7 The World Office
Standards and Business Process Outsourcing in India

In Chapter 3, we saw how the offshoring of services has become a powerful and significant phenomenon in contemporary capitalism. The shift began in the 1980s with outsourcing contracts in data processing and call centres at the bottom of the value chain. Far more advanced sectors now include legal, fiscal, medical, architecture, consulting activities, and many sorts of business services enabled by information technology. In the same chapter our discussion of the drivers of service offshoring stressed the importance of looking beyond ICT, labour costs, and the mobility of service providers and consumers to take due account of language and cognitive skills, cultural understanding, and various kinds of geographical links likely to support the tradability of services. The scope of industries concerned goes beyond conventional views on barriers to the tradability of services focused on the specificity of distinct service industries and institutional environments shaped by government policies usually referred to as non-tariff measures. In contrast to restrictive hypotheses on the standardisation and internationalisation of services confined to distinct industries and their relations to national institutions, my analysis emphasises an *extensive hypothesis*: service standards can link national economies to the global marketplace by responding to quality and security uncertainties that can accommodate opposing political economy objectives and power configurations. It is from this perspective that the present book analyses service standards as a form of transnational hybrid authority whose scope extends from physical measures to societal values, blurs the distinction between private and public actors, and reinforces the deterritorialisation of regulatory practices in contemporary capitalism.

In contrast to prior chapters on (re)insurance, in this chapter, we focus on activities that match more closely the ideal type of a relational, non-material service, relying on high-intensity labour, some of which is oriented towards the end consumer – in short, services understood in conventional accounts as less likely to be standardised and internationalised. We examine more specifically the offshoring of business services.

While labour intensive, such activities are supported by a great deal of information and communication technologies; they are thus often called IT-enabled services (ITeS), or business process outsourcing (BPO) when the specifics of the tasks outsourced are seen as particularly important. More than any other country, India epitomises the extent to which the expansion of such segments of the tertiary sector is likely to follow the rise of the global knowledge-based economy. Despite the rise of alternative locations in the Philippines, Eastern and Southern Africa, the Maghreb, Latin America, and Eastern Europe, despite the 'death of outsourcing' announced by the giant consulting firm KPMG to which we referred at the beginning of Chapter 3, India remains the world's leading outsourcing location. Throughout the post-2008 global economic crisis, India not only continued its double-digit growth of the industry; it even increased its market share in the global sourcing industry. According to the National Association of Software and Services Companies (Nasscom), the voice of the IT service industry, India accounted for 55 per cent of the global outsourcing market in 2017 compared with 52 per cent in 2012 and 51 per cent in 2009 (Nasscom, 2012, 2018). In a keynote address at an India–China business forum in 2015, the Indian Prime Minister, Narendra Modi, did not hesitate to use a cliché to compare the two giant emerging economies: 'You are the "factory of the world"; whereas, we are the "Back office of the world". You give thrust on production of hardware, while India focuses on software and services.'[1]

Being identified as the back-office of the world indisputably endorses India's achievement over the last two decades; however, it also recalls the undemanding and repetitive tasks performed by low-skilled and cheap labour in call and customer centres – the archetype of jobs in an industry described by its critics as electronic sweatshops (Garson, 1988), panopticons of the workplace (Fernie and Metcalf, 1998), or assembly lines in the head (Taylor and Bain, 1999). Considering the range of services performed in India, PM Modi's cliché might thus look surprisingly self-defeating. For almost two decades, parts of the industry have moved away from basic back-office tasks such as outbound calls for marketing anything and everything from insurance to dodgy pills, inbound calls dispatched to remote customer centres, data processing, and software coding. These days, many companies operating in India can rightly claim to be part of a fully-fledged office of the world, not just undervalued peons. Young Indian PhDs prepare patent profiles for new drugs

[1] 'Read full text: Keynote address by PM at India-China business forum', *The Times of India*, 16 May 2015, online at: http://timesofindia.indiatimes.com/india/Read-full-text-Keynote-address-by-PM-at-India-China-business-forum/articleshow/47304933.cms.

developed by Indian, European, or American drug companies; other graduates develop complex financial products for major investment banks in London, New York, or Zurich; lawyers draft case briefs for giant law firms in the United Kingdom and elsewhere; actuaries develop models to assess risks in diverse insurance lines; engineers design key components of the next generation of aircraft and write software for their flight control.[2] Entrepreneurs have even rebranded the industry to move it away from what they see as an outmoded name, outsourcing. In 2012, Nasscom began a systematic rebranding strategy by referring to the industry as business process management (BPM) to emphasise the transformation experienced since its inception in the early 1990s; by doing increasingly complex work, performed in India or elsewhere nearer the clients by foreign affiliates of Indian companies, seeing itself more as a partner to its clients than a mere subcontractor, the industry should thus be better identified as 'a full-service value provider rather than an industry that plays only in the lower-end of the services spectrum … [and] give India a seat on the high table'.[3]

In this chapter, I build on the wide range of activities provided by the Indian office of the world to revise the conventional account that intangible and relational services are harder to internationalise and standardise than so-called industrialised services. The Indian office of the world, whether a disguised electronic sweatshop or an intrinsic partner of its customers, must codify the disaggregation of service production and delivery into discrete processes likely to be assessed against distinct quality performance and security guarantees. A wide range of activities and institutions have shaped the development of the Indian service industry, including a comprehensive use of standards. In examining the ambiguous transnational hybrid authority exerted by such standards, I focus on the three analytical dimensions used earlier in this book. The first is the extent to which such standards are set by actors able to bridge the public and private spheres; the second considers that even highly technical and managerial concerns cannot ignore social and cultural values; finally, the third looks at how standards require recognition from both transnational market forces and the territorial state.

I begin with some background on how India became the world's office. In contrast to conventional views confined to a state/market divide, I highlight that the development of IT services and business process outsourcing in India and their current and future challenges involve a

[2] Those examples are adapted from Sharma (2015: 185).
[3] Nasscom, 'From BPO to BPM', online at: www.nasscom.in/overview-9, accessed 12 July 2016.

complex relationship between global structural change induced by technological innovation and market constraints, foreign affiliates of multinational corporations, state policies, and local contexts. The chapter continues with an analysis of the rise and range of international standards and certified management tools used in business process outsourcing in India. Finally, the particular role of Nasscom, the voice of the Indian IT service industry, is considered in some detail, from the time when service offshoring began scaling up to more recent initiatives that attempt to transform India into an innovative standard maker. While conclusions that arise from evidence provided in the chapter can only be sketched out, the important point remains the ambiguous authority of service standards in India, where the institutional nature and political economy content of standards do not count for much, as long as they help to provide 'whatever the client asks for'.

India and the Not-So-Flat World of Services

In his best-selling account of the new 'flat world' of twenty-first-century globalisation, Thomas Friedman gives the Indian service industry a prime role, which resembles that of a dream business story,

> And so with Y2K [2000] bearing down on us, America and India started dating, and that relationship became a huge flattener, because it demonstrated to so many different businesses that the combination of the PC, the Internet, and fibre-optic cable had created the possibility of a whole new form of collaboration and horizontal value creation: outsourcing. Any service, call center, business support operation, or knowledge work that could be digitized could be sourced globally to the cheapest, smartest, most efficient provider (Friedman, 2006: 131–132).

This exciting view also introduced to the whole world – or at least to those millions of readers of the New York Times columnist – the daring part allegedly played in the story by Nandan Nilekani, the founder of Infosys Technologies, 'one of the jewels of the Indian information technology world', whose global conferencing centre in Bangalore is described as 'ground zero of the Indian outsourcing industry' (Friedman, 2006: 5,6).

Studies portraying the success story of the Indian service industry and its prominence in the global market for outsourced services have proliferated over the last two decades. What makes India's position among large emerging powers so distinct, in particular as compared to China's strategy based on mass manufacturing, continues to be widely debated. Beyond the entrepreneurial skills of the handful of captains of Indian industry popularised by best-selling books on management, most

analyses remain stuck in a narrow-minded state/market divide. Liberals take the dramatic shift that came with the liberalisation policies adopted in the early 1990s as a turning point – with some discussion on the respective weight of internal or external pressures (Heeks, 1996; Nayyar, 2012: 48ff). Some studies take the opposite view and focus on the role of the developmental state in technological innovation for late industrialised economies, in which India's success story in services echoes its well-crafted policies to build industrial capabilities in the pharmaceutical and health industries (Saraswati, 2008; Sarma and Krishna, 2010).

