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## INFORMATION TECHNOLOGY, ITS IMPACT ON GLOBAL INDUSTRIAL RELATIONS

**Dr.T.Krishna Kumar**

Assistant Professor

University College of Commerce and Business Management  
Shatavahana University, Karimnagar, Telangana State

### Abstract

The technological change occurs has altered in recent years so far as its effect on workers is concerned. The industrial sector have adopted a more humane approach to the worker who is affected by a change. In terms of technology some countries cannot enhance development at the same pace as others since access to new technologies is not free. Therefore, the impact and the pace of change vary from country to country. The participative democratic governments are more reluctant towards taking any initiatives for proper global Industrial relations. The main objective of this research study is to study the impact of change in technology on Global Industrial Relations, it is to be discuss the consequences of technology change on employment relationships Globally and in particular to India. In this regard an attempt has been made in this article to study the impact of change in technology on Global Industrial Relations, to discuss the consequences of technology change on employment relationships Globally and in particular to Indian democratic country. This research article to be discussed of Information Technology, its impact on Global Industrial Relations.

**Keywords:** Technological Changes, Work practices, Market Structure, Best Practices Global Development, Human Relations, Collective Process.

### Introduction

#### Statement of the Problem

*"The industrial revolution has tended to produce everywhere great urban masses that seems to be increasingly careless of ethical standards."*.....**Irving Babbitt**, Resource Person and American Business Critic

Technical change and industrial relations are becoming inextricably linked together. There is a need for a clear-sighted understanding of all the effects of technical change at the workplace. This would entail a conceptual framework in which the interaction between social and technical factors could be properly identified. At establishment level the innovation process typically involves a balancing of the social, economic and technological vectors of change. The issues of work practices and labour productivity which are to the forefront of workplace industrial relations exert a significant impact on the economic consequences of technical change. Where technological innovation involves significant change in work practices, such change will be facilitated when the forms of cooperation it demands and the costs and benefits it creates are congruent with the respective power and policies management and unions. The technological change occurs has altered in recent years so far as its effect on workers are concerned. All parties have adopted a more human approach to the worker who is affected by a change. Many employers have agreed to include provisions in collective agreements which cushion the impact of change. Trade unions have become increasingly aware of the problems associated with changes and have in many cases succeeded in negotiating appropriate provisions. Government has also contributed a great deal to the amelioration of the adverse effects of technological change. In addition to such concepts as unemployment, insurance and social welfare payments, government has provided training and retraining programs, manpower placement services, mobility grants and similar programs.

All of the countries are at a similar stage of development and obvious inequalities among countries and continents emerge. In terms of technology, some countries cannot enhance development at the same pace as others since access to new technologies is not free. These countries depend on the willingness of those countries which have the technology to provide them with access. As a result, some countries remain excluded from the technological developments that globalization can bring about. At the same time, economically advanced countries of which the markets are saturated seek to access the emerging markets of developing and transition economies to sell their products. On the other hand, developing countries face many barriers in terms of accessing the markets of the most developed countries for their products and services. Therefore, the impact and the pace of change vary from country to country.

#### Need of the Study

Impact of globalization on Indian Labour is one of the major impacts of globalization is number of public organizations is decreasing and private-players are coming out. The role of government has decreased, as the economy is no more controlled and regulated. As a result of this competition in market increases which leads to more changes in technologies and technical know-how. As a result mindset of the people is changing. Before globalization when there was no competition there was assured market for the product. However, with the advent of globalization the monopoly of business started to decline. Thus, it I come difficult to facilitate the demand of trade unions as well as customers. In this scenario, the government should be playing the role of mediators, but due to



vested political interests, they are not playing their role and the number of industrial disputes has arisen. The action of MNCs can easily be regulated through government policies but it is very disheartening to see that our government is more reluctant towards taking any initiatives for proper industrial relations in this regard the need for the study has arisen. Increasing international economic interdependence has disturbed traditional IR arrangements in several broadways. Firstly, such arrangements have normally been confined to the circumstances created by national markets; but globalization has fundamentally changed, and considerably expanded, the boundaries of the market place. In this respect the extent of information flows made possible by new technology is building inter-enterprise networks around the world, is calling into question the traditional boundaries of the enterprise and is eroding current IR arrangements.

