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# **The Indian IT industry: A global production network perspective**

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## **Abstract**

With regard to the IT/ITES industry, globalisation and the rapid improvements in communications technologies, the decoupling of hardware from software opened a window of opportunity for countries rich in human capital such as India to become involved in the IT value chain. To this end, the Indian state created the enabling conditions for Indian IT firms to engage with global markets by particularly enhancing the quality of human resources, providing for tax holidays and infrastructure facilities. Further, the state has increasingly withdrawn from the regulation of the sector. Nonetheless, employees across the IT/ITES industry have benefited in terms of higher salaries, better working conditions and mobility in terms of status in society. At the same time, issues related to job security, social protection, working hours and work–life balance show shortcomings. Moreover, given that the work outsourced to India is at the lower end of the value chain, a highly educated workforce has been relegated to mundane and dead-end jobs in terms of employment. Thus, the gains from participation in the global economy do not seem to be effectively disseminated. With regard to enabling rights, the fear of reprisals by employers has made joining trade unions ineffective in practice. Nonetheless, the formation of UNITES and FITE though unsuccessful are some developments that point to the available space for creative and collaborative confrontation in the industry. The challenge remains for unions to grasp the emerging opportunities and ally themselves with other civil society organisations to courageously and creatively confront the practices of the IT industry.

**Keywords:** GPN, IT/ITES Industry, India, Workers, State, Social Upgrading, Unions, Resistance.

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## **List of abbreviations**

BPIAI Business Process Industry Association of India

BPO business process outsourcing

CLC(C) Chief Labour Commission (Central)

CMM Capability Maturity Model

FITE Forum for IT Employees

GCC Global commodity chains

GFA Global framework agreements

GPN Global production network

GUN Global union network

GVC Global value chain

HSBC Hong Kong and Shanghai Banking Corporation

HRM Human resource management

ISO International Organization for Standardization

IT/ITES Information technology and Information Technology enabled services

KPI Key performance indicator

KPO Knowledge process outsourcing

LLB Bachelor of Law

LPO Legal process outsourcing

MNC Multinational corporations

NASSCOM National Association of Software and Services Companies

OECD Organization for Economic Co-operation and Development

SLA Service level agreements

STP Software technology parks

TCS Tata consultancy services

UNI Union network international

UNI-APRO Union network international Asia Pacific regional office

UNITES Union for ITES Professionals

UNCTAD United Nations Conference on Trade and Development

Y2K The year 2000

## Introduction

The emergence of global production networks (GPNs) is made possible by deregulation of trade and capital flows, the rapid advances in transport and data communications and information technology that enables the fragmentation of production and its relocation across international borders coordinated and controlled rather than owned by multinational corporations MNCs (Barrientos et al., 2011a; Gereffi and Mayer, 2006). Not surprisingly, the United Nations Conference on Trade and Development (UNCTAD, 2013) estimates that 80% of world trade that is coordinated by lead firms<sup>1</sup> is now organised through GPNs. Furthermore, in 2013, 453 million jobs were GPN-related in 40 OECD (Organisation for Economic Co-operation and Development) and emerging economies (ILO, 2015). However, much of the GPN research has focused on lead firms based in the Global North with the consequent neglect of suppliers based in the South (Coe et al., 2008; Noronha et al., 2018). Besides this, despite the growing trend of outsourcing of IT and IT enabled service (IT/ITES) sectors, GPN analysis has focused exclusively on manufacturing (Flecker and Meil, 2010; Noronha et al., 2018; Zhu and Morgan, 2018). For instance, India is the worldwide offshore IT services market leader with a share of 55 per cent of the global outsourcing industry. The aggregate revenues in FY 2017 were about US\$154 billion, with exports contributing US\$ 117 billion of total industry revenues. The sector contributes 7.7 per cent as a proportion of national GDP with regard to its share of total exports it is around 22.5 per cent in 2017. It provides direct employment to 3.9 million and indirect employment to 10 million (NASSCOM, 2017).

In this paper we therefore correct this neglect of the suppliers and the service sector. We begin with providing a literature review of employment relations and the GPN sector, after which we describe the evolution of the IT industry in India and its facilitation by the state. The following section then debates the interface of the Indian IT industry's insertion in the GPN with social upgrading. Finally, we discuss the issue of individual and collective resistance.

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<sup>1</sup> In this paper we use the terms lead firms and clients synonymously

## **Employment relations and GPNs**

The global commodity chains (GCCs) concept was initially introduced by dependency and world systems theorists to highlight the increasing inequality for developing countries as a consequence of globalisation. Later, the global value chain (GVC) framework, gently pushed the level of analysis from a worldwide capitalist logic of labour process towards a more firm-centred conceptualisation and the need to participate in the global economy (Sako and Zylberberg, 2017). In fact, it is argued that developing countries have become increasingly dependent on lead firms to access developed country markets (Yang, 2017) through ‘strategic coupling’.<sup>2</sup> Consequently, large firms limit themselves to their core competencies while outsourcing other parts of their productive systems to spatially dispersed locations beyond the firm (Dicken, 2015). Thus, higher-value-added portions of chains are located with lead firms in developed countries, while the commoditised and cost-driven portions of the value chains are situated with suppliers in developing economies (Gereffi and Mayer, 2006; Noronha and D’Cruz, 2016c). Thus, the common theme in GVC is the outsourcing or subcontracting of simple, low cost and labour intensive parts of the work to developing countries (Lakha, 1994; Noronha et al., 2016) via ‘Captives’, essentially in-house service providers for global companies which directly own and control their offshored operations or ‘Third party’ service providers operating out of developing countries (Noronha and D’Cruz, 2009a). However, the control that lead firms exert over their suppliers in international supply chains differs significantly from the internal control that MNCs exert over their subsidiaries. Within GVCs, control of inter-firm relations is exercised not through ownership but through governance<sup>3</sup> (Robinson and Rainbard, 2013).

The GVC literature highlights three aspects of GVC governance: driving, coordinating and normalising (Lee and Gereffi, 2015). ‘Governance as driving’ means lead firms set the performance criteria in terms of price, quality and delivery standards that shape the behaviour of their suppliers (Lee and Gereffi, 2015). Lead firms who control the chain were assumed to set the parameters for other firms to follow and were very demanding with regard to controlling cost, raising quality and speed of delivery. They enforce these

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<sup>2</sup> ‘Strategic coupling refers to the dynamic processes through which actors in cities and/or regions coordinate, mediate, and arbitrage strategic interests between local actors and their counterparts in the global economy’. (Coe and Hess, 2011, 131–132)

<sup>3</sup> Governance is defined as the capacity to exercise control through the specification of the product, quality standards, quantities, delivery dates and price (Robinson and Rainbard, 2013)

requirements through a system of auditing and inspection which ultimately led to the decision of keeping or discarding a supplier (Humphrey and Schmitz, 2001). Supplier firms in highly competitive markets are forced to accept lower prices for their products, while shouldering the risk of market fluctuations (Xue and Chan, 2013). While the exact content and rhythm of the labour process is decided by suppliers, its parameters are pre-set by lead-firm designed product and process specifications (Selwyn, 2016). This increases the pressure on firms at the lower end of the chain to compete with each other and deliver quality goods within the shortest time frame at the lowest price (Ferus-Comelo, 2008).

