Negotiating For Digitally Delivered Services- Framework for a Comprehensive Approach

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Contents

Executive Summary

Trade in Services: Modes and Multimodality

Unlike goods, trade in services takes places through different forms and business models. Services can be performed and delivered across borders with the service provider and recipient in two different countries. Examples include IT or software services or IT enabled services (ITES) such as customer support or online education. In trade parlance this cross-border mode of service delivery is called Mode 1. Such cross-border or Mode 1 services are increasingly the dominant mode of global services trade. Improvements in digital technology and infrastructure has made it possible for a large number of services specializations (occupations and sectors) to be performed remotely and delivered cross-border. The focus of this paper is on this wide range of such Mode 1 services trade in Digitally Delivered Services.

Services can also be traded through branches or affiliates of the exporting party located in the importing country. For example, the branch of a US bank or the campus of an European University located in Japan providing financial and education services in that country. Service performance and exports through such physical presence of branches/affiliates in the importing country are defined as Mode 3 in trade parlance.

There are instances where the service provider (i.e., the actual person) performing the service physically travels to the importing country. Examples include an Indian IT professional travelling to US to provide services to US based firms. Such service performance are defined as Mode 4 in trade parlance.

It needs to be noted that most businesses would provide their services to clients in other countries, i.e., export their services using a combination of the above-mentioned Modes, i.e., the service delivery would be 'multi-modal' in that sense. This is especially true of Digitally Delivered Services, and the key argument in this paper is that such multi-modality needs to be taken into account in the regulatory frameworks governing trade in services, and provisions that reflect this reality be made integral within trade agreements.

The Centrality of Cross-Border (Mode 1) for India's Services Exports

Indian IT/ITeS exports have largely been cross-border or Mode 1, with other Modes such as Mode 4 and Mode 3 playing important supporting roles. As the scope and range of services

that can performed and delivered from offices/locations in India to serve a global market place has expanded exponentially due to the digital revolution, India is becoming one of the global hubs of digitally delivered services which includes the traditional IT/ITES in its ambit. For the purposes of this paper digitally delivered services or DDS will include the IT/ITES.

In the initial years of the IT boom in India, offshore delivery of services was complemented by an equal emphasis on sending Indian professionals to foreign countries to service clients in-person (Mode 4). However, over time, with developments in technology and infrastructure, a large number of services that could only be delivered in-person can now be remotely performed through digital delivery. As such, in the future, the share of Mode 4 (which involves professionals travelling to a client's country to service the client) in India's export basket is only likely to go further down in favour of Mode 1 (which is cross-border digital delivery of services).

Fundamental role of supporting Mode for DDS: Supplemental need for physical presence in client country (Mode 3) and visas for workers for location in client sites (Mode 4)

This transition reflects in the way modern Indian firms export services today under the 'global delivery model'. This is multimodal delivery of services. An Indian firm may service a US client through a combination of modes as follows. A large chunk of the project may be performed in India and delivered digitally to the client (Mode 1). The firm may also open a branch in the US to effectively perform certain services through commercial presence (Mode 3), or might send certain high-level professionals abroad for specific project needs (Mode 4).

Such a global delivery model necessitates that firms enjoy a certain level of certainty in terms not having any impediments in their operational model. In other words, there should be allowed to delivery their services cross-border through digital means, have the right to open offices in the countries where their clients are situated, and when required be able to send their personnel across border to their clients location abroad for short periods of time to take care of commercial, operational or technical issues.

Therefore the need for market access and operational certainty of the global delivery model of firms focusing on digitally delivered services is multi-modal. The negotiated outcome for digitally delivered services should reflect this reality, i.e., provide market access, national treatment and regulatory clarity across all modes.

Securing such a multi-modal access, especially for firms that are operating in the digitally delivered services space is critical to the smooth operation of global value-chains in services that have emerged in the last two decades with cross-border delivery using digital means forms at the core of their operations. As we argue in this paper, digitally delivered services are well on their way to becoming the dominant business model in global trade in services. This dominance will only further expand and deepen as remote performance and delivery of more and more occupations and services specializations becomes possible due to technological innovation.

India in particular stands to be a major beneficiary of these developments. The rapid increase in the number of Global Capability Centres or GCCs in India, and India's overall dominance in this GCC space is reflective of remote/digital performance of a number of core services specializations.

We argue that there is a need to pursue a dedicated approach for negotiating market access and regulatory certainty for digitally delivered services through binding commitments in FTAs taking into account this riding tide of GCCs and the expansion of possibilities for the remote delivery of services across a range of occupations and sectors. Such services can potentially power India's second middle-class revolution just like IT/ITES did starting the early 2000s.

The core objective of this paper is to provide an in-depth analysis of the challenges facing digital delivery of services today. More importantly to anticipate and identify the potential future barriers to digital delivery of services and the global delivery model and suggest solutions that can be worked into India's FTAs in the present so as to pre-empt any challenges from emerging for the biggest component of India's services exports.

India can take the lead in providing many of these solutions, and thus pave the way for other countries that are equally interested in digitally delivered services to build on these solutions and further mainstream them within the global trade policy architecture.

While Mode 1 today remains largely free of regulatory barriers, this is already starting to change as the world becomes increasingly dependent on cross-border digitally delivered services. Pressures of competition and diverse regulatory approaches in different countries will lead to reductions in current levels of open-ness and barriers will start to emerge.

Thus, it is even more important to secure the current levels of open-ness for cross-border performance and delivery of services available in most economies. It needs to be pointed out

that India had actively pushed for all WTO members to take a binding commitment on their existing autonomous regime (i.e., rules as they currently apply), especially for Mode 1 and Mode 3 market access during the Hong Kong Ministerial in way back in 2005. Indian negotiators had presciently understood the importance of cross-border delivery in the future of services trade, and the fact that cross-border delivery is augmented by commercial presence in client countries and placement of personnel in client sites.

Our paper argues for a bilateral version of the Hong Kong Ministerial outcome dedicatedly for digitally delivered services, with several other layers related regulatory issues added on to it. The paper offers a framework that can serve as a blueprint to negotiate services in trade agreements, and would bring trade agreements in line with the multimodal way services are actually supplied today. It also offers solutions for thorny issues of tech neutrality and classification of new services, and provides for the accountability of service suppliers digitally delivering services without physical or commercial presence in the target market.

A key message in our paper is that India needs to shift its focus away from an over emphasis on securing commitments on Mode 4 or temporary movement of Indian workers abroad. We argue that there is a need for a fresh look at the whole issue of Mode 4. Demographic shifts across the world will create demand for foreign workers for a diverse range of services and occupations, and current structure of securing commitments in FTAs related to movement and management of cross-border flows of workers is no longer fit for purpose for the current realities.

The demand for workers from countries like India would increasingly come from firms abroad, not Indian firms whose needs and priorities would change. This fact is borne out by recent US work visa data, which shows that while there has been a decline in Indian firms applying for H1B visas, it is multinational US giants like Amazon, Microsoft and Tesla that are applying for an ever-larger number of H1B visas to bring Indian talent to the US.[2]

[2] https://www.businesstoday.in/nri/visa/story/tcs-wipro-infosys-indian-it-firms-face-over-50-decline-in-us-h-1b-visa-approvals-in-fy24-report-457185-2024-12-13

Chapter 1: Rising Importance of Digitally Delivered Services

Digitally delivered services (DDS) are charting the future of international services trade, and India, due to a plethora of factors (ranging from a large English-speaking population, large absolute number of STEM graduates, relatively lower labour costs, existing economies and scale and goodwill in IT/ITES, IT infrastructure), is primed to dominate in the trade of DDS across a range of occupational and sectoral specializations.

Facilitating this trade in DDS and future-proofing it from policy shocks would require policy-makers to focus on the specific business models related to DDS delivery and its understanding the unique challenges that exist or might emerge in the future. Developing such an understanding will require us to appreciate the evolution of DDS starting with the IT/ITES revolution that started roughly four and a half decades back.

Part 1: The History of Indian Services Trade

The history of Indian services trade has largely been the history of India's IT industry. The Indian IT industry as we know it today traces its origin to the 1980s when big, bulky mainframe systems gave way to microcomputers, which could be used to run a wide variety of software. This allowed companies to buy cheap computer systems, and build software tailored to their needs that would run on those systems.[3]

Indian IT firms like Infosys, TCS and Wipro offered such companies the ability to develop this software at a cost significantly lower than that in their own countries, using competent skilled labour in India available at much lower prices. In the early 1980s, the internet infrastructure that we depend on today for international communication and remote delivery of work did not exist. Apart from the lack of physical infrastructure, the technological tools and sophistication that would allow teams to work remotely were also missing. As such, building software for companies in the US or the UK required Indian IT firms to send their coders to those countries in a practice known as body shopping.