MNC's are the primary driving force for change. They are organizations that engage in FDI and own or control productive assets in more than one country They are creating very complex international production networks which distinguish globalization from the simpler 6 forms of international business integration in earlier periods. As producers of global goods and services (notably, in the area of mass communications), centers of networks and large employers, MNC's have an impact extending far beyonds urban centre's in the countries in which they are located. In addition to the activities of MNC's, many locally-based enterprises, of varying, sizes, in many countries are using information technology to focus on the demands of international "niche" markets in a way which is contributing to a growing individualization and collectivism of work.

Secondly, globalization has disturbed the status quo between "capital" and "labour" in each country, in the sense that capital is significantly more mobile in an open international environment, while labour remains relatively immobile (here it should be noted that, under globalization, International labour migration is continuing, but, proportionately to the rate in the 1970's, has not increased. This can place "labour" at a relative disadvantage, in that capital can now employ labour in different countries, at lower cost and on a basis, which can prejudice the continuing employment of workers in the originating country.

Thirdly, globalization is having a contradictory impact on IR. It is accelerating economic interdependence between countries on an intra-and inter-regional basis and encouraging similarities in approach by individual enterprises in competitive markets. This may lead to some convergence in industrial relations arrangements around the world. At the same time, there is clear evidence of resistance towards convergence, based on particular national and regional circumstances. This aspect will be considered later in the paper, in relation to Asia the Pacific.

In the past few decades there has been a revolution in computing and communications, and all indications are that technological progress and use of information technology will continue at a rapid pace. Accompanying and supporting the dramatic increases in the power and use of new information technologies has been the declining cost of communications as a result of both technological improvements and increased competition. According to Moore's law the processing power of microchips is doubling every 18 months. These advances present many significant opportunities but also pose major challenges. Today, innovations in information technology are having wide-ranging effects across numerous domains of society, and policy makers are reacting on issues involving economic productivity, intellectual property rights, privacy protection, and affordability of and access to information. Choices made now will have long- lasting consequences, and attention must be paid to their social and economic impacts. One of the most significant outcomes of the progress of information technology is probably electronic commerce over the Internet, a new way of conducting business. Though only a few years old, it may radically alter economic activities and the social environment. Already, it affects such large sectors as communications, finance and retail trade and might expand to areas such as education and health services. It implies the seamless application of information and communication technology along the entire value chain of a business that is conducted electronically. The following sections will focus on the impacts of information technology and electronic commerce on business models, commerce, market structure, workplace, labour market, education, private life and society as a whole.

### **New Business Models**

One important way in which information technology is affecting work is by reducing the importance of distance. In many industries, the geographic distribution of work is changing significantly. For instance, some software firms have found that they can overcome the tight local market for software engineers by sending projects to India or other nations where the wages are much lower. Furthermore, such arrangements can take advantage of the time differences so that critical projects can be worked on nearly around the clock. Firms can outsource their manufacturing to other nations and rely on telecommunications to keep marketing, R&D, and distribution teams in close contact with the manufacturing groups. Thus the technology can enable a finer division of labour among countries, which in turn affects the relative demand for various skills in each nation. The technology enables various types of work and employment to be decoupled from one another. Firms have greater freedom to locate their economic activities, creating greater competition among regions in infrastructure, labour, capital, and other resource markets. It also opens the door for regulatory arbitrage : firms can increasingly choose which tax authority and other regulations apply.



Computers and communication technologies also promote more market-like forms of production and distribution. An infrastructure of computing and communication technology, providing 24-hour access at low cost to almost any kind of price and product information desired by buyers, will reduce the informational barriers to efficient market operation. This infrastructure might also provide the means for effecting real-time transactions and make intermediaries such as sales clerks, stock brokers and travel agents, whose function is to provide an essential information link between buyers and sellers, redundant. Removal of intermediaries would reduce the costs in the production and distribution value chain. The information technologies have facilitated the evolution of enhanced mail order retailing, in which goods can be ordered quickly by using telephones or computer networks and then dispatched by suppliers through integrated transport companies that rely extensively on computers and communication technologies to control their operations. Nonphysical goods, such as software, can be shipped electronically, eliminating the entire transport channel. Payments can be done in new ways. The result is dis-intermediation throughout the distribution channel, with cost reduction, lower end-consumer prices, and higher profit margins.