In contrast to both those narratives, the account provided in this book shows that the development of IT services and business process outsourcing in India build upon a more complex relationship between global structural change, foreign-affiliates of multinational corporations, state policies, and local context. In a much-quoted article, Dossani and Kenny set out to explain the dynamics of offshoring 'from the perspective of the firm, the industry, and the recipient country' (Dossani and Kenney, 2007: 773). However, even in that perspective the authors stress that the developments that made Indian service offshoring feasible depended not only on multinational firms and some early Indian entrant firms but also on a wider span of market institutions: 'The growth in offshoring is intimately linked to the prior development of India's software sector and an enabling regulatory and other institutional environment' (Dossani and Kenney, 2007: 773). More explicitly, Parthasarathy (2013b: 383) emphasises 'the need for a nuanced, evolutionary understanding of offshoring'. In this perspective, the State is important, but not any state can effectively play a development role (Evans, 1995; Parthasarathy, 2004). As Srinivas highlights in her analysis of technological advances and market regulation in health industries in India and other emerging economies, the time has come to give up frontal oppositions between states and markets: 'Markets are contingent constructions of specific moments in technological advances, not least because change occurs in particular places, not in the abstraction of nations'; from that standpoint, the 'fundamental challenges for nation-states are to wed technological advance to local institutional context, as well as international standardization pressures' (Srinivas, 2012: 226). Based on such an evolutionary understanding, it is important to emphasise the processual, sequential, and overlapping dimensions of the wide range of institutions that have shaped the development of the Indian service industry and their comprehensive use of standards. After a first overview of the history of the Indian service industry, we will focus more specifically on the significance of technical standards among those different institutions either reinforcing or overcoming path-dependent advances of the industry.

How It All Began

As with many technological innovations, the early history of Indian IT services is closely linked to military technology and defence spending. The Indian nuclear and space research establishment began to invest in IT capabilities in the wake of independence in the 1950s. It depended on affiliates of multinational corporations (MNCs) to have access to hardware bundled with software. While most of the work was done within MNC affiliates, a few defence contracts started to outsource some software development to local firms – a move made possible by a very high standard of secondary and higher education in cities like Bangalore and Mumbai, where much of the civil service and defence industry was located after independence. As an OECD study on the growth of the Indian software industry points out, 'one of the biggest contributions that the public sector research establishment made to the Indian software industry was to provide a nucleus of highly skilled engineers and scientists' (OECD, 2000: 133). In 1971 the importance of this nexus between MNCs, state procurement policies, and a local legacy prompted the Indian government to establish the Department of Electronics in order to provide a stronger and more coordinated impetus to the industry. The so-called Software Export Scheme was adopted the following year to extend access to the required hardware. In due time, developments of the industry owed much to the particular role played by one multinational firm: International Business Machines Corporation, a.k.a. IBM.

IBM began operations in India as early as 1951, and the firm rapidly secured a quasi-monopoly in data processing machines and services. The originality of IBM's operations in India is that most of its revenues came from importing discarded machines from the American and European market, refurbishing them locally, and leasing them out to Indian users at very high rental prices. For instance, in 1975, computers used for those services cost around $1,200, while IBM in India charged $20,000 or more as annual rental for similar machines, with prices quoted in dollars for products and services manufactured in India – a covert practice in breach of Indian law (Sharma, 2015: 61). Concerned by such abusive practices and adamant that foreign direct investment should fall in line with developmental priorities, the Government of India and parliamentary committees paid particular attention to IBM's operations concerning balance of payment, domestic competition, labour markets, and technological innovation. After several failed attempts, the adoption of the Foreign Exchange Regulation Act in 1973 provided a legal mechanism to curtail the firm's abuses. By requiring foreign companies working in India with more than 40 per cent foreign equity to obtain fresh

approval from the Reserve Bank of India to continue their operations, this legislation prompted an intense power struggle between the Government of India and IBM, which opposed minority Indian shareholding in its manufacturing, sales, maintenance, and other service operations. After much wrangling, IBM was asked to withdraw from India due to its unwillingness to comply with the rules on foreign exchange. In May 1978, it did so and ceased all operations until its re-entry in the mid-1980s, first in joint ventures with the Tata group, and later as a fully owned IBM affiliate since the late 1990s. In 2014, IBM India was active in every segment of the Indian IT market – hardware, software, research, business process outsourcing (BPO), and consulting. With some hundred thousand employees in the country, it portrayed itself as the largest foreign employer in India (Negandhi and Palia, 1988; Athreye, 2005; Sharma, 2015: 55–75).

The IBM story is important in the sense that it points up already existing capabilities in the Indian IT landscape. With policy explicitly designed by the Government of India to support the industry and a relatively abundant pool of skilled labour available, the emergence of local companies began in the late 1960s. Tata Consultancy Services (TCS) was established in 1968 as a division of Tata Sons, the largest Indian group active in wide-ranging activities in engineering, chemicals, consumer goods, and services (Ramadorai, 2011). Usually considered India's first software services company, TCS was also the first firm to export software in return for access to imported hardware in 1974 (Heeks, 1996: 69). With a view to further develop its software services, it is probably no coincidence that TCS created a joint venture with the American service firm Burroughs the same year as IBM left India. Tata Burroughs Ltd (TBL), as it was known at the time, started to export software services in 1978 and many other firms soon followed suit. Many firms that began with other operations moved to software services as their core business, developing customised software both on and off site (OECD, 2000: 134). Today, TCS remains the largest Indian IT service firm. Although a company was specifically created for maintaining computer systems after IBM's departure, in 1978, more than 1,000 programmers found themselves on the job market. Their best option was either a visa clearance to find a job in the United States or to create (or join) a small or medium enterprise in India. While the latter is typically praised by studies emphasising Indian entrepreneurship taking advantage of new market opportunities, the former fuelled the trend of 'body-shopping': service offshoring resting on genuine delocalisation of bodies, farming out Indian software professionals to the clients' sites to execute short-term projects. As shown in much detail in a study on how the American

IT industry invented this highly innovative global labour market management system, India thus became 'not only a source country of flexibilized IT labor, but also a coordinating center for global labor mobility' (Xiang, 2007: 10). At the turn of the millennium, probably more than one thousand agents were supplying as many as 20,000 temporary Indian IT workers across the United States (Xiang, 2007: 4).

Where Standards Come In

Standards played a less known, but significant, role in the unexpected consequences of the dramatic exit of IBM for the place of India in the world of services. Initially, the objective of the Government of India was to support the endogenous development of an IT hardware industry. However, faced with an extremely low rate of computerisation and a highly fragmented market, the standardisation of the hardware sold on the domestic market remained weak. This in turn discouraged firms from selling all-included packages of software bundled with their hardware, as, for instance, was the practice in Taiwan and Japan. Instead, they provided separate software services or none at all; this move prompted the emergence of small and independent local firms specialising in the development of ad-hoc software and in-house developments in larger companies. Thus, while the initial objective of the Government of India was to support the manufacturing of an indigenous hardware industry in order to increase access to computers, the lack of standards in that segment of the industry resulted in the unexpected emergence of IT services that would soon be ready for a huge surge in export markets (Saraswati, 2008: 1147; Niang, 2013: 240). Basically, the winding-up of IBM operations made room for the flurry of local software service companies created as a substitute for the lack of standards in the burgeoning Indian IT hardware industry.

It is against this backdrop that changes to the underlying interests in IT policy formation occurred years ahead of the conversion of the Indian economy via liberalisation reforms in the early 1990s. India's emergence as the prime low-cost destination for IT services offshoring began in the 1980s. While the initial industrial policy was driven by hardware protectionist interests, the growing ability to capitalise on the software industry's export potential led the Department of Electronics to change course. The bulk of the credit for this transformation usually goes to the technophile politician Rajiv Gandhi, who succeeded his mother, Indira, after her assassination in 1984, although she had initiated the policy shift during her second term, which had begun in 1980. Despite the continuation of the strong link established by Nehru between the

Indian state and prominent scientists, there was a shift away from a main focus on basic science to supporting state-led import substitution infrastructure. The new alliance was between technophile bureaucrats and private sector avant-garde technologists (Sharma, 2015: 99–103). The first major policy change was the Computer Software Export, Software Development and Training Policy of 1986, explicitly aimed at increasing India's share of world software production and gaining access to global technologies. In the words of N. Seshagiri, who took over as director of the Computer section in the Department of Electronics in January 1982, the basic means to achieve this was the 'flood in, flood out' method, i.e. allowing an initial flood in of imports to achieve a greater flood out of exports.[4] Overall, the significance of this policy rests on much easier access to imported software packages and many measures supporting the export of software services (Saraswati, 2008: 1148). The next measure that put the industry on a launching pad was the gradual development of several state-run Software Technology Parks (STPs) in the 1980s and the decision in 1991 to set up an umbrella body called Software Technology Parks of India (STPI) to run these parks as autonomous entities under the supervision of the Department of Electronics. STPI not only ensured forward-looking management of STPs, including guarantees regarding tax exemptions and financial incentives but also provided indispensable services, especially high-speed data links through satellite earth stations, to attract foreign multinational corporations and support burgeoning Indian firms; no less important were large exemptions granted for preferential access to land and for labour law holidays (Upadhya and Vasavi, 2008; Upadhya, 2009).

