Modern Services in India

Policymaking and Governance

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ABSTRACT

India has been one of the successful countries worldwide in terms of modern services exports, especially in the areas of ICT and software. Indian IT industry has built up an enormous confidence in global markets. Moreover, in recent times, the country has emerged as one of the fastest growing telecom markets in the world. Various government policies and initiatives have been recently taken by the government - such as Digital India and Start up India - to promote modern services in India, with the view of 'Modernization' at its core. Considering the ten good principles highlighted by Devlin and Moguillansky in their 2014 book titled "Breeding Latin American Tigers", this study aims to analyze the process of policy making in India for promotion of modern services. It highlights the main public and private actors responsible for definition and implementation of policies, along with their organizational and implementation mechanisms through various institutions. The paper then evaluates the governance of these institutions and checks their compliance with them.

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OUTLINE OF THE PAPER

1. Introduction: background, justification, hypothesis, outline.

2. Overview: Export performance of modern services within a global context

3. Policy making in India:
    a. Mapping of public and private players, their role and responsibilities
    b. Policies for modern services sector
        i. Specialized human capital: Education, Certification, Skill development and training
        ii. Digital ecosystem and ICT
        iii. Innovation and Startups
        iv. Export Promotion strategies
        v. Attraction of FDI, FTAs, supranational commitments
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4. Governance of main government and public-private polices towards the exports of modern services: Evaluation of governance of polices towards modern services and compliance with the good principles detailed in the study by Devlin and Moguillansky (2011) on federal and state level
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Introduction

Since the turn of the century, the importance of trade in commercial services has grown dramatically. Services have become a major part of a country's trade basket. This is not only true for developed economies: the growth in services in the developing world has been attributed as one of the reasons why these countries are growing faster than their developed counterparts (Gabriele, 2004).[2] Services account for the largest share of GDP of most developed and developing countries, and the sector has been growing at a rapid pace for over two decades.

Services trade represented about 9% of world GDP in early 2000s. This share has risen in the last two decades reaching 13% of global GDP in 2017 with a growth rate of about 3% per annum since then.[3] The share of services in global trade rose from 20% in 2005 to about 23% in 2017. [4] Today, services also occupy an impressive 66% share in global FDI, largely through business and financial services, trade and telecommunication services. [5] The United States and the EU have traditionally been the biggest exporters and importers of services. From 2005, there were two new entrants from Asia, who have climbed the ranks: China and India.

Particularly, India leads the way in *non-traditional* or *modern* services. The IMF and the United Nations have defined these types of services as services those are traded through the Internet and as a result have spread very rapidly in the last decade. These modern services can be bought or sold without the movement of the supplier or the consumer and constitute Mode 1 type of services. Modern services mainly include financial and other business services, communication services, and information and computer services. Both developed and developing countries have witnessed the growth of such services. Many studies show that modern services have been the fastest growing sectors in India and globally (since when?). Although they require usage of high-end technology, some of them in the form of BPOs and KPOs are labor intensive. Thanks to cheaper labor costs, developing countries have come to occupy a majority of such jobs. India is however the global leader in business and knowledge outsourcing due to its language advantage and has become a preferred destination for most developed countries (Gott and Sethi, 2017). Sheth and Singh, 2014[6] emphasize:

> "India is still expected to lead the market by 51 percent market share with CAGR 15 percent, and almost 17 percent in only BPO in for 2007-12. NASSCOM estimate that

[2] UNCTAD report 2004, accessed at: http://unctad.org/en/docs/ditctncdmisc20036_en.pdf
[3] World Development Indicators, World Bank accessed at: https://data.worldbank.org/indicator/BG.GSR.NFSV.GD.ZS?view=chart
[4] UNCTAD STAT accessible at http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx
[5] http://unctad.org/en/PublicationsLibrary/wir2017_en.pdf
[6] Accessed at: https://www.researchgate.net/publication/282244948_India_Business_Process_Outsourcing

BPO market should observe a CAGR of 13 per cent and to reach USD 225 billion by 2020 from USD 101 billion in 2012."

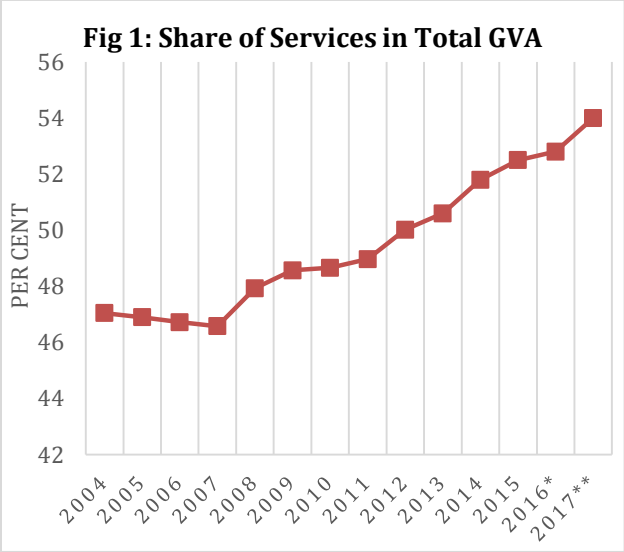
India has been one of the successful countries worldwide in terms of modern services exports, especially in the areas of ICT and software. Indian IT industry has built up an enormous confidence in the global markets particularly in the software industry and information technology enabled services (ITES) (including BPO industry). India is also considered as a pioneer in software development and a prime destination for IT-enabled services. Moreover, in recent times, the country has also emerged as one of the fastest-growing telecom markets in the world being the second largest wireless network in the world after China. Various government policies and initiatives have been taken by the government such as Digital India and Start up India to promote modern services in India, with the view of 'Modernization' at its core.

Section 2 analyzes the growth of India's services sector, with a focus on modern services, while Section 3 explains the process of policymaking to promote this sector, with a focus on five main strategy pillars. Section 3 highlights the main public and private players responsible for definition and implementation of policies, along with their organizational mechanisms through various institutions. Section 4 lays out the 10 principles that policymakers should follow for an effective governance and sustained growth, as highlighted by Devlin and Moguillansky (2011) in their book titled," Breeding Latin American Tigers". Considering these ten good principles, this section evaluates the governance of Indian policymakers and institutions and checks their compliance with the principles.

This study is based on review of secondary literature and interviews with policymakers, services experts, industry etc. The secondary research covered literature review, data analysis and extraction of institutional framework and policies from different government websites. Data are from the World Bank, UNCTAD, and Ministry of Commerce; India was also used to prepare an overview of the services sector and its contribution to the economy. Further, primary research in the form of interviews with key policy makers and academics was conducted to delve deeper into the governance aspects of services-linked policies.

Overview

The services sector plays a key role in India. The share of services in GDP has increased over time while the importance of agriculture has decreased. Services constituted over 50% of Gross Value-added in 2016 or US $1.097 trillion. [7] Since the turn of the century, the services sector has grown by around 15% per annum and its contribution to GVA has crossed the 50% mark since 2012. Its share in GDP has now surpassed that of agriculture and manufacturing combined with 54% in 2017. (Figure1).

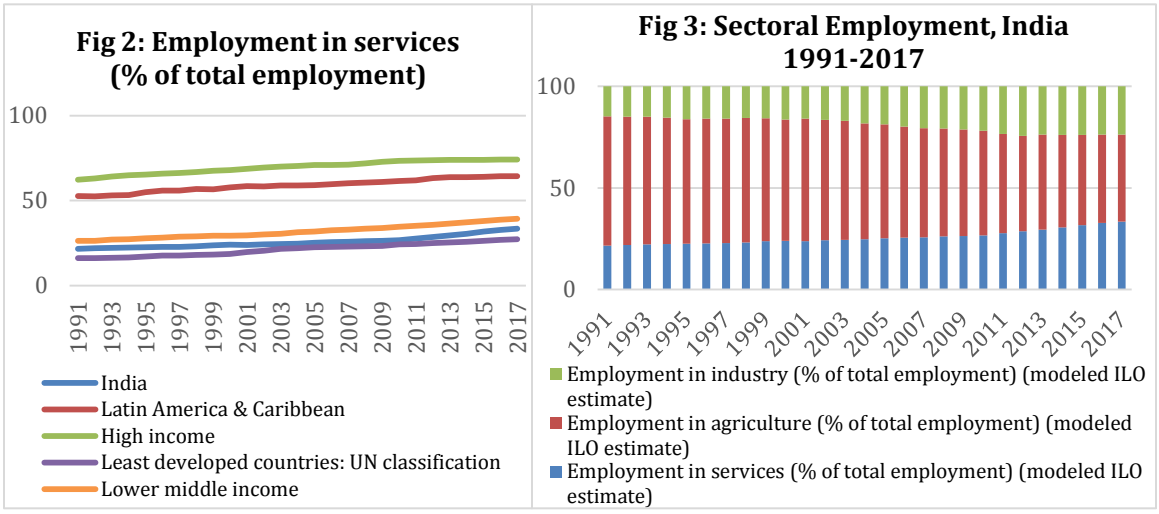


Note: * First Revised Estimates; **Advanced Estimates
Source (Fig 1): National Accounts Statistics, MOSPI

Despite the importance of services in GDP, India employs one of the lowest percent of workers [8] (as a percent of total employment) in services among developing economies. This could be attributed to the fact that 80% of the services sector in India is informal and not included in the jobs numbers. The World Bank data reports that share of employment in the services sector has increased since 1991, reaching 31.2% of the work force in 2017.

By contrast, the share of employment in agriculture has declined while the share in industry has stagnated at around 25%. [9] However, compared to Latin American countries and group of other lower middle-income countries, participation in service sector is very low in India, with levels close to that of LDCs (Figure 2).

[7] https://data.worldbank.org/indicator/NV.SRV.TETC.
[8] Among the South Asian region comprising of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka
[9] World Bank Data; Modeled around ILO estimate (see figure 4)



Source (Fig 2 &3): World Development Indicators, World Bank

Services employment in India rose from 22% to 33% between 1995 and 2017. This came with a declining combined share of agriculture and manufacturing from 77% in 1995 to 66% in 2017 (fig 3). This coupled with rising productivity in the modern services sector since the turn of the century, has ensured substantial growth in the sector in India. KLEMPs database shows that productivity in services has grown faster than manufacturing for modern services only, services overtook manufacturing in 2000. The services industry is estimated to employ nearly 3.9 million people in 2017, an addition of ~170,000 workers over FY2016. The ITeS/BPO sector provided employment to people with various skill sets. It is also the largest employer of women, with about 30% women in the workforce. While 46% of the employees are technically skilled, the industry enables employment in adjacent verticals like transportation, and the real estate and hospitality sector. Moreover, it generated indirect employment of over 10 million in FY16[10]. Firms have realized that the industry must 'move forward' with the changing environment and needs of clients. To do so, they have established Re-Skilling programs for their existing employees.

This rapid growth can be attributed to the series of structural reforms taken by India as a part of IMF conditionality in early 1990s.The economy was liberalized through a series of reforms and a large number of service sectors were deregulated to let private and foreign players enter the market. This has boosted India's competitiveness in the sector. Since then, India has run a trade surplus in services for two decades due to the high volumes of the IT-BPO exports.