### Global Market and Information Technology

The impact of changes in information technology on the organization of production and work at enterprise level – the IR heartland-provides a specific example of the forces encouraging and supporting globalization. The discussion which follows reflects the situation – currently or developing – in many western industrialized countries and in the more advantage Asian countries. It is a trend which is likely to spread more generally across the Asia and Pacific region with increasing industrialization and the impact of globalization. Increased competition in global (and in many domestic) markets has created demand for more specialized better-quality items. This has lead to higher volatility in product markets and shorter product life cycles. These circumstances require enterprises to respond flexibility and quickly to charge in market demand. In terms of the organization of production, new technologies are increasing the scope for greater flexibility in production processes, and are resolving information/ coordination difficulties which previously limited the capacity for production by enterprises at different locations around the world. Where enterprises are servicing more specialised markets, smaller and more limited production processes are now involved. New technology has also made it possible to produce the same level of output with fewer workers. In both situations, there is increased emphasis on workers having higher value capacities and skills to perform a variety of jobs. This has blurred the distinctions (both functional and hierarchical) between different kinds of jobs and between labour and management generally. In addition, efforts to improve products (through innovation, quality, availability and pricing) have lead enterprises to establish cross-functional development teams, transcending traditional boundaries between engineering, manufacturing and marketing.

These developments have been accompanied by the erosion of the standardized, segmented, stable production process (of the “Ford” type) which had facilitated collective IR. In many industries and enterprises there are also fewer workers available to be organized in trade unions. Another area of enterprise activity to be affected by globalization concerns the organisation of work. To achieve the flexibility and productive efficiency required to respond quickly and effectively to market changes, narrow worker job description, are having to be re-written. This is resulting in work tasks based on broader groupings of activities, emphasizing the undertaking of “whole” tasks. In the interests of greater efficiency, work is also being re-organized, giving greater emphasis to team-based activities, and reintegrated with a view to improving linkages across units and departments within an enterprise. Related changes have seen a “flattening” of management hierarchies and devolution of greater operational responsibility and authority to lower-level managers, supervisors and work teams. In this process of adaptation, many enterprises have been increasingly relying on internal and external “benchmarking” to establish and maintain “best practice”, and to emphasize “organisational learning” (i.e., applying lessons related to superior performance to the work of individual managers and workers). All of these changes are directed to achieving stronger commitment by workers to the enterprise and its objectives and closer relations between managers and workers, based on consultation and cooperation.

The technological progress over the last century has undergone a slow but definite transformation. This can be categorized into three different stages viz., craftsmanship, mechanization and automation. Each of the stages had an influence on the nature of work and the skill level required to perform a job. The early craftsmanship was characterized by the worker/craftsman having control over the entire production process, from procuring the raw materials to the finished goods. This required end-to-end knowledge, where the worker got involved got involved in activities right from pitching to potential customers to delivering the final produce/service. Each product/service could be characteristically unique as each reflected the skills of the employee. This model of operation can still be found in some of the present-day service firms, what are termed as Service Complexes and Service Shops.

The second stage of mechanization was brought about by the application of principles of scientific management where tasks were broken and methods of estimating Globalization has a contradictory impact on industrial relations. On the one hand, it is accelerating economic interdependence between countries on an intraregional and interregional basis and encouraging similar business approaches of individual companies in competitive markets. This may lead to some convergence in industrial relations arrangements worldwide. On the other, hand, evidence exists that industrial relations in some countries resist the convergence trend; such resistance



from industrial relations actors is based on particular national and regional circumstances, such as in Europe and Asia. The effect of globalization on industrial relations.