In the late 1990s, the panic around the Y2K bug – of software programs that utilities and businesses depended on coming to a halt because of the date shift from 1999 to 2000 – provided further impetus to Indian IT firms, and a large number of IT workers from India were transported to developed countries like the US to resolve the issue.[4]

[3] Source Code, Vedica Kant, https://fiftytwo.in/story/source-code/
[4] What ails India's IT industry, R. Sukumar, https://www.livemint.com/Opinion/US1nOK59tYkRdJnEVfRPhK/What-ails-Indian-IT.html

The 2000s saw the rise of IT-enabled services (ITeS) – services that combine domain-specific knowledge with IT – for example banking and finance applications enabled through the internet, educational or legal services delivered via information technology, and a host of other services across a wide variety of sectors. By this time, the internet had taken root across the world, and a number of IT and IT-enabled services could be provided remotely to international clients by skilled workers sitting in India. Indian IT firms complemented their on-site Mode 4 workers with off-site delivery of services from their Indian premises under Mode 1. This fast-tracked the evolution to business model that combined services delivery across a number of modes to meet their client needs, i.e., the 'global delivery model'.[5]

However, Mode 4 continued to play a heavy role in the business of Indian IT firms – supported by the new H1-B visa programme, launched in 1990 in the US under President George H.W. Bush, to help American firms grappling with labour shortages in specialised sectors like programming, research and engineering bring in skilled workers from across the world.[6]

One associated impact was that this increased demand for highly skilled Indian IT workers resulted in the rise of numerous engineering colleges, churning out engineers in India at an ever-increasing rate.[7] The creation of a large private education eco-system in STEM subjects is now a major factor in the human resource development and economies of scale in skills that makes India such a competitive location for activities related to GCCs[8].

Indian IT firms started work in upkeep and maintenance of software and products built by other firms, as is illustrated by the Y2K experience. However, over time, they matured into being able to deliver customised products built by Indian engineers from the ground-up, creating further opportunities for the industry.

An Infosys engineer working in a supporting role for a software product built by an American company could still be replaced by other engineers, possibly those deployed by the original American developer, albeit at a higher cost. But an Infosys engineer working on a software built by Infosys itself was far more critical to a client's operations.

The autonomous regimes for cross-border delivery or Mode 1[9] in key markets like the US and Europe have been permissive and open to IT and IT-enabled services, and IT firms have not

[5] What ails India's IT industry, R. Sukumar, https://www.livemint.com/Opinion/US1nOK59tYkRdJnEVfRPhK/What-ails-Indian-IT.html
[6] Source Code, Vedica Kant, https://fiftytwo.in/story/source-code/
[7] Source Code, Vedica Kant, https://fiftytwo.in/story/source-code/
[8] Although many experts argue that there urgent need to update syllabus and learning methodology to reflect current needs in AI, machine learning, and domain specific knowledge in natural sciences, engineering, and professions
[9] In this context, the autonomous regime of a country is the set of trade-affecting laws and regulations in the country beyond those mandated by international agreements the country is party to. An open or permissive

faced any significant barriers in supplying services to clients in these markets. Such open markets played a critical role in ensuring unimpeded growth of this sector.

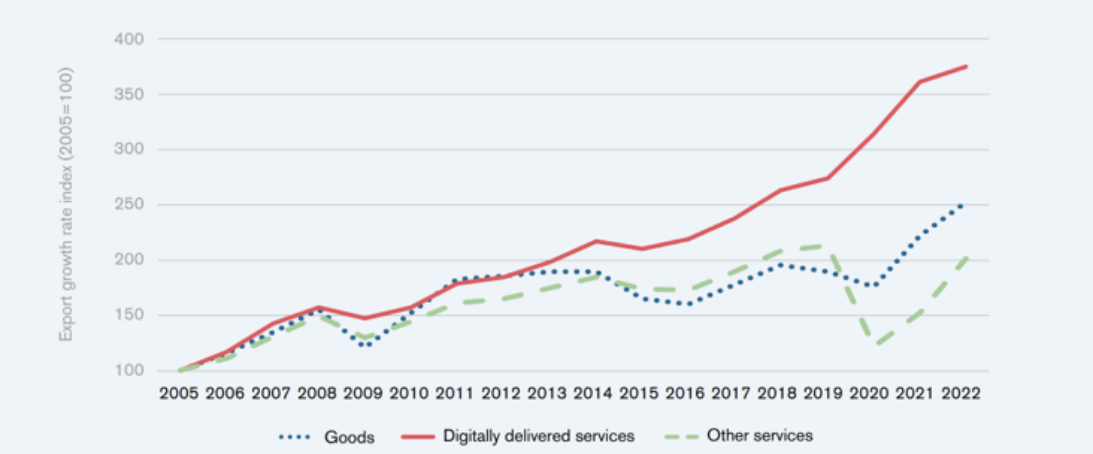
India engendered a middle-class revolution through the rise of IT and ITeS exports starting early 2000s. In the following part of the paper, we argue that the future of services trade will be defined by a widening of the scope and scale of IT enabled services, i.e., a much more expanded range of occupations that would be performed remotely in locations away from the service recipient and involve digital delivery. If India is to deepen and expand its middle-class revolution, it must take steps that secure its future as a leading exporter of digitally delivered services.

Part 2: Charting the Growth of DDS – World

The world as a whole is witnessing rapid digitalization trends, allowing an increasing number of services tasks (that traditionally required the service provider and customer to be physically co-located) to now be done online and remotely.

Recent reports provide further support of this shift. The 2023 Digital Trade for Development report (prepared collaboratively by the IMF, the OECD, UNCTAD, The World Bank and the WTO) found cross-border DDS to be the fastest growing segment of international trade, with a four-fold increase since 2005, outpacing goods and other services exports to account for 54 per cent of total services exports.[10] Figure 1 below summarizes these findings.

Figure 1: Booming Digital Exports: Surpassing Goods and Traditional Services



Source: WTO (2023b)

autonomous regime would mean that traders exporting to the country do not face significant regulatory hurdles, while a restrictive autonomous regime would imply the opposite.

[10] Digital Trade for Development, IMF (2023) https://www.wto.org/english/res_e/booksp_e/dtd2023_e.pdf, pg 3

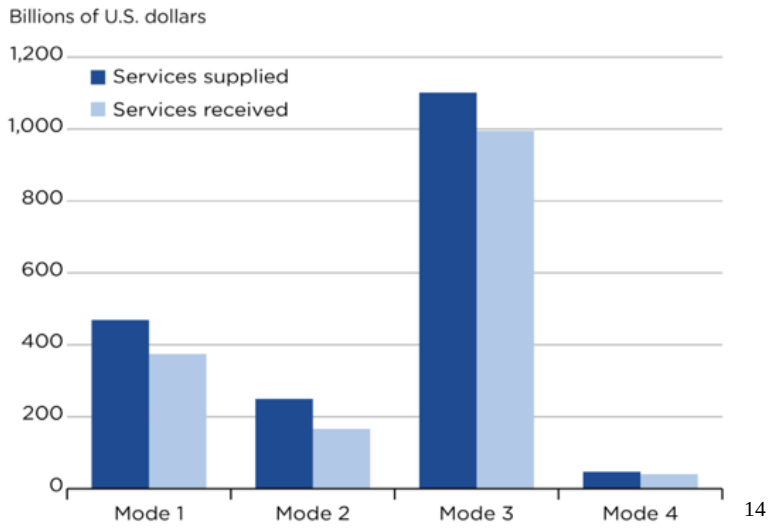
Note: The figure displays the growth rate of exports of goods, digitally delivered services and other services. The base year of the growth rates is 2005 (2005=100)

Some of the well-known unicorns in the Indian start-up eco-system underline these trends. Examples include Unacademy for education and DocOn or Practo for medical consultations. Unacademy had amassed over 50 million users by April 2024,[11] while online doctor consultations via Practo grew more than ten times between April and November 2020.[12]

Augmented reality applications are helping support remote maintenance of industrial machines or inventory management in warehouses. Occupational functions ranging from remote monitoring of patients, managing large engineering systems in factories, diagnosing patients, or managing an arbitration process can all be done online. This extends to providing tuition lessons or yoga instruction, editing a film, or being an executive assistant. Much of this is already happening and getting mainstreamed.