In 1991, the same year as the STPI was established and only days after the new Congress leader, Narasimha Rao, was sworn in as prime minister in the wake of the elections held after the assassination of Rajiv Gandhi, a balance of payment crisis forced the government to request financial assistance from the IMF. Together with the World Bank, a broad set of policy reforms was adopted with the aim of an immediate stabilisation programme and longer-term liberalisation by opening up the Indian economy to more competition both from within and abroad. Arguably, the abolition of the 'license-permit Raj' in July 1991 best epitomises the reform package that put an end to existing licenses for many business decisions, import and export practices that had existed since independence. The opening up of the economy undoubtedly had a major impact on the rise of Indian IT services on the global market. Yet,

[4] Dataquest, 'The New Software Policy: Dr. Seshagiri Clarifies', January 1987, pp. 82–95, quoted in: Parthasarathy (2013b: 385)

I have provided ample evidence of the importance of continuing state intervention in the transformation of the industry – a role that should be placed in a wider historical and institutional perspective, including the Indian education system fed by a dense network of Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs) dating back to the 1950s. While foreign companies built up technology transfers and capital contribution, they also had the advantage of highly skilled local staff. As recalled by Raman Roy, known as the father of the BPO industry in India, the bet was 'to bring the Indian perspective and be confident enough of the greater efficiency of the Indian workforce'.[5] In the opening of this chapter I also brought to mind the prime importance given by Thomas Friedman's *Flat World* to the so-called millennium bug in putting Indian IT services on the world's map. The story of how the Indian IT industry left its footprint across the globe has now been told again and again. Less known, however, is that it was not too long before standards once more played an important role.

We Provide Whatever the Client Asks For!

From 1991 onwards, the more liberal environment of important parts of the Indian economy triggered the entry of an increasing number of foreign firms in IT-enabled services. Pioneer experiences involved American companies such as American Express, General Electric (GE), and Texas Instruments in operating backroom functions, or airlines such as Swissair and British Airways in handling accounting operations. Those so-called captive units of multinational banks and airlines in the early 1990s rapidly matured into a multibillion-dollar industry. The entry of foreign firms helped local Indian software firms to acquire the required expertise to meet global standards in an ever-wider range of IT-enabled services. Moreover, as export zones dedicated to the software industry, STPs provided world-class communication facilities, massive tax incentives, privileged access to land, and labour law holidays for offshore services. Thus, instead of having programmers and other types of IT-related service providers scattered at client sites across the world, the tide of 'body-shopping' could be reversed, as services were now provided directly from India (Parthasarathy, 2013a: 387). However, this posed new challenges to an industry which soon realised that cost alone (i.e. exploitation of skilled, globally mobile, and cheap labour) could not do the job for long. Quality concerns needed to be addressed as well.

[5] Interview with the author, Gurgaon, India, 8 February 2008.

With body-shopping, quality chiefly depended on the programmers sent overseas and the reliability of the placement agents. With services offshored directly from India, the whole business process was involved in ensuring that orders would be delivered according to plan and in time. Gaining recognised conformity to existing international standards on quality management systems would quickly be seen as the only way forward.

Quality standards thus provided crucial tools without which the offshoring of service activities previously located in developed countries would, for the most part, have been unlikely. They contributed to overcoming the conventional resistance to relocation conveyed by the assumption that only basic, repetitive tasks could be outsourced to offshore locations. As Dossani and Kenney (2007: 775) remind us, foreign investors in service offshoring drew heavily on the 1990s managerial culture of reengineering by decomposing and standardising all sorts of business practices: being able to prove your conformity to standards recognised in the industry helped 'business decision makers [to] be persuaded that offshoring was an acceptable strategy or 'legitimate' … by proving that there were appropriate levels of security and sufficient assurances of business continuity. … The point was to create the perception that moving one's service operations to India was not 'unusual' or 'risky', but rather was part of a normal business model.' On the other hand, for the new Indian IT service firms, standards could be used as a response to reputation threats driven by their nouveau-riche destiny. As Rajesh Kalra, Chief Editor at the Times of India Group, points out, 'BPO remains a sector where it's easy to make quick money in setting up new businesses without too much regarding on quality and standards'.[6]

As the number of actors in the industry grew and became more heterogeneous, with their reputation increasingly at risk, the acquisition of quality certifications belonged to what the industry often refers to as a key 'differentiation strategy' (Banerjee and Duflo, 2000; Athreye, 2005: 408). For the person in charge of quality and process excellence in one of the major Indian BPO firm, standards build trust in this context: 'in our industry, the product *is* the transaction; when you do a call, that's a product for us; product quality is thus embedded in business operations with a team designing a framework for quality; this is how process standards became important.'[7] BPO pioneers of India as well as the younger generation of quality managers in charge of operations share

[6] Interview with the author, Noida (New Delhi), 19 January 2016.
[7] Rajesh Sehgal, Head of Quality and Process Excellence, Wipro, interview with the author, Sarita Vihar (Delhi), 22 January 2016.

this view: Raman Roy, one of India's BPO pioneers, was himself associated with the early development of a standard specifically dedicated to customer centres; Sudeep Banerjee, former President for Enterprise Solutions at Wipro, one of the Indian big three ITeS/BPO company, equates standards with calling cards: 'Wipro could claim being able to implement all sorts of quality standards at world level, even if those standards were not written by us.'[8] Likewise, the person in charge of internal audit and compliance in one of the Indian BPO firms with the fastest growth in recent years insists that standards were 'very important, because every time you go requiring new clients, the first thing the client want to see is whether you are an established player; it's a kind of credibility which, initially, was just to be in the game, but now it's BAU [business as usual] for us, ingrained in the normal processes of the company.'[9] It is not surprising, then, that at the height of the rush for certification with worldwide recognition, the Indian IT and BPO industry was notoriously known for exhibiting the largest number of quality certifications achieved by any single country, with more than 50 per cent of all certificates in the most significant segments of the industry and more than a third of worldwide entities registered with what was seen as the industry's gold standard – CMMI level 5 (Nasscom, 2010: 185–186). With such a massive use of certified standards, the outsourcing of business services in India achieved within roughly a decade what a World Bank study already suggested in 1994 as a vital transition from the 'low cost, low quality' to the 'low cost, high quality' quadrant of the global market (Hanna, 1994: 246).

After having weathered the global financial crisis relatively unscathed, the service offshoring industry has positioned itself as beyond the labour arbitrage and differentiation strategy that marked the emergence of the Indian office of the world. The new concepts à la mode are 'verticals' and 'digital' (Nasscom, 2018). Verticals stand for an organisation strategy aimed at delivering end-to-end highly customised services within a wide range of sectors as a form of advisory partnership. In the words of mid-level management officials in one of the leading BPO Indian firm, 'vertical brings the depth to content, with skilled people on the domain concerned … it's a process excellence, in which we pretty much service the entire value chain of services provided'.[10] For its part, digital denotes

[8] Interview with the author, Bangalore, 12 February, 2008.
[9] Amit Sharma, VP internal audit & compliance, EXL services, interview with the author, Noida (New Delhi), 20 January 2016.
[10] Vineet Malhotry, Sr Director for marketing, Cognizant, Interview with the author, Gurgaon (New Delhi), 19 January 2016.

a quality and security of the service provided built upon platforms directly enabled by the automated and robotised service delivery systems. The industry began with some hidden programmers and cheap labour working thousands of miles away, and moved on to B2B and B2C contact centres with increasingly specialised and complex tasks. It now spreads across the new world of big data and robotics: loan application procedures, insurance claims documentation, health service book accounting, or service desk calls answering; these are just a few examples of the tasks that can be carried out by what is increasingly known as robotic process automation.[11] According to NASSCOM, India is now the 'hotbed for digital innovation with a rich eco-system of start-ups, tech providers and service providers engaging in global delivery' (Nasscom, 2018: 213). This could suggest that process standards could lose their importance altogether as they would be replaced by algorithms engineering fully digitalised platforms. Yet, when asked about this, mid-level management in charge of quality and security certifications unanimously give a negative answer. They assume that even at a later stage, when service organisations could have fully integrated robotics with artificial intelligence, it would only require inventing really different types of standards. As it is unlikely that the whole process of an outsourced business will be automated, there will always be a part that has to be managed and intermediated and therefore in need of a standard against which assessing quality expectations.

It is one thing to remember that quality standards have been instrumental in the ability of the BPO industry in India to claim that it can provide whatever the client asks for. It is quite another to explain what is standardised by whom and where. In order to do that, we must go beyond the assumption that standards matter. By turning our attention to the three what, who, and where questions guiding the enquiry of this book, my investigation aims to uncover the ambiguous juxtaposition of power instances supporting the transnational hybrid authority of standards.

What is Standardised?

What exactly are the standards used across the Indian service offshoring industry to disaggregate repeatable and measurable tasks on a reliable basis at the global level? Does their scope support my extensive hypothesis on their role in the globalisation of services beyond the comfort zone

[11] Andrew Burgess, 'How robotics is changing the face of Business Process Outsourcing', *Robohub News*, 7 January 2015, accessed online on 15 June 2016: http://robohub.org/how-robotics-is-changing-the-face-of-business-process-outsourcing.

of industries identified as the most easily tradable and least dependent of the national territorial framework within which service relations are institutionalised? In other words, examining in detail the types of standards most commonly used by the business services outsourcing industry in India allows us to consider to what extent they reflect an ambiguous juxtaposition of technical specifications with societal values, opposing political economy objectives, and power configurations.

Offshoring of services in India unquestionably rests on many narrow technical specifications related to IT and other aspects of the infrastructure used for that purpose. The question here is rather about the quality assured by the *processes* performed by the service providers in charge of the outsourced tasks. It is for that reason that standards in management systems and business processes have become integral components of service offshoring with a whole range of dedicated quality and security standards. ISO 9000 series are by far the best-known and most widely used in India.

