a new source of power, such as digital tools to create social networks and propagate information quickly across borders in coordination with international campaigns. Some of these strategies have borne fruit, such as global campaigns targeting companies such as Uber and Deliveroo, which ended up having its workers win their cases in court to have them classified as employees and not independent contractors.

# **Providing Constructive Suggestions for Unions to Enhance Their Strategic Responses to Technological Advancements**

Unions must prepare themselves for the challenges that technology will present. Futures Studies and Scenario Planning will enable unions to analyze future trends and even devise strategies that would prepare them to face such tendencies. Unions should study the possibilities of automation, AI, and digital platforms further to establish the potential implications for jobs, wages, and rights of workers soon. Going forward and using predictive analysis tools will enable unions to prepare their members for a fast-changing labor market.

One of the main recommendations is that unions should concentrate on Reskilling and Upskilling Initiatives. Because digital technologies are changing fast, most workers will need new skills to stay up to date in the labor market. The unions can collaborate with the education institutions and governments to begin lifelong learning programs for equipping workers with digital skills.

Another strong push is a stronger Regulatory Framework in relation to the protection of workers in the digital economy. Unions should advocate for legislation that does not define gig workers as workers; avoids the general replacement of jobs by automation; and maintains private life under increased surveillance. International unions may collaborate with a mix of organizations including the International Labour Organization (ILO) on worldwide standards about worker protection in digital environments.

Another fruitful partnership can be with Tech Firms. Unions should seek

partnership opportunities with tech firms in developing solutions that are beneficial to both the workers and the employers. Unionization can be done together with companies on matters like the design of fair algorithms that do not discriminate against the workers or cause job losses.

Finally, unions need to embrace Digital Platforms for Mobilization. At least in the future of organizing may lie in hybrid models that would integrate digital and physical forms of organizing. Virtual strikes, online petitions, and global solidarity campaigns can be used to amplify workers' struggles and help unions reach their goals.

### Models for implementing technological changes

#### **Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM), created by Davis (1989), tells us that two main factors influence how technology gets adopted: perceived usefulness (PU) and perceived ease of use (PEOU). In the context of unions, we can use TAM to see how union leaders and members see and embrace digital tools and platforms. For example, if union members find digital communication tools helpful for organizing and easy to use, then more people will be on board.

- Perceived Usefulness (PU): This is how much a union member thinks a certain technology will actually make their job or union activities better.
- Perceived Ease of Use (PEOU): This is how much a union member thinks a certain technology will be hassle-free to use.

#### **Rogers' Diffusion of Innovations Theory**

Rogers' Diffusion of Innovations Theory will really give us a useful view for analyzing how unions, like all organizations, accept new technologies. It underscores the fact that innovations are not adopted overnight but take a multiphasic nature where several different factors influence uptake. Let's unpack this in terms of its five stages and what is influential in each:

- **Knowledge:** Union members or leaders are aware of the technology or innovation. Through this stage, they are given what that innovation is and how it works.
- **Persuasion:** Union members develop opinions regarding innovation. They evaluate the benefits and risks and the possibility of that specific technology in streamlining work processes or alleviating issues.
- **Decision:** The union makes a collective decision to either accept or reject the innovation. This is usually through members and leaders who can provide ideas sometimes with an expert from outside also being incorporated in the process.
- **Implementation:** When agreed on, the organization seeks to begin experimenting with the technology within its practice. This is usually a trial-and error testing procedure whereby the innovation is worked into existing ways of doing things.
- Confirmation: Following the introduction of innovation, the union will continuously test it to ensure it is meeting the expected standards and bringing in the promised

benefits. If it does, then the union commits fully to using technology long-term.

#### **Strategic Choice Theory**

Strategic Choice Theory, proposed by Child (1972), puts the focus on how unions actively make choices to navigate tech changes, instead of just reacting to outside forces. Basically, unions can choose to proactively adopt new technologies to make their bargaining power stronger, improve communication, and get their members more involved.

- **Environmental Context:** The external factors that have an impact on union strategies, like economic conditions, trends in the job market, and technological advancements.
- **Strategic Choices:** The conscious decisions that union leaders make to adopt technologies that fit with their goals and objectives.
- **Organizational Processes:** The inner workings of the union that help with implementing and incorporating new technologies.

We can also use these theoretical models to look at different aspects of union strategies in the digital age:

- 1. **Organizing and Mobilization**: Technology can really boost unions' ability to organize and mobilize workers by utilizing digital platforms, social media, and mobile applications. To understand how these tools are adopted, we can turn to TAM (Technology Acceptance Model), while the Diffusion of Innovations Theory helps us grasp how these tools spread within the union.
- 2. **Bargaining and Negotiation:** Digital tools are a game-changer for unions as they provide data analytics and communication platforms that strengthen their bargaining power. Strategic Choice Theory sheds light on how unions can proactively embrace these tools to gain a competitive edge.
- 3. **Member Engagement and Communication:** Technology makes it a breeze to communicate and engage with union members in real-time. By understanding how union members perceive the usefulness and ease of these communication tools through TAM, we can enhance their adoption and effectiveness.

## **Review of Literature**

# 1. Unions in the Digital Age: Collective Bargaining, Industrial Relations, and Technological Change

The book "Unions in the Digital Age: Collective Bargaining, Industrial Relations, and Technological Change" analyzes transforming changes digital technology brings into labor relations and collective bargaining. It argues how higher uses of digital means and tools have changed traditional union practices and necessarily forced new strategies in negotiation and engagement of its members. The authors see the double-edged sword of technology-teasing union relevance to address their present challenges while presenting them with challenges and opportunities equally. With technology in communication and organization, unions can strengthen advocacy and representation of worker interests on issues like automation and the growth of the gig economy.

2. Labor and the Digital Economy: Work, Workers, and Unions in the Age of Automation In "Labor and the Digital Economy: Work, Workers, and Unions in the Age of Automation," Ursula Huws assesses automation and the digital economy in detail regarding labor and unionization. Arguably, Huws contends that precariousness is a salient feature of work in the digital age, just like the kind of gig and platform jobs without stability and proper worker safeguards. This book illustrates how labor models are undergoing challenges and points out the need for unions to innovate approaches to organizing and advocacy on behalf of workers. Using case studies coupled with empirical data, I highlight why this is such a crucial role for unions: the gains of technological progress to be equitably distributed rather than exacerbate existing inequalities.

# 3. Digital Labour Platforms and the Future of Work: Towards Decent Work in the Online World

Report by Janine Berg, Digital Labour Platforms and the Future of Work, traces the emergence of digital labor platforms and their implications for workers and labor relations. The issue here involves classifying gig workers as independent contractors, which seeks to restrict them from access rights and protections characterizing employees. Ergo, Berg's advocacy for the right framework regarding decent work standards in the digital economy demands regulatory measures emphasizing fair pay, job security, and social protections for the worker on platforms. In this work, the imminent demand of the labor movement is enlightened by the urgent need to

engross itself with the platform-based labor models as a means to protect the rights and the welfare of an increasingly vulnerable workforce.