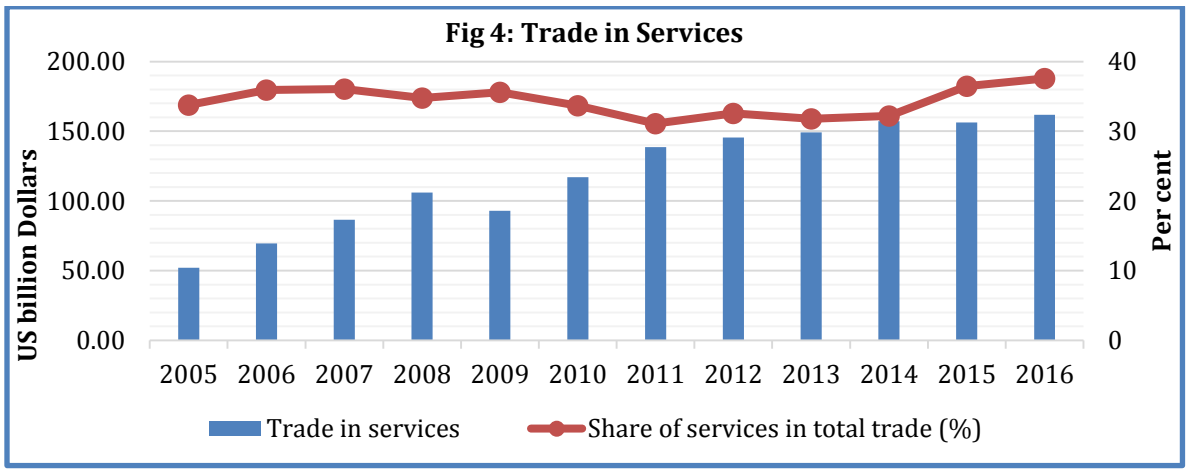
In India, services trade is captured by the RBI (central bank), in which foreign exchange transactions channeled through the commercial banks are reported to this institution. It follows the standard classification under IMF's BPM6[11], but it deviates slightly as it recommends that transactions should be measured when services are rendered rather than

[10] NASSCOM (2017) report

[11] Can be accessed here: https://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf pg 160-182

when payments are made. As a result, it can be difficult to report what kind of service has been traded. The RBI does not compute bilateral services flows; hence it is not possible to determine India's key services partners.

The importance of the services sector in India can be justified by the lion's share this sector contributes to the trade basket (total trade in goods and services). From 2005, the share of services in the trade basket grew from 33.7% to 37.6% in 2016 (Figure 4). Exports in particular grew at 10% in the period 2005-2016.[12] Due to such rapid growth in services exports, India has succeeded in raising its penetration in the global markets for both goods and services, with an expanding and highly diversified export basket. However, India only exports about 20% of the total value added in services sector[13], the lowest among its neighbors. This share has declined consistently over the period 2008-2015 and can be traced to higher domestic demand of services, larger proportion of non-tradable and low international demand following the financial crisis of 2008.



Source: UNCTAD stats

The share of services in total exports (exports of goods and services) was 37.3% in 2016, while it was 28.3% for imports.[14] Figure 5 shows the top performing sectors in services trade based on IMF's BPM6 classification.

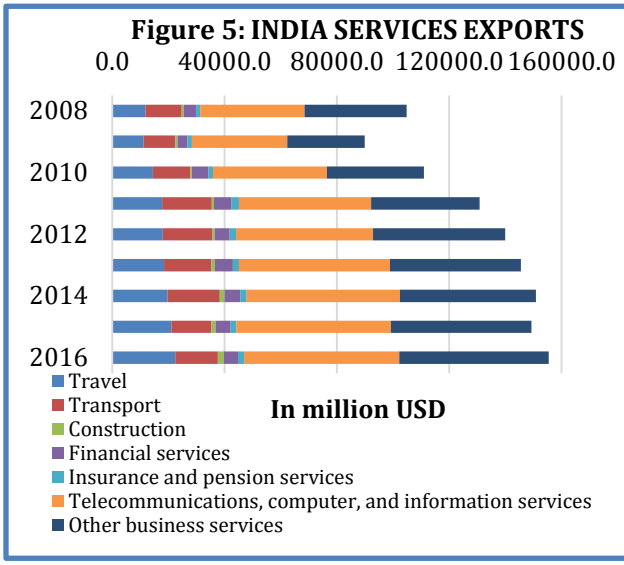
The Indian IT-ITes industry has been successful in achieving this growth with wage arbitrage through a combination of high-value services and increasingly non-linear play manifested in a shift from enterprise services to enterprise solutions (NASSCOM, 2013). About 80% of the Indian personnel are involved in providing solutions to global clients. Efforts at improving the competitiveness through various measures such as agile delivery models; standardization and automation of business processes; inclusion of delivery network in tier-2 and tier-3 cities; delivery excellence; process innovation; and domain expertise have been the key focus areas (NASSCOM, 2010, 2013). Moreover, quality education, skill sets, exposure to frontier technologies, and fluency in English have acted

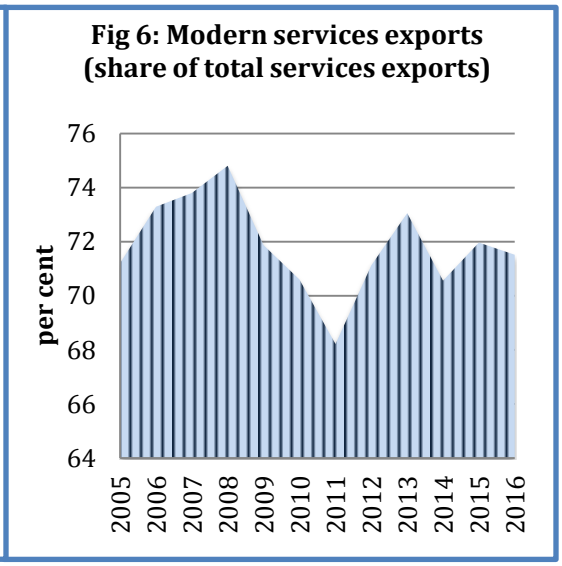
[12] UNCTAD database
[13] World Development Indicators, World Bank
[14] UNCTAD stats accessible at http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx

as major factors as well (Joshi & Mudigonda, 2008). India has the world's second largest English-speaking population at 72 million and the second highest number of engineering graduates, after China (NASSCOM, 2010). India also possesses favorable demographics as 30% of the workforce is aged between 18-25 years and 44% is within the age group of 25-30 years.

Other factors attributed to the expansion and success of services in India are the dynamic domestic demand, thriving competition faced by domestic players with the entry of an increasing number of players and services that have entered the market in a short period of time, and the focus on innovation in technology, that put the industry ahead of the global learning curve. Apart from these factors, the growth of services in India has been crafted by external demand, and events unfolding outside the realm of this study like the dotcom bubble or the financial crisis. Indian companies capitalized on these opportunities to deliver cost effective quality services.

The new wave of technology-driven transformation in the cross-border delivery of services allows trade in many new services. The spread of the Internet has enabled digitization and trade of wide ranges of services around the world. This array of services is constantly expanding and is being marketed largely through the Internet. Based on the nomenclature of the 6th BOP Manual by the IMF, the fastest-growing services sectors in the world are ICT, financial services, insurance and pension services, and other BPO/KPO based services. These services account for the lion share of Modern Services.[15]





Source: UNCTAD stats

[15] Modern services include ICT, financial services, insurance and pension services, charges for intellectual property usage, and other business services (incl. R&D, consultancy services, professional services and management services)

These modern services have rapidly changed the composition of India's top performing service sectors in terms of trade, moving away from traditional sectors, and towards financial services and ICT (Telecommunication, computers and information). The share of modern services in services exports has hovered around 70% since 2005 (fig 6). The share of Traditional services, mainly Travel (13% with value of US $22 billion) and Transportation (9% with value of US $15 billion) has remained low, although travel was among the top three performing sectors. Other business services, and ICT services occupied the first and second position respectively (figure 5).

In 2005, even though India did not make it to the top 10 of the world's biggest exporters of modern services, by 2016, India was ranked 7th position with a value of US $ 116.3 billion, and a 3.35% share of global modern services exports. India ranked closely with the USA, UK, Germany, France, China (5th), the Netherlands, Japan (7th) and Singapore. In the list of top modern services importers, India was 11th in 2005, and fell to 13th in 2016 with a value of US $53 billion in commercial imports or 2.8% of world's share[16] (see figure 7&8).

Fig 7: Top Modern Services Exporters (2016)

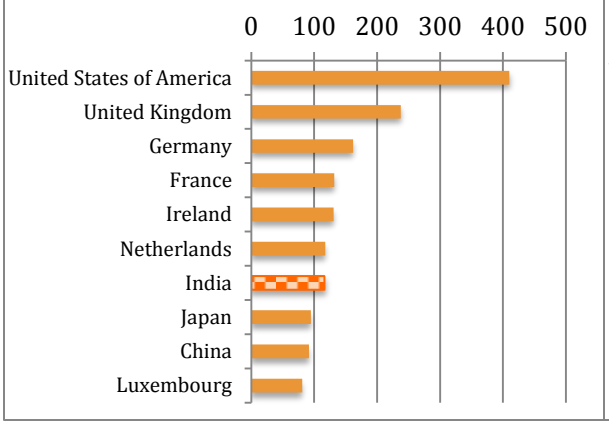
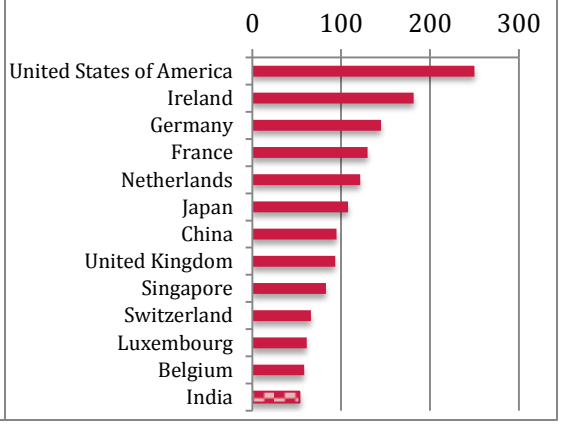


Fig 8: Top Modern Services Importers(2016)



Note: Based on BMP6
Source: UNCTAD stats

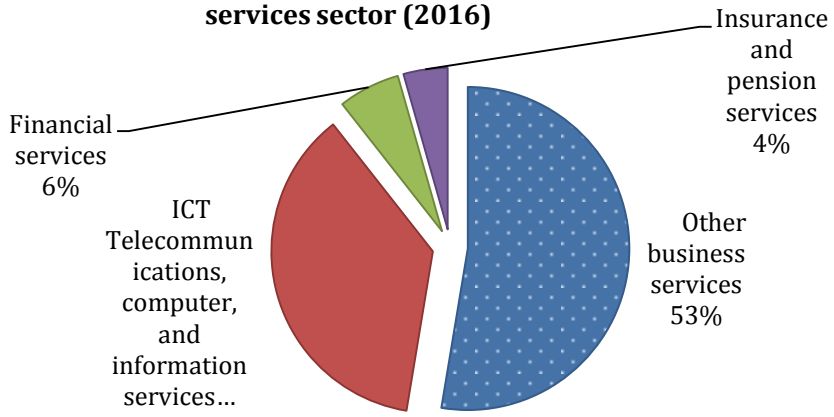
In recent times, the country has emerged as one of the fastest growing telecom markets in the world. The future progress of telecom in the country can be substantial. India has the second largest wireless telecom network in the world after China. [17] Moreover, the Indian IT industry has built up an enormous confidence for itself in the global markets. IT industry in India comprises of software industry and information technology enabled services (ITES), which also includes the BPO industry. India is considered as a pioneer in software development and a favorite destination for IT-enabled services. In South Asia, India dominated the ICT exports with a share of 96% in 2008-2016. This has been possible due to the availability of a large pool of IT manpower, thus making it a top sourcing market.

Global **IT-BPM** market stood at US$ 1.2 trillion in 2016 (excl. hardware). IT services grew mainly due to investments in cloud infrastructure. The industry is projected to grow

[16] UNCTAD Stat
[17] See: https://unstats.un.org/unsd/economic_stat/ICT-Korea/Documents/Godavarkar_India.pdf

nearly 8% in FY2017- from USD 143 billion in FY2016 to USD 154 billion (excl. e-commerce), an addition of USD 11 billion. Of this, e-commerce constituted $33 billion and the IT/ITeS sector grew at 8.5%, from US$ 130 billion in 2015 to US$ 141 billion in FY16. The ITeS or the BPO sector contributed US$ 26 billion to the services industry in 2016-2017.The share of IT-BPM sector to total services exports was 49%, with a 7.7% contribution to GDP in FY16. The domestic market has been dynamic as well, with a growth of 8.5% year on year between 2016 and 2017, generating revenue of US $ 38 billion (excl. e-commerce) in FY17 (NASSCOM Strategic Report, 2016).