### Impact of Technology

The Republic of India with a population of just over a billion is the second most populous state in the world after China. It has a population growth rate of 1.4% and literacy rate of 60%. Ethnically the Indian is dominated by Indo-Aryan race that is 72% of the total population. On religious lines the population is dominated by Hindus who are 81.3%. The Indian labour force is 406 million, with 60% in agriculture 17% industry and 23% services. Like most of the countries with colonial origin, India based most of its laws on the colonial structure left by the British. Industrial law was no exception, the Indian government built on colonial labour institutions and regulations to fashion and industrial relation system that sought to control industrial conflict through a plethora of protective labour legislation, influenced by the strong ties between the major political parties and labor forged in the struggle of independence. These laws covered a wide range of aspects of workplace industrial relations; including detailed laws on safety and health, dismissals and layoffs and industrial disputes. The basic purposes of these laws, like under the British colonial rule, were to contain industrial disputes within the framework provided by the laws and maintain continuity of production. One example of this strategy was the Industrial Disputes Act.

This act allowed employers to lay off employees only temporarily, with compensation up to 180 days and employer was also required to get permission from the government which was rarely given because of the close ties of the unions with the political parties. On the other hand, the right to strike existed but all strikes could be brought to an end with either party requesting for a third-party intervention through government conciliation offices. If conciliation failed the government had the right to refer the dispute to compulsory arbitration or a labour court or industrial tribunal for a final decision in addition to the above policy, the Indian Industrial relations were also tilted more towards the workers. In the absence of social security legislation, the burden of social policy like retirement, medical care and even child care was left on the employers. During this period the economic policy emphasized on the growth and long-term development of heavy industries in the public sector with largely indigenous technology, coupled with the policy of industrial licensing, import controls, and restrictions of foreign ownership that protected public and private sector firms from international competition

These protectionist policies created an atmosphere that led to increased inefficiency in the firms, over employment – especially in public sector in ability to introduce efficient and labour saving methods of production. These problems were enhanced by the fact that there was a relatively high incidence of labour strikes and also competition among various unions as there was no sole-bargaining agent legislation. The unions themselves were not united and at the same time there was not much of a spirit of cooperation between the employees and the employers.

There was diversity not only in unions but also in industrial relations laws, each state had the right to enact its own labor laws. This feature produced a variety of local colors of unions with varying orientations to labour relations and for the most part kept the labour movement from become national. Union density was about 38% in the formal sector workers. As can be ascertained from above, the unions had an influential voice due to their link with political parties, in fact all political parties had their union wings. Unions were mostly structured on enterprise, industrial, political or regional lines. Bargaining structure during this period was industrial or enterprise based, although there was provision in the law for tripartite structures and works council type institutions but these were not followed in practice. There was interunion rivalry and adversarial relationship with the employers. Although the employers were protected by the state policies of protectionism, still they faced the problem of high costs and rigid systems of production.

### New Global practices

As long as the protectionist policies were in place the higher cost and the relative lack of flexibility imposed by the industrial relations systems regulations did not pose a serious problem because Indian manufacturers did not have to compete in the international market. With the coming of globalization, the 40 years old policy of protectionism proved inadequate for Indian industry to remain competitive. Therefore, in 1992 the process of liberalization started. The balance of power shifted in the favour of the employers. Apart from the pressure from the international market, international bodies like IMF also exerted pressures to change labour policies in India. Employers pushed for workforce reduction, given their inability to retrench employees, they introduced policies of voluntary retirement schemes. There has been an increase in the demand for functional and numerical flexibility in the workplace by the employers. Globalization has also brought in the beginning of a government-employer coalition.

This coalition is quite obvious keeping in view the enthusiastic support of the government for economic liberalization. In Maharashtra for example for the first time the government has declared several private sector firms as essential and public utilities permitting a ban on strikes in these sectors. In a study by Heirs and Kuruvilla in 2018, they discuss the changes in the industrial relations in India and bring out the following dimensions:



- Collective bargaining in India has mostly been decentralized, but now in sectors where it was not so, are also facing pressures to follow decentralization.
- Some industries are cutting employment to a significant extent to cope with the domestic and foreign competition e., pharmaceuticals. On the other hand, in other industries where the demand for employment is increasing are experiencing employment growths.
- In the expansionary economy there is a clear shortage of managers and skilled labour.
- The number of local and enterprise level unions has increased and there is a significant reduction in the influence of the unions.
- Under pressure some unions and federations are putting up a united front i.e., banking.
- Another trend is that the employers have started to push for internal unions i.e., no outside affiliation.
- HR Policies and forms of work are emerging that include, especially in multinational companies, multi-skills, variable compensation, job rotation etc. These new policies are difficult to implement in place of old practices as the institutional set up still needs to be changed.
- HRM is seen as a key component of business strategy.
- Training and skill development is also receiving attention in a number of industries, especially banking and information technology.