Quality management standards were first developed in defence contracting in the United States and the United Kingdom during World War II and were later expanded by the British Standards Institution in order to address the growing internationalisation of production networks. The first ISO version was published in 1987, with successive revisions; the latest was adopted in 2015. More than a million certificates were issued worldwide in 2014, and India was the fifth country among them after China, Italy, Germany, and Japan; it remains the most popular quality management standard in the world.[12] As we will see, many other management systems and process standards are used in India. For the time being, let us bear in mind that such standards help to legitimise the transnational hybrid authority of non-conventional forms of market creation and regulation discussed in this book. As Tamm Hallström and other scholars have shown (Tamm Hallström, 2004; Higgins and Tamm Hallström, 2007; Gibbon and Henriksen, 2011), management systems standards do more than establish technical specifications designed to ensure quality. By objectifying, codifying, and reengineering management processes along a so-called Plan-Do-Check-Act cycle at all levels in the organisation, they convey a particular form of power that allows for an ambiguous mix of what can be standardised along the two poles of the physical and societal worlds. Indeed, in spite of not targeting the size of bolts and nuts, system management and process standards nevertheless span the material continuum of standardisation. Conformity assessment

[12] The ISO Survey of Management System Standard Certifications – 2014, online: www.iso.org/iso/home/standards/certification/iso-survey, accessed 28 June 2016.

and certification procedures would be inconceivable without the comprehensive number crunching that inserts the expert knowledge and private power of management consultants deep into the social fabric. Hence, when the head of an ICT and offshoring industry association claims 'Quality is THE vocation of standards',[13] far-reaching power issues are indeed involved.

Table 7.1 presents the range and core attributes of standards most widely used in the heyday of certification for business processes in Indian customer centres and ITeS-BPO companies. A striking feature is the width of this scope: they not only address quality of management systems and a multitude of tasks performed but also issues related to IT security management and performance targets regarding content. Moreover, it is worth noting that while some of them originate from official standardisation bodies such as the ISO and its alter ego the International Electrotechnical Commission (IEC), many others come from different standardisation bodies and umbrella organisations – something I will discuss at greater length when I examine *who* sets such standards. A major case in point are the tools developed by the Software Engineering Institute (SEI), a research and development centre sponsored by the US Department of Defence and operated by Carnegie Mellon University – now transferred to the CMMI Institute, a technology commercialisation enterprise working as a subsidiary of that private American university. Instead of disciplining management systems, the tools, described as capability maturity models, target the content of business processes in order to assess the ability of an organisation to perform the expected tasks. The fundamental mission of such standards is to provide a tool needed to let service providers and their clients conduct full-scale assessment of the problems likely to occur in all the tasks involved when a business process is performed. This means breaking large and complex business processes into tiny component modules in order to specialise activities. Basically, this implies a description and codification of tasks in their totality, before assessing the extent to which they can be executed using a set of consistent and repeatable steps, i.e. be fully standardised (Paulk, 2001; McIvor, 2010). In practice, this requires detailed documentation of hundreds of pages with countless quantified targets for different issue areas. Developed initially to focus on the managerial dimension of problems encountered by software developments in

[13] Mohammed Lakhfili, Head of Logica North Africa and President of APEBI (Moroccan Federation of Technologies of Information, Telecommunications and Offshoring), interview with the author, Casablanca, 21 October 2009.

Table 7.1 *Quality and security standards most widely used in Indian ITeS-BPO companies*

	ISO 9000 series	ISO/IEC 20000	ISO/IEC 27000 series	CMMI-SVC	PCMM	eSCM-SP	COPC-CSP COPC-CX	Six Sigma	COBIT
Scope	Quality management system	IT-enabled service quality management system	Information security management system	Capability Maturity Model Integration. Service quality management system. Replaces software capability models (SW-CMM)	People Capability Maturity Model. HR quality management system	eSourcing Capability Model for Service Providers	Performance management framework for customer relations services	Quality management system based on defect statistics in IT manufacturing	Control objectives for information and related technology (IT-enabled service quality management system)
Funding	Public + Private	Public + Private	Public + Private	Private + Public	Private + Public	Private	Private	Private	Private
Standardisation body	BSI –> ISO	BSI –> ISO	BSI –> ISO	Software Engineering Institute –> CMMI Institute	Software Engineering Institute –> CMMI Institute	IT Services Qualification Center	COPC Inc. (previously 'Customer Operation Performance Center')	Motorola corporate university	IT governance Institute (ITGI)
Umbrella organisation or company	ISO	ISO/IEC	ISO/IEC	Carnegie Mellon University and US Department of Defense –> ISACA	Carnegie Mellon University and US Department of Defense –> ISACA	Carnegie Mellon University	Private company	Motorola	Information Systems Audit and Control Association (ISACA)

Release date	1994: ISO 9000 2015: ISO 9001:2015	2005: version 1 2011: version 2 2016: under revision	2000: ISO 17799 (replaced in 2007 by ISO 27002) 2005: ISO/IEC 27001:2005 2013: ISO/IEC 27001: 2013	1991: CMM v1.0 (precursor) 2000: v1.0 CMMi 2010: v1.3 for services (CMMI-SVC)	1995: Version 1 2001: Version 2	2001	1996: version 1 2016: version 6 (renamed COPC-CX)	Started in mid-1980s	1996: COBIT 1 2012: C OBIT 5
Geographic Origin	UK –> Global	UK –> Global	UK –> Global	USA	USA	USA	USA	USA	USA

(*Source*: Nasscom Strategic Review 2007, 2010, 2012; interviews and compilation by the author)

defence contracts in the United States, capability maturity models now come in several configurations.

For instance, the latest version of the guidelines for a so-called Capability Maturity Model Integration in the field of services (CMMI for Services) outlines dozens of distinct processes, such as 'Capacity and Availability Management', 'Causal Analysis and Resolution', 'Decision Analysis and Resolution', 'Measurement and Analysis', 'Service System Development', or 'Work Monitoring and Control'. Companies are expected to define relationships between them and find ways to integrate specific practices involved in all those process areas. The ultimate power of the standard is thought to result from the ability of firms to evolve and compete in an ever-changing market thanks to a reflexive behaviour labelled 'continuous and staged representation' (a staged representation is, according to the reference document, concerned with the model as a whole, whereas continuous representation deals with individual processes). In order to measure improvements in processes and allow for competing benchmarking between firms, the model uses so-called capability levels regarding distinct tasks (incomplete; performed; managed; defined) and 'maturity levels' (initial; managed; defined; quantitatively managed; optimising), each of them defined as an 'evolutionary plateau for organizational process improvement' that eventually would characterise the overall performance of the firm (Software Engineering Institute, 2010: 26). Unsurprisingly, with such methodology, the latest version of the guidelines *CMMI for Services* published in 2010 uses more than 500 pages of detailed description.

Besides ISO/IEC standards and capability maturity models for fairly complex business process outsourcing, Table 7.1 shows that service offshoring in India also relies on tools specifically dedicated to more basic call centres and customer relation services, as well as on a flurry of management methodologies and performance tools fiercely competing for the lucrative market of business processes certification. Suffice it here to sketch out the most widely used among them. COPC Inc. (formerly known as Customer Operation Performance Center) sets performance-driven standards specifically devised for customer contact centres. Created in 1996, the first version of its Customer Service Provider (CSP) standard was based on the Malcolm Baldrige National Quality Award criteria and framework; its sixth version was renamed the Customer Experience (CX) standard in 2016, with the intention of giving more emphasis to the idea of a shared partnership – the new buzzword for defining the relationship between service providers and their clients in a supposedly truly co-defined and arguably co-produced service. For its part, COBIT (Control objectives for information and related technology)

is a management framework designed by the IT governance Institute, an American non-profit corporation established by a parent professional organisation with a worldwide presence in auditing controls for computer systems. Initially, the tool was principally used by IT auditors, but it has now expanded to include all sorts of metrics related to information security, risk management, and regulatory and compliance issues, such as those required by the Sarbanes-Oxley Act of 2002 that set new and expanded requirements for IT controls and reporting processes. Finally, Six Sigma is a management technique that has been extensively exploited across a wide range of industries. Originally developed by Motorola in the mid-1980s, it is based on defect statistics in IT manufacturing, with the aim of minimising the variability in business processes. To this end, it outlines key performance indicators which, once broken down, can quantify thousands of business processes and reach targets such as reduced costs and/or time, improved customer satisfaction, and, ultimately, increased profit.