#### 4. The Future of Work: Robots, AI, and Automation

In the book "The Future of Work: Robots, AI, and Automation," Darrell M. West discusses the social and economic implications of new technological developments in terms of employment issues. He further talks about how technological advancement can be a positive factor for contributions to productivity and efficiency and, at the same time, negatively challenge job displacement and skills gaps in society. The book asks for a proactive policy response-placing education, retraining, and social protection nets at the heart of preparing labor for an increasingly robot-like future where the concerns of jobs and living standards are assured.

#### 5. Positive and Negative Impacts of Technology in Organizations

The article by Hub Vela outlines the advantages and disadvantages of technology to organizations. According to the author, though technology can facilitate practices and drive productivity within an organization, it removes jobs and enhances employee monitoring. The article calls for a delicate balance between adopting new technologies to capture operational advantages and protecting employee interests. With astute adoption of technology, companies can boost their bottom line at the same time as encouraging an employee-centered work environment that values engagement and job security.

#### 6. Technological Change and Production Costs

StudySmarter has a study on how technological change has a concept with regard to production costs and productivity. Of course, technological advancements facilitate the production of more products at lower cost by firms. Yet at the same time, the study also refers to the implications regarding labor since more automation implies that fewer workers will be needed in selected positions. That creates questions over whether such technological progress can be sustainable, and what impact this may have on employment markets more generally. The results indicate that though technological changes can spark new economic growth, technology might also demand a modification of the overall strategy on workforce development in order to minimize and prevent job loss and to promote equal access to new jobs.

#### 7. Technology and Organizational Behaviour

The article offered by Lumen Learning on technology and organizational behavior explains how technology reshape organizational forms and behaviors of employees. It indicates that technology can flatten hierarchies, encourage cooperation, and improve communication, especially in virtual working arrangements. It has, at the same time, noted significant difficulties related to leading distributed teams and keeping a unified organizational culture. It further suggests that effective management styles should help to organize organizations to make good use of technology, as well as connecting the employee to their role in the organization.

#### 8. About Positive Organizations of Technology in the Work Environment

It was in this context that the blog post by Vantage Circle further expanded on how technology can help improve the overall communication, efficiency, and levels of engagement of people at work. It further claimed that better communication tools and technologies have the potential to foster collaboration within a hybrid or remote setup. It gives great emphasis on investing in

technology to make employees more motivated and productive. Acknowledgment of the possible downsides to burnout and work-life balance notwithstanding, it encourages strategic technology deployment that doesn't come at the expense of employee well-being relative to organizational objectives.

#### 9. Labor Unions and Technology Impacting Jobs

Article by Shalin Jyotishi in Forbes reviews the changing impact labor unions face due to technology reshaping jobs and workplace dynamics. It proceeds with the attempts made by unions about pushing workers' rights in industries with more work impacted by automation and gig work. According to Jyotishi, technology is improving the reach of organizing as effectively as in forming communication and outreach among the members. This article recommends that unions need to shift tactics along with the shifting labor landscape and face the unique problems of today coupled with technological change while simultaneously exploiting the opportunities that may exist for additional worker protection.

#### 10. Industrial Relations and Technology Research

The ScienceDirect article provides empirical insights into the nexus between technology, industrial relations, and labor market dynamics, proceeding to show how technological innovation impacts employment patterns, labor relations, and worker agency. The research emphasizes that the dynamics of labor relations must continually change as conditions demanded by this modern technological upgrade are done rapidly. It promotes cooperative efforts from governments, employers, and trade unions in shaping policies based on fair labor practices moving forward with the changing technological outlook.

## **Statement of Problem**

Previous policy on union strategies was dominantly based on traditional methods of organization and advocacy, such as face-to-face meetings, paper-based communications, and conventional negotiation techniques. Strategies such as these worked well when the digital technologies were less pervasive, but have now become hugely inadequate to effectively deal with contemporary challenges that unions face in a digital age.

#### **Problem:**

- Current union tactics, like traditional face-to-face meetings, paper communication, and conventional negotiation styles, are no longer enough to respond to the challenges brought by the digital transformation of workplaces.
- The emergence of digital technologies, such as automation, data analytics, and digital communication platforms, will fundamentally change the union landscape.
- Tradition Approaches in Organizing, Communication, and Mobilizing: Traditional organizing, communication, and mobilizing techniques are no longer effective enough to handle the increasing workforce spread all over geographically distant workplaces and virtual platforms.
- Unions are compelled to integrate digital tools such as social media, online resources, and data-driven decision-making to remain relevant in addressing urgent worker needs.
- The new and sophisticated ways of reaching, organizing, and fighting need to be adopted by unions, especially the young generation that is more techie.
- Workers are decentralizing due to the rise in remote work, where employees demand jobs needing flexible work conditions, and the gig economy where freelancing activities dominate; hence, it is hard to access workers using the traditional methods.
- The inability to exploit data in negotiations will make the unions take uninformed decisions and then navigate in an e-environment.
- The unions require reframing of strategies, that is, away from the old ways and towards technology-driven strategies involving digital communication, virtual organizing, and data analytics.
- There exists a research gap with regards to how technological changes influence changes in union strategies and, therefore, the effectiveness of such strategies in protecting workers' rights within this digital age.

# **Research Methodology**

Research is a systematic process of collecting, analyzing, and interpreting information to increase understanding of a particular topic or issue. It involves a structured approach to inquiry that aims to discover new insights, validate existing knowledge, or solve problems. Research is typically carried out in an organized, objective, and methodical manner, following a clear set of guidelines and procedures.

#### **Research Design**

This research is descriptive research.

Descriptive Research is a type of research that focuses on providing an accurate portrayal or account of characteristics, behaviors, or phenomena as they exist in a population or situation. The primary aim is to describe what is happening, as opposed to determining why or how something happens.

It does not involve manipulating variables or making predictions; rather, it emphasizes observing, recording, and describing conditions without attempting to influence them.

#### **Research Objective:**

- 1. To analyze the current impact of digital technologies on union strategies.
- 2. To identify best practices and innovative approaches unions are adopting to navigate technological changes.
- 3. To assess the effectiveness of these strategies in protecting workers' rights and interests.
- 4. To provide constructive suggestions for unions to enhance their strategic responses to technological advancements.

#### **Need for the Study**

#### 1. Rapid Technological Change:

Tech's breakneck evolution demands a swift deep dive into its union impact. AI, robots, and digital platforms now rule the roost. We must grasp how these game-changers shake up the workforce and union playbook.