Keeping in view the above analysis, it is quite evident that the industrial system right now is trying to shift from the old system to the new. In the process, it is experiencing tension between the workers who are trying to keep jobs and the employers who are trying to achieve flexibility so as to cope with the domestic and international market competition. In essence, these practices have accentuated the diversity existing in the Indian industrial system considerably.

### Global Competition

The role of the state in the industrial relations depends on the ideological (socialist, communist, or neo capitalist persuasion), political (neo-colonial, democratic, dictatorships) and socio economic (protectionist and neo-liberal policies) orientation. In India the role of the state may be studied over four times periods: colonial period, post-colonial period, emergency era (1975-77), and post liberalization era (1995-2020). During the colonial period under the British the industrial relations were just another means of keeping the colonies inline, the labour law and the power of the state was used to maintain peaceful industrial relations so as to have continued production. In the post-colonial era, the Indian government more or less built its labour relations structure on the pre-existing colonial law; the main purpose was again to achieve industrial peace. At the same time, in India there was political support for the Indian unions and there were laws that protected the rights of the worker but the main purpose again was that industrial peace should be maintained. The Indian state was tolerant of unions and recognised the value of labour manager rent cooperation in the context of planned economic development. There was more burden on the employers but protectionist policies kept the employers, complacent. During the emergency rule the rights of the unions were restricted, but this era did not have a lasting effect on the industrial relations. In the era of globalization and liberalization, the government has realized that in order to keep India competitive, policies should be implemented that resulting in flexible workplace practices.

The employers are not facing the pressures of global competition and they also want to remain competitive. For this purpose, the stress is now on more pro-employer policies. The role of the state has always been pervasive in Indian industrial relations. There have always been detailed laws on collective bargaining dispute resolution, employee participation and employment security. There is also a court system, the independent labour courts in India are the main mechanism for the implementation of labour law. During the independence movement, the political leaders and held leadership positions in major trade unions, they led and supported trade union movements in major industries. After the independence (1947) many trade union leaders held important positions in the government. Besides, under Prime Minister Jawaharlal Nehru, the Indian government opted for socialistic Ideology based on the principles of controlled economy. During this period the government had three basic policies: Industrialization through public sector, creation of democratic institutions and protecting the interests of working class. Therefore, during this period and till liberalization the union membership increased. The verified membership of the All-India Central Trade Union Organizations (CTUOs) - includes a total of 12 central trade union organizations increased from about 2 million to over 20 million between 1990-2020.

### Summing Up

In industries, where the public sector dominates, the government naturally plays a central role in determining wages. In other industries that are dominated by private sector, it chooses to play a major role by establishing wage boards. In all these industries there is little space for collective bargaining. The trend towards flexibility is not only evident from collective bargaining, it is also apparent from the changes in work practices. Now more and more firms are introducing new manufacturing technologies. Total quality management, leaner organisations by eliminating middle management and supervisors and more HR practices are becoming the norm in industrial set ups. The predominant effort of the Indian companies is to restructure themselves. Often their focus is primarily on



numerical flexibility, although these efforts are accompanied by more dynamic and flexible HR practices that are in tune with a long-term orientation to competitiveness based on higher technology intensive production. To sum up, it can be said that the Indian state has and is still playing an important role in the country's industrial relations. The basic purpose of the state intervention has been to maintain industrial peace, but recently with the advent of globalization the policy is changing towards more competitive approach. New technologies opened up employment opportunities in new and emerging sectors. Globally. Skills needed have undergone a change from that of manual dexterity and physical strength to those of trouble shooting and process handling. Group based incentivization and company specific bargaining are becoming more common. Unions no longer resist technology change but are concerned with the implications on the number of jobs, their content and earnings. It's also argued that subjective norms need to be considered as a variable influencing the behavioural intentions of workers with respect to acceptance of technology change.

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