Such cases of standards qualifying management systems and the content of business processes indicate how far the material continuum of standardisation brings together the two poles of the physical and societal world in supporting the offshoring of all sorts of IT-enabled services and business process outsourcing. It is true that most of the tools devised for such purpose could be considered to be close to the physical end of the continuum. Indeed, the work processes involved in the definition of the service provision become a simple technical challenge to be solved in such a way as to define segmented tasks on the basis of their lowest common denominator. However, this does not mean that there is no societal dimension involved and no debate concerning their political economy content. First of all, standards do not float in thin air; they are socially embedded and, therefore, when firms adopt them, more often than not they must struggle to get them truly implemented. To this end, mid-level management's challenge is the establishment of a reliable relationship with the workforce. As Arvind Kasi, vice-president for quality & compliance at 74/7 Customer, a customer relations firm, points out, 'the most important thing is that the practical implication of using standards is the need of documentation; standards do not make people straightjacketed and losing opportunities to act … it is not necessary to do all the paper work … and if documentation is a problem, then keep it aside and adopt best practices'.[14] Process standards such as those we have discussed in this section are even identified by some managers of

[14] Interview with the author, Bangalore, 28 January 2016.

the Indian BPO industry as freely available knowledge accumulated over years of innovation in management techniques. At least, this is what Rajesh Segal would have us believe when he considers the leadership taken by Indian companies in instigating a new ISO standard specifically focused on BPO as 'the biggest initiative we could be engaged in … we wanted to take this knowledge that we have created back to society or to the industry as such.' Moreover, as we will see, with the Indian initiative to launch a new ISO/IEC standard specifically dedicated to IT enabled services and business process outsourcing (ISO/IEC 30105), strong interests oppose two approaches to quality and security standards in the service sector: those in favour of assessing the content of business processes and those behind the certification machinery associated with the ever-growing families of management systems. Last but not least, such quality and security standards, like all standards, draw boundaries between those who conform and those who do not. As Parthasarathy and Srinivasan (2008: 280) remind us, 'since this clearly creates winners and losers, and there is no "best" means of drawing boundaries to benefit everyone equally, standards are socially contested'.

All this provides some evidence that process standards used in India to serve offices around the world extend along a material continuum that ambiguously includes physical and societal dimensions. Where does that leave our second analytical dimension focused on the actors in charge of setting standards?

Who Sets the Standards?

Who plays or claims to play a role as standard setter and thus gains power to define how companies and their employees are expected to conform? In other words, who exactly has the authority to set those standards? Much ambiguity remains regarding the wide range of actors and standardisation bodies which create the tools used to connect the Indian office to the rest of the world. In many respects, the ambiguity blurring the public and the private spheres of the institutional continuum of standardisation enables the authority of standard-setters who would otherwise have more difficulty ensuring wide recognition of the large range of instruments devised for the industry. In the same way as we just saw that standards are seen as a passport to provide 'whatever the client asks for', regardless of their political economy content, standards users in the Indian office of the world give little weight to the institutional nature of bodies in charge of setting standards. It comes as no surprise then that a fragmentation of standard-setters prevails and that the Indian service offshoring industry has for long been confined to the status of standard

taker, rather than standard maker. As we will see, the situation might change in the near future as a result of the Indian initiative to develop a new ISO/IEC standard specifically dedicated to IT-enabled services and business process outsourcing (ISO/IEC 30105).

In 2008, in the heyday of the quest of Indian firms for certification of management systems, business processes, and maturity models, mid-level management officials in charge of quality clearly saw no difference of status between ISO standards and management methodologies and performance tools devised by American firms, research centres, or their spin-off technology commercialisation enterprises, such as the CMMI Institute. Thus, Raman Roy, one of the pioneers of the BPO industry in India, could claim: 'Who sets the standards is not important. The most important is what the market needs and the responses given to it.'[15] Similarly, According to Punit Kumar, a general manager for corporate communication at Wipro, 'it may not be possible to have a universal standard in the ITeS industry, because we are all competing for ourselves. … The customer is the only sacro-saint. If the customer wants us to adopt a standard, we will.'[16] As the 2010s went on, many voices argued that the traditional role of certification to recognised standards may not be as much of a 'differentiator' as it was earlier. Unsurprisingly, the distinct institutional nature of organisations in charge of setting standards was not seen as so important either. In such settings, mid-level management could keep on shopping freely among standard-setters and make the following claim: 'We have all the minimum standards in place … we can thus provide whatever the client ask for to comply with.'[17] Similarly, when asked about the types of process standards used and their respective significance, in some cases interviewees first flagged ISO tools; in others, business processes and maturity models such as those devised in the United States by the CMMI Institute, COPC, or COBIT were the only ones worth an acknowledgement.

Be that as it may, those different strands of standard-setting bodies are not as opposed as conventional accounts would have it. As we saw in Chapter 4, the ISO and IEC standardisation system follows a model of national participation or delegation, with a national body holding the voting rights used in the technical committees at the international level. In contrast, standardisation in the United States follows a model of direct participation, where companies have direct access to standard-setting

[15] Interview with the author, Gurgaon, 8 February 2008.
[16] Interview with the author, Gurgaon, 8 February 2008.
[17] Manoj Brahmankar, VP for corporate business excellence, HGS (Hinduja Global Solutions), interview with the author, Bangalore, 29 January 2016.

activities fragmented between a number of sectorial organisations competing for market-driven recognition of the international reach of their standards. It is against this background that tools set by research centres and management consultancy firms such as the CMMI Institute can be recognised and valued as highly as standards of the ISO portfolio. Yet, my analysis emphasises that behind labels of 'national delegation' for ISO and 'direct participation' in the United States, actors setting standards are mostly the same; large firms dominate technical committees, with some minor involvement of government agencies and a quasi-total absence of not-for-profit associations from civil society. Standard-setters in the ITeS/BPO industry reflect the same picture.

Although privacy and disclosure rules get in the way of gathering full evidence of industry-level membership and participation, a first approximation of such transnational hybrid authority is the continuing importance of business processes and maturity models devised by US bodies. A striking feature of the CMMI Institute is how it resembles hybrid organisations as described by Koppel (2003).[18] While privately owned (initially by a private university, then its spin-off), it was created at government request to address the specific public policy concern of defects in IT defence contracts in the mid-1980s. It is under such circumstances that Carnegie Mellon University established the Software Engineering Institute in 1984 as a Federally Funded Research and Development Center. Initially, its funding source came mostly, perhaps uniquely, from public funding (the US Department of Defence). As a mix of private initiative and public resources, the entity later expanded by entering the larger market for management standards and business process capability and maturity models; this gave it the opportunity to lessen its dependence on revenues derived from government – a move apparently reinforced in 2016 by the acquisition of the CMMI Institute by ISACA, the professional association for IT governance, assurance, and cybersecurity that also offers COBIT, another widely used standard in the ITeS/BPO industry around the world.[19] Yet, as Koppell (2003: 8) and Weiss (2014: 154) remind us with regard to the difficult task of identifying those hybrid entities operating under some sort of government sponsorship, they essentially rely on the 'functional ambiguity' that allows them to cunningly combine the best worlds of both the private and

[18] Chapter 2.

[19] 'ISACA Acquires Global Capability Maturity Leader CMMI® Institute', ISACA Press Release, 3 March 2016, online: www.isaca.org/About-ISACA/Press-room/News-Releases/2016/Pages/ISACA-Acquires-Global-Capability-Maturity-Leader-CMMI-Institute.aspx, accessed on 28 June 2016.

public sectors. While clearly ambiguous as the public or private spectrum of the institutional continuum of standardisation is concerned, the CMMI Institute is less so, however, in terms of national representation. Although some Indian business pioneers have been associated with the work undertaken by SEI/CMMI, the bulk of the organisation revolves around the large service management firms that belong to the Carnegie Mellon University's network of partners based in the United States.

A second approximation of fragmentation of standard-setters under the ascendency of large American IT service management firms is provided by the lack of involvement of the Bureau of Indian Standards (BIS), the official national standardisation body close to the Indian government. Although claiming membership in hundreds of technical committees and subcommittees, actual participation has so far remained low. The weak involvement of BIS in international standardisation activities is shown by the small number of secretariats of technical committees or subcommittees for which it has responsibility and in which national standardisation bodies are known to have considerable leeway to build an understanding around their schemes. The number of secretariats at technical committee or subcommittee level for which a national standardisation body is given responsibility is often taken as the most appropriate proxy for their influence at ISO (Afnor, 2018). In 2018, BIS was in charge of only ten secretariats, which represents little more than 1 per cent of 800 or so secretariats at work at ISO.[20] In comparison, China, as another large emerging country, was not only involved in sixty secretariats (8 per cent), but took the lead on a number of initiatives directly related to services and management systems (Afnor, 2018). For instance, the China National Institute of Standardisation promoted the revision of the ISO/IEC Guide 76 that provides recommendation on consumer issues to be considered in developing standards for services; it also instigated the creation of a new working group on consumer issues in services (ISO/COPOLCO/WG 18), for which it serves as convener. In this regard, one can understand the aspiration of BIS Director General

[20] In 2018, BIS secretarial responsibilities were in the following ISO committees and subcommittees, some of which bear a striking legacy of the British Empire: ISO/TC34/SC7 – Spices, culinary herbs, and condiments; ISO/TC 113 – Hydrometry; ISO/TC 113/SC 1 – Velocity area methods; ISO/TC 113/SC 6 – Sediment transport ; ISO/TC 120 – Leather; ISO/TC 120/SC 1 – Raw hides and skins, including pickled pelts; ISO/TC 120/SC 2 – Tanned leather; ISO/TC 120/SC 3 – Leather products; ISO/TC 146/SC 1 – Stationary source emissions; ISO/IEC JTC 1/SC 7 – Software and systems engineering (see: https://www.iso.org/member/1794.html?view=participation&t=S, accessed on 9 August 2018).