Fig 9: Composition of India's trade in modern services sector (2016)



Source: UNCTAD stats

Figure 9 and table 2 show that other Business services[18] occupied 53% share of modern services, followed by the Telecommunication, Computer and information sector. The growth of these two sectors has been very significant in the past two decades. ICT continued to be the top export, while other business services was the top imports Indeed, India is a net importer of consultancy and professional services.

Table 2: Composition of India's modern services sector (2016)

Sector	Exports	Imports	Total Trade
Other business services	*53202.1*	*32749.9*	85952
ICT: Telecommunications, computer, and information services	*55317.9*	*4768*	60085.9
Financial services	*5082.8*	*5021.2*	10104
Insurance and pension services	*2144.9*	*5067.6*	7212.5
Charges for the use of intellectual property not included elsewhere	*529.4*	*5470.2*	5999.6

Source: UNCTAD Statistics

[18] Other business services include R&D, consultancy services, professional services and management services

The government's 2018 **budget has** recognized the importance of the growing digital ecosystem in India and had set forth a commitment to invest in research, training, and skilling in robotics, artificial intelligence, data analysis, quantum communication and Internet of Things. Indian Prime Minister Modi in his speech at Davos in 2018 referred to the IT sector and commented, "As India continues to grow, and the IT sector charts its global trajectory, policy instruments to support the journey would be essential. In this context, the proposal to review existing guidelines and processes and bring out a coherent and integrated Outward Direct Investment (ODI) policy will be important for the IT sector, as the Industry undertakes M&A, and sets up Development centers etc.".

Until now, India has mainly been focusing on IT and software services. India has the potential to develop a niche sector in professional services, including architectural, engineering, consultancy, legal, and accountancy and auditing services, along with R&D (Prasad and Sathish, 2010). The country has a lot of potential that can be realized, should the right government policies and support be put in place. These services also accounted for a 20.2% of total service exports and 33.7% of total service imports in 2016-17.[19] The rise in business services imports can be attributed to imports of R&D services and professional consulting services. In terms of exports, India has maintained its role as a "back office" for international consultancy firms, based in the United States and the EU. In terms of management consulting, the sector has gown phenomenally in India, with rising importance of high-end strategy consulting (Srinivasan, 2014). Overall, the share of other business services in India's exports has escalated since 2004. The biggest challenge Indian personnel face is the restrictive immigration policy of the developed countries and lack of recognition of professional skills. To maintain its competitive position, India needs to expedite its MRAs to push service exports through preferential channels. India must also move up the value chain by intensifying R&D efforts.

The **Indian startup ecosystem** has seen significant activity in terms of growth of number of startups, funding and emerging unicorns. Government initiatives like Startup India, Digital India and tax breaks, as well as government support to new startups will help Indian startup ecosystem to power the competitiveness of India globally. [20]

The industry comprises of 16,000+ firms that offer complete range of services. With a presence of over 4,750 start-ups, India is the 3rd largest start-up ecosystem in the world. In FY2017, IT-BPM exports from India are expected to reach USD 117 billion, a 7.6% growth from the previous year and an increase of USD 8.2 billion. India has become a digital solutions partner. As technology continues to evolve rapidly and permeate more layers of business operations, digital solutions have become an integral component of the growth roadmaps for most enterprises. The Indian IT-BPM industry is adapting to and in many ways is shaping the digital transformation of the global technology and business

[19] For more information, see: http://mofapp.nic.in:8080/economicsurvey/pdf/152-166_Chapter_09_Economic_Survey_2017-18.pdf pg 157

[20] Read more here: http://www.tholons.com/TholonsTop100/pdf/Tholons%20Top%20100%20-%202017%20v.7.pdf

services environment.

The services sector attracts the largest chunk of FDI inflows in India and accounts for the largest share in FDI outflows as well. FDI has become the key source of financing for services sector projects and has positively affected India's growth, employment and technology transfers (Joshi, 2006). The Department of Industrial Policy and Promotion (DIPP) collected the data on FDI inflows and according to their quarterly report for June 2017[21], the share of services sector [22] (as a percentage of total inflows) is 55.76% for the period April 2000- June 2017 and 54.26% in the period 2016-2017.[23] The government has taken measure to attract FDI by formulating the National IPR policy and implementation of the GST.

The tremendous growth of services couples with India leading the 2017 Global Services Location Index, as it is the preferred destination for offshoring. Several multinational companies have set up their operations to India, and this has created spillover effects for the entire economy in the form of availability of latest technology, firm level technology absorption and technology transfer. Over the years, India has held the top most position in the GSLI, 2017. In 2017, several Latin American countries have strengthened their position (Colombia, Peru, Mexico, Brazil and Chile). [24]. As the industry leader, India offers a large pool of English-speaking skilled labor at a cost that no other country can match. India's cost advantage against the United States is also widening due to the strong US dollar, and the improved performance of Indian students on standardized tests. Salaries in India are a third to a fifth of their counterparts in developed countries like the USA and European nations. However, Porter (1990) argues that the existence of relatively cheap labor may not explain the existence of competitive advantage for such a long span of time. The competitive advantage depends on the nation's ability to increase its productivity over time through continuous up gradation of skills and technology. India must recognize the growing needs of the Fourth Industrial Revolution and invest in robotics, artificial intelligence, cloud computing, big data and research and development to maintain its competitive edge.

Another such ranking is the Tholons Services Globalization Index. It ranks countries and cities who have established leadership and a sizable revenue base in services globalization over the last two decades through the measurement of talents, skill, infrastructure, digital innovation, availability of workforce, related costs and quality of life. In 2017, India topped the list, while others in Asia include China (2), The Philippines (3) and Vietnam (8). Other countries that have ranked high belong to the Latin American and the Caribbean: Brazil (4), Mexico (5) and Chile (7). The USA and the UK rank 11th and 14th

[21] http://dipp.nic.in/sites/default/files/FDI_FactSheet_June2017_2_0.pdf

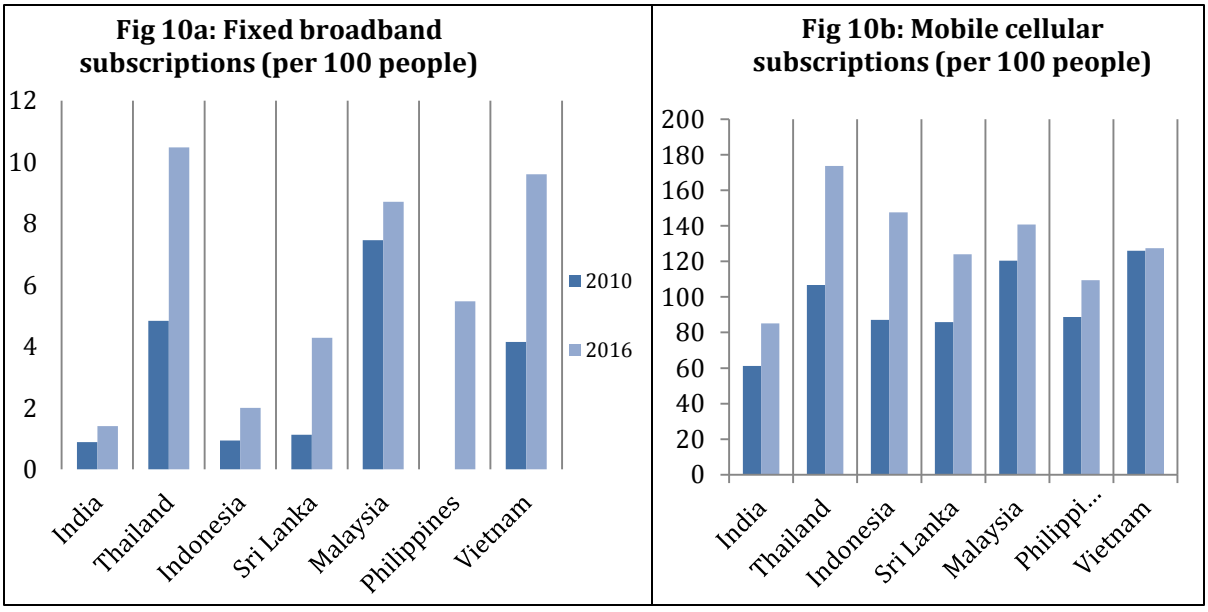
[22] Described by the RBI as a total of financial and non-financial/ business services, Banking, Insurance, Outsourcing, R&D, Courier, Technology testing analysis, Telecommunication, Trading, computer hardware and software, construction development, hotel and tourism, hospital and diagnostic centers, consultancy services, sea transport, information and broadcasting and air transport (including air freight).

[23] http://eaindustry.nic.in/key_economic_indicators/Key_Economic_Indicators.pdf

[24] GSLI is calculated by A.T.Kearney, see more here: https://www.atkearney.com/digital-transformation/gsli

respectively. India has indeed been the undisputed leader in Tech and BPM for clients for over two decades. It is emerging as the leading location for digital skills and solutions to Multinational corporations (MNC). India also has a vibrant startup ecosystem with over 5000 startups.

The World Economic Forum's Global Competitive Index report for 2017-2018 shows that India still needs to work hard on adoption of technology, despite attracting large amounts of foreign investment in the IT sector. India ranks poorly in the ICT use index, particularly for fixed broadband subscriptions (measured per 100) and mobile cellular subscriptions (measured per 100). Figure 10a and 10b show that India performs the worst in the South-South East Asia region, on both metrics. Unlike India, Sri Lanka and Vietnam have been able to raise their standing in recent years. Only Indonesia has comparable numbers to India. This poses as a serious concern in the digital age we live in. Only 1.4 people per 100 have access to a broadband connection, that means only 19.6 million have access in a country of 1.4 billion persons. While 15 out of every 100 do not have a mobile subscription that is 210 million are still without a mobile connection. The government of India launched the Digital India initiative in 2015 to ensure 100% ICT penetration through the establishment of adequate digital infrastructure.



Source: World Development Indicators, World Bank

However, with 375+ million **Internet subscribers**, India has the 2nd largest user base after China. India is gaining global market shares everywhere, be it the number of Internet users, smartphone users, and app downloads, and online payments. There is significant push from the government to 'go digital', the global technology giants are supporting this; and the 1.3+ billion people are embracing this trend aggressively. The Government of India, through its '**Digital India**' mission, has successfully initiated many projects which include the National Digital Literacy Mission, e-kranti mission, Wi-Fi hotspots, NOFNs being laid, newer technologies are tried to bring Internet closer to the population. India has

been creating a future-ready digital workforce, with more than 150,000 employees with SMAC (social, mobile, analytics and cloud) skills. The SMAC market is expected to be valued at US $ 225 billion by 2020.[25]

Among the proposed 100 Smart Cities initiative launched by the government in 2015, 60 cities are already undergoing developments, with a proposed fund allocation of Rs. 2 billion/city/year.[26] It has put India on the path of becoming a digital economy and the outlook for future seems promising. IT megaprojects such as nationwide broadband highways, universal mobile access and public Internet access program are in the pipeline under the Digital India initiative. The National Optical Fiber Network aims to connect all 2,50,000 Gram Panchayats in the country with high-speed broadband. IT solutions in the domains of education, healthcare, urban planning and financial inclusion are focus areas of the program and this is creating several opportunities for the IT sector. The Digital India initiative will create around half million direct or indirect jobs (Sector survey, IT & BPM Sector, 2016).

With these initiatives, coupled with '**Make in India'**, India has embarked upon the journey of becoming a 'Digital Nation'. India is setting itself up to be the digital transformation partner for global businesses. It has continuously been the world's No. 1 preferred location for setting up in digital technologies and is also home to 4,750+ start-ups offering a ready ecosystem for collaboration and partnerships in niche technology areas (NASSCOM, Strategic Review 2017).