#### 2. Shifting Employment Patterns:

Gig work WFH, and flex jobs have turned traditional work on its head. Unions need to rethink their whole approach to bat for workers in this brave new world.

#### 3. Union Relevance and Effectiveness:

Unions must roll with the tech punches to stay in the game. If they don't, they risk losing members and clout. That spells trouble for safeguarding worker rights.

#### 4. Policy and Advocacy:

Union chiefs and government officials crave hard numbers and deep dives to craft smart plans tackling tech's curveballs. This research dishes up the juicy details to fuel those brainstorms.

#### **Significance of the Study**

#### 1. Enhancing Union Strategies:

This study will give unions practical tips to update their game plan for the digital era. It'll spotlight winning tactics and top-notch methods helping unions pack more punch in their fight for workers.

#### 2. Protecting Workers' Rights:

Unions can create better plans to protect workers' rights as tech changes jobs. This matters a lot for gig workers and people working from home.

#### 3. Smart Rules:

This study can help leaders make rules to keep workers safe as tech shifts things.

#### 4. Adding to School Talks:

This work will spark new chats about unions and tech in schools. It'll fill in blanks and kick off fresh talks about how tech and unions mix.

#### **5. Boosting Union Bosses:**

Union chiefs can use what we learn here to make smarter choices and run things better. Even though we might look at certain places or jobs, what we find out will matter for unions all over. Tech keeps shaking up job markets everywhere.

#### **Scope of the Study**

- **Emerging Technologies:** There is an entire slew of studies that could be done to explore the impact of newer technologies like AI and machine learning and blockchain on union strategies as well as labor negotiations.
- Technological Changes in Remote Work: Investigate how unions must adapt their strategies and engagements to better organize as well as assist members working in remote or hybrid settings, which are increasingly becoming an emergent reality.
- Virtual Union Platforms: Design and Deliver: More related research could include designing and delivering virtual platforms for organizing, engagement, and advocacy with even more accessible and efficient mechanisms of communication.
- **Data-Driven Union Strategies:** Future studies may look at data analysis and how big data is increasingly playing an important role in unions' decisions to make better-informed choices, predict trends, and negotiate more efficiently.
- **Sector-specific technological impact:** The next round of research can focus on how technological change uniquely affects particular sectors say,

the technology industry, manufacturing, or healthcare - and how unions in these sectors must adapt.

#### **Data Collection**

**Data Collection** is the process of gathering information from relevant sources to address specific research questions, hypotheses, or objectives. It involves systematically recording observations, responses, or measurements to gain insights, make decisions, or draw conclusions. Data collection can involve primary or secondary data depending on the research purpose..

**Primary Data** refers to original data collected firsthand specifically for the research at hand. It is gathered directly from sources such as individuals, organizations, or observations to address a particular research question. Since primary data is collected directly by the researcher, it is tailored to meet the exact needs of the study and provides fresh, relevant information.

The **primary data** is collected directly from Chief Human Resource Officers (CHROs), Chief Executive Officers (CEOs), Managing Directors (MDs), HR Heads, and Board Members of the member companies of the Employers Federation of India. You have approached 30 companies for your research survey.

**Stratified Sampling** is a type of probability sampling method where the population is divided into distinct **subgroups or strata** based on specific characteristics (e.g., age, gender, job role), and a random sample is taken from each stratum. The goal of this method is to ensure that each subgroup is adequately represented in the sample, improving the accuracy and reliability of the research findings.

#### **Sample Design**

Content	Preference
Sample Universe	50 organizations
Sample Area	Top Level Management
Sample Size	30 organisations
Method Of Sampling	Stratified Sampling Method

Table no. 4.1

#### **Tools Of Analyses**

#### Questionnaire

A structured questionnaire will be used to collect data. It will include multiple-choice questions, Likert scale questions, and open-ended questions to gather both quantitative and qualitative data. The questionnaire will be framed in regards to "The Impact of Technology on Unions by the Change in Policies made to work in the Digital Era.

#### **Limitation of The Study**

- 1. Small sample size limits the generalizability of the findings.
- 2. Reliance on self-reported data introduces potential biases.
- 3. The study focuses on immediate impacts, not long-term effects.
- 4. Fast-paced tech advancements can quickly outdated findings.
- 5. Broader contexts may influence technological impacts.
- 6. Variations across industries may limit findings' applicability.
- 7. Qualitative insights may lack breadth for broad conclusions

# **Data Analyses and Interpretation**

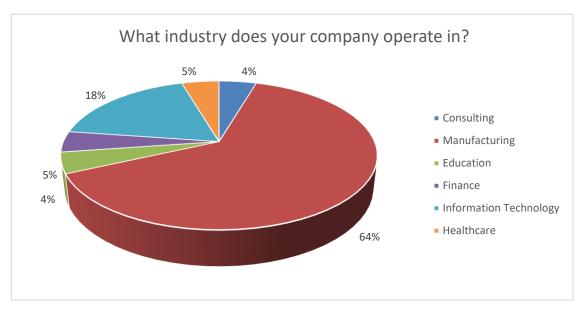


Figure no. 5.1

#### **Analysis**

Out of the 100% responses,

- 63.6% of the organisation were from Manufacturing sector.
- 18.2% are from Information Technology sector.
- The other sectors involve Healthcare, Finance, Consulting and Education contributing 4.5% each.

#### **Interpretation**

From the above analysis I interpret that, the majority of respondents (63.6%) are from the manufacturing sector, followed by 18.2% from the information technology sector. The remaining sectors—healthcare, finance, consulting, and education—each contribute 4.5%, showing a more limited representation from these industries. This suggests that the feedback and perspectives on union strategy changes are primarily influenced by the manufacturing and IT sectors, where unionization and workforce dynamics may differ significantly from those in smaller-represented sectors.

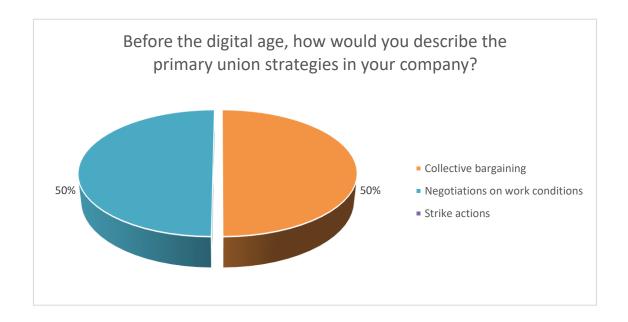


Figure no. 5.2

Out of 100% responses,

- **45.5%** of the organisation use **Collective bargaining** as the primary union strategies.
- **54.5%** of the organisation use **Negotiations on work conditions** as the primary union strategies.