Relations between lead and supplier firms in GPNs were initially conceptualised as a two-fold distinction between producer-driven and buyer-driven supply chains (Gereffi, 1994). However, some argue that the complex, varied, and dynamic governance mechanisms are insufficiently described by these simplistic notions of ‘buyer-driven’ or ‘producer-driven’ chains (Coe et al., 2008; Hess and Coe, 2006; Yang and Coe, 2009). For instance, Raj-Reichert (2015) challenges the notion of suppliers being powerless, they in fact are indispensable and exercise opportunities to ‘push-back’. Given this criticism, ‘governance as coordination’ which highlights the varied forms of inter-firm linkages in GVCs was introduced (Lee and Gereffi, 2015). This is a 5-fold typology of governance relationships, namely market, modular, relational, captive and hierarchy which is decided by a combination of three key factors: transactional complexity, codifiability of information and supplier capabilities was proposed (Gereffi et al., 2005). At one end of the spectrum, market governance implies a more equal power distribution, while hierarchy at the other end of the continuum means a large proportion of power accrues to the lead firm. In between these extremes, modular implies that highly capable suppliers are able to make products to a customer’s specifications, fully control the technologies that facilitate business processes, use generic machinery and sourcing, and assemble necessary components on behalf of the customer. Relational indicates complex interactions creating mutual dependence and high levels of unique, non-redeployable human and physical assets, while captive chains denotes that suppliers are highly dependent on the buyer and cannot switch since they are often subject to intense monitoring and control by this customer (Lund-Thomsen, 2013). Nonetheless, this expanded governance framework, though a major improvement on the buyer-driven and producer-driven chains conceptualisation, remains a set of ideal types (Yang and Coe, 2009). Moreover, the five GVC types of governance describing aspects of linkage coordination do not describe the governance of the whole chain. One GVC could include several forms of governance (Ponte and Gibbon, 2005).

Lastly, governance as normalising deals with various standards and relevant normative frameworks shape the overall conditions of GVC participation and upgrading (Lee and Gereffi, 2015). Ponte and Gibbon (2005) argue that lead firms have been able to embed complex quality information into widely accepted standards, and codification and certification procedures as a pre-qualification mechanism of inclusion and exclusion in the chain. Such measures are intended to increase the predictability of transactions, the efficiency of production and the profitability of the lead firm (Selwyn, 2016).

According to Lee and Gereffi (2015) a central argument of the GVC approach is that the type of governance structure significantly affects upgrading. Upgrading refers to the process by which countries and firms ‘climb the value chain’ from low value assembly activities to relatively high-value activities, enhancing competitiveness (Gereffi, 2005) along four economic dimensions: product, process, functional and chain (Barrientos et al., 2011a)<sup>4</sup>, by enhancing their use of technology, skills and knowledge (Humphrey and Schmitz, 2002). Thus, the GVC framework with its core conceptual innovations, ‘governance’ and ‘upgrading’, was firm-centric as it focused on lead firm actions in governing commodity chains and supplier firm attempts to increase their competitiveness through upgrading within these chains (Coe et al., 2008). However, GVC studies have found that product and process upgrading are facilitated by learning from global buyers, whereas global buyers do not necessarily facilitate functional upgrading (Lee and Gereffi, 2015). In fact, lead firms limit, subordinate and frequently exclude the participation of suppliers from developing countries, preventing them from moving up the value chain (Khan et al., 2015).

More so, even though the internal structures and relationships inside firms play a critical role in how GVCs operate (Coe et al., 2008; Selwyn, 2013), little attention is given to the organisation of work and employment at the intra-firm level, with voices of other stakeholders, particularly suppliers and workers in developing countries going unheard (Smith et al., 2002; Xue and Chan, 2013). It was assumed that if suppliers can increase profits through economic upgrading, social upgrading outcomes in terms of measurable standards (wages, benefits, etc.) and enabling rights (freedom of association, collective bargaining, etc.) would follow. However,

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<sup>4</sup>There are four types of economic upgrading: (1) process upgrading makes the production process more efficient by substituting capital for labour; (2) product upgrading introduces more advanced product types that enhance the features of the product; (3) functional upgrading changes the mix of activities performed; (4) chain upgrading shifts to more technologically advanced production chains requiring them to move to new industries or product markets that utilise different marketing channels and manufacturing technologies (Barrientos et al., 2010).



while GPNs have brought employment and economic growth to many developing economies, particularly in Asia, they are also associated with exploitative employment relations, environmental irresponsibility and recurrent ethical dilemmas (Clarke and Boersma, 2017). Rather, managers' room for manoeuvre in supplier firms is constrained by the lead firms' expectations of how work should be organised. Work and employment relations in the supplier firms are shaped by demands that lead firms make on suppliers that relate not just to price, quantity and quality of outputs, but also to inputs in terms of processes and practices (Zhu and Morgan, 2018). For instance, to survive, firms may need to intensify or extend the labour process (Baglioni and Campling, 2017). Consequently, moving up the value chain in GVCs does not automatically translate into good jobs, stable employment, better wages and working conditions (Barrientos et al., 2011a; Christian, 2012; Goger et al., 2014; Xue and Chan, 2013). Rather, poor wages and working conditions, precarious employment, work intensification, health and safety risks and minimal investment in employee development are commonly identified consequences of GPNs (Wright and Kaine, 2015). The pressure on suppliers adversely affects workers at the bottom end of supply chains (Ferus-Comelo, 2008). In the worst case, the kind of jobs created are low skilled manual tasks that are casual and flexible, often associated with poor working conditions and low incomes (Barrientos et al., 2011b; Gereffi, 2014; Noronha et al., 2016, 2018). Even relational arrangements between lead firms and suppliers are not sufficient to neutralise the potentially adverse consequences for employment relationships. Unfair or unsafe working conditions may arise from opportunistic behaviour by suppliers, pressures imposed by lead firms, ineffective employment laws and regulations or a combination of these factors (Wright and Kaine, 2015). In short, economic upgrading does not appear to affect strategies that squeeze labour. In fact, workers are subjected to increasing pressures to produce faster and cheaper (Xue and Chan, 2013).

Further, progress made in measurable standards (e.g. the size and type of employment, wages and working hours) may not extend to enabling rights (e.g. freedom of association and the right to collective bargaining), with many export sectors having an extremely low level of unionisation (Barrientos et al., 2012) resulting in social downgrading (Coe, 2014). Corporate globe-trotting bolstered by partisan state policies and the industry's decentralised structure pose tremendous barriers to labour organising. GVCs allow companies to circumvent labour laws, deflect their employment responsibilities and keep their transnational workforce divided along organisational and national boundaries. These practices render labour organising difficult in an era of globalisation (Ferus-Comelo, 2008).

Thus, outsourcing of production has enabled firms to distance themselves from traditional labour relations and to break out of the unionised industrial areas, turning the global supply chain into a barrier to organising and collective bargaining (Merk, 2009). Further, dispersal of production not only reduces labour costs but also enlarges the global labour pool in the process, increasing the competition between geographically differentiated workers (Selwyn, 2016). This has allowed GVCs to play off workers in one place against those in another as some groups of workers are likely to have material interests that coincide with the strategies of their employers, even if they lead to the exploitation and abuse of workers elsewhere (Rainnie et al., 2011). This uneven organisational and political geography within the union movement means that some union actors become empowered through GVCs while others become marginalised, leading to considerable conflict and internal tensions within global union networks (GUN) (Cumbers et al., 2008). This revives the old scalar dilemma of representing the local and national interests of workers, as against the developing of more internationalist strategies (Wills, 1998).

