Morkers connect...

How is digitalisation changing the Garment Supply Chain

The global market for garments (textile, garment, shoes and leather goods taken together) has been changing fast over the last decade, and so has its supply chain, but the pandemic pushed the industry to increase its pace of change. To adapt to the COVID-19 lockdowns, increase in cost of raw material and rising shipping costs due to the disrupted supply lines, global companies expanded their online sales. With more and more people working from home, there has also been a change in the demand pattern - demand for formal clothes declined with an increase in demand for casual garments. Fast fashion trends pushed by the companies also meant the nature of orders changed manufacturers were expected to produce in smaller batches and with shorter lead time (delivery time). Trade fairs and fashion shows have gone online saving both time and cost substantially. In design, digital technology has increased the speed of the approval process between retailers and manufacturers; controls production tightening on planning has improved flexibility and speed.

How does Digitalisation look like in a garment factory?

Digitalisation is not a single technology that can be implemented, but it is a wider

transformation of work through technological and organisational changes, both small and big, visible and invisible on the shopfloor. Neither is it just about the introduction of big machines, robots or full-automation of work. This can be a part of it but fundamentally digitalisation is about small changes towards standardisation, fragmentation rationalisation of production processes, digital collection and analysis of all data regarding these changes in order to reorganise work, minimise costs and increase output and productivity per worker. This digital transformation has implications in significant changing working conditions therefore and changing employment and workplace relations

Digitalisation of the garment supply chain means different things for retailers and for manufacturers. Both have separate interests to fulfil through digitalisation. While retailers (especially the dominant global garment multinationals) want to how their outsourced manufacturers are functioning digitally control and tighten their control over them, manufacturers are going digital to increase flexibility, productivity and greater control over their workers. The extent of digitalisation will vary and depend on several factors - from region to

region, size of the company, capacity to invest, profitability, integration in the global market and competitive advantage. and available technical capacity. This is leading to restructuring of the industry itself - with small manufacturers being pushed out of the market and large manufacturers consolidating their gains and expanding in the global south.

Garment manufacturing is already using a range of software programmes at various stages of production beginning from production planning to its final product delivery. Large companies are investing in intelligent planning systems (Fast React Systems) that plans all processes within minutes using a customised algorithms. Today software can create a digital image of the production floor and standardise production planning and processes. Companies are increasingly integrating tracking and tracing technology to tighten their control over the entire production process from the moment materials enter the facility till the final product leaves the facility. The extent and spread of digitalisation in South Asia is still quite uneven and limited to large producers.

What will be the impact of these changes on workers?

Let us take the example of one technology

that is the simplest and most ubiquitously used at this point in garment manufacturing – RFID [Radio Frequency Identification] tags. The fabric roll gets tagged with a RFID tag (see image) as it enters the

factory gate. From here as that fabric moves from one department to another, from one worker to another, each performing different processes at each stage, the tag keeps moving along the production process, till it reaches packaging where it goes into the cartons ready to ship.



What does this technology do? All order data is first entered into a software and this data copied on to the RFID chips. Each task gets entered into the RFID chip through the production process using a smart tracker. With this information at every point, supervisors are able to detect delays, identify workers responsible for the delay, and intervene - which on a shopfloor translates to isolation of workers, harassment and pressure. Further, with this data, supervisors can push production targets. If one line is able to finish X pieces in one hour, and other lines are only able to finish (X-10) pieces in the same time, this data is used by

supervisors to push the target even as the day progresses. This kind of monitoring without human intervention leads to more psychological pressure on the workers. This also makes it more difficult for



workers to engage in any form of covert industrial action as it would get immediately noticed and the workers involved identified. Thus, what this technology primarily achieves is increasing the control over the workplace manifold and hence also over the workers. The already skewed power balance between the employer and the workers, gets further tilted in favour of the employers.