#### **Interpretation**

From the above analysis I interpret that, there is a fairly even split in union strategies, with 54.5% of organizations primarily focusing on negotiations around work conditions, while 45.5% rely on collective bargaining. This indicates that while both approaches are commonly used, there is a slightly stronger emphasis on addressing specific work conditions as the key strategy for unions, reflecting the need for tailored agreements in response to evolving workplace environments.

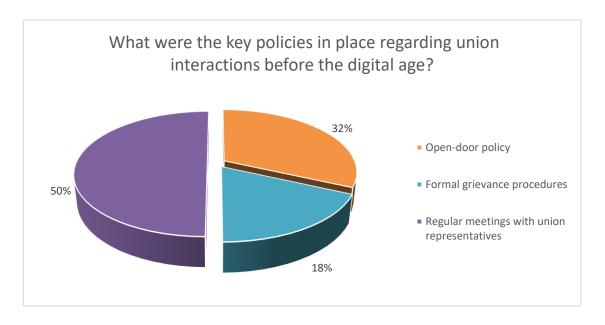


Figure no. 5.3

Out of the 100 % responses,

- 50% of the organisations's key policies regarding union interactions before the digital age was **Regular meetings with union representatives**.
- 31.8% of the organisations's key policies regarding union interactions before the digital age was **Open door policy**
- **18.2%** of the organisations's key policies regarding union interactions before the digital age was **Formal grievance procedures**

#### **Interpretation**

From the above analysis I interpret that, before the digital age, 50% of organizations relied on regular meetings with union representatives as their primary policy for union interactions, reflecting a traditional face-to-face approach. Meanwhile, 31.8% employed an open-door policy, emphasizing informal, direct communication with unions. A smaller portion (18.2%) used formal grievance procedures, indicating a structured method for handling disputes. Overall, the focus was predominantly on regular, in-person engagement with unions.

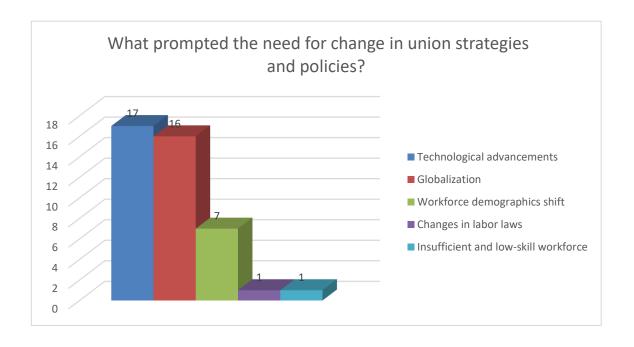


Figure no. 5.4

Out of the 100 % responses,

- 77% of them said the factor that prompted the need for change in union strategies and policies is **Technological Advancemnets**
- 72.7% of them said the factor that prompted the need for change in union strategies and policies is **Changes in labor laws**
- 27.3% of them said the factor that prompted the need for change in union strategies and policies is **Globalization**

- 31.8% of them said the factor that prompted the need for change in union strategies and policies is **Workforce demographics shift**
- **4.5%** of them said the factor that prompted the need for change in union strategies and policies is **in sufficient and low skillworkforce**

#### **Interpretation**

From the above analysis I interpret that, the main factors driving the need for changes in union strategies and policies are technological advancements (77%) and changes in labor laws (72.7%), indicating that shifts in work due to automation and evolving regulations are the top concerns. Other factors like workforce demographics shifts (31.8%) and globalization (27.3%) are also notable, but less impactful. A small percentage (4.5%) pointed to an insufficient and low-skilled workforce, suggesting that skill gaps are a relatively minor concern in comparison to technological and legal changes.

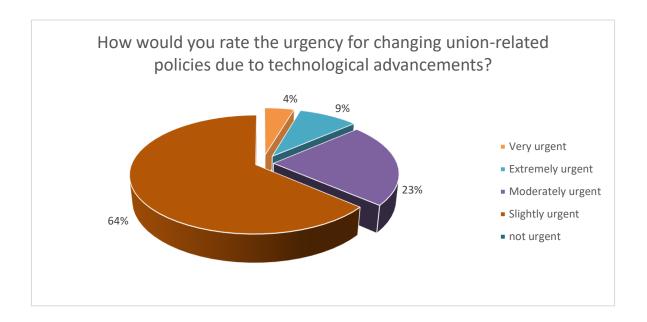


Figure no. 5.5

#### <u>Analysis</u>

Out of the 100 % responses,

- 63.3% of the respondents said that it is **Slightly urgent** for changing union-related policies due to technological advancements
- 22.7% of the respondents said that it is **Moderately urgent** for changing union-related policies due to technological advancements
- 9.1% of the respondents said that it is **Extremely urgent** for changing union-related policies due to technological advancements
- **4.5%** of the respondents said that it is **Very urgent** for changing union-related policies due to technological advancements

#### <u>Interpretation</u>

From the above analysis I interpret that, most respondents (63.3%) view the need to change union-related policies due to technological advancements as only slightly urgent, while 22.7% see it as moderately urgent. A smaller percentage considers it extremely urgent (9.1%) or very urgent (4.5%). This suggests that while the majority acknowledge the impact of technology, they do not perceive an immediate or critical need for policy changes, with only a minority seeing it as an urgent priority.

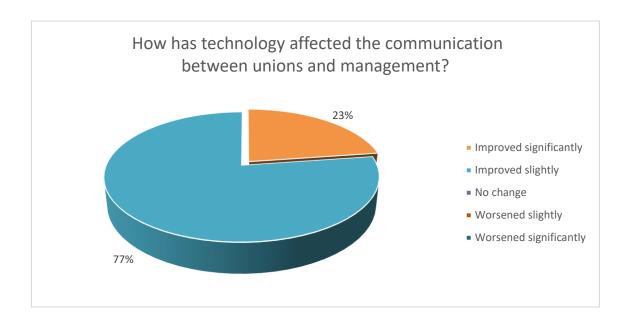


Figure no. 5.6

Out of the 100 % responses,

- 77.3% of the respondents said that technology has Improved the communication between unions and management slightly.
- 22.7% of the respondents said that technology has Improved the communication between unions and management **significantly**

#### **Interpretation**

From the above analysis I interpret that, 77.3% of respondents believe technology has only slightly improved communication between unions and management, while 22.7% feel it has significantly improved communication. This indicates that although technology has had a generally positive impact on communication, the majority view the improvements as incremental rather than transformative.