Alka Panda 'to become more pro-active in ISO by participating to more TCs.[21] According to J. Roy Chowdhury, BIS Head of international relations and technical information services, the challenge that lies ahead for BIS is indeed clearly to 'play the role India is expected to play as a large emerging country but that it is not playing now'.[22]

In short, by examining who exactly has the authority to set standards most widely used in India to service the offices of the world, we see much ambiguity in the fragmentation of the bodies involved and actual actors drafting the specifications. While the industry hardly makes any distinction between ISO/IEC standards and the management tools and business process methodologies devised by American private or hybrid organisations, the prominence of large firms and consulting companies and the weak involvement of the Bureau of Indian Standards indisputably tilts the balance of the institutional continuum of standardisation towards the private sector.

Where is the Indian Office of the World Standardised From?

The third axis of our analytical framework is the spatial continuum where the jurisdictions that support the system of recognition of standards overlap. Earlier chapters have shown that, here too, standards are ambiguous: they rest on the dual nature of sovereignty – the principle of the territorial state on which lies the endogenous recognition of standards and the exogenous processes of the transnational guarantees given to the principle of contract inviolability in a world of globalised capitalism. We have just seen that attempts to homogenise management tools and business process capability and maturity models across sovereign spaces face a plurality of standards. The question I now address is how do the intertwined exogenous and endogenous poles of the spatial continuum of standardisation play out in the ability of the Indian ITeS/BPO industry to use and comply with standards.

A first point is worth mentioning: the fact that Indian ITeS/BPO industries are identified as standard takers, rather than standard makers undoubtedly encapsulates a spatial dimension. At the time when management systems and business process standards became all-powerful, several Indian business executives and standardisation officials were already concerned by the dominance of imported standards initially

[21] Alka Panda, BIS Director General, interview with the author, New Delhi, 21 January 2016.

[22] J. Roy Chowdhury, BIS Head of international relations and technical information services, interview with the author, New Delhi, 21 January 2016.

conceived for IT manufacturing and basic service outsourcing within the United States. The absence of industry-wide standards specifically dedicated to the ITeS/BPO sector was seen as a typical case in this regard. Whilst the situation obviously resulted from the American first-mover statute in outsourcing services, Indian entrepreneurs and officials were worried that it could generate difficulties for further consolidation of the sector in India. According to Rama Mohan, Head of Business Transformation Group at Infosys BPO, 'for the whole BPO industry … all standards adopted are global standards, with no Indian origins … there is a need for the Indian model to become a new global model, in which the Indian perspective could be brought.[23] High-ranking officials at the Bureau of Indian Standards clearly shared this view when they claimed to be 'bothered that standards are imposed [and suggested that] BPO industries in India should become standards makers and make the standards themselves instead of taking them'.[24]

Arguably, no tool other than the so-called eSCM standard provides evidence of such exposure to the exogenous logic of market recognition and dependency in Indian service offshoring. eSCM stands for eSourcing Capability Model. It is a framework developed in the United States by ITSqc – another spin-off from Carnegie Mellon University. Developed as a model specifically dedicated to IT-enabled services industries to improve their relationship with their clients, it was initially seen as a strategic tool for Indian firms that would help them to scale up the value chain and keep competing at a global level. As Manoj Brahmankar, Vice President for corporate business excellence at HGS (Hinduja Global Solutions), points out, 'we adopted eSCM … we found a lot of value in terms of practices across the life-cycle'.[25] Yet, the same informant somehow reluctantly later made us understand that, 'unfortunately, the standard is not being maintained anymore; any standard that is not maintained in the business environment does not stay relevant'. Clearly, this means that cost and energy spent in reengineering the organisation of the company so as to comply with the standard was basically undertaken in vain – a situation that many companies in India and elsewhere have experienced as the tool became obsolete. According to Rajesh Segal, Head of Quality and Process Excellence at Wipro, the reason why 'eSCM didn't take off that well [is that it was] too detailed

[23] Interview with the author, Bangalore, 11 February 2008.
[24] Rakesh Verma, additional Director General of the Bureau of Indian Standards, interview with the author, New Delhi, 6 February 2008.
[25] Interview with the author, Bangalore, 29 January 2016.

and heavy on practices'.[26] Similarly, the former Nasscom vice president for BPO describes eSCM as 'very bulky to implement; you would need an army of people to keep track of the data and information in order to get the certification'.[27] What was clearly a painful experience with wide consequences for any organisation having adopted eSCM also provides harsh evidence of how firms, as standards takers rather than standards makers, adopt and comply with standards set and maintained in organisations far abroad. As a result, they depend on exogenous developments and have no leverage whatsoever on their outcome.

Whilst the exogenous logic of transnational market recognition backed by the dominance of US-imported IT management and business process standards for the most part prevails, it is important to note the endogenous dimension upon which such developments relied at first. Building on the approach sought after by the aforementioned 1994 World Bank study calling for a transition towards the 'low cost, high quality' quadrant of the global market, the first wave of certification of the Indian industry targeted the newly established ISO 9000 total quality system management standard. And here it was the territorial state that was called in to support the required market recognition. The Government of India launched a programme of subsidies, with firms awarded ISO 9000 or equivalent certification made eligible for a grant from the state-owned Export-Import Bank, thanks to which they could claim up to 50 per cent of the costs of obtaining quality certification (Sharma, 2015: 176–177). Such a finely tuned policy supporting the early development of Indian and foreign affiliate ITeS/BPO firms shows that the shift towards liberalisation policies that took place after 1991, far from leading to a diminishing role of the state, rested on a number of targeted interventions among which certification subsidies, skill development, marketing assistance, and training were particularly instrumental for supporting the authority of standards.

From Standard Takers to Standard Makers: The Power of Nasscom

As stated earlier, Nasscom is the National Association of Software and Services Companies – the Indian industry body that has supported the Indian ITeS/BPO companies to compete on the global market and set

[26] Interview with the author, Sarita Vihar (Delhi), 22 January 2016.
[27] Raju Bhatnagar, Secretary General of the Bangalore Chamber of Industry and Commerce and former Nasscom vice president for BPO, interview with the author, Bangalore, 27 January 2016.

very high standards for themselves. In many respects, Nasscom alone epitomises the ambiguous power configuration supporting the recognition of standards. Established in the late 1980s by a small group of Indian entrepreneurs active in the United States as a way to overcome the mutual mistrust that prevailed between government and the IT and software industry in India, it became so successful that it soon substituted for government policies in many issues closely or loosely related to the industry. Basically, the government has given Nasscom a blank cheque to develop industrial policy at home and promote the industry abroad. While formally a private not-for-profit business association, it executes all sorts of policies that would otherwise be under the sole responsibility of the state. Nasscom reflects intrinsic ambiguity regarding its position in relation to the private and public spheres. Moreover, while the body was first instrumental in supporting narrowly defined system management standards, it has later widened its activities to broader societal issues, including security concerns and privacy protection. Finally, it demonstrates considerable ambiguity by mingling the spatial dimensions on which the recognition of standards rests. As we have just seen, as an Indian business association, it has a close relationship with the territorial state that reinforces the endogenous principle of standards recognition; at the same time, an essential part of its work is to support the exogenous practices through which US-imported IT management and business process standards used in India may gain transnational market recognition.

In the 1990s, besides lobbying the government for major reforms in legislation, it joined forces with the government's incentive programme to make compliance to quality standards a top priority. Throughout the 2000s and 2010s, it continued to play a major role in institutional reforms and standards promotion. For instance, discussing the major step characterised by the adoption of the IT Act in 2000 regarding the inclusion of new security guarantees, a high-ranking official who lived through the early history of Indian IT bluntly claims: 'basically, Nasscom drafted the Act'; and when the 2008 Data Security Act came as a new piece of legislation intended to fill the gaps left by the previous one, our informant stresses that 'here again Nasscom had a major drafting role'.[28] Just as Nasscom has been the main driving force behind the most important regulatory oversight initiatives of the industry, it also took operational responsibility in setting up and collecting data privacy and security standards. Of note in this regard is the creation in the second half

[28] Puneet Kumar, General Manager for corporate affairs, Wipro, interview with the author, Gurgaon, 8 February 2008.

of the 2000s of the National Skill Registry despite a number of heated discussions regarding implications for recognised standards of privacy protection. As service offshoring in India deals with sensitive data not only from client companies but also individuals, for instance with health-care records and tax forms, Nasscom collects all sorts of information, which allows employers to perform background checks on existing or prospective employees. At about the same time, it also set up the Data Security Council of India (DSCI), a self-regulatory agency to uphold data privacy and security standards.