To give another example the software that plans the organisation of the shopfloor designs the shopfloor in such a manner that. work flows

continuously from one worker to the next one in a way that it gets individualised and there is minimal or no interaction amongst workers. This is often done through the use of kaizen, the Japanese term for continuous improvement. In the image, vou can see that the worker lines are separated by the moving line bringing the cloth bundles that are to be stitched by the workers on both sides. As this moving line never stops feeding bundles, workers have to continually keep picking up work as they finish one and pass it on with no time for break. Both the process of picking up and passing on are recorded through the RFID chip. This puts the workers are under continuous pressure to speed up, in the fear of slowing down. Further this process is motivated by fear,

and not by a supervisor and as a result individual workers begin to compete against each other in fear of producing less than the other. The outcome – employers make more profit while workers get isolated from one and another and more physically and mentally drained.

Finally, let us take the example of the jacquard machine which simplifies and automates complex process. In

Bangladesh, when this was first introduced it replaced 10 workers with one machine operator. In the next round, the same machine operator was made to operate



2 machines and today in most factories, 1 jacquard operator operates 3-4 machines. This means, one worker today is able to perform the work of 30 to 40 workers while simultaneously producing more than what the 40 workers could originally produce. This can more than double worker productivity and contribute to a quantum leap in profit for the employer while a huge loss of jobs for workers. Further, by cutting the number of workers, employers have successfully crushed the worker protests at the sweater manufacturing factories across country. Workers currently employed in these factories are more precarious and scared than ever before. Workers forming or joining unions becomes next to impossible with a large number of workers unemployed and willing to replace them any moment.

How can workers intervene in this process of digitalisation?

digitalisation of The our industry demands a digitally-informed response from unions. This is also not the first time that workers and unions have to respond to a rapid introduction of new technology. However, collective bargaining usually lags behind technological change as workers and their trade unions react slowly to structural change. This often leads to a lack of involvement of trade unions in the early stages of technological change. At the root of this problem, however, is not the inertia of the trade unions - it is the desire of employers to surreptitiously bypass trade unions. Sometimes employers also introduce changes claiming that new technology will make work easier and lighter for workers. Consequently, new technology is often introduced without workers either knowing about it or fully understanding the implications of it. For example, the RFID chip introduced to track progress on a shopfloor in most cases looks like a simple plastic disk, like the button in the image, that workers have to tie to their bundles at every stage.



Workers are unaware of the implication of this innocuous button being introduced and hence unable to respond to as a change in working conditions. Under section 9A of the Industrial Disputes Act, employers are required to provide notice to all workers regarding any change in the conditions of work applicable to them. Yet employers violate this provision with impunity till workers raise it as an issue.

This kind of organised stealth can only be countered through continuous monitoring of the workplace by workers about any, even the smallest, change in their work practice. With trade unions, especially in the global south, submerged in struggles for the basic - a subsistence wage, protection against arbitrary and vindictive dismissals, social security, the daily connect with the shopfloor gets lost. Employers also make sure unions have limited, if any, access to the shopfloor, putting in place continuous practices to intimidate workers so they do not join unions, and finally bury the unions in disputes so that they do not find the time to monitor changes that employers introduce. However constant shopfloor monitoring by unions is not impossible. This requires an active membership of the union on the shopfloor with a democratic leadership that respects every worker and ability to understand processes. This is a time consuming process and needs to be continuously, which may makes it at times tedious. By involving more and more workers in daily union activities, especially the young workers, trade unions can bridge this gap. Younger workers with better understanding of

technology are usually able to detect technological changes faster than older workers. This will also help bridge the age gap that plagues trade unions today.

Sometimes this monitoring also requires creativity – an anticipation of change. Before any change is introduced, employers often test the water by discussing possibilities of change or threaten workers with the impending

change or organise trainings on new technology etc. These are signs of testing how workers react to these changes. To believe that these are empty exercises is a folly. Every action of an employer is measured both in terms of the cost of the action itself and its implication. To believe in the benevolence of employer is to believe that Business is Charity.