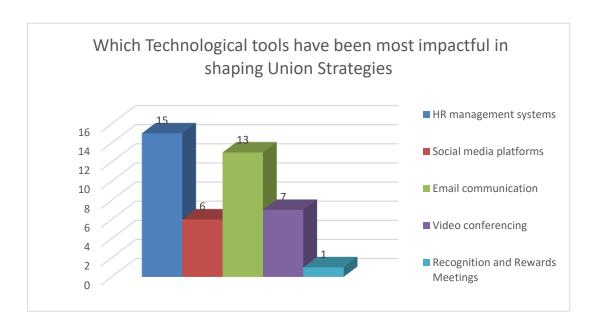


Figure no. 5.7

Out of the 100 % responses,

- **68.2%** of the respondents said that **HR management systems** have been most impactful in shaping union strategies.
- **59.1%** of the respondents said that **Email communication** have been most impactful in shaping union strategies.
- 31.8% of the respondents said that Video conferencing have been most impactful in shaping union strategies.
- 27.3% of the respondents said that **Social media platforms** have been most impactful in shaping union strategies.
- 4.5% of the respondents said that **Recognition and RewardsMeetings** have been most impactful in shaping union strategies.

#### **Interpretation**

From the above analysis I interpret that, HR management systems (68.2%) are considered the most impactful in shaping union strategies, followed by email communication (59.1%). Video conferencing (31.8%) and social media platforms (27.3%) are seen as moderately influential, while recognition and rewards meetings (4.5%) have had minimal impact. This suggests that technology-driven tools like HR systems and email are central to shaping union strategies, with more interactive platforms like video conferencing and social media playing a lesser, though still relevant, role.

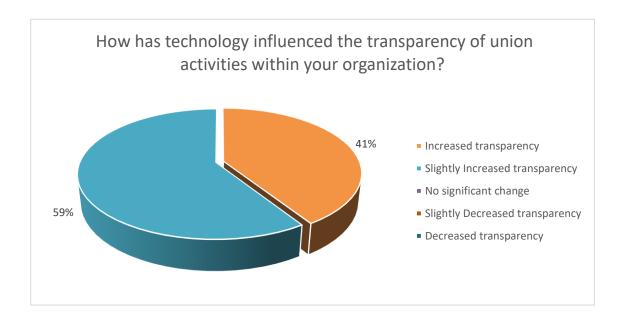


Figure no. 5.8

Out of the 100 % responses,

- **59.1%** of the respondents said that technology has **Slightly Increased transparency** of union activities within your organization
- **40.9%** of the respondents said that technology has **Increased transparency** of union activities within your organization

#### **Interpretation**

From the above analysis I interpret that, 59.1% of respondents believe technology has slightly increased transparency of union activities within their organizations,

while 40.9% feel it has led to a more significant increase in transparency. This suggests that while technology is generally viewed as a positive factor in enhancing transparency, most see the improvement as moderate rather than substantial.

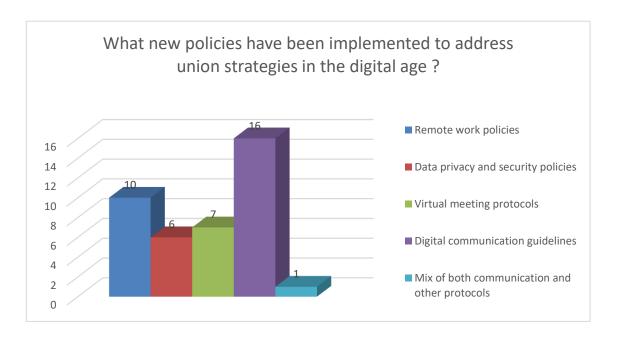


Figure no. 5.9

Out of the 100 % responses,

- 72.7% of the respondents said that **Digital communication guidelines** is implemented to address union strategies in the digital age.
- **45.5%** of the respondents said that **Remote work policies** is implemented to address union strategies in the digital age.
- 31.8% of the respondents said that Virtual meeting protocol is new policy implemented to address union strategies in the digital age.
- 27.3% of the respondents said that **Data privacy and security policies** is implemented to address union strategies in the digital age.
- 4.5% of the respondents said that Mix of both communication and other
  protocols is new policy implemented to address union strategies in the
  digital age.

#### **Interpretation**

From the above analysis I interpret that, a substantial majority of respondents (72.7%) have implemented digital communication guidelines to adapt union strategies for the digital age. Additionally, 45.5% have adopted remote work policies, reflecting the shift towards flexible work arrangements. Virtual meeting protocols (31.8%) and data privacy and security policies (27.3%) have also been introduced, highlighting the growing importance of secure and effective online interactions. A smaller percentage (4.5%) reported a mix of both communication and other protocols as new policies, suggesting that while the focus is primarily on digital communication, other aspects are also being considered.

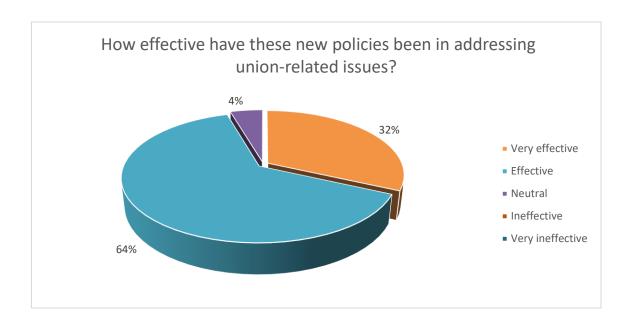


Figure no. 5.10

Out of the 100 % responses,

- **63.6%** of the respondents said that the new policies in addressing union-related issues are **Effective**
- 31.8% of the respondents said that the new policies in addressing union-related issues are Very Effective
- 4.5% of the respondents said that the new policies in addressing union-related issues are **Neutral**

#### **Interpretation**

From the above analysis I interpret that, a significant majority of respondents (63.6%) consider the new policies implemented to address union-related issues to be effective, while 31.8% rate them as very effective. A small portion (4.5%) remains neutral regarding the effectiveness of these policies. This suggests a generally positive perception of the new policies among respondents, indicating that they believe these changes are making a meaningful impact on union-related issues.

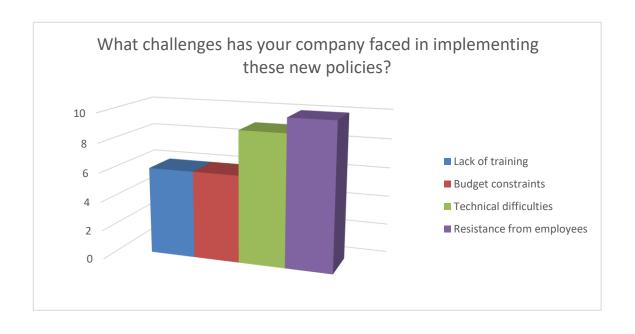


Figure no. 5.11

#### <u>Analysis</u>

Out of the 100% respondents,

- 45.5% of the respondents mentioned the challenge which they faced in implemnting new policies was **Resistance from employees**
- 40.9% of the respondents mentioned the challenge which they faced in implemnting new policies was **Technical difficulties.**
- 27.3% of the respondents mentioned the challenge which they faced in zimplemnting new policies was Lack of training
- 27.3% of the respondents mentioned the challenge which they faced in implemnting new policies was **Budget Constraints**

#### **Interpretation**

From the above analysis I interpret that, 45.5% of respondents identified resistance from employees as the main challenge in implementing new policies, followed closely by 40.9% who cited technical difficulties. Additionally, 27.3% pointed to both a lack of training and budget constraints as key obstacles. This highlights that employee resistance and technical issues are the primary barriers to policy implementation, with training and financial limitations also posing significant challenges.