Policy Making in India: Actors and Process

With regards to services in India, the major development in the last 25 years has been in the IT/ITeS sector, while financial services and professional services have recently started to expand more quickly. The process of policymaking in India to support these sectors can be summarized in the following excerpt from an interview with a Government of India official (Research interview, July 2018)[27]:

> *"The IT sector started growing in late 1980s with an external pull and there was no policy establishment in place to promote it. Only after experiencing a substantial demand from the developed countries, did the government in India feel the need to establish a policy framework to regulate and support the IT sector. One of the main reasons was the need to facilitate the rapidly growing external demand for skilled labor through body shopping, and second was to fill the vacuum due to the brain drain. The government believed it was a good opportunity to increase employment opportunities. India Taxation policies in the sector came forward when the sector started to grow rapidly, with the big IT giants gaining global recognition. It was then that the 'tech establishment' entered policymaking agendas. The evolution of services sector is a work in*

[25] Accessed at: http://www.makeinindia.com/sector/it-and-bpm

[26] More at: http://hlrn.org.in/documents/Smart_Cities_Report_2018.pdf and http://www.ncpedp.org/list_of_100_smartcities

[27] For reasons of confidentiality, the identity of the official cannot be disclosed

progress, with information technology being recently replaced by research and development. There is an underlying theme in India "to let professionals manage their own house". Even where the state could have intervened, they chose to stay at arm's length. It was a democratic mindset, driven by elements of vested interests and the government did not try to get deep into managing services sector. Eventually, a lot of agencies mushroomed, that individually managed an aspect of services sector. For example, the Institute of Chartered Accountant, the Architecture's Association and Bar Council of India regulate their respective sectors. It was very recently that the state started to look at services in a cohort and composite manner, as result of increasing tradability of services. Services have been 60% of GDP for many years now, and the state never paid attention to it till it was a domestic agenda. There existed silos within the government structure, but the increase in exports in services ("Export Connect") acted as a unifying point for the creation of an active Department of Commerce. The last 5-6 years have witnessed a rise in government intervention to manage these services. The tech wave has led to rapid evolution of the services sector, with a gamut of startups, R&D, financial, professional services growing phenomenally. This helped the government recognize them as important sectors, to help them connect with the external market"

An active government policy has acted as a propeller of the services industry. Over time, the role of the government has changed from being a regulator to an innovator and enabler. The framework[28] presented by Devlin and Moguillansky (2014) highlights the common operational principles guiding a sector's organization for effective formulation and implementation of strategies. It emphasizes the collaboration between the government and the private sector; consistency in intelligent policymaking; avoidance of politicization and enhancement of consolidation of diverse existing policies.

This section analyzes the "WHAT"[29] of public sector institutional organization. It insists on pragmatism in public policy, accepting the proactive role played by the state in development and export promotion of services sector. However, it is not easy (or even advisable) for India to replicate the strategies, institutions or processes of the 10 success stories highlighted in Devlin and Moguillansky (2014) given the significant differences in the economic, social and political reality of India with the Latin American countries. Nonetheless, the organization and operation of the public sector, albeit different in form, are quite similar across successful countries. Using the concepts presented above, this section critically examines the role and nature of emerging policymaking in India.

India has an ambitious set of initiatives, programs and plans that cover various strategic pillars for sustained growth and are de facto national plan. India has a long-term vision of becoming a knowledge and innovation economy. It wishes to develop capabilities for the Fourth Industrial Revolution, with advanced skills and access to technology through innovation and research & development. The country has a nationwide, multi-sectoral initiative to devise an action plan to drive overall development based on education,

[28] The framework is derived from 10 success stories from the world, studied by Devlin and Moguillansky in their book titled Breeding Latin American Tigers, 2014

[29] The "HOW" is dealt with in the next section on governance

entrepreneurship, innovation and digital connectivity. Such activities entail value addition and knowledge accumulation. This is possible due to the proactive role of the state, with focus in developing a few service clusters. Some of the programs are broad in scope and the greatest challenge will be to coordinate and implement them as well as to maintain political commitment over subsequent electoral cycles. The government has formulated a legislation to attract FDI and 'brand' India globally. The private sector has gained greater representation in the agencies responsible for implementing policies for national development. Public-private partnerships have taken on a formal path for consultations and implementation of strategies through various bodies. They initiate programs to complement each other's plans for the overall development of the service sector. For example, NASSCOM works in tandem with the government to address the growing skill gap through continuous upgrading of skills.

Latin American countries have also come a long way, overcoming a past rife with mistrust between the state and the private sector. In India, however, the government accepted the special role played by private sector companies and have supported their needs to develop the services sector. Most importantly, India IT sector's boom was initiated by the growth of a few giant companies in the early 1990s. They were adept at outsourcing low-end services. The government's interest grew on the foundation laid down by the vibrant BPO sector that attracted foreign companies to India by display of skill and low wages.

The policy making structure is unique in India. Formulation and implementation takes a three-pronged approach: central, state and industry levels. The distribution of power between the Central and State government defines lawmaking in India. Under such a quasi-federal system, services are divided under three separate lists: Union (under the Central government), State (only under the State government), and Concurrent List (under both the Center and State governments). Box 1 describes the relevant sectors.

Box 1: Services sector jurisdiction

The Central Government develops umbrella programs and initiatives that span over various ministries and departments. Each department under the ministries implements the brief given to it under the Allocation of Business Rules.[30] There are two types of central initiatives to promote the production of modern services and to promote the exports of these services abroad. Further, there are initiatives that are generic in nature and common across sectors (horizontal approach), while others are sector specific (vertical approach) in nature.

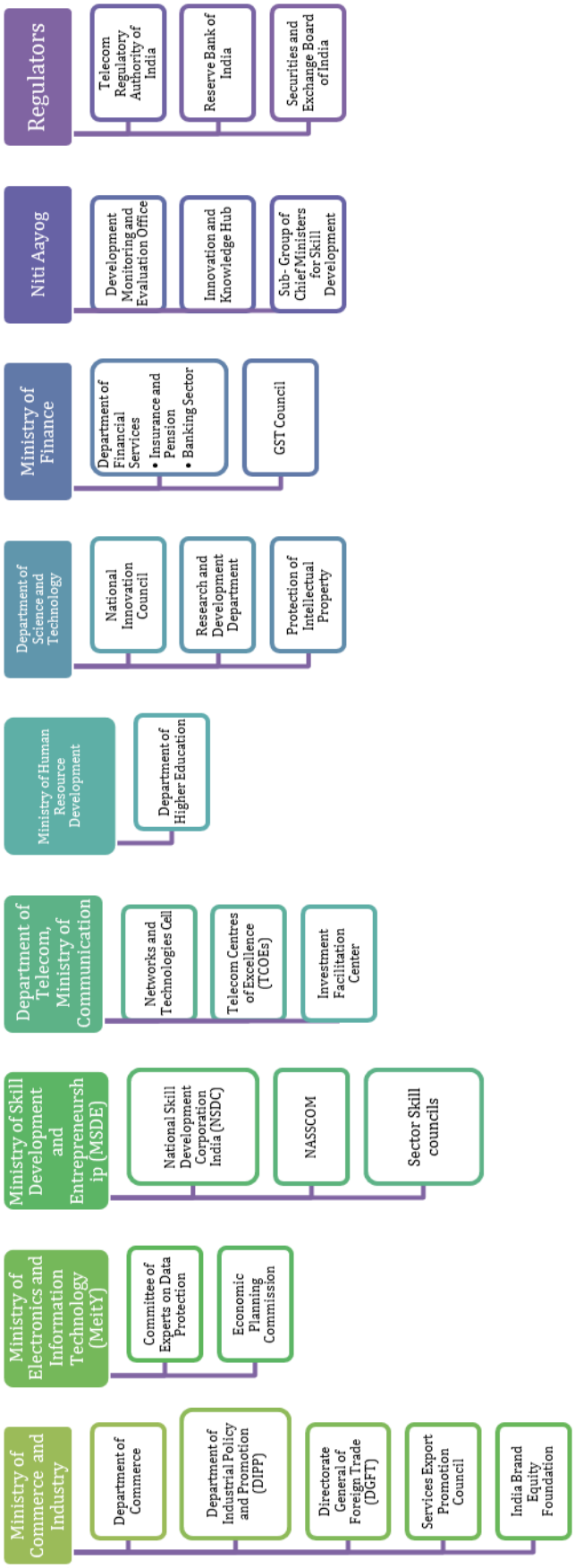
Box 2 presents the web of central ministries that are involved in policy making in India for modern services. These central ministries coordinate on multiple levels with the state governments, industry bodies and regulatory authorities through various initiatives. Four nodal ministries have been identified, along with their roles. For example, the Department of Industrial Policy and Promotion is in charge of formulating the Consolidated FDI Policy, and for the functioning of the Foreign Investment Facilitation Portal[31]. The Department of Economic Affairs is responsible for the operation of the 84 Bilateral Investment Protection and Promotion Agreements that India has entered into.[32] The roles and responsibilities of the ministries have been summarized in Box 3. The present government also set up a public think tank, NITI Aayog to monitor and evaluate the implementation of policies by central and state agencies.

There exist inter-ministerial linkages, as the central ministries coordinate their activities through common organizations and committees set up by the government of India. For example, skill development initiatives are carried out by the Ministry of Skill Development and Entrepreneurship (under the National Skill Development Council) as

[30] https://cabsec.gov.in/aob_first.php?page=1
[31] http://www.fifp.gov.in/.
[32] https://dea.gov.in/bipa.

well as the Ministry of Human Resource Development's department of Higher and Technical education. These are implemented by the state governments in their respective states based on the special needs and are evaluated by the NITI Aayog. Another such inter linkage occurs in the case of protection of intellectual property, which is conjointly handled by the Department of Industrial Policy Promotion (DIPP) and the Ministry of Commerce and Industry under the MSIPO program. The Department of Science and Technology also participate via its program on IP protection.

Box 2: Interweb of Central ministries and Departments Responsible for Policymaking



Box 3: Functions of key ministries

With regard to the regulatory architecture in the service sector, compliance is an issue that is self-regulated. Some regulatory agencies have been made responsible to regulate their sub-sector. The Telecom Regulatory Authority of India (TRAI)[33], Reserve Bank of India

[33] TRAI is responsible for regulating the allocation and tariffs of telecom services for service providers

(RBI)[34] and the Securities and Exchange board of India (SEBI)[35] are responsible for setting industry standards and issuing guidelines for the sector. Policymaking and implementation is also carried out by industry-led bodies[36] that work as a liaison between the government, the companies and the users of the services. Such bodies are responsible not only for assessing the needs of firms, but also to provide considerable insights to the central planning agencies for effective policymaking. Over time, they have also developed private sector-led programs to contribute towards centrally planned initiatives. Apart from these, the government works with non-governmental business associations FICCI[37] and CII[38],on issues of promotion of the industrial sector and to coordinate policies ranging from central to state level.

NASSCOM	Cellular Operators Association of India
NASSCOM is a private initiative started in early 1990s. NASSCOM started as a small group of people and has grown over the last few years with a turnover of $154 billion, according to recent statistics. This happened due to active government support and interventions from central and state governments. NASSCOM has a seed in every strategy and operation that are conceived in the ministries. Inadvertently, they are an operative in strategizing and developing policy. This is on invitation from the government to hold these consultations because they have shown the ability and capacity. They make predictions for the country on how the IT sector looks. It is a private initiative that is taken as a national construct and flows as a global collaboration. NASSCOM have helped built the Brand India as an IT hub.	COAI was constituted in 1995. The Association is dedicated to the advancement of modern communication through the establishment of world-class mobile infrastructure, products and services and to delivering the benefits of innovative and affordable mobile communication services to the people of India. Over the years COAI has emerged as the official voice for the Indian telecom industry and interacts directly with Ministries, Policy Makers, Regulators, Financial Institutions and Technical Bodies. It provides a forum for discussion and exchange of ideas between these bodies and the Service Providers, who share a common interest in the development of mobile telephony in the country. It presents an industry consensus view to the Government on crucial issues relating to the growth and development of the Indian telecom Industry.