Our History

On 8 April 1929, the British imperial government tried to pass the controversial the Trade Disputes Bill workers' relating to conditions. Interestingly despite the united opposition to the Public Safety Bill tabled on the same day, when it came to protecting the rights of workers the legislators were divided and the British government was able to get it passed with 56 votes in favour to 38 against it. Among those present and voting were Motilal Nehru. Sardar Vallabhbhai Patel. Muhammad Ali Jinnah, Madan Mohan Malaviya and others. When Vithalbhai Patel, the then President of the Central Assembly, was about to announce the results of voting on the Public Safety Bill. two bombs were thrown into the Assembly hall from the visitors' gallery by none other than Bhagat Singh and Batukeshwar Dutt along with loud cries of Ingilab Zindabad! and Workers of the World Unite! These were accompanied by red flyers against these two Bills. Singh and Dutt could escape after the bombing but they courted arrest and claimed that their act was intentional.



What was in the Trade Disputes Act, 1929?

In 1906, British parliament, with a Liberal government and substantial presence of the Labour Party for the first time, passed

the Trade Disputes Act providing trade unions with immunity from liability for damages arising from industrial actions. This was an outcome of the continuous campaign by trade unions against the Taff Vale judgement of 1901 that established trade unions as legal corporations and as such their funds liable for damages arising from strikes. The decision was potentially crippling for the unions. The new law reversed the Taff Vale judgment and provided unions with complete immunity from liability for civil damages, including providing some degree of immunity to individual unionists and some legal protection for peaceful picketing.

With the Conservatives coming back to power in the 1924 election with Baldwin as the Prime minister and Churchill as the Chancellor of the Exchequer, Britain embarked on a disastrous economic path that led to the miners' strike. The British Trade Union Centre (TUC) gave a call for a General Strike in solidarity with the mine workers. In response, the Conservative Government passed the Trade Disputes and Trade Unions Act. 1927 which outlawed general strikes and sympathetic strikes, mass picketing and banned civil servants from joining unions affiliated to the Trade Union Congress. This act also hurt the Labour Party which lost about a third of its subscriptions.

As a last act before losing in the general elections in May 1929, the Conservative government pushed through the Trade Disputes Act of 1929 in India that banned strikes, prohibited one union from supporting another, prohibited civil servants from becoming members of a

political party and prohibited workers from providing financial support to political parties. It required a 15-day written notice for strikes and lockouts in public utility services. This too was in response to the rising strikes across the textile mills in Bombay demanding recognition of the Girni Kamgar Union, a stop to arbitrary victimisation and dismissals of leaders and members and reinstatement of the terminated office bearers of the union. The number of workdays lost in Bombay city itself in 1928 to industrial actions was 31,647,404 days. The Bombay Millowners' Association in its Report for the year 1928 stated: "...Your Committee naturally supported the underlying the principle Bill, Committee laid special stress was the necessity of incorporating in the Bill, special provisions for controlling picketing. What is now erroneously called" peaceful picketing" does not really exist. Picketing is picketing at all stages and under all conditions, even though disguised under the more harmless terminology of "gentle persuasion." It is intimidation pure and simple, often accompanied by excesses which are as unfair in their nature as they are tyrannical in their effect. Your Committee have accordingly made a strong and emphatic recommendation for stopping it or at least for controlling it so as to it from degenerating into prevent coercion and intimidation."

The report goes on to add: "...we want peace and goodwill; and that we don't want to fight. But, if in our own interests and for our very existence, we are forced to do so, we shall fight with our backs to

the wall. We will not tamely allow an industry in which over 60 crores of rupees have been sunk and which we have taken half a century to build up with such labour and sacrifice to be ruined by the idiosyncracies and caprices of those who have set themselves up as labour leaders, but who apparently are guided and led by revolutionary organisations outside the country." This attitude of the millowners was reflected in the divided voting at the Assembly, Central where legislators voted for the Trade disputes Act to protect the interest of the Indian bourgeoisie and Singh and Dutt bombed the Assembly in protest.

employers about industrial actions. From expanding the notice period for strike action from 15 days in public utilities to 60 days in all industrial establishments. the law makes it almost impossible for workers to go on strike. In addition, if a strike at any point is declared illegal, the trade union engaged in it, under the code, can be de-registered. This in turn means that the trade union will no longer enjoy civil immunity and neither will their thereby pushing leaders workers' struggles outside the realm of even constitutional rights. The Code brings back what Singh and Dutt died fighting for.

Why is this relevant today?

The new Industrial Relations Code reinstitutionalises this paranoia of