Many accounts of the Indian outsourcing success story put Nasscom in the limelight. In the words of Kshetri and Dholatia (2009: 231), much of the credit for the remarkable progress in Indian offshoring firms' success should indeed go to non-state actors such as Nasscom, whose role is viewed as 'phenomenal … in monitoring the industry behavior and bringing significant institutional changes'. The standing of Nasscom as the successful voice of India in support of the ITeS/BPO industry remains, however, in debate. First of all, local interests are often put on the back burner. The ability of Nasscom to work closely with central government and provincial state officials has in numerous cases led to stiff opposition from important parts of the population that depend on the traditional economy and on access to land pre-empted by Software Technology Parks and other comparable developments. While the land issue is one of the major bones of contention, the rapid rise of such enclave economies within a predominately agricultural society with a long history of social justice movements and conflicts on caste identities has led to a number of wider dislocations, be it in Bangalore, seen as the Mecca of global service offshoring, or in many other locations elsewhere in India (Upadhya, 2009). Important, too, is the fact that trade unions are systematically excluded from industrial relations in service offshoring. The IT, software, and ITeS/BPO industry does not report under the Companies Act that frames the business environment in India, but under the Shop & Establishment Act, which provides large exemptions regarding industrial relations issues. In addition, in most states across India and for most of its existence, the industry enjoyed exemption from the labour law.[29]

Second, while conventional views claim that Nasscom played a crucial role in building the trustworthiness of Indian offshore services, critiques point out that the support given to quality standards and initiatives such

[29] Industrial Employment (Standing Orders) Act, 1946; see, for instance: 'Labour unions cry foul over exemption of IT from labour law in Karnataka', *The Economic Times*, 7 November 2013.

as the National Skill Registry epitomises the cartelisation of the industry, levelling the employment playing field and agreeing not to poach their respective workforce between themselves. Perhaps more importantly, it reflects its anti-union stand. From this point of view, the registry is rather a blacklist of employees whose potential implications with unions and industrial action are labelled as managerial risk. This is obviously the backdrop that leads Karthik Shekar, General Secretary of the National Confederation of Unites (NCU), to underscore that 'Nasscom's registry is used to create fear among workers, a psychosis among those who know that they are blacklisted as not a single company will accept their application whatever their skills are.'[30] This pioneer union activist in service offshoring in the Bangalore region shows great concern that despite complaints made up to the Prime Minister's office, no legal action can be taken, as cases are impossible to document in accordance with courts' requirements – a situation that helps Nasscom to continue claiming that such allegations are groundless. It is no wonder that the activist does not have a high opinion of quality standards either: 'managers bring in fancy jargon like CMMi and the like, the middle management, with western culture education, but deeply Indian, ends up totally confused. Call it pcmm-3, but it's just a matter of how people work and the reality on the ground is completely different.'[31]

A last point is the difficulty of distinguishing between the domestic and foreign interests represented in Nasscom. The body persistently defines itself as truly representative of the industry. A high-ranking official can thus proudly claim a membership of '97% of the IT industry … consisting of Indian companies but also foreign affiliates [standing united behind] a body defining and promoting self-regulation'.[32] Conventional analyses are keen on taking over this assumption. For instance, Kapur praises the role of Nasscom that, unlike other industry associations in India and many other developing countries, is neither distant from the state nor in continuous conflict with its members, thus 'giving the industry a unified voice [working] in tandem with the Indian state to jointly promote the sector's interests' (Kapur, 2002: 98). In contrast to this view of a body working hand-in-hand with domestic firms and affiliates of foreign companies to support the sector's interest, some contrasting voices assume that Nasscom is – or at least was at the beginning of its existence – rather a mole working in the interest of large American IT

[30] Interview with the author, Bangalore, 26 January 2016.
[31] Interview with the author, Bangalore, 13 February 2008.
[32] Ameet Nivsarkar, Nasscom Vice President and Head of Research, interview with the author, New Delhi, 7 February 2008.

and service firms. According to Rajesh Kalra, Chief Editor at the The Times of India Group, there are indeed many allegations about Nasscom: 'At the beginning, it was controlled by a few US companies who put a lot of money in it and Nasscom eventually helped them a lot … basically, it's a big boys' club of the rich and powerful … a lobby for foreign captive companies … Google, Microsoft and so on have strong leverage in India'.[33]

After all, whatever the endogenous or exogenous dimension, the technical or societal nature, and the private or public purpose of the interests pursued by Nasscom, the umbrella association clearly understands the importance of standards for the ITeS/BPO industry in India and the risks associated with a fragmentation of instruments with more or less overlapping, duplication, and dependency. As of 2007, a group of far-sighted Indian entrepreneurs perceived the need for a standard that would be specifically dedicated to the BPO industry and was likely to be adopted independently of decisions taken thousands of miles away in any subsidiary or spin-off of a private American university. As the respected pioneer of the industry Raman Roy pointed out when I met him in early 2008, India must 'take the lead; Carnegie Mellon University set business processes standards for IT, Nasscom should do the same for BPO, with, for instance, Nasscom standards level xyz. That kind of standardisation is now critical for our growth rate targets.'[34] Nasscom indeed took over the initiative to put India in the driving seat and transform the industry into a standard maker rather than just a standard taker. This is basically how the ISO/IEC 30105 standard was born and eventually published in 2016 under the general title 'Information technology — IT Enabled Services/Business Process Outsourcing (ITESBPO) Lifecycle Processes'.[35]

How ISO/IEC 30105 Came to Life

Fixing the Y2K bug at the turn of the millennium provided Indian IT services with an opportunity to prove itself to its clients with all the required certifications in place. In the following years, the BPO industry in India had already matured and was widely seen as a credible destination. Although a number of standards were used, such as eSCM and COPC, none of them were as widely accepted as CMMI tools used in the

[33] Interview with the author, Noida (Delhi), 19 January 2016.
[34] Interview with the author, Gurgaon, 8 February 2008.
[35] Initially within the subcommittee on software and systems engineering (ISO/IEC JTC1/SC7/WG25) and subsequently transferred to the subcommittee on IT Service Management and IT Governance (ISO/IEC JTC1/SC40/WG3).

software industry. As emphasised by Raju Bhathnagar, first convener-to-be of the ISO/IEC working group, 'there was a gap which needed to be filled – that is a standard for the BPO industry itself'.[36]

Nasscom took advantage of a plenary meeting of an IEC/ISO technical committee organised in Hyderabad in May 2008 to submit its proposal for a new item agenda. Badly prepared, not attuned to ISO/IEC procedures, the move was sent back to the drawing board. A study group eventually convened to better determine such needs. With the help of a few experts sharing their previous experience with foreign national standardisation bodies, Nasscom steamed ahead to achieve its plans. It forcefully lobbied the Bureau of Indian Standards (BIS), who only had a limited understanding of the project. It thus made sure that BIS, as the national standardisation body representing India in IEC/ISO arenas, would be in a position to take the lead on the project. In order to make its case for an IEC/ISO standard dedicated to BPO only, it enrolled close to a hundred stakeholders at home and abroad among affiliates of foreign companies and national standardisation bodies. In 2009, when it came back to the negotiation table, it was much better prepared and could provide sufficient evidence of a business case for a new formal standard.

While eventually adopted, the proposal to establish a new standard (ISO/IEC 30105) still faced considerable resistance. The group of experts that a few years earlier had launched the first version of ISO/IEC 20000 on IT service management were at odds with what they identified as a proposal containing too many overlaps with their own project so as not to compete with it. According to one of the top experts in charge of the working group responsible for ISO/IEC 20000, a key concern was accordingly to make sure to be in a position to control any future developments[37]. ISO/IEC 20000 thus undertook some manoeuvring to change the organisational structure in which the drafting of standards would take place by creating a new subcommittee to accommodate both working groups responsible for ISO/IEC 20000 and ISO/IEC 30105-to-be. Such a turf war concealed a deeper conflict between two opposing approaches to quality and security standards: on the one hand, those in favour of keeping the definition and control of the tasks at the outer layer of management systems, and those who advocated digging into the business processes models themselves on the other. According to an expert who was present throughout the deliberations, the Indian initiative prompted such an 'interesting, or even a virulent debate' precisely because some delegations, in particular from France

[36] Interview with the author, Bangalore, 27 January 2016.
[37] Confidential interview with the author, Geneva, 13 June 2016.

and, to a lesser extent, the United Kingdom, were strongly opposed to the Indian approach based on business processes, seen as incompatible with the basic principles guiding the certification of management systems.[38] In contrast, the Indian view was that 'in BPO, process implementation and value creation (i.e. internal process bringing value and ability to improve it) are key'.[39] It is difficult to come to any final analysis on whether the debate was guided by personal agendas, certifiers' interests, matters of principle, or simple misunderstandings. However, when the time for a decisive vote came, it was only by the abstention of one expert who saw no contradiction between both methods that the Indian approach was eventually approved and the project launched.

After more than six years of drafting procedures, ISO/IEC 30105 was published in 2016 under the name 'Information technology — IT Enabled Services/Business Process Outsourcing (ITESBPO) Lifecycle Processes'. It consists of five parts with the aim of serving as reference, assessment, and maturity models and guidelines for service providers performing outsourced IT-enabled business processes. Figure 7.1 outlines the relationship between the various dimensions included in the main parts of the standard. Delving into the technical detail of the document would take us beyond the scope of this book. Suffice it here to stress that a striking feature of the standard is at once its distinctiveness and its comprehensiveness. Although initially based on the ill-fated eSCM standard of the CMMI family with a similar two-dimensional model of process categories and organisational capability levels, the four parts of the standard describe a set of detailed tasks, processes, evaluation procedures, and organisational maturity. Ideally, these cover the whole lifecycle of services provided by business process outsourcing companies in areas as diverse as human resource management, administration, health care, banking and financial services, supply chain management, travel and hospitality, media, market research, analytics, telecommunication, engineering, and manufacturing.