Thus far, the discussion gives the sense that forms of governance develop ‘regardless of the institutional context’ and therefore, power in international supply chains is de-coupled from the impact of state regulation and trade regimes (Robinson and Rainbard, 2013). In fact, the GVC framework focused on the dyadic relationship between client and supplier firms to the detriment of social, cultural and political dimensions of power (Bair, 2008). Since business functions are not ‘placeless’ (Flecker and Schönauer, 2016), there is a need to incorporate the institutional and social context into research examining the governance of GVCs (Bair, 2008). Clearly then, in spite of the fact that GPNs are constructed to escape domestic institutional constraints such as industrial relations systems and employment regulation, they are fundamentally influenced by the concrete socio-spatial, institutional and cultural contexts that constitute and are reconstituted by the economic, social, and political arrangements of the places they inhabit (Coe et al., 2008; Czaban and Henderson, 2003; Hess and Coe, 2006; Lane and Probert, 2006; Lane and Probert, 2009). In fact, firms and states are continuously engaged in an intricately choreographed and negotiated process over investment projects. Firms attempt to take advantage of national differences in regulatory regimes (Coe et al., 2008), whereas states try to embed MNC activities as strongly as possible in the local/national economy (Liu and Dicken, 2006). For instance, states have often facilitated governance in GPNs by developing policies aimed at creating competitive advantages for places and facilitating ‘strategic coupling’ between global firms and regional contexts (Selwyn, 2016). Thus,

regulatory governance strategies encompass not only active regulation, but also active de-regulation – that is, the maintenance of unregulated environments or the ‘outsourcing’ of regulatory functions including standard setting for private actors (Alford and Phillips, 2018). The most significant problem arising from GPNs is that they are primarily concerned with reducing labour costs by seeking regulatory frameworks that offer more favourable conditions. This leads to a double dynamic: the externalisation of labour and the exploitation of different regulatory regimes (Robinson and Rainbard, 2013). In fact, state regulatory strategies are constrained by internal and external forces in the context of global competitive pressures, significantly limiting their ability to increase regulatory protection for precarious workers operating in GPNs (Alford, 2016). To this end, organisations are aided by home and host states, who are powerless or unwilling to control labour standards in the GPNs, giving rise to a regulatory deficit and a global backlash against such networks (Lane, 2008).

However, Selwyn, (2016) argues that despite capital’s strategies to fragment global labouring classes and reduce their bargaining power, workers enjoy new forms of structural<sup>5</sup> and associational power<sup>6</sup> which can be used to ameliorate their circumstances and generate progressive human developmental outcomes. Consequently, union actors have to be sensitive to their complex positionalities in dealing with the dialectical relations of capital and labour, particularly when trying to translate national practices to the transnational scale (Cumbers et al., 2008). Global framework agreements (GFAs) are one instance in this broader strategy where unions not only aim to extend labour rights within the global operations of a particular MNC, but also beyond its organisational boundaries to subcontractors and suppliers (Davies et al., 2011). In addition, though labour agency in GPNs has mostly been understood as the collective organisation of workers through trade unions, most workers in export-oriented industries in developing countries rarely engage in outright resistance strategies. Rather, they exercise their agency through their micro-level decision-making processes that focus on how workers seek and terminate particular types of employment, make incremental improvements

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<sup>5</sup> ‘Structural power’ accrues to workers from their ability to disrupt the production process through suspension of work. New ‘choke points’ and the possibility of ‘bullwhip effects’, where stoppages of work in one node of the value chain disrupt the functioning of other nodes, and of the value chain as a whole (Selwyn, 2016).

<sup>6</sup> ‘Associational power’ is generated through workers organisations, such as trade unions and political parties, that can, if sufficiently well organised, use workers’ structural power as a means of forcing employers to ameliorate worker’s pay and conditions (Selwyn, 2016).

in their working lives, and are embedded in broader social and community relations (Carswell and De Neve, 2013; Lund-Thomsen, 2013; Noronha et al., 2018)<sup>7</sup>.

With this background, we first describe the evolution of the Indian IT industry and then use the GPN framework to analyse the industry.

### **Evolution of the Indian IT industry**

With globalisation and the rapid improvements in communications technologies, the decoupling of hardware from software opened a window of opportunity for countries rich in human capital (Arora et al., 2001b; See Noronha and D'Cruz, 2016c for details) such as India to become involved in the IT value chain. Consequently, the Indian software industry caters primarily to the global market, with the contribution to the domestic market being negligible (Durán, 2006; Ethiraj et al., 2005). By the late 1980s and early 1990s, most software companies in India acted as sub-contractors, executing assignments onsite (at client's premises) through human power contracts popularly known as 'bodyshopping' (Nath and Hazra, 2002; Russel et al., 2015; Xiang, 2007). The Indian software firm largely provided software programmers and analysts on a temporary basis to the client who managed and supervised them (Arora and Asundi, 1999). Later, the first-generation Indian engineers who had settled in the US and were working in the Silicon Valley convinced the senior management of large American corporations to take advantage of wage arbitrage for software skill and to establish operations in India (Saxenian, 2002; Nath and Hazra, 2002). As a result, lead firms were formed by establishing captive centres (i.e., wholly owned subsidiaries) or through global providers such as IBM and Accenture and Indian third-party providers – including Tata Consultancy Services (TCS), Infosys and Wipro. However, the phase of rapid growth began when Y2K<sup>8</sup> and ecommerce services were offered during the technology boom beginning in the 1990's (Fernandez-Stark et al., 2011).

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<sup>7</sup> A theoretically refined analysis that recognises more disaggregated concepts of agency provided by Katz (2004) distinguishes between resilience (everyday coping practices), reworking (efforts to materially improve conditions) and resistance (direct challenges to capitalist social relations).

<sup>8</sup> The year 2000 (Y2K) computer software problem arose because in the 1960s and 1970s computer programs were designed to use only two digits to represent the year (in both software and hardware) in order to lower computer storage costs as a result some computers had the prospect of processing the date 2000 as the date 1900 this would either produce errors in their expected behaviour or shut down completely.

This resulted in the emergence of the onsite-offshore model as the better value-added model of software service delivery (Athreya, 2004). Offshoring allowed the software service provider to better leverage the labour market advantages in India. The business model of the Indian software industry focuses on lean staffing onsite at the client location and a large workforce offshore in India contributing to service delivery (Ethiraj et al., 2005). Service level agreements (SLAs) define every parameter that governs the relationship between client and the supplier, such as work to be done, billable items or units, deliverables, productivity and quality benchmarks, reporting requirements, project management methodology, pricing and terms for payment and adjustments (Noronha and D'Cruz 2009a, b; Noronha et al., 2016; Sahdev et al., 2017). Penalties are imposed if project deadlines are not met. Further, every renewal of contract means improvements in performance (Noronha et al., 2018). Thus, SLAs are central to understanding the transnational governance, because these specify the quality standards and quantitative requirements that remote suppliers must deliver to clients and end-customers in the 'home' geographies (Taylor, 2010). When the project is large, one or more members from the project team work onsite with the client to coordinate on a regular basis between the client and the offshore team in India (Agrawal et al., 2012). These employees perform those tasks requiring direct client interaction such as requirement analysis or the implementation of the new software and training of the client's staff (Feuerstein, 2013; Madsen, et al., 2015).