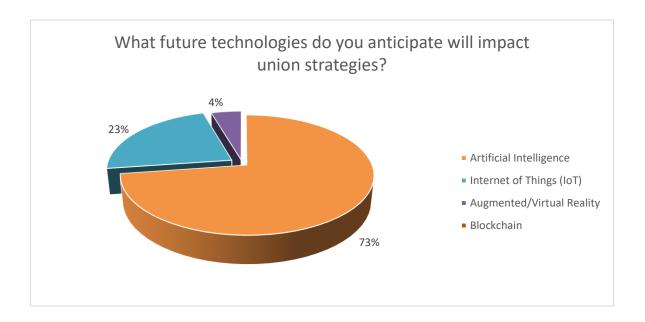


Figure no. 5.12

Out of the 100% respondents,

- 72.7% of the respondents anticipated that Artificial Intelligence will impact the union strategies.
- 22.7% of the respondents anticipated that Internet of Things will impact the union strategies.
- 4.6% of the respondents anticipated that Augmented/Virtual reality will impact the union strategies

#### **Interpretation**

From the above analysis I interpret that, a significant majority (72.7%) of respondents anticipate that artificial intelligence will have the greatest impact on union strategies. A smaller portion, 22.7%, expect the Internet of Things to influence union strategies, while only 4.6% foresee an impact from augmented or virtual reality. This suggests that AI is viewed as the most disruptive technology for shaping the future of union strategies.

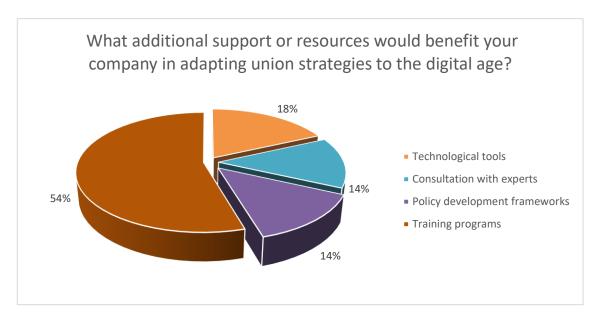


Figure no. 5.13

Out of the 100% respondents,

- 54.5% of the respondents said that, Training Programs would benefit the company in adapting union strategies in the digital age.
- 18.2% of the respondents said that, Policy development frameworks would benefit the company in adapting union strategies in the digital age.
- 13.6% of the respondents said that, Technological tools would benefit the company in adapting union strategies in the digital age.
- 13.6% of the respondents said that, Consultations with experts would benefit the company in adapting union strategies in the digital age.

#### **Interpretation**

From the above analysis I interpret that, 54.5% of respondents believe training programs would most benefit companies in adapting union strategies in the digital age. Policy development frameworks are highlighted by 18.2%, while 13.6% each favor technological tools and consultations with experts. This suggests a strong emphasis on skill development as the key approach for companies to successfully align with union strategies in a digital context.

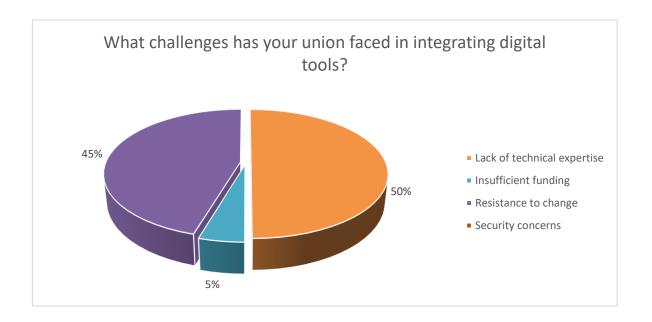


Figure no. 5.14

Out of the 100% respondents,

- 50% of the respondents said that, Resistance to change is the challege union faced in integrating digital tools.
- 45.5% of the respondents said that, Lack of technical expertise is the challege union faced in integrating digital tools.
- 0.5% of the respondents said that, Insufficient funding is the challege union faced in integrating digital tools.

#### **Interpretation**

From the above analysis I interpret that, 50% of respondents see resistance to change as the primary challenge unions face when integrating digital tools, while 45.5% identify a lack of technical expertise as a major hurdle. Only 0.5% point to insufficient funding as an issue. This suggests that the biggest obstacles to digital integration are organizational and skill-related, rather than financial constraints.

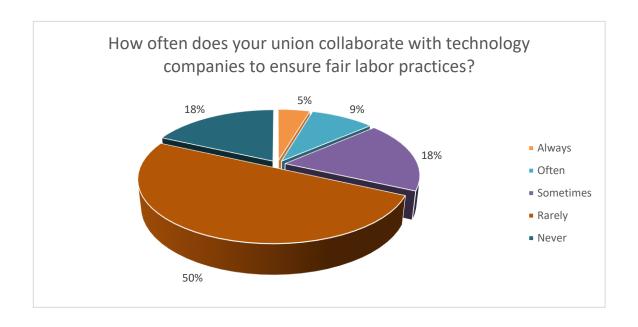


Figure no. 5.15

Out of the 100% respondents,

- 50% of the respondents said that, the Union collaborates with the technology companies Rarely, to ensure fair labour practises.
- 18.2% of the respondents said that, the Union collaborates with the technology companies Sometimes, to ensure fair labour practises.
- 18.2% of the respondents said that, the Union collaborates with the technology companies Never, to ensure fair labour practises.
- 9.1% of the respondents said that, the Union collaborates with the technology companies Often, to ensure fair labour practises.

• 4.5% of the respondents said that, the Union collaborates with the technology companies Always to ensure fair labour practises.

#### **Interpretation**

From the above analysis I interpret that, half of the respondents (50%) believe unions collaborate with technology companies rarely to ensure fair labor practices. Meanwhile, 18.2% say unions collaborate sometimes, and another 18.2% say they never collaborate. Only 9.1% think unions often collaborate with tech companies, and a mere 4.5% say this collaboration always happens. This suggests that union engagement with technology companies to promote fair labor practices is seen as infrequent or limited.