The rise of Mode 1 services across the world is further supported by a 2019 working paper by the Bureau of Economic Analysis (BEA) at the US Department of Commerce.[13] Figure 2 below shows the mode-wise distribution of trade in services in the US:

Figure 2: US Trade in Services by Mode



[14]

[11] Unacademy Net Worth in 2023 | What Is the Income of Unacademy?, Ankita Panda (2023) https://digest.myhq.in/unacademy-net-worth/#:~:text=The%20platform%20boasts%20an%20impressive,of%20India's%20largest%20tech%20platforms.

[12] The Practo Blog, "Building access to quality healthcare: COVID-19 & beyond," November 30, 2020, https://blog.practo.com/building-access-to-quality-healthcare-covid-19-beyond/https://www.bea.gov/index.php/system/files/papers/WP2019-7_2.pdf

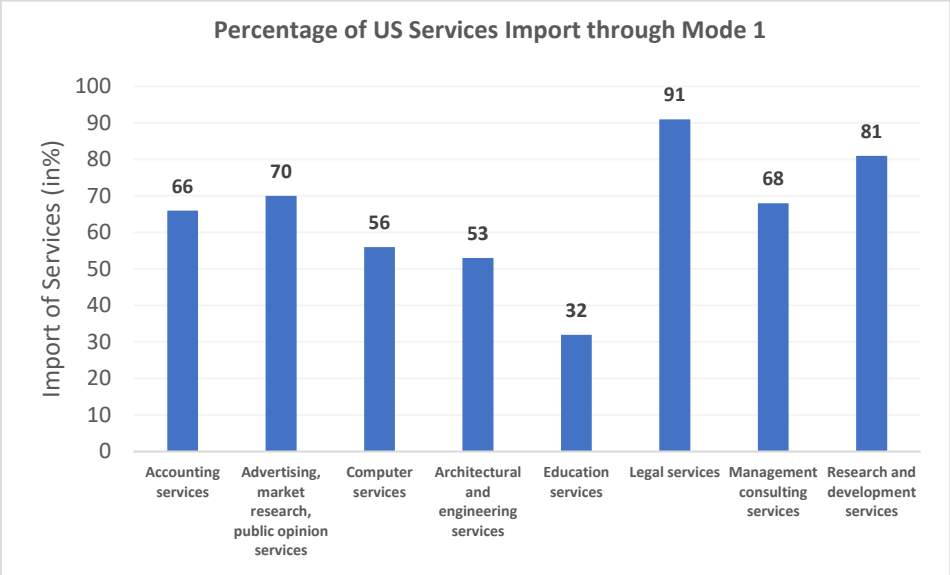
[13] Measuring Trade in Services by Mode of Supply, Michael A. Mann (2019) https://www.bea.gov/index.php/system/files/papers/WP2019-7_2.pdf

[14] Measuring Trade in Services by Mode of Supply, Michael A. Mann (2019) https://www.bea.gov/index.php/system/files/papers/WP2019-7_2.pdf, pg 24

Source: U.S. Bureau of Economic Analysis

The BEA working paper conducted an extensive survey to find out the percentage of services imported into the US via Mode 1. Figure 2 below summarizes the results.

Figure 3



Source: Survey-based percentages are from the preliminary results of BEA's 2017 BE-120 Benchmark Survey of Transactions in Selected Services and Intellectual Property with Foreign Persons.[15]

As can be surmised from Figure 3 above, the dominant mode of importation of all services is Mode 1 or cross-border delivery with the exception of education services. Most of the services sectors listed in Figure 2 are those where India has strong export capabilities.

A 2021 report by the McKinsey Global Institute on 'The future of work after COVID-19' found that the pandemic has further accelerated this shift towards digitalization across various sectors.[16] In a corresponding McKinsey survey, 75 per cent of the people using digital services for the first time stated that they would continue using them post-pandemic.[17]

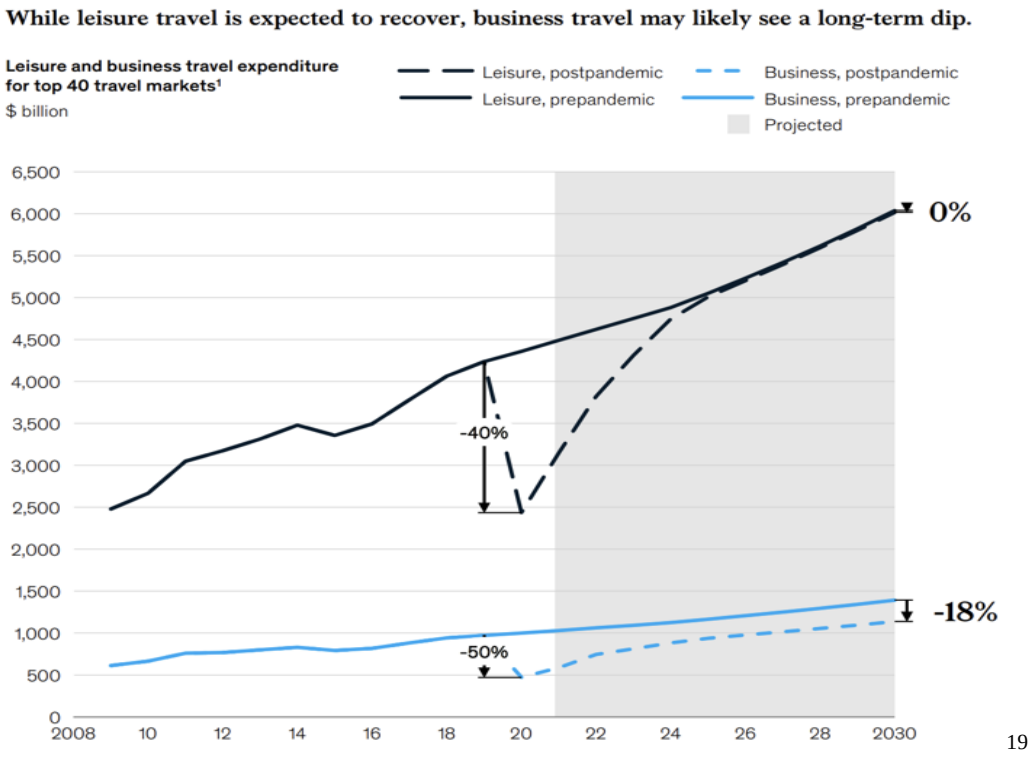
This shift has not just affected how end-users consume services, but also how businesses function day-to-day. COVID-19 saw video conferencing services like Zoom and Microsoft Teams being quickly integrated into the daily operations of a large number of companies. In a 2020 global survey by McKinsey, 85 per cent of business executives stated that "their company

[15] Measuring Trade in Services by Mode of Supply, Michael A. Mann (2019) https://www.bea.gov/index.php/system/files/papers/WP2019-7_2.pdf, pg 9
[16] The Future of Work After Covid-19, Mckinsey Global Institute (2021) https://www.mckinsey.com/~/media/mckinsey/featured%20insights/future%20of%20organizations/the%20future%20of%20work%20after%20covid%2019/the-future-of-work-after-covid-19-report-vf.pdf, pg 50
[17]The Future of Work After Covid-19, Mckinsey Global Institute (2021) https://www.mckinsey.com/~/media/mckinsey/featured%20insights/future%20of%20organizations/the%20future%20of%20work%20after%20covid%2019/the-future-of-work-after-covid-19-report-vf.pdf, pg 51

had increased adoption of virtual communication and collaboration tools since the start of the pandemic".[18]

This has resulted in a dip in business travel, as virtual meetings and remote work allow companies to save the costs and modalities involved in sending executives abroad. Figure 4 underlines how while leisure travel has recovered from its pandemic induced dip, business travel has not fully recovered reflecting a permanent shift towards more remote operations and performance of work.