Additionally, the Central Government holds consultations with the various stakeholders through industry bodies. For example, MeitY consults and incorporates NASSCOM's advice in IT sector policy making. The drafting is triggered based on the inputs that are received by the government from its consultations with the formal institutional apparatus (state associations and central federations). Theses industry-bodies are also sought by the

[34] RBI is the apex monetary and financial authority in India, responsible for formulating and implementing of monetary policy, maintaining price stability in the economy, prescribing broad parameters of banking operation and maintaining public confidence in the system, facilitating external trade and payment, and is also the banker to the government and to other banks.
[35] SEBI on the other hand is responsible for protecting the interests of investors in securities and to promote the development of, and to regulate the securities market.
[36] See Appendix 1
[37] http://ficci.in/about-us.asp
[38] http://www.cii.in/about_us_History.aspx?enc=ns9fJzmNKJnsoQCyKqUmaQ

Central Government to understand the issues faced by the private sector, to hold stakeholder consultations for international negotiations. An example of a recent dispute was between the IT and the Telecom sector on the localization of servers in IT sector. The IT sector, represented by NASSCOM argued against localization as it adds to costs of operation. By contrast, the Telecom sector, represented by Cellular Operators Association of India (COAI)[39] argued for localization to promote Make in India initiative, to protect sensitive data and to avoid jurisdiction issues for data in the case where international servers are used. However, the strength of these services councils is dependent on the nature of the service itself. While in the IT sector, NASSCOM has been able to organize the companies and raised its stature due to the external connect and the sheer popularity of its members, others like the health services sector (under the SEPC) is engaged in the promotion abroad through mainly trade fairs.

Thematic Policy Analysis

The central initiatives can be divided into themes: Digitalization, ICT and Technology, Startups and Innovation, Skill Development, , , Export Promotion and Outreach: FDI attraction and trade agreements. For the scope of this study, we will focus on Export Promotion. However, the nature of the policymaking is such that most of the themes overlap in content. To explain the exact nature of strategies that exist, a brief description of the other four themes is also presented. The Government of India has taken two types of initiatives to expand the production and the development of modern services and to promote their exports. Each of these initiatives is either generic or targets a specific sector of the economy. The various central government initiatives have been presented below. Of these, Skill India, Digital India, Start Up India, Invest India are key policies that stand out.

Theme 1: Skill Development

In the 1980s, India still had stringent policy regulations in place restricting imports of hardware. Indian software firms carried out low-value addition jobs. By mid-1980s, with the advent of personal computers, the world witnessed a huge demand for software and services. This led to a massive brain drain, as the Indian diaspora came to occupy a large share of the Silicon Valley. Indian software skills and personnel were respected in terms of credibility and reliability. The decade following that witnessed an exponential growth in BPO and outsourcing exports from India. The country was the number one destination for location of outsourcing industry. However, the same period was also responsible for attracting workers from the manufacturing sector, in search for jobs in the growing IT/ITeS sector. This massive supply outweighed the needs of the industry, and causing unemployment to rise. There was a gap between education attainment and job opportunity. This gap could only be filled by a national skill development program, not only through quality education but also through skill training to make the graduates "employable" in

[39] More at: https://coai.com/about-us

this quick-paced technology led industry. The Skill India[40] initiative launched in 2015 was a consolidated effort to engage various stakeholders in filing this gap.

SKILL INDIA
• The campaign was launched in 2015 with the aim of skilling 500 million Indian by 2022.
• Spearheaded by the Ministry of Skill Development and Entrepreneurship
• It includes institutional training, infrastructural development, and convergence of skill base across states, sustainable livelihoods as building blocks for achieving the overall objective.
• Launched with the aim to empower the youth of the country with skill sets, to make them more employable and productive at their jobs. It was initiated due to the lack of employment creation in India to absorb the country's youth workforce
• Skill India offers courses across 40 sectors , and is recognized by both the industry and the government under the National Skill Qualification Framework.
• Training Centers are responsible for imparting training in Soft Skills, Entrepreneurship, Financial and Digital Literacy. Duration of the training varies per job role, ranging between 150 and 300 hours. Upon successful completion of their assessment, candidates are provided placement assistance by Training Partners (TPs).
• It also includes sub-programs such as SANKALP (Skill Acquisition and Knowledge Awareness for Livelihood Promotion Program), National Skill Development Mission, Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Skill Loan scheme and Rural India Skill. Under PMKVY, the Government pays the entire training and assessment fees.

Under the Ministry for Skill Development and Entrepreneurship, the National Skill Development Corporation (NSDC) was set up with the aim of developing the skill landscape in India. It partners with the private sector, central ministries, state governments, universities and non-profit organizations to fulfill its objectives to include up gradation of skills to international standards, coordinate private sector initiatives by working with 21 universities for alignment of education and training. To supplement this body, Sector Skill Councils (SSC) was set up by the NSDC as an autonomous industry-led body to facilitate the expansion of skilled workforce in India. The SSC creates occupational standards and qualification bodies, conduct skill gap studies and assess and certify trainees.

SECTOR SKILL COUNCILS

The Ministry of Skill Development and Entrepreneurship (MSDE) has also set up SSCs to promote skill development in strategic sectors of the economy. The SSC for IT sector is under NASSCOM, while that of Telecom is handled by the Confederation of Industries of India (CII). With 38 SSCs to date, the mission is to develop a workforce of 3.3 million workers by 2022. They are developed to train and certify trainees to help reduce the skill Gap in India.

The government identified the need for a commonplace where employees, employers, training providers, policymakers, certifying agencies and funding agencies can exchange information about the needs of the industry and skill availability. The National Skill Development Agency created a marketplace called "Skills Exchange", a labor market information system (LMIS) following the suggestions of the Twelfth Planning Commission Report in 2011. To supplement this system, SSC for IT and NASSCOM have

[40] For more information: http://msde.gov.in/nationalskillmission.html.

recently launched a public-private initiative to create an environment for development of professional skills and to fulfill the demand for trained human resources in the IT-BPM industry. The aim is to create career awareness and provide suitable tools in the form of training and workshops to help explore various opportunities in the sector and promote progressive development in the country (Research interview, NASSCOM executive, June 2018)[41]. NASSCOM has launched a product called "Aggregators of Aggregators". Different state governments are ready to collaborate with NASSCOM on this. The SSC is also setting new job standards that will enable sectors to absorb skilled HR with the changing times. More details have been given in the Appendix II.

With the right ecosystem to 're-skill' people, India has been able to retain global leadership in digital skills. USD 1.6 billion was spent annually on training workforce in the sector. This has led to a growing pool of technically skilled manpower produced by the many educational institutes including the highly rated IITs, the regional engineering colleges like NITs, IIMs and NIITs. These Institutes have produced quality professionals of varying technical skills and proficiency in English.

NITI Aayog – A government run think tank – is also instrumental in setting up an Innovation and Knowledge Hub to document innovative approaches. Skill development is one of the key areas to be documented to ensure reproducibility and sustainability of projects undertaken by various state governments. The NITI Aayog has also developed the Sub group of Chief Ministers on Skill Development with the vision to skill, re-skill and up-skill 500 million workers by 2022.

Theme 2: Digitalization, ICT and Technology

The use of technology is rapidly increasing in all part of the economy. Connectivity can be enhanced through telecom and digital means. As compared to other emerging markets, India lags on these two forms of connectivity. More than 200 million persons do not have access to mobile networks, while only 300 million have access to a broadband connection. India needs to connect its people to unleash the potential of its domestic service sector. The Department of Telecommunication is responsible for developing the National Telecom Policy with the aim 'connectivity for all'. As India gears up for the Fourth Industrial Revolution, the policy for 2018 weaves other themes under one strategy to develop the infrastructural, skill and innovation capacities of the country. Telecom Centers of Excellence (TCOE) have also been set up as a public private partnership model in 2007-08 under the TRAI to promote development of new technologies, generate IPRs and promote innovation to make India a global leader in telecom innovation. It brings together academia, entrepreneurs, industry and government.

The National Telecom Policy was developed under the umbrella of an older nationwide program named Digital India[42], launched in 2015, to digitize provision of services. It was

[41] For reasons of confidentiality, the identity of the executive cannot be disclosed
[42] For more information: http://digitalindia.gov.in/content/programme-pillars.

a flagship program of the Government of India to transform the country into a digitally empowered society and knowledge economy. It is an umbrella program that weaves together many Government ministries and departments to provide the much-needed thrust to growth area in the economy. It caters to the pillars of Digital India: e-Governance, Public Internet Access program, Universal Access to Mobile Connectivity, IT for jobs and Information for All. The implementation of the program has been through the establishment and expansion of core ICT infrastructure. The mission has successfully initiated many projects, including the National Digital Literacy Mission, e-kranti mission, Wi-Fi hotspots. Experts believe that the current policy that aims is to enhance connectivity across the country, so that everyone relates to the Internet of Things, and every city in the country can become a Smart City.

Theme 3: Startups and Innovation

India is one of leading countries in the world in the domain of scientific research and among the top five in space exploration. It is also emerging as a major R&D hub in Information Technology and electronics and accounted for 40% of the global R&D in engineering services. A recent initiative launched by the government, the **Atal Innovation Mission** works to promote innovation in India.

Centre for Excellence for the Internet of Things	Atal Innovation Mission
It was developed by MeitY on a PPP model to enable IoT ecosystem through maximizing indigenous solutions across the IoT value chain, leveraging India's strength in IT through collaborative efforts of industry-government- academia- startups/entrepreneurs for India's contribution to global competitiveness and well -being. It was launched in 2015 and will act as a catalyst, supporting policy and regulation development, monitor the IPR generated in the system. It will also create an innovation platform for start-ups, energize research mind-set and reduce cost in R&D. The government of Karnataka has joined the initiative as state partner through grant of space as well as program execution support in the state (MeitY annual report	• Aims to transform the innovation and entrepreneurship landscape in the country • More than 500 Tinkering labs and incubation centers have been set up in across the country to facilitate the holistic development of students • Innovation Index Framework to track promising innovations in the country and the newly launches ***Festival of Innovation*** for reinforcing the inclusive nature of the innovation ecosystem.

A nationwide program "Startup India[43]" aims to promote young entrepreneurship in India. This program has the potential to generate large-scale employment and maintain India's competitiveness in the technology sphere. The ecosystem thus developed is connected to

[43] For more information, visit https://www.startupindia.gov.in/status.php

angel investors; venture funds, incubation centers and knowledge hubs. The center for excellence of IOT also works in tandem with the Startup India initiative. It helps to monitor the intellectual property generated during the process and creates a platform to energize research mindset.

Startup India
• Launched in 2016 to build a strong eco-system for nurturing innovation and Startups in the country that will drive sustainable economic growth and generate large-scale employment opportunities.
• The government has also established a panel of patent, design and trademark facilitators to assist in filing of IP application by the startups under the Startups Intellectual Property Protection scheme.
• The Finance Act of 2016 has also made provisions for tax exemptions for 3 years under the scheme "Fund of funds for startups "to invest in the startups.
• The government has set up Research Parks to propel successful innovation through incubation and joint Research and Development (R&D) efforts between academia and industry.

Theme 4: Export Promotion

The Export Promotion Policy for modern services was developed in two steps: identifying key sectors, and infrastructure to increase exports of services. The Government of India, through the Department of Commerce, released the "Champion Service Sectors" in May 2018. The program targets 12 sectors with the aim of promoting their development and realizing their potential. Each relevant ministry/department is required to implement the Action Plans for these sectors. This initiative will enhance the competitiveness of India's service sectors through the implementation of focused and monitored Action Plans, thereby promoting GDP growth, creating more jobs and promoting exports to global markets. Given services sector in India has immense employment potential, the proposal will enhance the competitiveness through the implementation of targeted and monitored Action Plans, thus creating jobs in the country.

CHAMPION SERVICE SECTORS	Legal Services
Information Technology & IT enabled Services (IT & ITeS)	Construction and Related Engineering Services
Tourism and Hospitality Services	Communication Services
Medical Value Travel	Environmental Services
Transport and Logistics Services	Audio-visual Services
Accounting and Finance Services	Education Services
Source: Department of Commerce, India	

More recently, a new Services division was set up under the Directorate General of Foreign Trade, Ministry of Commerce to examine EXIM policies and procedures from the point of view of services and to improve the availability of data on services. The government has provided infrastructural parks, tax holidays and financing options to enhance exports from the services sector.