However, this was not enough to overcome separation of production and consumption in software work, and as a result there was a pressure to standardise products so that they could be recognised as reliable by purchasers removed from the place of production (Prasad, 1998). Standardisation was critical to the dis-embedding and fragmentation of software processes to impart structure and predictability to them (Rothboeck et al., 2001; Sahay et al., 2003; Gereffi, 2006). As a result, processes such as the International Organization for Standardization (ISO), CMM (Capability Maturity Model), Six Sigma<sup>9</sup>, etc. were held to be necessary for creating unambiguous and uniformly understood sets of conventions and practices (Fernandez-Stark et al., 2011) and to meet international standards to increase competitiveness in the global market (Durán, 2006). Quality and security of data is important to win the confidence of clients (Agrawal, 2014). Moreover, Indian firms saw certification as a marketing tool to distinguish themselves from competitors and to demand a

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<sup>9</sup> Six Sigma is a statistical-based, data-driven approach for eliminating defects in a product, process or service.

higher price per unit of effort (Arora and Asundi, 1999) which made it possible to capture turnkey contracts, particularly in domains such as banking and retailing (Parthasarathy, 2004; Parthasarathy and Aoyama, 2006). Nonetheless, the adoption of these standards has had a multiplier effect as several organisations have begun to adopt certifications (Prasad, 1998). To this effect, MNCs played a significant role in this ‘process’ and ‘functional’ upgrading as the Indian software industry began to shift from bodyshopping to offshore services (Parthasarathy and Aoyama, 2006). Similarly, to counter the pre-existing prejudice on the part of onshore clients towards Indian suppliers, to meet ethical standards (Noronha et al., 2016) or to ‘signal quality’ of their processes and people (Athreye, 2005; Arora et al., 2001a), Indian IT/ITES firms employed only engineering graduates, and those with a computer science degree or a Masters in Computer Applications (MCA). Similarly, as Indian IT firms over the past decades began to offer all services in the value chain, including business process outsourcing (BPO) which included call centres, knowledge process outsourcing (KPO), and a significant number of advanced services for specific industries such as law, finance and health care that were once strictly considered to be the preserve of the industrialised world (Fernandez-Stark et al., 2011), they employed those with a Bachelor of Law (LLB) degree for legal process outsourcing (LPO) firms or graduates for BPO and call centre work, even though the tasks involved did not require these qualifications (Noronha et al., 2016).

### **The State as a facilitator**

In fact, the IT/ITES industry has become an icon of development, with the gurus of the industry seen as heroes of today’s India. Accordingly, the triumph of IT/ITES services is attributed to individual entrepreneurship set free from the shackles of state intervention in a liberalised, privatised and globalised environment (van der Veer, 2005). Thus, the popular view is that the industry expanded on the basis of comparative advantage and there was no explicit effort by the government to galvanise the agglomeration economies which developed spontaneously. The development of the software sector was primarily attributable to the activities of the private sector initiated through a symbiosis of foreign and domestic firms. The governments at various levels became involved only after the success of the sector was evident (Pack and Saggi, 2006). In fact, a critical role was played by non-resident Indians (NRI), who had immigrated to the United States in the 1950s, by facilitating the match between buyers of software services from the United States and sellers from India

(Kattuman and Iyer, 2003; Pack and Saggi, 2006: 35). Further, the major impetus to the demand in the 1990s came from a broad set of ‘accidents’ such as the introduction of the Euro and the Y2K problem which enterprising businesses in India capitalised on through the well-known practice of ‘bodyshopping’, the contracting out of the services of IT workers (Messner, 2013; Pack and Saggi, 2006). Therefore, the growth of the industry must be attributed to early liberalisation of the Indian economy and benign neglect, rather than the active strategic support of the state (Kattuman and Iyer, 2003). However, this popular view often ignores the role of the state in making India a destination for software services.

Others argue that while the international division of labour is underpinned by the global strategies of MNCs, development policies pursued by states are important too (Lakha, 1994). The emergence of the Indian software industry is an outcome not only of an explosion in global demand for high-skill and low wage software professionals, but also of the changing role of the Indian state (Parthasarathy, 2004). Nollen (2007) for instance, argues that from its very early years the government was very active in promoting the software industry by first being a regulator and producer and later taking on the role of a promoter and supporter (Aggarwal, 2013; Heeks, 1996). Besides this, the genesis of Bengaluru’s (formerly known as Bangalore) emergence in the 1990s as a hub in the global knowledge economy may be traced back to Nehru’s decision in the 1950s to locate the strategic public sector defence and electronics industry in the city (Parthasarathy, 2004). Consequently, had it not been for the state’s investment in technological and educational infrastructure in the 1960s and 1970s — designed for import-substitution industrialisation — the IT services industry would not have been in the position to exploit the emerging opportunities in the 1980s (D’Costa, 2011). Thus, until the 1980s, the IT industry was guided by a protectionist strategy. However, since then the government has slowly begun to roll back these policies to make the software industry better prepared for international competition (Aggarwal, 2013), with a focus on promotion and support of the industry rather than control and ownership (Heeks, 1996). Alongside this change to a more liberalised economic environment, there was also a shift in the approach to policy making where inputs from the employers’ body — the National Association of Software and Services Companies (NASSCOM), founded in 1988 — began to play an important role. The state increasingly embedded itself in private capital by making policies that drew on industry feedback (Parthasarathy, 2004). This growing embeddedness of the state was reflected in the establishment of the software technology parks (STPs) in 1990. As export zones dedicated

to the software industry, the STPs offered data communication facilities, uninterrupted electricity, concessional land, centralised air conditioning, tax free status for 100 per cent export-oriented firms, financial and marketing support, and financial incentives for firms to provide offshore services (Aggarwal, 2013; Chatterji, 2013; D'Costa, 2011; Parthasarthy, 2013). The STPs not only provided the necessary infrastructure to reinforce the skill advantages which a region like Bengaluru already possessed, but were also instrumental in firms shifting from 'bodyshopping' services to offshore services. This shift to offshore services marked the beginning of a new relationship between the Indian software industry and global markets (Parthasarthy, 2013), leading to its integration into the global division of labour (Lakha, 1994).

In addition to national policies, in recent years governments at the state level have also competed to announce their own IT policies to attract investments. The state governments offer a range of fiscal benefits to the IT/ITES sector, which include: rebates in property registration fees and stamp duty exemption; entry tax and sales tax exemption; and reduced power tariffs. Besides this, IT/ITES projects also receive several additional exemptions from city-level zoning regulations which include location policy irrespective of local area master plans, additional building heights or floor area ratio (Chatterji, 2013). Given the perception that the IT industry is best left to private initiatives and responses to market signals, the state has increasingly withdrawn from the regulation of the sector (Chandrasekhar, 2005; Stevens and Mosco, 2010). In fact, industry leaders often express contempt for existing regulations, fearing escalation of costs that reduce competitiveness and endanger India's entry into the global marketplace (Stevens and Mosco, 2010). The dialogue between government and IT/ITES firms aims at allowing the sector to function with minimal red-tape and maximum labour flexibility (Penfold, 2008). Almost all states have extended certain regulatory exemptions related to labour and environmental laws to the IT sector, which enable them to run 24/7 schedules for 365 days on a shift basis, to serve their clientele spread across several time zones on a real time basis (Chatterji, 2013). At the national level, the Chief Labour Commission (Central) (CLC(C)) office has advised their subordinate offices that routine and periodic inspections may not be necessary since the employees engaged by these IT/ITES are usually qualified, and are therefore in a better position to protect and promote their



interests (GOI 2009–10). At the state level, IT/ITES companies are allowed to self-certify<sup>10</sup> in respect of laws such as the Payment of Wages Act 1936, the Minimum Wages Act 1948, the Contract Labour (Regulation and Abolition) Act 1970, the Workmen Compensation Act 1923 and the Employees' State Insurance Act 1948, among others. The most controversial of this is the blanket exemption of the Standing Orders Act 1946 provided by the states such as Karnatak, Maharashtra, Gujarat, Haryana, Tamil Nadu, Andhra Pradesh, Orissa, Rajasthan and Madhya Pradesh to the IT/ITES industry. However, labour legislation and related institutional measures apply to this sector, though IT/ITES employers aided by government apathy would like us to believe otherwise (D'Cruz and Noronha, 2010; Noronha and D'Cruz, 2009a, 2016a).