Figure 4: A Transformation - Service Delivery Pre- and Post- Pandemic

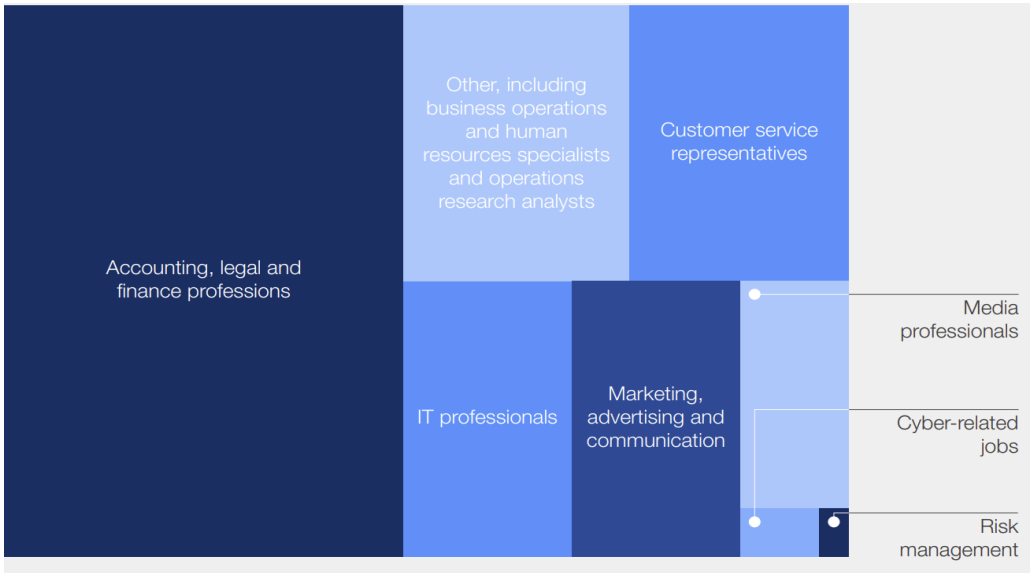


Source: The future of work after COVID-19, Mckinsey Global Institute, 2021

A 2024 white paper by the World Economic Forum estimates that there are 73 million global jobs today capable of being performed completely remotely, i.e., via Mode 1, and this figure is expected to grow to 92 million by 2030.[20] The overview results of the white paper are captured in Figure 5 below. It is interesting to note that most of the jobs/occupations represented in Figure 5 belong to sectors where India is a competitive exporter of services.

[18] McKinsey Global Business Executives Survey, July 2020 https://www.mckinsey.com/featured-insights/future-of-work/what-800-executives-envision-for-the-postpandemic-workforce
[19] Source: McKinsey Tourism Recovery Model, November 2020; McKinsey Global Institute analysis, https://www.mckinsey.com/~/media/mckinsey/featured%20insights/future%20of%20organizations/the%20future%20of%20work%20after%20covid%2019/the-future-of-work-after-covid-19-report-vf.pdf, pg 55
[20] The Rise of Global Digital Jobs, World Economic Forum (2024) https://www3.weforum.org/docs/WEF_The_Rise_of_Global_Digital_Jobs_2024.pdf, pg 15

Figure 5: Distribution of Jobs Capable of being Performed Remotely



Source: The Rise of Global Digital Jobs, World Economic Forum

The scope of occupations/jobs that can be remotely performed is increasing rapidly, thanks to new technology and business models. In the near future, automation, VR and AR technologies, and other innovations will likely allow an even larger set of occupations and services to be performed remotely, creating new opportunities and expanding the addressable market for offsite workers.

The table below provides a few examples of this new and emerging ecosystem of services:

Table 2: Emerging Ecosystem of Remote Services

Remote Machine Operator	Product Customisation Engineer
Drone Operator	Remote Security Management
Equipment Monitoring and Support	Counselling/Lifestyle
Drone Camera Specialist	Traffic Management
Remote Security Management	Equipment Maintenance and Repair
Digital Tutorials	Digital Content/ PR

As internet of things (IoT), digital twins (these are lifelike, interactive virtual replicas of physical objects or environments supported by VR/AR tech that can be used for simulation, training and decision-making in fields like engineering, healthcare, education, and urban planning, to name a few[21]) and automation technologies including robotics become ubiquitous, the range of tasks and the range of services within which such tasks fall will keep expanding. The repercussions cut across a wide range of sectors, viz., legal services, education, health, entertainment, architecture, transport and logistics, and more. Some of them would represent a new means of how a service is performed and new business models; others will represent an entirely new service.

All of the above points to reduced dependence on on-site support and greater use of remote working. This means Mode 1 will increasingly come to dominate service delivery not just in IT, but also a wider field of occupational specialisations in medicine, education, engineering, legal and financial services.

It is, therefore, no surprise that the market for cross-border services under Mode 1 has grown over the years and, in 2022, world exports of digitally delivered services reached USD 3.9 trillion[22], and constituted 34.7% of all services exports[23].

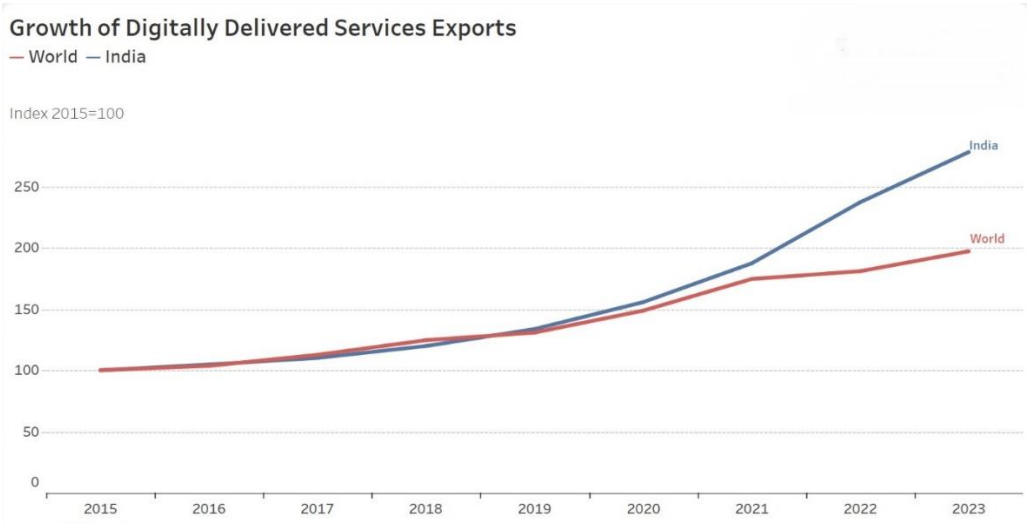
This also points to a decreasing dependence on Mode 4. Of course, some on-site support for IT and IT-enabled services will always be needed; it is that the numbers are likely to come down in the medium to long run. This is actually good news for India since Mode 1 has far lesser transaction costs, and a greater portion of the 'value-added' component of the export is retained in India.

Part 3: Charting the Growth of DDS – India

The graph below shows that 2021 onwards, India has significantly outpaced the world in the growth of DDS exports.

Figure 6[24]

[21] The future of innovation: immersive digital twins, kinetic vision (2023) https://kinetic-vision.com/the-future-of-innovation-immersive-digital-twins/#:~:text=An%20immersive%20digital%20twin%20is,an%20engrossing%20and%20responsive%20experience.
[22] https://www.wto.org/english/res_e/statis_e/gstdh_digital_services_e.htm
[23] https://www.wto.org/english/res_e/statis_e/gstdh_mode_supply_e.htm
[24] https://www.wto.org/english/res_e/statis_e/gstdh_digital_services_e.htm



Source: WTO Estimates

As stated in the previous chapter, most business, professional and technical services (the sectors that represent India's current strengths in services exports) are delivered to clients using a combination of remote offsite work and on-site work that requires physical presence in the client location. Naturally, sending people on-site to client locations in foreign countries would require the Indian firm to obtain appropriate visas for their employees to be able to physically travel to and work in the country where the client is located.

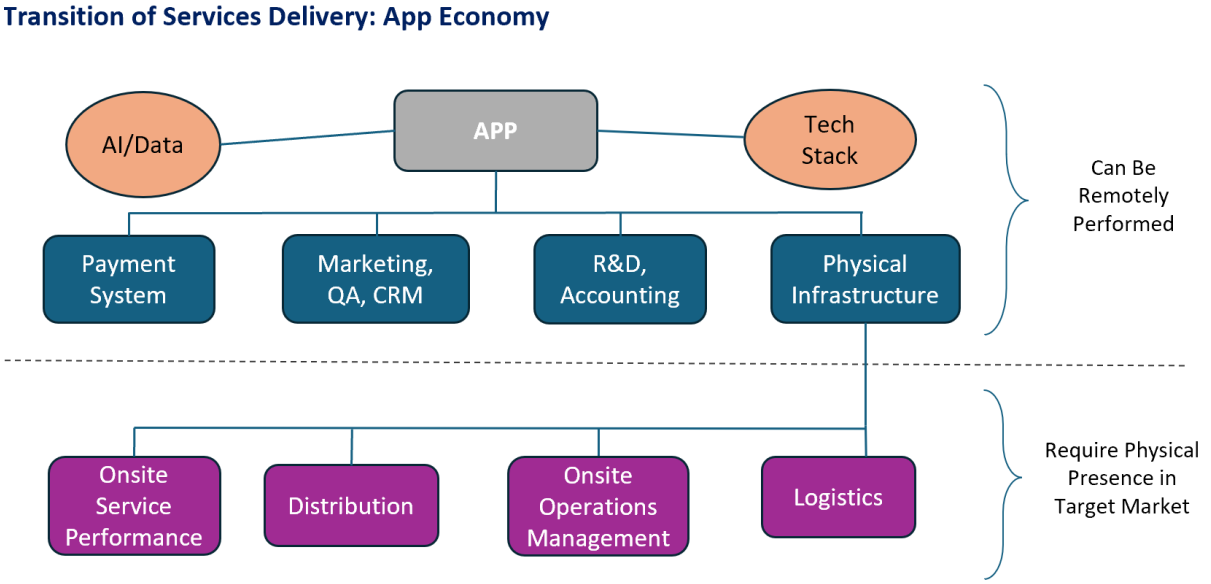
The proportion of work being done offsite in India vis-à-vis that being done onsite has been increasingly shifting in favour of remotely performed offsite work as more and more tasks can be done remotely due to improvements in technology and the falling costs of real-time communication, including online meetings and collaboration technologies.