The **SEZ Policy** was announced in April 2000 to specifically demark duty-free enclaves for trade operations, duties and tariffs. With the aim of creating competitive, convenient and integrated zones, the program offers world-class infrastructure, utilities and services for globally oriented businesses.[44] The scheme also includes 100% Income Tax exemption on export income for SEZ units, Central Sales Tax, Service Tax. Through this, it has promoted IT/ITeS in smaller cities of India. Tamil Nadu, Telangana, Maharashtra and Karnataka are pioneers in setting up SEZs and lead with the highest number of SEZs in their states. IT/ITES/Electronic, Hardware/Semiconductor is the single most important segment accounting for 63.46 per cent of the total formal approvals and employing over 1 million persons, with a total investment of US$80 billion. [45] The Foreign Trade Policy 2015-2020 also proposed the "Services Exports from India Scheme (SEIS)" under which, exports of notified services[46] from India will be encouraged and maximized through a reward of the Duty Credit Scrip[47]. Only Modes 1 and 2 will be applicable. The eligible service providers should have minimum net free foreign exchange earnings of US$ 15,000 in the preceding financial year. The scheme pays rewards[48] up to 5% of Net Forex earnings.

Precedents of this policy are Software Technology Parks of India (**STPIs**) that were set up in 1991 for the promotion of software exports from India, under the MeitY, with the direct aim of promoting the development and export of software and software services. The services rendered by STPI for the Software exporting community have been statutory services, data communications servers, incubation facilities, training and value-added services. STPI has played a key developmental role in the promotion of software exports with a special focus on SMEs and start up units. This is a 100% export-oriented scheme, with full customs duty exemption, and 100% FDI is permitted across sectors. Over 2500 units are registered under STP Scheme. Overall exports from STPI registered IT/ITes units increased by 9% from 2014-16, reaching a value at $50 billion in 2016. STPIs possess strong global experience in managing ICT projects from the stage of initiation to implementation stage. Additionally, STPI has been promoting SMEs by offering incubation services, human resource development and exports promotion efforts (STPI Annual report, 2015). The organization has been a major thrust to the development of IT/ITeS/EDSM industry in many states such as Karnataka, Tamil Nadu, Telangana, and

[44] It provides drastic simplification of procedures and a single window clearance policy on matters relating to central and state governments.

[45] http://commerce.gov.in/writereaddata/uploadedfile/MOC_636281140249481285_annual_report_16_17_eng.pdf

[46] Services included under this scheme include Business services, communication services, construction and related services, education services, environmental services, health services, social services, tourism and travel services, and transportation services.

[47] They are freely transferable and usable for the payment of customs duty, excise duty and service tax. Policy document can be accessed at: http://www.servicesepc.org/wp-content/uploads/2017/12/Foreign-Trade-Policy-Mid-Term-Review.pdf

[48] http://dgft.gov.in/exim/2000/pn/pn15/pn0315.pdf

Maharashtra that lead with highest software exports by registered STPIs. [49] The overall exports done by STPI registered IT/ITes units increased by 8.77 per cent between 2014-2016.

Moreover, BPO Promotion and Common Services Centers have been established to help create digital inclusion and equitable growth in the BPO export sector. It also aims to provide employment to 15,000 persons in smaller cities. These centers work alongside the Smart Cities program to develop tier2 ad tier 3 cities in India as innovation and digital hubs.

Theme 5: Outreach: FDI Attraction, International Standardization and trade agreements

Indian IT-ITeS industry has been a forerunner with the adoption of quality **certifications** that act as signaling devices. Two of the most widely adopted international certification standards by Indian companies are the capability maturity model (CMM) and the international standards organization (ISO 9000) series (Coward, 2002).

This study has so far focused on software exports, but India has many more niches, particularly in the Telecommunication and professional services and R&D sectors. The growing exports of these two sectors are a clear evidence of their rising importance in India's services export basket. The Telecom Equipment and Services Export Promotion Council (TEPC) promotes the exports of Telecom services, through international seminars and facilitating participation of exporters in overseas exhibitions. The Council makes recommendations to the government for policy changes in promotion of exports from the sector. Similarly, the Services Export Promotion Council (SEPC) of India under the Ministry of Commerce acts as a liaison between the government and the professional services industry. It promotes activities abroad, through overseas trade fairs and encourages observance of international standards. Members of the SEPC can avail the benefits under the SEIS. An annual flagship global event called Global Exhibition for Services (GES) is organized to promote trade in services, enhance strategic cooperation and strengthen multilateral relationships between all stakeholders. The GES has been very successful in showcasing India's strengths in services sectors.

The Consolidated FDI policy is announced each year by the Department of Industrial Policy and Promotion [50] to attract and promote foreign direct investment in order to supplement domestic capital, technology and skills, for accelerated economic growth. In India, services are fully liberalized, with 100% FDI allowed in most services sectors, with the exception of Broadcasting services (49%), Insurance and Pension services (49%) and Banking services (20%) in the public sector. India also adopted the National IPR policy and the GST regime to increase the attractiveness of India as an FDI destination. The

[49] https://www.stpi.in/upld/254AnnualReporte.pdf

[50] The complete document for the FDI Policy 2017 can be accessed at http://dipp.nic.in/sites/default/files/CFPC_2017_FINAL_RELEASED_28.8.17.pdf

Make in India initiative has also recognized the IT-BPM sector as a strategic sector to attract foreign investment.

While it is vital for the central government to work closely with the respective state governments to implement policy initiatives, it is equally important for to work with its country neighbors, global partners and international organizations. Efforts have also been made for effective market access abroad through comprehensive economic partnership agreements with important markets. The path to holistic growth of the economy, rise in global competitiveness and increased international cooperation is through India's efforts in negotiating increased market access, while being committed to international standards. In services sector, India has signed many **Trade Agreements** in the form of bilateral Free Trade Agreements, and Comprehensive Economic Partnership and Cooperation Agreements. Given the importance of services in India's competitiveness in the global economy, most of the recent agreements that India has signed have a separate chapter on services and investment relating matters. The list is given in the table below:

International Agreements with Services Chapters	Date of signing
India Malaysia Comprehensive Economic Cooperation Agreement	2011
India Singapore Comprehensive Economic Cooperation Agreement	2005
Japan India Comprehensive Economic Partnership Agreement	2011
India Sri Lanka FTA	(Services chapter under negotiation)
India Korea Comprehensive Economic Partnership Agreement	2009
India ASEAN Agreement on Trade in Services and Investment	2014
SAARC Agreement on Trade in Services	2010

In matters of **multilateral commitments**, India had presented in September 2016[51](when?) its proposal on the 'Concept Note for an Initiative on Trade Facilitation in Services' (TFS), with the purpose to propose an agreement to facilitate reduction in transactional cost associated with unnecessary regulation and administrative burden on trade in services. The focus of the agreement is on making existing market access meaningful – complementing the GATS – and not on getting new market access. India sees the TFS as a way to implement domestic reforms, because it reduces trade costs (i.e. complex processes), via greater transparency through fast track clearances, regulatory cooperation and knowledge sharing.

[51] WTO (2016), Communication from India: Concept Note For An Initiative On Trade Facilitation In Services, S/WPDR/W/55, 27 September.

India does not support TiSA, which many believe outweighs the impact of the proposed TFS, due to certain clauses requiring the countries to bind their current level of domestic liberalization in services TiSA also forces a country to automatically commit any future policy changes under TiSA and ensure that any future concessions granted to one trading partner will automatically get extended to all other members of TiSA. India is not prepared to sacrifice its autonomous policy changes[52], and thus favors TFS, which allows India to push for liberalization of Mode 4 and simultaneously maintain FDI restrictions in financial and other business services. For India, liberalization under mode 4 is the most important component of services facilitation, and this is evident in all its agreements. Another widely debated area is e-commerce, where India is not keen to liberalize the sector due to its infant domestic industry despite its support for digitization and digital payments systems (Mukherjee and Kapoor, 2017).

State Initiatives

Aside from central initiatives, States have also undertaken reforms in law and formulated state- specific policies to attract the modern services providers to set up base, promote the development and exports of services. The political relationship between the State and the Central government is such that the central government policies tie up with the state governments to facilitate central policy implementation on a micro level by providing power, land and industrial clusters. Such initiatives include infrastructural development, relaxed land and labor laws, fiscal and non-fiscal incentives, to compete vis-à-vis other states of India to attract investment and incentivize companies to set up operations. Karnataka[53], Tamil Nadu, Andhra Pradesh, Telangana[54], Maharashtra[55] and Delhi NCR have been very aggressive in attracting Multinational Companies, Startups and other enterprises to set up operational offices in their cities. There is a sense of ***competitive federalism*** between the five leading states in the IT sector to perform better than the others, with a political gain as a reward.

As a part of the initiatives, State Governments have formulated policies targeting the IT/ ITeS/ Software/ Telecom and BPO-KPO sectors in their economies. Across states, the focus is on increasing the ease of doing business. Some of the incentives include subsidized land subject to employment generation, power at concessional rates, exemptions from strikes, relaxed labor rules for employment of female contract laborers, availability of state-owned/financed infrastructure[56] and skill development programs[57].

[52] https://www.indiabudget.gov.in/budget2017-2018/es2016-17/echap09_vol2.pdf
[53] http://itbt.karnataka.gov.in/Documents/i4-policy.pdf
[54] http://wehub.telangana.gov.in/aboutus.html and for more information on the Telangana Innovation Policy, 2016, visit: http://www.telangana.gov.in/PDFDocuments/Telangana_Innovation_Policy_2016.pdf
[55] Maharashtra's IT/ITeS Policy can be accessed at http://mahaudyog.in/?q=content/maharashtra-itites-policy-2015
[56] For example, to attract investment in IT/ITeS units, Telangana state government has created Information Technology Investment Regions (ITIRs) through ultra-modern planned infrastructure. Other states have invested in SEZs that are managed jointly by private sector and state agencies.
[57] The Karnataka government has developed a skill development program under PPP model to provide skills to the unemployed youth for employment in the ICT emerging cities of the state (YUVA YUGA Scheme): http://www.ictsds.karnataka.gov.in/?q=node/131

With the aim to promote *tier- II cities* as they offer lower costs of living, operation costs, skilled human resources, and low commuting time, and promote *MSMEs* in the sector, State Governments have offered incentives in the form of tax cuts, cheaper rental costs, cheap electricity and a guarantee to purchase IT products/services from them to promote their development. Some other unconditional non-fiscal incentives have been granted in the form of exemption from pollution control act, statutory power cuts, inspections pertaining to labor and wages standards. Some of the most successful cases have been presented in Appendix III.

Implementation and Monitoring: Governance Aspects

The framework provided by Devlin and Moguillansky in their book titled "Breeding Latin American Tigers", 2014, lays out 10 good principles that national policy making should follow for effective governance and sustained growth. They can be summarized as:

i. Technical leadership should be in hands of key ministries, with a nodal agency to coordinate them
ii. Promote medium and long-term strategic thinking
iii. An effective promotion requires specialized agencies to administer and supervise the strategy
iv. Establish a clear and realistic mandate; implement it by defining hierarchical functions for each agency involved
v. Competent and meritocratic bureaucracies are a success for the development policy
vi. Incentives must be coordinated between the agencies to ensure policy coherence and maximize long-term impact
vii. Promotion policies requires extensive public private consultations and deliberation
viii. The effectiveness of the policies should depend on objective evaluation of the process and impact by an independent agency
ix. Minimize risk of government capture by special interest groups through public-private alliances
x. Well-established rules for transparency

This section aims to study the Indian case in the light of this framework, and while checking for compliance with the 10 good principles; it will offer suggestions to tweak the framework to suit the Indian policymaking scenario. The following observations about the governance of policymaking to promote the development of services sectors in India are based on research interviews conducted by the author with key industry players, government representatives and the academia.

One thing that stands out is that the framework presented is a good beginning for our discussion. India is a democratic quasi-federal society. As we saw in the previous section, policymaking in India is a web, rife with interlinks and overlapping jurisdictions. Policy agendas are general developed by a central ministry, and each state is expected to implement it subject to their state's specific needs and bottlenecks.

The first principle in the framework mentions the presence of a ***nodal agency to overlook and coordinate the efforts of key ministries involved***. Until 2014, the Planning Commission was responsible for this activity. It coordinated the ministries and acted as a liaison between the central and state departments. Moreover, it was the sole agency in charge of effective resource allocation. It formulated a plan for the country and defined the stages to carry out, while identifying the obstacles on the way to sustained growth. This ensured policy coherence and maximum long-term impact.