### **Social upgrading a mixed bag**

Nonetheless, employers argue that they have formulated their own working norms, guidelines and practices that provide employees with facilities and fair treatment that go beyond the provisions of any law. The IT/ITES sector is also often applauded for providing exceptionally good grievance redressal procedures via open forum meetings, open door policies, counselling and suggestion schemes, non-hierarchical structures, informal work culture, merit based promotions, career growth through tie-ups with educational institutions, and gender equality (D'Cruz and Noronha, 2012; Noronha and D'Cruz, 2009a; Rothboeck et al., 2001; Sahay et al., 2003), challenging the hegemonic traditional management practices, which were both overly paternalistic and hierarchical by often employing caste in their working (D'Mello and Eriksen, 2010). Besides this, the explosive growth of the industry gives these professionals the ability to negotiate aggressively and demand high concessions in terms of compensation and career advancement from companies. This has prompted firms in the IT/ITES sector to explicitly introduce human capital management strategies such as high salaries, opportunities to work abroad, quick promotions, flexi-time, parental leave, provide more congenial and satisfying work environments, transport facilities, the option to telecommute from home, stock option plans, cafeterias, sports facilities, de-stress rooms, on-site childcare and health facilities comparable to those of their strongest competitors in the US and elsewhere (Arora and Athreye, 2002; Penfold 2009; D'Cruz and Noronha, 2006). Most employer organisations sought to provide physical work environments of

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<sup>10</sup> 'Under the self-certification scheme, employers employing up to 40 persons are required to provide only a self-certificate regarding compliance with labour laws, while those employing 40 or more persons are required to submit a self-certificate duly certified by a chartered accountant' (ILO, 2014)

international standards resembling those in the West. There was also an effort to create fun in the workplace, particularly in the BPO sector with cultural activities and get-togethers such as team outings, team parties and office gatherings organised frequently (Noronha and D'Cruz, 2009a). In fact, some researchers have argued that well-being and job satisfaction form the pivot of HR practices implemented in the Indian IT sector, which is supposed to be highly innovative, professional, formal, structured and world-class (Thite and Russell, 2009). Thus, Barrientos et al. (2011a) conclude that workers in this sector move both towards better paid employment associated with progressive social upgrading – a clear instance of a 'race to the top' (Arora and Athreye, 2002).

### Commodified work

However, despite paying substantially above Indian standards and providing employees with numerous benefits, the difficulty in retaining talented professionals remained. What remains hidden behind the chic and yuppie image of the industry, however, are the mundane, labour-intensive manufacturing processes (Ferus-Comelo, 2008).

Quite naturally, with the shift from the onsite to the offshore model, the tedious, low-end, labour-intensive work, the unrelentingly monotonous and low paying execution tasks of low level design, coding, testing, support and maintenance performed by bodyshoppers (Ethiraj et al., 2005; Feuerstein, 2013; Xiang, 2007), were among the first to be outsourced (Blomqvist et al., 2015). The knowledge requirement for these tasks was minimal, as they require less business user involvement and can be executed at offshore locations with fewer risks and lower cost (Mishra and Mahanty, 2015). Besides this, early life cycle tasks such as design and user requirement analysis were considered more difficult to outsource, as they required more intimate knowledge of the firms' work practices (Sahay et al., 2003) and were often tacit and difficult to convey over long distances (Parthasarathy, 2000). Even in the case of turnkey projects entailing design and high level systems integration, the work done in India is of low value such as coding, conversion, debugging, and testing, and customisation of multinational products, most of which are carried out offshore for cost reasons (D'Costa, 2003; Feuerstein, 2013; Veloso et al., 2003). Thus, the origin of the Indian software industry was firmly rooted in performing low-end, technically less demanding and labour-intensive work for the global IT industry, and exploiting labour cost arbitrage opportunities between India and developed country markets (Ethiraj et al., 2005).

Faced with a small and undeveloped domestic software services market, this suited Indian software firms who focused primarily on the export market (Ethiraj et al., 2005).

Similarly, Noronha et al. (2016) hold that LPO organisations concentrate on low-end, low value document review and routine support functions that have limited scope, while the more sophisticated and strategic work is performed by lawyers in the client's country. Thus, majority of the work outsourced to foreign attorneys constitutes 'low-end' or 'commodity' legal work (Woffinden, 2007) that is divisible and generic in nature, requiring only minimal firm specific knowledge (Regan and Heenan, 2010). Thus, even KPOs, who some argued entail genuine complexity and high value services (see Taylor and Bain, 2006), have been subjected to standardised processes solutions rather than being customised (Noronha et al., 2016). Even with regard to BPO work, Taylor (2010) holds that companies commonly route to India only the 'mass market' calls which are highly standardised, codified and routinised, with premium or privileged customers being serviced domestically. This suggests that there are certain limitations on the ability of India to move up the value chain even in the case of call centre work (Taylor and Bain, 2006). In short, the recent focus on ITES as a driver of software exports reinforces the low wage segment of the value chain (D'Costa, 2004).

Not surprisingly, from a global value chain perspective, many of the IT jobs in India are routine, monotonous, non-innovative, tedious, uncreative, less skilled, and low-end, and involve activities such as development, maintenance, testing, coding, low level design, data conversion and on-line technical support based on the instructions and specifications given by the client (Agrawal et al., 2012; Arora et al., 2001a; Arora et al., 2001b; Arora and Asundi, 1999; D'Costa, 2004; D'Costa, 2003; Gereffi, 2006; Lakha, 1994; Nath and Hazra, 2002; Rothboeck et al., 2001). In fact, while Fernandez-Stark et al. (2011) argue that process upgrading facilitates workforce development and industry upgrading, Prasad (1998) holds that defining and documenting the software development methodology and the pressures to standardise products has resulted in deskilling and breaking of the individual employee's monopoly of knowledge over the labour process. This rationalisation has turned software work into a mechanical activity that is constantly monitored and measured in terms of time, effort and productivity, which blurs the distinction between IT and ITES work

(Upadhyaya, 2010). In fact, Noronha and D'Cruz (2016b) argue that most work would fall within the scope of the definition of workman<sup>11</sup> under the Industrial Dispute Act, 1947.

The service level agreements (SLAs) between these lead firms and their clients are further routinising work (Noronha et al., 2016). These SLAs keep the client satisfied, through quantitative and qualitative parameters regarding accuracy, workload targets, data security and ethical standards (Noronha et al., 2016). With each renewal of contract, clients demand improvements in performance. Under pressure to win bids, Indian suppliers committed to infeasible deadlines and were held responsible to deliver on their commitments. Clients also defined supplier key performance indicators (KPIs) and imposed penalties if project deadlines were not met (Noronha et al., 2018). Wallace (2009) cautions that the outsourcing providers in India are under constant pressure by their clients to reduce operating costs and increase service levels, resulting in a 'sacrificial HR strategy' that compromises employees' well-being and job satisfaction in favour of company objectives (D'Cruz and Noronha, 2012). In some cases, this led to depersonalised bullying (D'Cruz and Noronha, 2009a; D'Cruz, 2012).