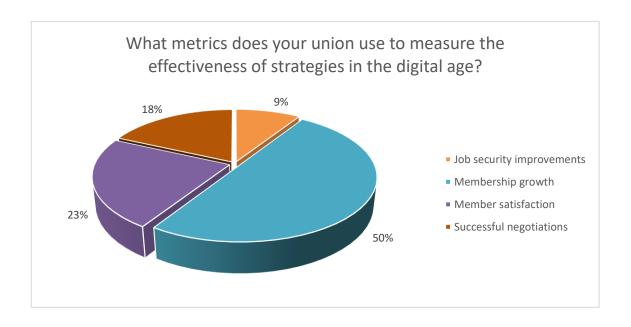


Figure no. 5.16

Out of the 100% respondents,

- 50% of the respondents said that, union use Membership growth to measure the effectiveness of strategies in the digital age.
- 22.7% of the respondents said that, union use Membership Satisfaction to measure the effectiveness of strategies in the digital age.
- 18.2% of the respondents said that, union use Successful negotiations to measure the effectiveness of strategies in the digital age.
- 9.1% of the respondents said that, union use Job security improvements to measure the effectiveness of strategies in the digital age.

#### **Interpretation**

From the above analysis I interpret that, 50% of respondents believe unions measure the effectiveness of their strategies in the digital age primarily through membership growth. Membership satisfaction follows at 22.7%, while 18.2% focus on successful negotiations as a key metric. A smaller portion, 9.1%, view job security improvements as the main indicator of strategic effectiveness. This highlights that unions prioritize expanding their membership base as the primary measure of success in the digital era.

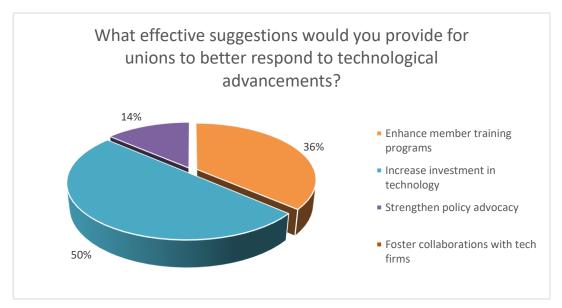


Figure no. 5.17

Out of the 100% respondents,

- 50% of the respondents said that, there should be increase of investment in technology.
- 36.4% of the respondents said that, the member training programs are enhanced.
- 13.6% of the respondents said that, the policy advocacy should strengthen.

#### **Interpretation**

From the above analysis I interpret that, half of the respondents (50%) believe there should be an increase in investment in technology, indicating a strong focus on advancing technological capabilities. Meanwhile, 36.4% emphasize the importance of enhancing member training programs, and 13.6% suggest strengthening policy advocacy efforts. This indicates a preference for prioritizing technology investment, followed by training, with a smaller focus on improving policy advocacy

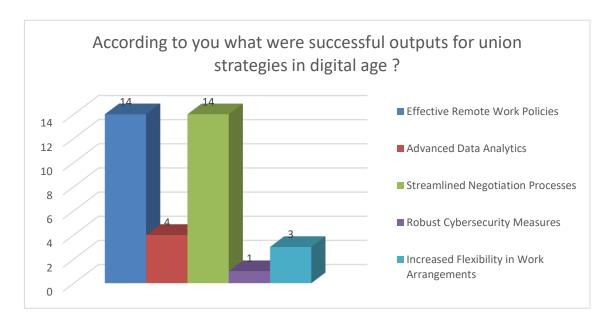


Figure no. 5.18

Out of the 100% respondents,

- 63.6% of the respondents said that, the successful outputs for the union strategies in digital age is it has Stremlined Negotiation Processess and Effective Remote work policies.
- 18.2% of the respondents said that, the successful outputs for the union strategies in digital age is it has advanced the Data Analytics
- 13.6% of the respondents said that, the successful outputs for the union strategies in digital age is it has increased flexibility in work arrangements
- 4.5% of the respondents said that, the successful outputs for the union strategies in digital age is it has robust cybersecurity measures.

#### **Interpretation**

From the above analysis I interpret that, a majority of respondents (63.6%) believe union strategies in the digital age have been most successful in streamlining negotiation processes and implementing effective remote work policies. A smaller group (18.2%) credits advancements in data analytics, while 13.6% highlight increased work flexibility as a positive outcome. Only 4.5% of respondents see robust cybersecurity measures as a key success. This suggests that improved negotiation and remote work solutions are the most impactful outcomes of unions adapting to the digital age

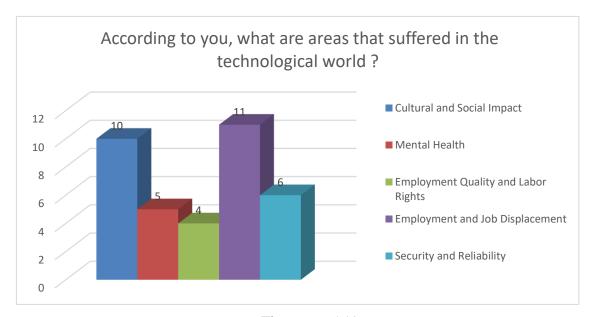


Figure no. 5.19

Out of the 100% respondents,

- 50% of the respondents said that, Employment and Job Dispalcement are the areas which suffered in the technological world.
- 45.5% of the respondents said that, Cultural and Social Impact are the areas which suffered in the technological world.
- 27.3% of the respondents said that, Security and Reliability are the areas which suffered in the technological world.
- 22.7% of the respondents said that, Mental Health is the area which suffered in the technological world.
- 18.2% of the respondents said that, Employment Quality and Labour Rights are the areas which suffered in the technological world.

#### Interpretation

From the above analysis I interpret that, half of the respondents believe employment and job displacement are the most affected areas in the technological world, followed by 45.5% who highlight cultural and social impacts. Security and reliability concerns were noted by 27.3%, while 22.7% pointed to the negative effects on mental health. Additionally, 18.2% of respondents believe employment quality and labor rights have been adversely impacted. This suggests that job-related concerns and social implications dominate perceptions of technology's drawbacks.

## **Conclusion**

### **Findings**

#### **Technological Challenges and Impacts:**

Summarizing all the responses, the employment and job displacement was indicated to be the most affected area because of technology with a percentage of 45.5%, followed by cultural and social impacts with a percentage of 27.3 percent, and security as well as reliability concerns at 27.3 percent.

Other areas affected by technological means include mental health with 22.7% and quality of employment as well as labor rights with 18.2%.

#### **Effectiveness of Union Strategy**

Membership growth (50%) is the significant indicator unions measure in monitoring the productivity of their approaches, and membership satisfaction ranks the following at 22.7% then successful negotiations are at 18.2%.

The smooth negotiation process and good remote work policies are considered as the most productive results of union strategy in the digital age by 63.6%.

#### **Cooperation with Technology Companies:**

Unions merely cooperate with technology companies for fair labor practice which only reaches to 50%, and 9.1% claimed for frequent cooperation.