While remote performance of professional, business, technical, scientific services are one part of this spectrum of digitally delivered services, there are other emerging business models that are becoming increasingly important. One such example of this combination of digital component of a service with a physical operational aspect is reflected in what is called the app economy. Most apps manage a significant amount of the work involved in providing any particular service to consumers is done remotely in offices located in a few cities. The actual service though being mediated and provided through the app though is delivered on location.

For example, one can order food online using an app. The digital order management with the restaurant in question, assignment of a delivery agent, payments, tracking the order, and even guiding the delivery agent with help of geospatial tools-all of this are digital components of the service being performed in a few large offices. The actual preparation of the food and its delivery is being physically performed across thousands of locations in multiple cities.

A large number of such apps are already ubiquitous – providing taxi services, groceries, housekeeping services, entertainment, banking, logistics, management, health services, education services and services in a host of other areas. What needs to be noted is that the operational model of any app has two layers – a back-end management layer which can be located anywhere in the world while managing that app's business operations anywhere globally, complemented by a front end which requires actual physical operations in whichever geography the app is providing its services. Figure 7 below illustrates this operational model.

Figure 7



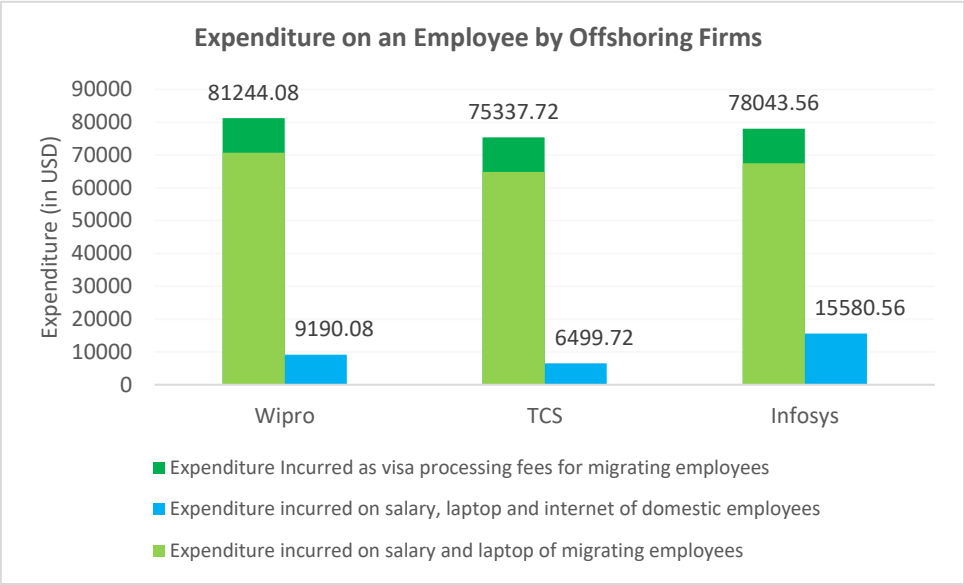
Some apps on the other hand are completely digital in nature-with both the backend and actual service delivery being through digital means. Examples include digital streaming of entertainment content (Netflix or Zee5), online gaming (Playstation Network, PokerBaazi), online payment platforms (Paytm, GooglePay), banking or brokerage services etc.

As many apps grow in scale and become global in operations (some like Uber or Netflix already have), economies of scale and efficiency would demand that they manage their backend operations (all of the functions in that can be remotely performed as indicated in figure 7 above) in large clusters serving several geographies, and not have dedicated backend operations in every country they provide services in. In many cases, such backend operations would be global in scope, and extremely large in size, i.e., very large global capability centre (GCC) type operations. India, given its competitiveness, would be in a great position to attract a very significant chunk of this business.

There are strong financial reasons for this shift towards digital delivery. A cost-component analysis (conducted by the authors of this paper) comparing the expenditure incurred by major

Indian IT firms on on-site employees vs. off-site employees shows an enormous gap between the two in favour of off-site employees, on whom the expenditure incurred is far lower.

Figure 8

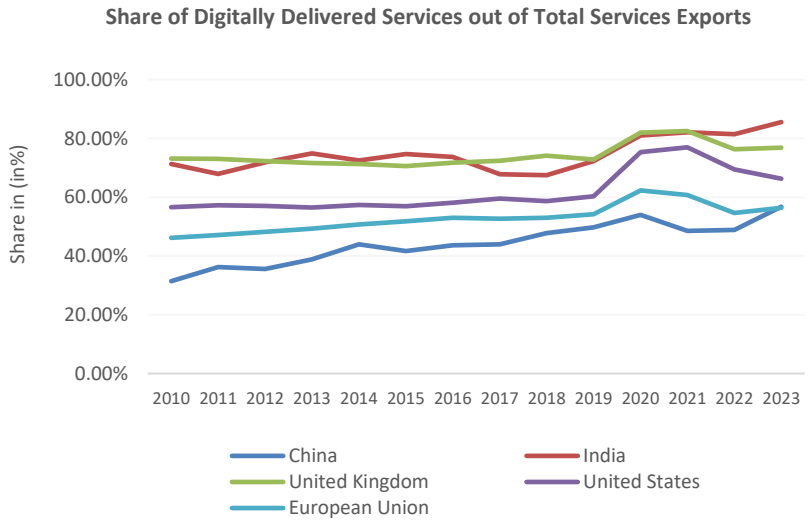


Source: Analysis based on author's own calculation using Glassdoor data

Figure 8 suggests that the cost of sending employees for onsite work is much higher than the same work done remotely in India. As per the analysis, the expenditure on an onsite employee is around eight times higher as compared to that on an offsite employee because of the minimum wage criterion for sponsored skilled work visas, sponsorship licence fees, and visa processing fees. The detailed analysis can be found in Annex 1 of this paper.

The analysis is supported by the trade data presented in the graph below, which shows that, for India, services export through Mode 1 dominates exports through other modes.

Figure 9

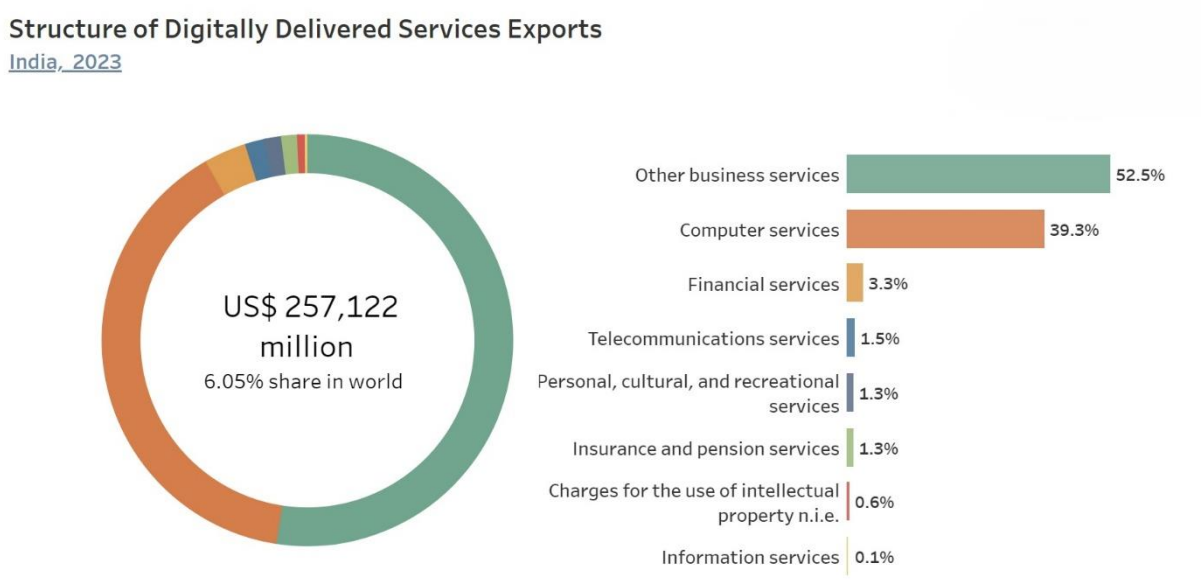


Data Source: UNCTAD

The share of DDS exports in India's total services has remained above 70 per cent on average in the last decade, with a peak share of 85 per cent in 2023, which is among the highest when compared to China and other developed countries. This shows that India's services export has increased significantly over the years and that the growth has been fuelled by exports through Mode 1.