### Implications for employees

In terms of other parameters like job security, working with constant deadlines, annual leave with pay, freedom of association, etc., the sector fares badly against comparable jobs in other sectors (Sarkar et al., 2013). The blanket exemption from the Industrial Employment (Standing Orders) Act, 1946 allows employers to be abusive. Further, employees are forced to comply with the management or be blacklisted or deprived of relieving letters that would restrict their mobility. In fact, the inhumane way of terminating employees' employment through forced resignations and bullying was rampant, especially during a downturn (D'Cruz and Noronha, 2009a; D'Cruz and Noronha, 2013a). Legislation that gives those employed for over six months a right of appeal against dismissal without reasonable cause is often not invoked by IT/ITES employees, given the difficulty and delay in the legal system, the ease of finding another job in the sector (Penfold, 2008) and the perception of being professionals (Noronha and D'Cruz, 2006, 2009b). Besides this, benefits are withdrawn

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<sup>11</sup> The Industrial Dispute Act, 1947, governing industrial relations in India defines a 'workman' as any person employed to do manual, unskilled, skilled, technical, operational or clerical work. It exempts the defense forces, police, managers, administrators and supervisors drawing wages exceeding ten thousand rupees per month (Noronha and D'Cruz, 2016b)

without a dialogue and companies do not provide procedures for acting against sexual harassment (Noronha and D'Cruz, 2017). Further, though legislation requires the availability of maternity leave, evidence suggests that those seeking to take maternity leave are often encouraged to resign (Penfold, 2008).

Project-based work with unpredictable workloads and the requirement to deliver projects consistently within the stipulated time often required employees to work several hours at home as well on weekends, national holidays and festival days (Babu et al., 2015; Noronha and D'Cruz, 2017; Sardeshmukh & Srinivasan, 2014). Furthermore, long working hours, unpredictable workloads, constant pressure of updating skills and travel impacts on the lives and careers of software professionals, creating an intense, high stress work lifestyle. The concept of a 24-hour knowledge factory required software professionals to adopt a more fluid approach to time (Sardeshmukh & Srinivasan, 2014). Further, American companies had not just outsourced their IT needs, but also their own nightshift (Baas, 2007), causing internal strife in the arena of work–life balance (Baas, 2007; D'Mello, 2005). Similarly, call centres operate around the clock throughout the year (i.e. 24/7/365), relying on night shifts to service overseas geographies whose time zones are ahead or behind that of India (McMillin, 2006; Noronha and D'Cruz, 2006; Ramesh, 2004). However, working late does not imply being paid overtime. The salary is fixed, regardless of the hours worked (Baas, 2007). Odd working hours usually led to disturbances in personal and social life and significantly impacted workers' health, manifesting in several symptoms of mental and physical illness such as nervousness, chronic fatigue, stiff neck, sore eyes, backaches and headaches, impaired vision, numbness in fingers, body ache, fever, asthma, sore throats, nausea, dizziness, rashes, insomnia, anxiety, restlessness, irritability, depression, drowsiness, loss of appetite, changes in body weight, decreasing vigilance and gastrointestinal problems (McMillin, 2006; Noronha and D'Cruz, 2006; Poster, 2007; Ramesh, 2004). It was also noticed that employees developed poor eating habits, overeating, smoking and drinking excessive coffee and so on to cope up with the psychological and physical strain (McMillin, 2006; Ramesh, 2004; Singh and Pandey, 2005). Upadhyaya (2010) concludes that from the perspective of decent work, problem areas include job security, social protection, working hours and work–life balance. This, according to Salminen-Karlsson (2015), could be interpreted as denoting exploitative paternalism.

### Experience of employees onsite

Even when working onsite, Indian employees were always expected to accede to unreasonable requests made by clients, as it was difficult for Indian suppliers to coerce non-Indian employees to do so. Indian managers forced their Indian employees to work long hours by invoking their single status, applying peer pressure or threatening their continuity on the onsite assignment (Noronha and Magala, 2017). The Indian workers lived under the constant threat of being sent back to India and were subjected to aggressive yelling or screaming, strict monitoring and abuse amounting to workplace bullying (D'Cruz and Noronha, 2015). Therefore, Indian employees never called in sick or made use of holidays. At times, even leave that was granted to them was cancelled by Indian managers at the last moment. These actions created a sense of inequity in relation to their Dutch counterparts amongst Indian employees. This was reinforced when Indian suppliers set up work councils at the insistence of the client, but left out the Indian employees from their purview. Given the nature of their work, they were seen as replaceable, expendable and dispensable commodities on the assembly line rather than knowledge workers. As a result, Indian suppliers did not endow their employees with high-end skills valued by the market, or invest in training and certifications both in terms of time and money. Labour was seen as a cost and not a potential asset; investing in the quality of the labour force was virtually unheard of (Noronha et al., 2018).

Offshoring not only impacted the supplier employees, but also resulted in the bargaining power of onsite client employees being compromised (Blomqvist et al., 2015). Some Dutch freelancers secretly wished that the outsourcing experiment with Indians failed (Noronha et al., 2018). Since their tasks could be easily transferred to India, they lost control over the sole ownership of knowledge of the work process. Thus, offshoring changed the power relations between client and their employees, forcing the latter to make concessions regarding their employment conditions as they became more replaceable. However, in spite of replacing their tasks being sent to India with new strategic management tasks – which implied job enrichment – the onsite employees themselves did not welcome these moves. Nonetheless, the offshoring process resulted in onsite staff ending up in a superior status vis à-vis their Indian colleagues. Consequently, a new bottom level in India was added to the organisational hierarchy, creating a level below onsite personnel, who thereby passively moved up one step in the hierarchy and in the value chain (Blomqvist et al., 2015).

## **Experience with employee voice**

The sector lacked virtually any kind of workers' association (Mehta, 2016). There were no unions, employees' committees or representatives, or any other democratic measures or policies for collective influence. Even European managers working in India did not import such traditions (Salminen-Karlsson, 2015). The challenges stem from a number of sources such as an anti-union corporate culture, state complicity with this culture, the complex global production networks along which manufacturing processes are currently organised and the priorities and politics of unions themselves (Ferus-Comelo, 2008).

The anti-union corporate culture disregards the basic freedoms provided by the Indian Constitution. The majority of IT/ITES firms backed by NASSCOM persistently lobbied against unionisation in the sector. Employees also harboured the view that a collectivist agenda is at odds with business interests, and pursuing such a path would unleash conflict. By juxtaposing the unsavoury picture of union related conflict and its consequences with the attractive image of peace and co-operation in the absence of unions, employers tried to avert union formation. Indeed, management's subtle references to conflict, because the presence of unions creates tension, anxiety and disruption through the use of strike and job action, paid off (Noronha and D'Cruz, 2006; Noronha and D'Cruz, 2009a, b). Undoubtedly, the very nature of capital being able to shift to low cost destinations enabled employer organisations to propagate this view among employees. When clients can readily source labour from multiple locations, the possibility of work being taken elsewhere discourages labour from pressing for even the most legitimate demands (Penfold, 2008; Noronha and D'Cruz, 2006). Corporations use this exit strategy as a way to deny workers their freedom of association and the fundamental right to collective bargaining (Ferus-Comelo, 2008). In fact, the codification and standardisation of tasks enabled by new technologies (Noronha et al., 2016) coupled with lower capital intensity and sunk costs, as well as weaker links with local suppliers, makes the offshoring of services more footloose than manufacturing (UNCTAD, 2004).