The story of the ISO/IEC 30105 standard detailed here shows that Nasscom put considerable energy into shepherding the project of a new ISO/IEC standard specifically dedicated to the BPO industry through to a successful conclusion. If nothing else, it provides compelling evidence of how standards are identified as powerful tools in the organisation of

[38] Alain Renault, Senior R&D Engineer at the Luxembourg Institute of Science and Technology, former member of ISO/IEC JTC 1/SC 40 WG 3, IT-enabled services/Business process outsourcing, Skype interview, 16 June 2016.

[39] Ravi Veeraraghavan, Vice President for Business Process Outsourcing, TCS; convener of ISO/IEC JTC 1/SC 40 WG 3, IT-enabled services/Business process outsourcing, Skype interview with the author, 21 June 2016.

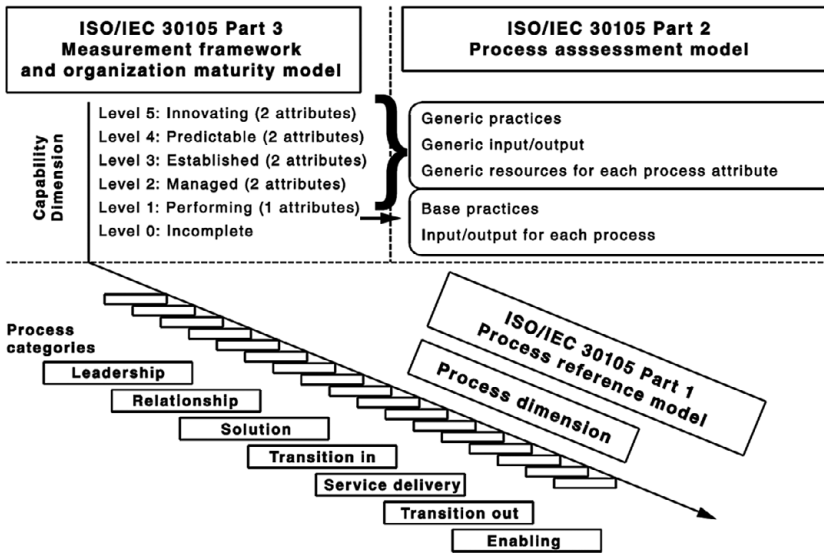

Figure 7.1 ISO/IEC 30105 and its various parts
Source: Sample Draft International Standard ISO/IEC 30105, ISO/IEC JTC 1/SC 40, reference number ISO/IEC DIS 30105–2:2015(E), 2015.

global markets and for which valuable resources are devoted to move technical diplomacy into full-swing. The choice of targeting the joint ISO/IEC arena demonstrates that private-only instruments *à la* CMMI have their own limits. The hybrid public–private dimension of ISO/IEC arenas is seen of higher standing and worth spending substantial resources to draft instruments that can be explicitly recognised as international standards in the sense of Article VI: 5b of the General Agreement on Trade in Services (GATS). Moreover, ISO/IEC 30105 describes highly technical specifications – a scientific organisation of business practices that remains, however, deeply embedded in societal values. As a method devised to 'help companies achieve transformational outcomes more quickly',[40] the detailed tasks, processes, evaluation procedures, and organisational maturity levels defined by the standard have extensive impact on the social organisation of the work undertaken within industries and beyond on the everyday life of employees themselves. Finally, by turning the Indian service offshoring industry into standard maker rather than standard taker, ISO/IEC 30105

[40] ITES/BPO Study Group Presentation to WG25, Niigata, 25 May 2010 (PowerPoint presentation).

contributes to shift the intertwined poles of the spatial organisation of standardisation towards its endogenous end. It clearly results from a strong Indian will to gain more recognition of its own ability to innovate in the establishment of a new standard specifically dedicated to the BPO sector of the industry; as one informant put it, a key objective was indeed to 'provide legitimacy to the internationalisation of the Indian outsourcing industry'[41] – as if this marked a new step in the process begun in the 1990s, when the industry had to prove its conformity to recognised standards in order to make service offshoring a legitimate and business-as-usual strategy. At the same time, however, the whole effort would be in vain if, once the standard is published, only a small fraction of the industry in India adopts it. To be fully successful, the move from standard taker to standard maker needs large market recognition of the new standard far beyond a portion of the Indian offices of the world. This is why Nasscom planned an important promotion campaign in 2016 to support swift adoption of ISO/IEC 30105.[42] The campaign was clearly all the more important, as some experts who supported the project in its early days later admitted to having no expectation whatsoever of large adoption of the standard by a service industry already overloaded by the many new regulatory requirements associated with the post-crisis era.

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The story of how India has become the world office outlined in this chapter shows that standards mattered right from the start of the journey to the latest prospects of the industry. This clearly contradicts conventional accounts that consider the standardisation of tasks in ideal-typical service industries unlikely. Although varying in degrees, business services offshored in India are indeed much more intangible and relational than (re)insurance studied in previous chapters. They are also more labour intensive. And Yet! They seem rather less resistant to standardisation, trade, and internationalisation. The many ways in which standards play a role in fixing quality and security uncertainties thus support my extensive hypothesis on the power of standards in the global expansion of services.

While this account deviates from studies assuming that industry specificity is likely to dictate its propensity to be standardised and, hence, internationalised, what lessons can be drawn from this argument

[41] Alain Renault, Senior R&D Engineer at the Luxembourg Institute of Science and Technology, Skype interview with the author, 16 June 2016.

[42] Ravi Veeraraghavan, Vice President for Business Process Outsourcing, TCS; convener of ISO/IEC JTC 1/SC 40 WG 3, IT-enabled services/Business process outsourcing, Skype interview with the author, 21 June 2016.

regarding the ambiguity supporting the transnational hybrid authority of such standards? At first sight, the power of standards in use in the office of the world looks rather unambiguous: large American IT services management firms act as *de facto* private standard setters for a flurry of instruments focused on highly technical and narrowly defined management systems and business processes; this would leave the service offshoring industry in India as a mere standard taker, dependent on global market recognition whatever its immensely successful accomplishments in gaining certifications to those standards. My analysis has shed light, however, on a different picture in answering the three question of who sets what standards from where. From this perspective, business management and process standards reflect a more ambiguous form of authority that is not thoroughly private, let alone exclusively public, that includes major socio-political concerns behind their thick veil of technical specifications, and whose exposure to an exogenous logic of market recognition intermingles with the endogenous dimension of government subsidies and incentives. The chapter provides ample evidence of how the tools used for the offshoring of business services in India span those three dimensions I refer to as institutional, material, and spatial continuums. Depending on the distinct standards concerned, location on the continuum indubitably varies. But of late, the consolidation of their transnational hybrid authority seems to follow a coherent path towards a sturdier combination of both poles of each continuum.

Regarding the issues included in the material continuum of standardisation, the new IEC/ISO 30105 standard explicitly seeks to broaden the scope of its tool with a target of content defined in the most comprehensive way through the whole lifecycle of business processes. More alarming are the contentions about the anti-competitive, anti-union stance of Nasscom's policy and instruments and its disregard for local people and interests. Moreover, it is worth reiterating that complying with standards draws at the same time hierarchical boundaries excluding those unable to comply. In any case, what is important for our purposes is that fundamental human and labour rights are dealt with in the name of technical standards on business process quality, capability and maturity models, data security, and privacy protection. The ambiguity of issues at stake supports Nasscom's ambitions to use the power of standards to make the Indian service offshoring industry a world powerhouse. Concerning the institutional continuum of supporting the technical diplomacy of standardisation, the resources that Nasscom devoted to support the adoption of a new standard within the IEC/ISO arena in itself shows limits to the private authority of those American entities devising the management methodologies and performance tools most widely used in

the industry. Moreover, we saw that those entities cannot even be defined as private, since their functional ambiguity reflects a hybrid pattern able to combine the best of both the private and public worlds. Finally, regarding the spatial continuum along which compliance to standards is recognised, the weight of transnational capitalism obviously keeps tilting the balance towards the exogenous end of the continuum. The prevailing fragmentation of certifications that provide 'whatever the client asks for' pays scant attention to the institutional nature and political economy content of standards. Besides a handful of government policies supporting the adoption of standards and the recent IEC/ISO 30105 initiative expected to demonstrate the ability of Indian service industries to be standard makers rather than standard takers only, the endogenous dimension of standards recognition remains weak. Just as any other form of private authority in the global political economy, if the compliance to standards is only guided by the exogenous principle of transnational capitalism, with inadequate state support and consent, the odds are that it may prove to be weaker than expected. A first step to cope with such a situation would obviously be to rest the authority of standards on a wider segment of the continuum with stronger government policies, a greater involvement of the Bureau of Indian Standards (BIS) in international arenas, and an effective participation mechanism for neglected local people and interests, supporting the ability of civil society associations to bring forward standardisation issues in relation to the everyday life of millions of people.