However, the growth of DDS exports in India has largely been confined to two sectors – other business services, and computer services. This is borne out by WTO data, as represented in the graph below.

Figure 10 [25]



Source: WTO Estimates

As such, there's immense potential for growth in areas like financial services, recreational services and more. Even within the category of computer services, areas like gaming services represent untapped potential. India should aim to diversify its services exports to have a more robust export palette that is resistant to shocks in any particular service sector.

The sustained growth of DDS exports in India can be attributed to a number of factors. The paper expands on the following three of these:

a) The rise in internet access
b) Economies of scale and skill
c) Global capability centres

[25] https://www.wto.org/english/res_e/statis_e/gstdh_digital_services_e.htm

The Rise in Internet Access

Government initiatives like Digital India have improved internet usage among the Indian population from 7.5 individuals per 100 people in 2010 to 43.4 individuals per 100 people in 2020. The following figure maps India, China, and other developed countries' positions concerning internet usage and the export of DDS.

Figure 11

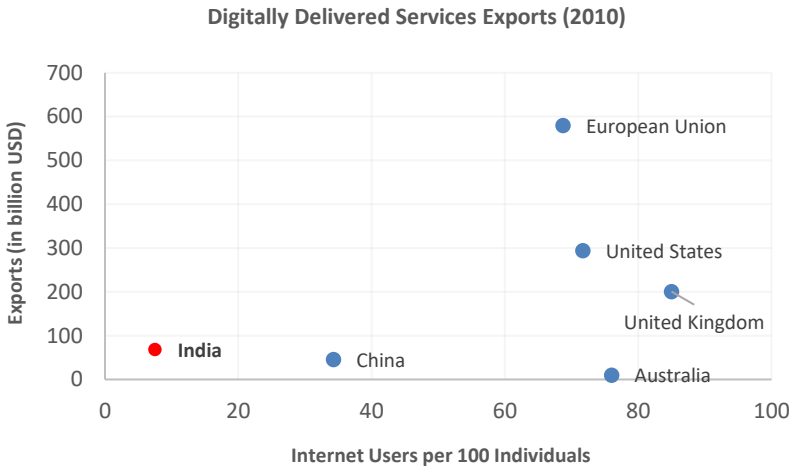
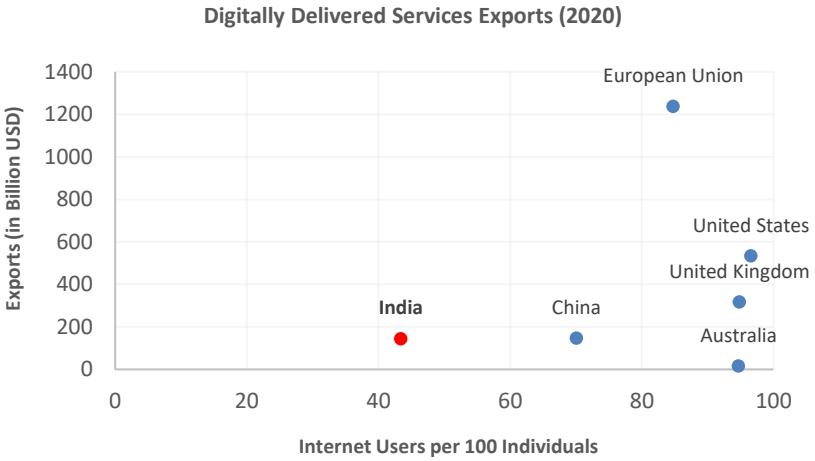


Figure 12



Data Source: Author's calculation from WTO & WDI Data

However, the graph also shows that there remains huge potential for growth in DDS for India with improved internet access, as it still lags behind developed countries in terms of internet use per 100 individuals.

The rise in high quality internet access has, of course, allowed multinational corporations to conduct their global operations from India, but it has also opened the doors of trade for a large number of MSMEs and domestic companies, which are today able to tap into an international market of consumers for increased profits and greater resilience.

Economies of scale and skill

Large corporations across the world have chased economies of scale ever since the first industrial revolution in an attempt to lower costs, secure greater profits and reach new markets. The most recent successful step in that strategy has been offshoring. What started as the offshoring of back-office operations to countries with cheaper skilled labour has now progressed to core business operations of multinational corporations being performed in countries like India. High-skilled, cheap and abundant labour, lower living and infrastructure costs, and the business-friendly overtures of the government have made India a prime destination for such offshoring, and have allowed companies to keep growing to take advantage of economies of scale.

Global Capability Centres

Today, global capability centres (GCCs) play a key role in India's export of DDS. A GCC is an offshore captive unit of a business entity providing an array of specialised services, be it, R&D or even back-office functions. What distinguishes a GCC from the branch of a business entity is that while branches of foreign companies in India can end up paying up to 40 per cent of their profits as tax,[26] GCCs are set up so that the services performed in these units are considered to be exported to the parent business entity, avoiding the hefty tax on profits.

This makes GCCs ideal for companies, and India is the preferred location for such GCCs[27] owing to the combination of high-skilled, low-cost labour, and the well-established infrastructure for offshoring and digital delivery of services. GCCs have empowered the R&D ecosystem in India, which is likely to have ramifications on India's long-term success and competitiveness in emerging sectors, such as the increasing servicification of manufacturing, among others.

However, as India and the world rapidly shift to a digital model of delivery for services, governments will have to tackle new issues that emerge from this transition. The first of these issues involves mixing of domain expertise with digital delivery. Today, a host of services ranging from legal and medical advice to accounting and auditing can be supplied remotely, with the legal/medical/accounting professional present in a country different from the client's.

[26] https://tax.cyrilamarchandblogs.com/2024/05/taxation-landscape-of-global-capability-centres-gccs-in-india/
[27] https://zinnov.com/centers-of-excellence/global-capability-centers-101-all-you-need-to-know-about-gccs-blog/

Most countries have stringent qualification requirements and standards for a variety of professionals – certainly for legal and medical professionals. The interaction between such requirements and digital delivery of services brings up three questions:

1. How will a country ensure that consumer protection, quality and competence norms are followed in the digital delivery of a service by a professional, when that professional does not reside within its territory?
2. If an importing country requires professionals in an exporting country to adhere to its qualification and licence requirements to be able to supply services in the importing country, how do the professionals in question fulfil those requirements?
3. If the qualification requirements for supply of a professional service result in Indian professionals having to partner with foreign professionals (who do fulfil those requirements), and thus, cause Indian professionals to lose out on a large part of the value share despite doing most of the work, how can that be rectified?

In the next chapter, we look further explore policy challenges that are likely to impact DDS like the ones listed above and try to delineate workable solutions for them.

Chapter 2: Present and Future Issues in trading DDS (DDS)

The Need for a Multi-modal Approach for all Professional, Technical, Business and Operational Services

As we established in preceding sections, firms do not serve clients using a single mode of service delivery. Every service delivery contract would include at least a combination of two or more modes. Given the cost arbitrage between India and developed countries, the bulk of the work would be done remotely (i.e., Mode 1) by Indian workers located in India working out of Indian facilities.

However, there would be continued need to have some workers at the client site, helping implement the project or integrating new applications, technologies or processes on-site. This would require the firm to have workers on location in the offices of their client. This means obtaining temporary visas for these workers who would have to travel to the country where client offices are located (i.e., Mode 4).

In some cases, where there are multiple clients in one country, an Indian firm might invest in a fully operational office in the country in order to serve clients better, co-ordinate operations and business development, and even acquire specialised skills and local talent (i.e., Mode 3).

This brings us to what is known as the global delivery model (GDM) which we have referred to in earlier sections of this paper. We provide a detailed explanation of GDM in Box 1 that follows.

Box 1: Global Delivery Model (GDM): The GDM is a business model pioneered by Infosys, rooted in distributed, multi-location project management to optimise the cost, risk and workflow of a project. According to Infosys,[28] *"it is based on the principle of taking work where it can be done best, makes the most economic sense, with the least amount of acceptable risk."* Typically, the GDM involves a combination of onsite and offsite work, offering clients the best of both options.