Employers also typecast collectivisation with blue collar jobs as signifying 'evil stuff' (Balasubramanian and Sarkar, 2017). In addition, employers argue that sophisticated human resource management (HRM) strategies have a significant potential to take care of the interests of educated 'executives' who have a voice of their own (Noronha and D'Cruz,

2006, 2009b). In fact, in the Indian context, far from consulting employees, high commitment management practices are advocated as a means to ensure union avoidance (Noronha and D'Cruz, 2009b). Further, the highly individualised wages linked to performance systems and the lack of time and space hampered the development of long-term relationships and collective mobilisation (Rothboeck et al., 2001). It is not surprising then that employees in this sector came to believe that union formation would only precipitate problems for employer organisations, clients and employees themselves, threatening the continuity of the industry, and in turn, of their own employment (Noronha and D'Cruz, 2006; Noronha and D'Cruz, 2009a, 2009b; Noronha et al., 2018). Staying away from unions and avoiding conflict, even in instances where their rights were violated, was the preferred option. Hence it was not uncommon to find employees quitting their current jobs and seeking fresh appointments within India's booming sector rather than engaging third-party intervention to redress their grievances (Noronha and D'Cruz, 2009a; Penfold, 2009).

Furthermore, mobilising membership was impeded by the employee self-concept of being 'professional' and participants did not consider themselves to fall within the purview of collectivisation endeavours (D'Cruz and Noronha, 2009b; 2013b; Noronha and D'Cruz, 2006; 2016b). Overall, it was difficult to convince IT/ITES employees of the need for a union. They saw no relevance for unions and they associated these with blue collar workers. Slogan shouting on the streets and picketing ITES organisations was seen as detrimental to their professional image. Believing in the relevance of merit as a means of career progress, employees feared that the presence of unions would reverse these trends by introducing a levelling effect through attempts to protect the less capable (Noronha and D'Cruz, 2006; Noronha and D'Cruz, 2009b). In their view, intelligent, qualified, motivated, responsible and upwardly mobile professionals like themselves, whose jobs provided good returns, whose work environments were modern and chic, and whose employers looked after their well-being, were not in the same category as factory workers (D'Cruz and Noronha, 2009b; Noronha and D'Cruz, 2006, 2009b). Even in the Netherlands, possibilities of collectivisation were impacted by the typical disdain for unions espoused by knowledge workers and the essential nature of GPNs which divides workers. Their only concern was high housing costs in the Netherlands, which Dutch unions showed little concern for. However, the prime motivation to organise Indian employees arose after many Dutch union members began losing their jobs due to outsourcing (Noronha, et al., 2018).



### Two organising initiatives

Responding to these circumstances, unionists acknowledged the need to move away from the conventional protest and grievance handling functions of unions, and instead to engage in partnership with management. They foresaw unions as having a much larger role to play in solving a wide variety of workplace problems, including attrition. Union for ITES Professionals (UNITES) was to operate from the standpoint of co-operation and responsibility, rather than militancy and aggression, so that 'mutual gains' were secured for all the stakeholders. The interest of the industry and the workers went hand in hand. Employees had to be flexible and accommodating of employers' needs for the industry to survive. Accordingly, productivity was emphasised and extreme Leftist leanings were denounced. This strategy was expected to rebuild the credibility of Indian unions as respectable, credible, dignified and responsible groups which ITES-BPO employees would be proud to be a part of (Noronha and D'Cruz, 2009a, 2009b).

Emphasis on social dialogue rather than protest as means to resolve disputes formed a significant part of UNITES's agenda. The main goal of social dialogue was to promote consensus building and democratic involvement among the main stakeholders in the world of work. Successful social dialogue structures and processes had the potential to resolve important economic and social issues, encourage good governance, advance social and industrial peace and stability and boost economic progress. UNITES further believed that dialoguing with NASSCOM was required to make India's ITES-BPO industry more sustainable (Noronha and D'Cruz, 2009a, 2009b). At the same time, globalisation required employees to have a strong voice and UNITES remained committed to this end. Since offshoring had pitted employees of different nationalities against each other, UNITES believed that the only way forward was for employees to come together and convince employers to rethink their strategies in favour of development that was sustainable for all. Present policies that suggested a race to the bottom were not in the best interests of employees, customers, national economies or sustainable development. Instead of responding to employer initiatives to relocate work overseas with arguments that could be misconstrued as racist, xenophobic or protectionist, the thrust required was that of decent work for all. This stance seems quite natural given that the issue of outsourcing jobs abroad stirs great emotion among employees in the West (Krishnan, 2007). American union representatives wanted to protect the jobs of their members and consequently did not support the outsourcing to low wage countries such as India, China, Philippines, etc. In fact,

unionists visiting India were surprised that Indian IT workers did not seem to be overly concerned about workers displaced by outsourcing (Tisza, 2005).

Therefore, according to UNITES, the only way to ensure compliance with decent labour standards was for employer organisations and Union Network International (UNI) to establish GFAs which included clauses on employees' rights, union rights, health and safety, elimination of discrimination, minimum wages and working conditions, employment stability, respect for others at work and respect for the environment (Noronha and D'Cruz, 2009a, 2009b). In this way, Union Network International - Asia Pacific Regional Office (UNI-APRO) strived to move from individual corporate standards to general sectoral standards as a means of overcoming structural and associational weakness by organizing and building new unions (Helfen and Fichter, 2013). However, despite untiring efforts to sign a GFA with Hong Kong and Shanghai Banking Corporation (HSBC), worldwide the initiative has not paid off. As a part of the global campaign for GFA when UNITES leaders in India went to hand over a written representation to HSBC Hyderabad, they were stopped. The bank retorted that while HSBC was committed to fair employment practices they did not see the need for any global agreement.

At the same time, employees feared adverse reactions, including dismissal, if their employers learned about their links with a union. Employees expressed reluctance to be publicly associated with unions and those who attended union meetings strove to maintain the secrecy of their association with the union (Noronha and D'Cruz, 2009a, 2009b). Of course, this is exacerbated by the fact that while the industry employers themselves form legitimate associations such as the National Association of Software and Services Companies (NASSCOM) and the Business Process Industry Association of India (BPIAI), the same privilege is denied to workers in the sector (Jose 2012). In fact, union efforts towards registration are often stalled by the government (Noronha and D'Cruz, 2006, 2009b). However, D'Cruz and Noronha (2013b) argue that more than government apathy and employer antipathy, it was the dissipation of the initial enthusiasm of organizing ITES-BPO employees that hindered union formation. Though initially UNITES showed promise, in the long run it failed to exploit the contradiction inherent in the term 'professional' as espoused by employers, nor did it adequately respond to this socially constructed identity (Noronha and D'Cruz, 2009b). The undemocratic functioning, financial weakness (because of the dependence on foreign funds rather than on member subscription), inadequate

mobilising skills of office bearers, internal rivalry and concentration of power in the hands of the Bengaluru leadership contributed to the ineffectiveness of UNITES. To conclude, UNITES not only failed to make a break from the past but also failed to leave its imprint on the memory of its constituency.

Nonetheless, another initiative to organise IT/ITES employees, Forum for IT Employees (FITE) emerged from within the Young Tamil Nadu Movement, formerly known as Save Tamils Movement, an independent political movement comprising IT professionals and youths. The movement was formed in November 2008 in the backdrop of Sri Lanka's genocidal war against Eezham Tamils that proclaimed "Stop the war, Save Tamils". However, the trigger for FITE came in December 2014, when the business newspapers announced that Tata Consultancy Services (TCS) planned 'restructuring' and 'workforce optimisation' affecting some 25000 senior employees. These trepidations were confirmed when those who were de-allocated from projects received the termination letters with no valid reasons. The contradiction was highlighted that powerful corporations could have an organisation 'NASSCOM', while IT employees were criminalised for union activity. The posturing of FITE seemed more aggressive as compared to that of UNITES. They argued that the IT/ITES global production networks could be strongly impacted if employees refuse to monitor the transactions of a banking-software, write/test code, delay a project delivery, or refuse to answer calls from customers of various countries for just a single day. The important thing about this movement was that employees not just of TCS but other IT companies were also mobilised and a petition was submitted to the Labour Commissioners at various cities across India, restraining TCS from carrying out further retrenchment. Moreover, UNITES seemed reluctant to invoke the Industrial Dispute Act 1947 or the time was not ripe to do so in 2005. However, by the time FITE was formed the application of the Industrial Dispute Act 1947 became relevant given the large-scale of dismissals. They argued that the definition of 'workman' as defined by the Industrial Dispute Act 1947 was applicable to them and therefore invoked the existing labour laws and approached the labour courts. Further, FITE was initiated by IT/ITES employees working within the industry and they even contributed from their own personal funds towards the cause. Accordingly, FITE mobilised IT/ITES employees by using combination of offline and online methods but UNITES relied mainly on e-mobilising. (Noronha and D'Cruz, 2017).