> *"From a highly centralized planning system, the Indian economy is gradually moving towards indicative planning where Planning Commission concerns itself with the building of a long term strategic vision of the future and decide on priorities of nation. It works out sectorial targets and provides promotional stimulus to the economy to grow in the desired direction. Planning Commission plays an integrative role in the development of a holistic approach to the policy formulation in critical areas of human and economic development. In the social sector, schemes that require coordination and synthesis like rural health, drinking water, rural energy needs, literacy and environment protection have yet to be subjected to coordinated policy formulation. It has led to multiplicity of agencies. An integrated approach can lead to better results at much lower costs."*[58]

However, the commission was dissolved in 2014, and a new agency was set up in the form of the NITI Aayog[59] with a different role. It ***monitors and evaluates the implementation by central and state agencies***. NITI Aayog also promotes adherence by states, issues directives for policy making and good governance practices and promotes the public-private model wherever applicable to aid in implementation and extend the inclusivity of government policies. It set up the State Skill Development Missions (SSDMs) to implement state-specific guidelines for national skill development programs and create a 3-tier structure at state, district and block level to ensure effective coordination and monitoring.

Given the size of the economy, coordinating all the efforts made by the respective, specialized agencies is an arduous task. The ***effectiveness of policy implementation is judged by the judiciary and the legislation itself.*** Some experts believe that India does not need an independent agency, as it will not be accountable to the people of this democracy, while others call for a strong institutional emergence by the creation of a public private council that is run by the private players, with constant guidance from the state.

Both the union and state governments are directly involved in policy making. A unique power distribution exists between the central and state governments and under such a quasi-federal system; services are divided as per their jurisdiction. Yet, the ***Cabinet Committee on Economic Affairs*** is pivotal in decision making in the country. It is headed by the Prime Minister and ensures adequate representation from key ministries in the

[58] Read here: http://planningcommission.gov.in/aboutus/history/function.php?about=funcbody.htm
[59] For more information, visit http://niti.gov.in/content/functions#

committee. In India, most of the government agencies are headed by the ***IAS bureaucracy***[60] that is an inseparable part of the executive of the Government of India. These bureaucrats are posted in all government agencies. It ensures administrative continuity to the process of policy making.

It is common in developing countries to that they prepare a long list of to-do items and then find it difficult to meet goals because of a lack of a legal framework or agreement within the government. Plans usually become national programs for the incumbent government because of the inability to build consensus and – a process that continues through political cycles. However, in India, the change of leading political party at the center in 2014 did not lead to a discontinuity of policies in place since the 2000s. The Twelfth Five Year Plan (2012-2017) by the Planning Commission lays out recommendations that were picked up by the next government, despite it being their biggest opposition. They continued to implement nation-wide programs that had its foundations in the recommendations from 2011. India undertook export promotion in the standardized policy framework by providing tax breaks, setting up SEZs and technology parks.

Today, ***India has a medium to long-term strategy focused on diversifying and boosting exports by means of a battery of incentives and attraction of FDI***. India followed the standard template that was used by emerging economies to increase exports and launch their countries in the global platform. Exporting firms and startups were given a market place of incentives to shop at since the early 2000s. The strategy also involved negotiating FTAs in services with partners in South and Southeast Asia. This policy has continued since then, and the efficacy can be seen in the export growth statistics, as India is one of the leading exporters of modern services today.

Previously, it was seen that the Central Government developed umbrella programs and initiatives that span over various ministries and their departments. ***Each specialized department under the ministries implements the brief pertinent to their own jurisdiction***. These specialized agencies are in the form of central departments, ministries and regulatory authorities that help in implementation of the agendas set by the central government. Thus policymaking in India is handled at a disaggregate level.

Public-private alliances in India have taken on different roles. The skill India initiative is one such example; it works with different stakeholders to maximize the outreach. Others like the Data Security Council of India, headed by NASSCOM works in association with the GOI; and the SEPC, focuses on Health services. Moreover, academics and think tanks assist in policy deliberations, and make up expert groups and committees to provide background research.

[60] The IAS stands for Indian Administrative Services and is the highest civil service examination in India. It produces competent officers on merit basis. They occupy positions in ministries and government agencies to serve the nation. They however, remain neutral to the changing political parties in the center and continue to perform their role till the end of their tenure.

CONCLUDING REMARKS: ISSUES AND RECOMMENDATIONS

A quick summary

The growth of the services sector has been an organic process. It started in the 1960s and expanded from late 1980s, despite the absence of a policy framework. Most importantly, external demand from the developing world attracted the young, English speaking population to join the bandwagon of growth. They started off with providing back-office solutions to clients in other parts of the world. Soon, the service industry in India expanded. One of main thrust came from the liberalization efforts in mid-1990s, which helped unleash the potential of India's skilled workforce, along with a suitable time zone that enabled them to work around the clock. This was the business process outsourcing boom and India became the global leader for location of outsourcing operations. Today, the country is taking the leap and gearing for the forthcoming 4th industrial revolution. Indian private sector and policy makers understand the needs to embrace this wave of new technology, both in terms of skill and access to technology. The Collective collaborative effort addresses an employability factor of 350 million, of which direct employment generation of 100 million by 2022. It covers, skilling, re-skilling, up-skilling programs, of which, 90% is intense skilling.

The three-tiered center-state-industry system of policy making has created a web of interlinkages that coordinate the activities in the services sector. *Central programs like Startup India, Skill India and Digital India have been successful. State governments have undertaken legal reforms and formulated state- specific policies* to compete vis-à-vis other states of India to attract investment and incentivize companies to set up operations. The governments of Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Maharashtra and Delhi NCR have been very aggressive and successful in this respect. Recently, the government recognized 12 services as Champion Sectors, with a 5,000-crore budget. These sectors have a vision document with expected targets in place. The Department of Commerce is pushing the knowledge-based services, like legal and accounting services however, these sectors remain small due to the extensive regulations set forth by BCI and ICI to monitor them.

Pending issues and recommendations

BPO services are now shifting to other countries in the region, specifically Indonesia and Bangladesh, because they have discovered a better-cost (wage) arbitrage than India. Naturally, multinational companies are locating to these destinations to reap the benefits of lower labor costs. With jobs flowing out and the prevalence of higher value-tech driven services like robotics, AI, big data and cloud computing, India faces a massive skill gap. The country finds itself in a new era of digital construct and has realized that they cannot survive independently as an IT sector without the active collaboration of other sectors like automotive, retail, manufacturing, healthcare, life sciences. The 'new tech' is creating automation. This implies more people who are thinkers and attuned to the new tech

available. The recent estimates say that 40% of the current IT employment will be obsolete and is going to need re-skilling. ***The looming question is how to insert the young population into high value services sectors***. The answer is Rapid re-skilling of those already involved in the IT sector, to raise their employability. The focus needs to shift from just skilling to increasing use of technology and enhancing employability of the young population. India also needs to move up the value chain, as it has been stuck long enough in low skill, backend jobs. The need is even more apparent today, given how India is losing these low wage jobs to its neighbors in the region and Eastern Europe. ***Despite programs aimed at increasing connectivity, more than one billion people do not have access to the Internet in India today.***

To boost exports in modern services, especially technology led IT industry, India needs to increase the focus on services in SEZs and enhance data protection and consolidate the diverse needs of the telecom and IT sector in issues relating to localization of servers.

To enhance the exports of professional services, there is a need for foreign countries to give due recognition to India qualifications in terms of Mutual Recognition Agreements (MRAs). India needs to sign more MRAs to promote Indian professionals in accounting, legal, consulting and business services and that enhance recognition of their skills. India must undertake capacity building of lawyers and firms in dealing with international law and third country law. Legal firms are regulated by the Bar Council of India that limits the size of these firms. This has restricted the growth of legal firms in India vis-a-vis international firms that are much larger in size. The Bar Council of India must also facilitate overseas firms to outsource legal services to India, given how entry of foreign lawyers and firms is restricted in India.

The government must also ***encourage greater certification of Indian personnel and companies*** to provide services and compete for outsourced professional services from developed countries. This can also help ***deal with the licensing gap*** that exists due to international standards, qualification requirements, technical standards. India needs a certification program that can train the informal services sector, meet thresholds levels and orient the economy towards providing services. There is a gap between qualification and employability that needs to be bridged through training and skilling programs. In addition , to be globally competitive India needs to adhere to global standards and have more service providers certified by international agencies.

India has untapped potential for coupling technology with trade and knowledge creation with wealth creation.[61]. They must enhance patent funding to promote innovation and R&D. The department of Scientific and Industrial Research is operating a scheme for recognition and registration of in-house R&D units established by the corporate sector. However, partnerships and alliances have scope to mature further. While developed countries and other emerging markets spend up to 4% of GDP[62] on R%D, India does not even spend 1%. India needs to invest in R&D, innovation, AI, robotics to compete with

[61] www.planningcommission.gov.in/aboutus/committee/wrkgrp12/sandt/wg_ppp.pdf

[62] Data accessed at: https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?year_high_desc=true

other emerging economies. India also face data privacy barriers in other countries in mode 1 of services. It is thus extremely difficult to get access to the developed markets because of the stringent GDPR laws. There is an entry barrier for MSMEs in terms of lack knowledge about Data privacy laws and there is a need to facilitate them to export through mode 1 to the developed economies.

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Appendix I

Some key stakeholders for policymaking, apart form the central and state ministries:

Regulatory Authorities

Telecom Regulatory Authority of India	• Regulating the allocation of telecom services • Regulation and setting of tariffs of services
Reserve Bank of India	• formulating and implementing monetary policy • maintaining price stability in the economy • prescribing broad parameters of banking operation and maintaining public confidence in the system • facilitating external trade and payment • banker to the government and to other banks
Securities and Exchange Board of India	• Protecting the interests of investors in securities • Promote the development of, and to regulate the securities market

Industry Bodies

National Association of Software and Services Companies (NASSCOM)	• Established in 1988 for the development and promotion of the IT- BPM sector. It works in association with MeitY and MSDE.
Other Service Providers Association of India (OSPAI)	• Established to meet the industry needs of Telecom sector as well and to ensure implementation of government policies in the industry. It works in association with MeitY, Ministry of Commerce and Industry, TRAI and Ministry of Finance.
The Internet and Mobile Association of India (IAMAI)	• Formed in 2004 to represent the interests of online and mobile value-added services industry in India, a sub-sector of the Telecom industry.

Appendix IIA

Some of the key initiatives taken to promote modern services in India are given below.

Skill Development:

AGGREGATORS OF AGGREGATORS

NASSCOM has roped in various online courses providers across the world under one roof, such that a retail marketplace is created for learning, like an Amazon for learning about the new tech. The platform is AI enabled, where it diagnoses your aptitude and helps you learn the new skills. The government is providing support to this program by incentivizing the course takers by partly paying for the courses. This results in a certification that enables the learner to look for suitable jobs through an inbuilt marketplace that brings together employers looking for bright minds with the new-tech skills and the freshly skilled job seekers.

Digitization and ICT:

NATIONAL TELECOM POLICY (DoT, 2018)

The Government has proposed the NTP 2018 and seeks to spur the socio-economic development with ***connectivity for all*** through assured quality of service, facilitating development of infrastructure and services for new technologies including 5G and IoT, while paving the way for the Fourth Industrial Revolution, Industry 4.0), encouraging innovation, and developing a large pool of digitally skilled manpower.

Objective: Leapfrogging India into the top-50 nations in the ICT Development Index (IDI), released by ITU every year, by 2022; to attract an investment equivalent to USD 60 billion in communication sector by 2020 and USD 100 billion by 2022; to become net positive in international trade of communication systems and services by 2022; and to create 2 million additional jobs in ICT sector by 2022.

Key Policies: Rationalize the taxes and levies on ICT equipment, infrastructure and services, simplify the One Nation- One License concept for services, and increase international cooperation. Develop data centers involving legal, cyber and data security connectivity, build physical infrastructure for communication networks through the role of local and state governments, power, and tackle human capital relating issues with cooperation with Ministry of Human Resource and Development, as well as data analytics, cloud computing, and homegrown digital platforms and applications. Also, setup Special Technology Zones (STZs) for experimental products, technology innovation and development of required infrastructure for R&D.