This GDM further evolved in the mid-2000s with most Indian IT majors setting up offices in the US, the EU and regional hubs like Singapore (ASEAN) and Dubai (Middle-East) to develop business and have a base for operations closer to their key clients. Over time, some of these offices (that represent Mode 3 or investment in service delivery operations abroad made by Indian IT firms), have gone on to become major employers in those locations. Examples include TCS in Amsterdam (where the firm has been one of the sponsors of the

[28] Infosys to lead the evolution of Global Delivery Model to next level, Infosys (2004) https://www.infosys.com/newsroom/press-releases/documents/2004/delhi-pc-pressrelease-final.pdf, pg 1.

famous Amsterdam marathon) and the suburbs of Washington DC (Northern Virginia). Indian IT giants have established a robust business presence in the US, with Tata Consultancy Services (TCS) employing 50,000 people, Infosys 35,000, HCL Technologies 24,000, Wipro 20,000, and LTI Mindtree 6,500. Together, these companies contribute around 2 per cent to the US tech industry workforce.[29]

Another critical dimension of such Mode 3 investments are the strategic acquisitions made by Indian IT majors to integrate specific domain or technical expertise. Some prominent examples of these include Panaya (US), Fluido (Finland), and Base (Denmark) by Infosys, and Alti (France), Pramerica (Ireland), and W12 Studies (UK) by TCS.

Essentially, the Indian IT and ITeS sector provides services solutions to its international clients across Modes 1,3 and 4, and, therefore, requires market access and national treatment to these export markets across modes. Service delivery is not about 'modes' but about the ability to combine various models to best serve the foreign client efficiently and at minimum cost. This paper argues that businesses do not see the services business in terms of modes; neither should policy-makers and trade agreement negotiators.

Our discussion on the GDM makes it clear that Indian firms supplying services in foreign markets do not sell their services mode-wise. The GDM utilises multiple modes to offer a comprehensive package of services to clients. As such, the traditional strategy of pursuing mode-specific commitments in our trade agreements does not align with the way the services industry conducts international business.

It is, therefore, in India's interest to develop a working solution that secures effective market access **across modes** for DDS. In other words, while DDS are essentially performed offshore and delivered cross-border (so-called Mode 1), associated functions and client servicing might require on-shore presence through Mode 3 (on-site commercial presence) and Mode 4 (right to temporary move workers to client sites). Denial of access in any of these associated modes essentially adds massive transaction costs and uncertainty.

Effective market access means that a services supplier should be able to deliver a service to a foreign client in a competitive and cost-effective manner. Any market access or national treatment restrictions that apply to the overall business model adds costs and inefficiencies. Such restrictions, therefore, should be considered as impediments to effective market access to such DDS.

[29] IT Report: Tech Hiring to recover in CY24, HDFC Sector Report, https://www.hdfcsec.com/hsl.docs//IT%20-%20Update%20-%20Apr24%20-%20HSIE-20240410134722122975 3.pdf

For example, if an Indian firm supplying accounting software to a client in a foreign market needs to send certain professionals to the client in order to train the client's employees in the use of that software but is prevented from doing so due to the restrictive visa regime of the importing country, then that would preclude the firm from providing that service in a competitive manner.

Similarly, a certification or qualification requirement that acts as a de-facto barrier for remote performance of a service by non-citizens of the importing country would prevent the Indian firm from offering its services to the foreign client in a cost-effective manner. Examples of such restrictions could include the requirement that a potential employee needs to be a chartered engineer to formally deliver certain services in the host country, and that only nationals of that country who are resident there can qualify as chartered engineers. Another such example might be that in order to qualify as a chartered engineer, the potential employee has to have obtained an engineering degree from a college located in the host country as well as three years relevant experience in the host country, which would largely rule out foreign professionals engaged by a firm abroad to supply these services cross-border. In Part 1 of this section that follows we discuss a range of such potential barriers to effective cross-border or Mode 1 delivery of DDS.

Part 1: Ensuring Multi-modal Access – Moving People for Onsite Work

For all services where firms depend on the 'multi-modal' services delivery model (i.e., the global delivery model) discussed in Box 1, i.e., a combination of Modes, 1, 3, and 4, effective market access can only be ensured by having adequate commitments across all these modes. Any restriction in any of these modes is effectively cutting off market access for Indian firms.

In this context, temporary movement of personnel to support on-site operations that complements the offshore work becomes a critical element in the overall delivery of the service to the client. One has to recognize that the services provided by such personnel on-site are part of the value-chain of services, representing 'intermediate' activities that complement the 'whole' production or delivery of this service. Any impediment to it, therefore, is an impediment that adds transaction cost to the value-chain of services.

Therefore, access to visas that facilitate such temporary movement is a very distinct need and cannot be equated with the traditional visa regime that facilitate workers for much longer stays. In essence, work visas today are dominated by these traditional visa regimes that were designed essentially to address worker and skill shortages in the host country. This is evident from the

fact that these visas have strict economic-needs and labour-market tests[30] implicit in their approval process. Examples include the H1B visa programme in the US or the German work visa for skilled professionals.

These visa regimes are representative of the needs of the host country to fulfil its own labour market – not to address the needs of DDS firms to enable them to service their operations at the front end in their client sites in the host country in combination with the work they are executing offshore in their home country. Such 'business as usual' visa regimes are clearly not fit-for-purpose for the modern-day services value-chain, especially DDS operations.

DDS operations with the GDM requires a flexible business visa regime where Indian firms can move their employees to client sites on a needs basis and respond to client needs quickly. This is deserving, therefore, of a different category of visa, or a modification of existing short-term visas allowing for greater flexibility in terms of what types of activities are allowed under them. For example, while most business visas allow business development, a key aspect of continuing business development is the ability to effectively service the client, i.e., provide support at client location.

What is needed is a) some degree of certainty of visa approvals and b) the timeliness of such approvals. The firms must have a high level of certainty that they will be able to get visa approvals when needed and that the processing time will be rational and allow them to quickly deploy personnel at the client site when needed without overlong processing times.

To illustrate with an example, depending on the type of contract and contract size for performance of services that the Indian firm has to fulfil for clients in the FTA partner country, the firm as a whole (as opposed to individuals) could be given a certain number of work visas to service their clients. Indian firms with several such contracts with multiple clients in the FTA partner country could make combined applications for the gamut of their needs annually.

The demand for such assured visas should be firm-specific rather than individual-specific. Thus, the demand is not anymore for movement of natural persons, but movement of natural persons associated with the legal person, i.e., the firm supplying services to foreign clients.

[30] **Economic-needs test:** An economic-needs test could take many forms. One such form would be a government preparing a list of professions for which there is unmet demand in the domestic market. Foreign natural persons who practise the professions on the list are much more likely to be issued a work visa by that government, while those who do not are likely to be denied such visas.
Labour-market test: This test imposes conditions limiting the use of third country service providers or natural persons to situations where the specific demand cannot be met domestically. For example, if a firm in Australia wishes to hire an Indian professional, under a labour-market test, the Australian government could require the firm to show that the job expertise they seek cannot be found in Australia. If the firm cannot prove that, the government will not issue a work visa for the Indian professional.
It is relevant to note that there is no agreed definition for an economic-needs test or a labour-market test at the WTO.

Agreements could integrate greater levels of facilitation by being inspired by the concept of authorised economic operator (AEO) in goods,[31] i.e., a trusted digital service provider (TDSP). As we argue in detail later in this paper, the concept of such a 'trusted' entity is central to several of the solutions we recommend on different sets of issues. We detail the basic conceptualisation of such a 'trusted' entity programme in Chapter 3 that follows. For the purposes of this discussion, qualification as a TDSP for a firm would come with a set of rights and obligations.

These obligations could include the firm executing a bond or guarantee against the overstay of persons it has sent to the host country on visas and shouldering the financial responsibility for any and all expenses related to the repatriation of such persons. Adequate exceptions and safeguards would need to be woven into such obligations. For example, if the natural person gets poached (i.e., recruited) by a local firm of the host country, that should not be held against the sending firm, and should be treated as an exception and render the Indian (sending) firm free of any obligation related to repatriation.

In return for following the requisite obligations, the firm would get a formula-based, contract-linked access to visas, wherein it would have the right to a certain number of temporary visas proportional to the financial value of the business it is conducting in the host country. These visas should fall outside the visa cap under the host country's general visa policy.

Further, these contract-linked visas would be a genuinely short-term visa category that would allow firms to complement their cross-border component of service delivery according to their contracts. This category of visa could have certain restrictions that reduce the possibility of the temporary movement turning into permanent migration, which would address the complaints of developed countries surrounding immigration, as well as counter the brain-drain of highly skilled talent from India or other developing countries to developed nations.