The two cases of union organising, UNITES and FITE, even though 10 years apart continue to be confronted by similar issues of professional identity, individualism, transparency, political affiliations, internal democracy and gender neutrality. Office bearers of both unions avoided using the word ‘union’ in their name. FITE completely ignored the word while UNITES did not spell out its acronym. Another similarity was that both were confronted with apathy by IT/ITES employees to join unions, which was accentuated by lack of experienced leadership. One indicator of this was that though both UNITES and FITE put in considerable amount of effort to mobilise employees, they were unable to charge a membership fee. UNITES sustained itself largely from the financial support from UNI affiliates, but once the source of these funds dried up the organisation collapsed. In the case of FITE, there was no such financial backing and its long-term viability has already come into question. Further, both were concerned about affiliating to union federations that were in turn allied to political parties. Despite this, finally succumbing to pressure, UNITES became affiliated with INTUC and FITE connected with the New Democratic Labour Front (Noronha and D’Cruz, 2017).

#### Attempts at individual resistance

Not surprisingly, we found that Indian employees had to fend for themselves. Notwithstanding their foregoing circumstances, Indian employees demonstrated resilience by building a good relationship with the client or blending in with the onsite Indian manager who secures their onsite appointment. Alternatively, they also became involved in several projects to secure their continuation in the Netherlands. Lastly, in an attempt to rework things those who felt a sense of imminent repatriation, resigned and intensified their job search in the Dutch market. Nonetheless, all this was possible because of the strong Dutch legal framework, which does not require employees to pay bond amounts and also specifies a one months’ notice instead of three months’ notice (as in the case of an Indian supplier), in the case of an employee who decides to quit. The speed at which justice is delivered in the Netherlands also emboldened Indian employees to approach courts vis-a-vis their Indian employers (Noronha et al., 2018).

Onsite client employees also resisted documentation and standardisation of their knowledge as it rendered them substitutable and weakened their professional position (Blomqvist et al., 2015). They obstructed the knowledge transfer process, verbalised resistance toward the temporary deskilling during the documentation phase, showed irritation with having to

repeat the process while training offshore employees and being unwilling to understand Indian colleagues (Blomqvist et al., 2015). Further, onsite client employees demanded that they be shown economic benefits accruing from offshoring managements and the denying of this only strengthened the resolve to reinforce resistance (Blomqvist et al., 2015).

Similarly, in call centres back in India, notwithstanding their ambivalence to the oppressive work environment (D'Cruz and Noronha, 2015), participants described a range of breathers, releases, outlets and pauses as manifestations of disorganised coaction and collegial coping (quasi)supervision, subsuming several variants that some of them and/or their colleagues occasionally resorted to (D'Cruz and Noronha, 2013c). Participants underscored that these activities and behaviours provided them with means of gaining some respite from and power over their stringent work context and did not symbolise any anti-work or anti-employer sentiment. Specifically, breathers, releases, outlets and pauses not only provided agents with some slack time but also allowed them to maintain their performance records. In other words, agents engage in these activities despite their sense of professionalism, while also knowing that if their employers discovered their behaviour, they would face punishment up to the level of dismissal. (Noronha and D'Cruz, 2013c). While undoubtedly indicative of unauthorised and oppositional resistance (Ashforth and Mael, 1998), these behaviours stand in contrast to traditional and conventional forms of resistance such as protests and mass movements that are formal, active, organised, overt, targeted, sustained, collective and intentionally disruptive working class revolutions (Ashforth and Mael, 1998; Prasad and Prasad, 1998).

The maximum employees did was to form an exclusive e-group through which they maintained contact with each other and shared their concerns. The e-group and group meetings helped them to collectively redress their problems. Through these means, they were able to articulate and solve issues relating to connectivity, holiday compensation, projections and attendance and other inequities (Noronha and D'Cruz, 2008).

## Conclusion

With the emergence of global production networks (GPNs), it is argued that developing countries can now industrialise by inserting themselves into these chains rather than by building their own value chains from scratch (Gereffi, 2014). Accordingly, many emerging economies have shifted their development strategies from simple export-oriented industrialisation to aiming to gain access to higher-value activities in global value chains (Gereffi et al., 2001). With regard to the IT/ITES industry, globalisation and the rapid improvements in communications technologies, the decoupling of hardware from software opened a window of opportunity for countries rich in human capital (Arora et al., 2001b; See Noronha and D'Cruz, 2016c for details) such as India to become involved in the IT value chain. Towards this end, the Indian state created the enabling conditions for Indian IT firms to engage with global markets particularly by enhancing the quality of human resources, and providing tax holidays and infrastructure facilities. Further, the state has increasingly withdrawn from the regulation of the sector. The dialogue between government and IT/ITES firms aims at allowing the sector to function with minimal red-tape and maximum labour flexibility as various state governments have granted labour legislation exemptions to the IT/ITES sector. Thus, the IT/ITES industry has shaped local institutions through its ability to lobby and influence national and state governments (Robinson & Rainbird, 2013). Nonetheless, employees across the IT/ITES industry have benefited in terms of higher salaries, better working conditions and mobility in terms of status in society. At the same time, issues related to job security, social protection, working hours and work–life balance show shortcomings. Moreover, given that the work outsourced to India is at the lower end of the value chain, a highly educated workforce has been relegated to mundane and dead-end jobs in terms of employment. Thus, the gains from participation in the global economy do not seem to be effectively disseminated.

With regard to enabling rights, the fear of reprisals by employers has made joining trade unions ineffective in practice. Employers with their subtle and overt aversion to unions dissuade employees from joining unions. Added to this, the possibility of work being outsourced to other destinations discourages labour from pressing for even the most legitimate demands. Framework agreements relating to offshored work, commonly negotiated between unions and large corporations, have been non-starters in supplier countries. Thus, integration into the GPN may have resulted in product and process upgrading (Gereffi et al., 2005) but we have demonstrated how the essential nature of GPNs

divides workers along the IT value chain. Nonetheless, the formation of UNITES and FITE – though unsuccessful – are some developments that point to the available space for creative and collaborative confrontation in the industry. Even though they were 10 years apart, the two cases of union organising were confronted by similar issues of professional identity, individualism, transparency, political affiliations, internal democracy and gender neutrality. The challenge remains for unions to grasp the emerging opportunities and ally themselves with other civil society organisations to courageously and creatively confront the practices of the IT industry (Ferus-Comelo, 2008). In the meantime, individual workers must fend for themselves. Most workers in export-oriented industries in developing countries rarely engage in outright resistance strategies. Rather, they exercise their agency through their micro-level decision-making processes that focuses on how workers seek and terminate particular types of employment, make incremental improvements in their work lives, and are embedded in broader social and community relations (Carswell and De Neve, 2013; Lund-Thomsen, 2013; Noronha et al., 2018). This is true of both onsite and offshore employees, including client and supplier employees.

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