Appendix IIB

A quick summary of the central initiatives under three main policy instruments to promote the production, development and exports of modern services has been given in the figure below. The keys to growth of the sector have been identified as the development of specialized human capital, the promotion of a safe and inclusive digital ecosystem and an aggressive and open FDI policy and an active export promotion policy.

Specialized Human Capital

- ***Skill India Initiative***
- Ministry of Human Resource Development ***(MHRD)***: Higher Education and Technical Education
- Ministry of Skill Development and Entrepreneurship ***(MSDE)***
  - National Skill Development Corporation India
  - Promotes technical education with MHRD
  - Convergence of Central skill development schemes/ programs in MSDE
- ***NITI Aayog***
  - Innovation and Knowledge Hub
  - Sub group of Chief Ministers on Skill Development
- ***Department of Science and Technology:***
  - Research and Development
  - Human capital Development
  - National Innovation Council
- ***Vocational and technical programs***, software development, courses in IT developed by top engineering colleges and universities like IITs, NITs, NIITs, ITIs etc.

Digital Ecosystem

- ***Digital India initiative***
  - Under MeitY
  - Distance technical education with MHRD
  - E-banking facilities with Ministry of Finance
  - E-Governance
- Innovation and Technology promotion through ***StartUp*** India
- Intellectual Property Protection ***(IPR)***
  - Promoted by the Department of Science and Technology
  - Co-handled by DIPP through Modernization and Strengthening of Intellectual Property Office ***(MSIPO)***
- ***Data Protection Law*** currently under review

Attraction of FDI and Export Promotion

- Consolidated ***FDI Policy*** released by the Department of Industrial Policy and Promotion (DIPP)
- Special Economic zones through MC&I ***(SEZs)***
- Software Technology Parks created by MeitY ***(STPs)***
- ***FTAs*** signed by India to ease trade in Financial services, ICT services
- ***Services Export Promotion Council*** set up under the Ministry of Commerce and Industry
- ***Brand India*** promotion through setting up India Brand Equity Foundation (IBEF)

Appendix III

Some successful state level initiatives have been highlighted below.

Karnataka

- Forefront of Information Technology and Bengaluru is the IT capital of India.
- A Brand Bangalore has been established to promote Karnataka as a preferred destination for technology investment in software and IT services, and outsourcing services.
- The Karnataka government under the Department of IT, BT and S&T released the i4 policy (IT, ITeS, Innovation and Incentives Policy), which relaxes the norms for the IT/ITeS/BPO/KPO/ Telecom based industries in the state, where companies were granted **exemptions from strikes**, relaxed labor rules for employment of **female contract laborers in night shifts**, conducive environment for **startups** through Internet provision at concessional rates, government land leasing, linkages to angel funds/mentors to develop linkages using the support from think tanks, state departments, NASSCOM and academic institutions.
- Bengaluru is already the 4th best technology hub in the world after Silicon Valley, Boston and London as per UNDP report.

Telangana

- The State of **Telangana,** through its IT, Electronics and Communication Department, formulated incentives for the ICT industry, keeping in mind the requirements of the existing industry.
- Among others, reimbursement of the cost of filing **Patents/ Copyrights** to encourage the filing of patents by companies located in the state and the expenditure incurred for obtaining quality certification
- Encouraged the **Green IT** initiative with subsidy on installation of solar power generation units for Mega IT projects.
- The state of Telangana is in the forefront of nurturing talent and gives extreme importance to innovation and entrepreneurship through its flagship initiative, **T-HUB**, with the aim to make the state a start-up hub, with special R&D grants to promote the product development, promotion of PhD students in technology sector.
- T-Hub is a PPP between the Government of Telangana, premier academic institutes and key private sector leaders. It is an intersection of start-ups, research and government sector. For more information, visit: https://t-hub.co/about/
- Another special mention for the Telangana State Government is the initiative to **empower the *women entrepreneurs,* called WE hub** to penetrate the IT industry. For this, the state has offered investment subsidy, interest subsidy on loans, uninterrupted supply of electricity, rebate on land costs and recruitment assistance.

Maharashtra

- The **Maharashtra** State Government has integrated IT SEZs within townships called Integrated IT Townships (IITTs) like in the cities of Powai and Thane, as they believe the success of SEZs will be enhanced if there is residential space close by.
- A promotion brand has also been established by the state of Maharashtra, along with a dedicated IT policy.

EXECUTIVE SUMMARY

India has been one of the successful countries worldwide in terms of modern services exports, especially in the areas of ICT and software. Indian IT industry has built up an enormous confidence for itself in the global markets comprising of software industry and information technology enabled services (ITES) (including BPO industry). India is also considered as a pioneer in software development and a favorite destination for IT-enabled services. Moreover, in recent times, the country has also emerged as one of the fastest growing telecom markets in the world with the second largest wireless network in the world after China. Various government policies exist and certain initiatives have been recently taken by the government such as Digital India and Start up India to promote modern services in India, with the view of 'Modernization' at its core.

Devlin and Moguillansky in their 2011 book titled," Breeding Latin American Tigers" have highlighted 10 "good principles" that national policy making should follow certain principles for an effective governance and sustained growth. They can be summarized as follows:

i. Technical leadership should be in hands of key ministries, with a nodal agency to coordinate them
ii. Promote medium and long term strategic thinking
iii. An effective promotion requires specialized agencies to administer and supervise it
iv. Establish a clear and realistic mandate; implement it by defining hierarchical functions for each agency involved
v. Competent and meritocratic bureaucracies are a success for the development policy
vi. Incentives must be coordinated between the agencies to ensure policy coherence and maximize long-term impact
vii. Promotion policies requires extensive public private consultations and deliberation
viii. The effectiveness of the policies should depend on objective evaluation of the process and impact by an independent agency
ix. Minimize risk of government capture by special interest groups through public-private alliances
x. Well-established rules for transparency

Aim: Considering these ten good principles, this study aims to analyze the process of policy making in India for promotion of modern services. It highlights the main public and private players responsible for definition and implementation of policies, along with their organizational and implementation mechanisms through various institutions. It then evaluates the governance of these institutions and checks their compliance with them.

Methodology and sources: The study is based on review of secondary literature and in-depth meetings with policymakers, services experts, industry etc. The secondary research covered literature review, data analysis and extraction of institutional framework and policies from different government websites. Data from World Bank, UNCTAD, and

Ministry of Commerce, India was also used to prepare an overview of the services sector and its contribution to the economy. Further, primary research in the form of interviews with key policy makers and academicians was conducted to delve deeper into the governance aspects of these policies.

Key Findings: Through our research, we found that *there is no nodal agency in India* to develop and promote the services sector, and both, the union and state governments are directly involved in policy making. A unique power distribution exists between the central and state governments and under such a quasi-federal system, services are divided as per their jurisdiction. For example, financial services, telecommunication services and IPR are under the central government, land and health are under the state jurisdiction, and labor laws, skill development and education are jointly administered. Additionally, there is *no long-term vision plan to facilitate the growth of modern services* in India. There are numerous ad hoc initiatives that exist but they lack coordination and a clear mandate.

The Central Government develops umbrella programs and initiatives that span over various ministries and their departments. *Each specialized department under the ministries implements the brief under their own jurisdiction*. There are two types of central initiatives, to promote the production of modern services on one hand and to promote the exports of these services abroad. There exist *inter-ministerial linkages* as sometimes, multiple central bodies and agencies coordinate their activities are. For example, skill development initiatives are carried out by both the Ministry of Skill Development and Entrepreneurship under the National Skill Development Council as well as the Ministry of Human Resource Development's department of higher and technical education.

Apart from central ministries and departments, *the government has also set up regulatory authorities* like the Telecom Regulatory Authority of India (TRAI), Reserve Bank of India (RBI) and the Securities and Exchange board of India (SEBI) to aid in the development of the services sector. TRAI is responsible for regulating the allocation and tariffs of telecom, while RBI is the apex monetary and financial authority in India, responsible for formulating and implementing of monetary policy. SEBI on the other hand, is responsible for regulation of the securities market.

Some of the central initiatives include Skill India with the aim of skilling 500 million Indian by 2022 and includes institutional training, through software programs, vocational and technical institutes and infrastructural development; Digital India to transform India into a digitally empowered society and knowledge economy; Start Up India to build a strong eco-system for nurturing innovation and startups through R&D centers and incubators; along with intellectual property and data protection laws, to assist the services economy. *To promote export performance in modern services*, Ministry of commerce and Industry, along with Ministry of Electronics and IT has set up Software Technology Parks (STPs) and Special Economic Zones (SEZs) around the country. The government has also

liberalized FDI in all service sectors expect financial services to attract foreign investment in the sector.

Such central policies are implemented by each state, subject to their specific needs and bottlenecks. *State governments have also undertaken legal reforms and formulated state-specific policies* to compete vis-à-vis other states of India to attract investment and incentivize companies to set up operations. The governments of Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Maharashtra and Delhi NCR have been very aggressive and successful in this respect. They have formulated policies targeting the IT/ ITeS/ Software/ Telecom and BPO-KPO sectors and across states, with focus on increasing the ease of doing business. Some of the incentives include subsidized land, fiscal incentives, concessional power, exemptions from strikes, linkages to angel investors for startups, relaxed labor rules for employment of female contract laborers, availability of state-owned/financed infrastructure and skill development programs. For example, *Bengaluru is the IT capital of India* and Karnataka is in the forefront of IT sector specific policies and is therefore a preferred destination for technological investment in software and IT/ ITeS.

Policymaking and implementation is also carried out by industry-led bodies that work as a liaison between the government and the industry The National Association of Software and Services Companies (NASSCOM) is one such agency and was established in 1988 for the development and promotion of the IT- BPM sector. It works in association with Ministry of Electronics and IT and Ministry of Skill Development and Entrepreneurship. The government also consults with CII and FICCI for policy formulation, and they also represent India at international services conclaves and forums.

The central ministries coordinate on multiple levels with the state governments, industry bodies and regulatory authorities through various government initiatives to promote the production and export of services in India. The government has set up a public think tank, *NITI Aayog to monitor and evaluate the implementation by central and state agencies*. It also promotes adherence by states, issues directives for policy making and good governance practices and promotes the public-private model wherever applicable to aid in implementation and extend the inclusivity of government policies.

While it is vital for the central government to work closely with the respective state governments to implement policy directives, it is equally important for it to work with its neighbors, *global partners and international organizations for issues related to market access and standardization*. In services sector, India has signed many *bilateral and plurilateral Trade Agreements* with separate chapters on services and investment related matters. For example, India-ASEAN agreement on trade in services and investment was signed in 2014, while CECA's with Japan (2011), Singapore (2005) and Korea (2009) were signed a decade ago. In matters of multilateral commitments, India has advocated for a trade facilitation agreement on services, while maintain distance from TiSA.

Concluding remarks and recommendations: From our analysis, we found that modern services promotion program in India does not follow all the ten "good principles". While, the central government, respective state governments and industry bodies work in tandem through the web of ministries and departments responsible for the formulation and implementation of policies, there is a *lack of a nodal agency to coordinate their efforts.* The central government forms policies that are implemented by specialized agencies, ministries, and state governments. The central agencies also work extensively alongside think tanks, industry-led organizations, and academia to maintain transparency in its processes and ensure proper implementation of its policies. The role of the states and specialized agencies is monitored and evaluated by NITI Aayog that also issues directives for good governance to all the players. However, the interplay of ministries and implementing bodies has created *a complex web of policy making in India that hinders the formation of a clear mandate and its effective implementation*.

Policymaking needs a *long-term vision plan* for sustainable development of the services sector and to discourage political players from being trapped in short term mentality. This document should address infrastructural, human capital, facilitation, innovation and market access needs of the industry in a harmonized way.

Further, to coordinate the activities of all the players involved, we recommend setting up of *a nodal services agency in India to promote domestic and international efforts* for growth. This agency should *include public and private participation* to ensure adequate representation of all parties and to prevent capture by a certain political party or interest group. We also recommend that *existing agencies are strengthened* to enhance implementation of polices and the sector is further modernized to reduce in project delays, increase the ease of doing business and enhance transparency in the system.