#### **Challenges in Policy Implementation:**

Most of the difficulties reported in implementing the newly formulated policies were employee resistance (45.5%) and technical problems (40.9%), followed by lack of training (27.3%) and insufficient budget (27.3%).

#### **Technology Impact on Union Transparency and Communication**

59.1% of respondents reported that technology increased union activity transparency to a small extent, and 40.9% of them reported that technology has significantly increased union activity transparency.

It has improved communications between unions and management, and 77.3% reported slight improvement, while 22.7% reported significant improvement.

#### **Embracing the New Wave:**

Artificial intelligence (72.7%) was the most influential technology shaping union strategies, followed by the Internet of Things (22.7%).

HR management systems and email communication have affected the most union strategies at 68.2% and 59.1%, respectively.

### **Suggestions**

#### **Upscale Training Programs:**

Since 54.5% of respondents feel that training programs would prove helpful to the organization in adapting union strategies, unions must increase technical training to help in fighting back against the actualism of lack of expertise (45.5%).

#### **Boosting Technological Partnership**

Unions must stay better connected with technology companies so that labor practices by them can be more fair as currently it is at a low level (50% state that they rarely collaborate). Active partnership will further help in solving concerns in areas of job displacement and labor rights.

#### **Mitigate Resistance to Change:**

To minimize resistance from employees (45.5%), unions have to improve communication on the advantages of new policies and engage employees more ideally at the initiation of policy formulation for acceptance.

#### **Strengthen Digital Policies as well as AI Embedment:**

The Unions should work hard towards developing and strengthening the guidelines on digital communication, remote work, and data privacy policies, as AI will significantly affect the union's strategies 72.7%.

#### Leverage Technology for Better Engagement and Transparency:

Compared to before, union activities have thoroughly improved communication and transparency through technology; hence, unions should seek more advanced tools, including HR management systems and AI, to better engage members and systematize union activities

#### **Invest More in Technology:**

Increase investment in technology by 50%: The unions should use their resources to better the technological tooling, training programs, and all forms of infrastructure so that they remain competitive and also effective in a digital environment.

#### Conclusion

In conclusion, the findings enlighten the difficulties and implications of technologyon union operations, especially regarding employment displacement and employeeresistance toward change. Although unions recognize that greater training programs and stronger partnerships are necessary with companies whose products and services go to support the larger technological environment, they must strive to develop proper digital policies and embracing advanced technological tools to promote engagement and transparency. This will help the unions better understandthe shifts in the landscape, which will ensure the unions remain effective advocates for their members in this digital age. Such strategies shall help unions adapt themselves to new technologies while being concerned about specific workforce

## Questionnaire

1002220
Designation

Name

What is the size of your company?

- A. Less than 100 employees
- B. 100-499 employees
- C. 500-999 employees
- D. 1000 or more employees
- 1. What industry does your company operate in?
  - A. Manufacturing
  - B. Information Technology
  - C. Healthcare
  - D. Finance
  - E. Other:
- 2. Before the digital age, how would you describe the primary union strategies in your company?
  - A. Collective bargaining
  - B. Strike actions
  - C. Negotiations on work conditions
  - D. Other:
- 3. What were the key policies in place regarding union interactions before the digital age?
  - A. Open-door policy
  - B. Regular meetings with union representatives
  - C. Formal grievance procedures
  - D. Other:
- 4. What prompted the need for change in union strategies and policies? (You can select multiple options)
  - A. Technological advancements
  - B. Changes in labor laws
  - C. Globalization
  - D. Workforce demographics shift
  - E. Other:

- 5. How would you rate the urgency for changing union-related policies due to technological advancements?
  - A. Not urgent
  - B. Slightly urgent
  - C. Moderately urgent
  - D. Very urgent
  - E. Extremely urgent
- 6. How has technology affected the communication between unions and management?
  - A. Improved significantly
  - B. Improved slightly
  - C. No change
  - D. Worsened slightly
  - E. Worsened significantly
- 7. Which technological tools have been most impactful in shaping union strategies? (You can select multiple options)
  - A. Email communication
  - B. Video conferencing
  - C. Social media platforms
  - D. HR management systems
  - E. Other:
- 8. How has technology influenced the transparency of union activities within your organization?
  - A. Increased transparency
  - B. Slightly Increased transparency
  - C. No significant change
  - D. Slightly Decreased transparency
  - E. Decreased transparency
- 9. What new policies have been implemented to address union strategies in the digital age? (You can select multiple options)
  - A. Digital communication guidelines
  - B. Remote work policies
  - C. Data privacy and security policies
  - D. Virtual meeting protocols
  - E. Other:
- 10. How effective have these new policies been in addressing union-related issues?
  - A. Very effective
  - B. Effective
  - C. Neutral
  - D. Ineffective
  - E. Very ineffective

- 11. What challenges has your company faced in implementing these new policies? (You can select multiple options)
  - A. Resistance from employees
  - B. Technical difficulties
  - C. Lack of training
  - D. Budget constraints
  - E. Other:
- 12. What future technologies do you anticipate will impact union strategies?
  - A. Artificial Intelligence
  - B. Blockchain
  - C. Augmented/Virtual Reality
  - D. Internet of Things (IoT)
  - E. Other:
- 13. What additional support or resources would benefit your company in adapting union strategies to the digital age?
  - A. Training programs
  - B. Consultation with experts
  - C. Technological tools
  - D. Policy development frameworks
  - E. Other:
- 14. What challenges has your union faced in integrating digital tools?
  - A. Resistance to change
  - B. Lack of technical expertise
  - C. Insufficient funding
  - D. Security concerns
- 15. How often does your union collaborate with technology companies to ensure fair labor practices?
  - A. Never
  - B. Rarely
  - C. Sometimes
  - D. Often
  - E. Always
- 16. What metrics does your union use to measure the effectiveness of strategies in the digital age?
  - A. Membership growth
  - B. Member satisfaction
  - C. Successful negotiations
  - D. Job security improvements

- 17. What effective suggestions would you provide for unions to better respond to technological advancements?
  - A. Increase investment in technology
  - B. Enhance member training programs
  - C. Strengthen policy advocacy
  - D. Foster collaborations with tech firms
- 18. According to you what were successful outputs for union strategies in digital age ?
  - A. Streamlined Negotiation Processes
  - B. Effective Remote Work Policies
  - C. Advanced Data Analytics
  - D. Robust Cybersecurity Measures
  - E. Increased Flexibility in Work Arrangements
  - F. Other:
- 19. According to you, what are areas that suffered in the technological world?
  - A. Employment and Job Displacement
  - B. Mental Health
  - C. Employment Quality and Labor Rights
  - D. Security and Reliability
  - E. Cultural and Social Impact
  - F. Other:

20.	Looking	back,	what	lessons	have	you	learned	from	transitioning	union
strat	tegies into	the d	ligital	age?						

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