An additional note needs to be made here. Some experts would argue that immigration is not the only worry for policymakers in developed countries. The bigger inter-connected issue is the loss of employment – especially well-paying white-collar jobs – to foreign competitors. However, such short-term temporary visas are unlikely to be a direct threat to long-term employment, as they are largely for on-site client support for a bulk of work being done elsewhere. These temporary, support-related jobs do not represent longer-term, productive employment opportunities for workers. A logical case, therefore, can be made that such short-

[31] AEO: The concept of an authorised economic operator emerged at the World Customs Organization as part of its SAFE Framework (Standards to Secure and Facilitate Global Trade). The AEO is defined as "a party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national customs administration as complying with WCO or equivalent supply chain security standards". It is essentially a partnership programme between national customs administrations and businesses.

term employment does not represent a genuine economic opportunity for domestic workers, especially white-collar job aspirants seeking stable career paths.

By placing the on-client site component of service performance within the broader definition of business development and delinking the visa from the individual to the firm will further help underline the genuineness of the business case for such visas for effective digital delivery of services.

Part 2: Operational Barriers

Currently, no significant barriers to Mode 1 supply of services exist in developed countries. While serious concerns regarding data privacy requirements and restrictions on cross-border transmission of data do exist, these concerns, largely speaking, have not translated into actual barriers on the ground yet.

This can, however, lead to a false sense of security amongst service suppliers. As technological transformation exposes advanced economies to direct competition from cheaper, younger, and often more competent workers from India-like countries, those with large shares of their workforce in the services industry might enact protectionist measures to restrict their Mode 1 markets.

Such measures could include taxes that effectively discriminate even if they technically pass the test of national treatment (i.e. they do not discriminate between foreign and domestic firms on the face of it). It could also include restrictions on data access and use, qualification standards, prudential secrecy and associated requirements to assuage concerns of consumer safety and quality of service delivery, etc. We discuss some of these possible barriers below. Some authors have argued that existing GATS commitments on national treatment provide adequate guardrails against any discrimination with domestic firms in sectors/sub-sectors where such national treatment commitment exists. Box 2 argues otherwise, underlining the need to proactively find solutions to potential barriers to DDS before they emerge.

Box 2: Existing GATS Commitments: Do they Suffice?

It might be argued that most developed countries have already made significant GATS commitments for computer services that guarantee market access and national treatment to foreign service suppliers, and thus the future of DDS for Indian service suppliers exporting to developed economies is already secure. However, this argument ignores the fact that a lot of DDS services being supplied today were not part of the GATS classification of services, and it cannot be assumed that existing GATS commitments would apply to such services. Further, developed countries could use a variety of arguments (some of which are discussed below) to justify future operational barriers as being GATS-compliant.

Tax Barriers

DDS exports are not subject to any discriminatory taxes by importing country governments, and this open and liberal access has been a key factor behind the relatively unimpeded growth of DDS exports globally. However, this current situation of liberal and open markets for DDS cannot be taken for granted as competitive pressures increase, and wealthier countries start experiencing the 'hollowing out of the middle jobs' through technological advancement and global integration,[32] which will create political pressure on governments to bring in measures to restrict DDS or at least create a more favourable ecosystem for onshore performance of the same tasks and occupations associated with such services. Let us discuss some of the possible measures of discriminatory or effectively discriminatory taxes that could emerge in the future.

A Higher Indirect Tax on the Digitally Delivered Version of a Service

Countries could consider imposing a tax on the digitally delivered segment of the service at a comparatively higher rate compared to the tax rate applied for the same service being performed traditionally (i.e., non-digitally). This would be consistent with national treatment since such a tax applies on all firms, whether foreign or domestic.

But while an indirect tax that imposes a higher rate on digital delivery of a service as opposed to the non-digital delivery of the same service would technically hit all firms, domestic or foreign, and all DDS, whether being performed from within the country or outside, it is likely to have a disproportionate impact on foreign service suppliers if they are dominant in the DDS of a specific sector/occupation.

To take an illustrative example, lower costs and adequate skill availability might make India the preferred destination for online real-time technical translation services (combining AI capabilities with highly skilled language professionals). The EU might choose to impose a tax

[32] https://www.imf.org/en/Blogs/Articles/2017/04/14/the-hollowing-out-of-middle-skilled-labor-share-of-income

of just 5 per cent if such technical translation services are provided on-site in the location where translation is needed but impose a 25 per cent tax when done online. The 25 per cent rate will apply whether the online work is being done by a firm within the EU or located in India. But since most of the online version of the work, i.e., DDS would typically be done out of India, it becomes an 'effective' protection without technically being discriminatory and in violation of national treatment.

Additional Cross-Border Delivery Related Levy

Countries could put a levy on all firms using cross-border performance of a service in the services value chain above a certain percentage (could be an absolute value, a percentage of total value of services sold, or value-added). It could be argued that such a levy effectively meets national treatment requirements since it applies on all firms whether foreign or domestic, and both have a choice of location to do business – a foreign firm can also choose to locate its operations in either the importing country or outside. However, the counter argument can be made that such a levy disincentivises cross-border DDS and, therefore, might be contrary to the existing GATS commitment on extending national treatment for cross-border delivery of services in that sector by the importing country. In other words, national treatment extends to the performance of service, not the treatment of firms.

But there are possible defences of such a policy in this context. For example, the tax-imposing country could argue that this additional levy is a specific "cess" to fund additional layers of scrutiny for cross-border DDS. It could also impose a generic cess on all cross-border DDS to find "green digitalization" and seek a carve-out under allowed exemption.

Additional levies based on issues of scrutiny with respect to data security, or security concerns in general, or ensuring customer safety and enforcing standards can also be other ways this can be justified. These are discussed in greater detail later. Finally, countries might argue that a DDS is an entirely different service from what they have committed under GATS, i.e., the digitally delivered version of the service is so substantially different that it cannot be considered the same as or similar to the committed service classification in the GATS schedule. These issues are discussed in greater detail under the topics 'New Services' and 'Tech Neutrality'.

Levy due to taxes or social security foregone

Governments might argue that DDS imports results in many people in the importing country not being employed and, therefore, not being taxed on their income. It also results in loss of social security contributions. Such ideas will increasingly gain currency in rapidly-ageing societies that are also facing the hollowing out of 'middle jobs' and, therefore, have fewer opportunities for income tax and social security collections.

Similar ideas related to automation have already been discussed in the mainstream. For example, the idea of a 'robot tax', where robots who replace humans are taxed just like a human worker would have been taxed, has been put forward and has found intellectual support from many academic and industry experts. Since DDS are a combination of automation and human workers replacing other workers in one location (i.e., the importing country), this concept can easily be extended to this instance.

Countries might develop certain formulas on 'job hours per USD value of service delivered' and levy additional taxes on DDS imports. For example, the US might decide that USD 350000 per annum of digitally performed radiology services imports is equivalent to the services of one FTE (full time equivalent worker in radiology services). Based on the median wages for that occupation (i.e., radiologist), it might calculate income tax and social security contribution foregone and require the DDS exporting firm to pay the equivalent sum.

Localisation Incentive (tax benefits)

Conversely, countries might choose to provide a local-content tax benefit to support domestic sourcing, which would have an impact similar to the imposition of an additional tax on imports in terms of the relative cost competitiveness between a local and offshore provider of DDS.

For example, Japan might choose to provide an additional income tax benefit to all income above a certain threshold to reduce the wage disparity between knowledge workers in India and Japan, making it less attractive to perform DDS in India. Assume that the wage difference per worker per annum for online graphic design consultants between India and Japan is USD 20,000. Japan decides to provide an income-tax exemption to Japanese workers in a manner that allows them to receive the same net income at an annual wage that is 15000 lower, thereby reducing the annual wage gap between India and Japan to a much lower USD 5000.

Examples of such measures can also include tax exemptions for corporate or indirect taxes that reduces the overall cost of performance of services between the exporting and importing economies. It needs to be noted that a tax exemption for local performance would be considered consistent with national treatment as it would be available to any firm that chooses invest in such business operations.

Box 3: Localisation Incentives being Considered in the US

In the US, the largest market for Indian services, such localisation incentives have already been discussed in the US House of Representatives, culminating in the House Tax Reform Blueprint in 2016. The proposal targets the perceived unfairness of indirect taxes like VAT (Value Added Tax) imposed on US firms in other countries like EU, Japan, Australia, India etc. Though all firms in these countries, whether domestic or foreign, must pay indirect taxes (VAT or GST), firms exporting to foreign markets can claim reimbursement for their indirect taxes in a WTO-compatible practice called zero-rating. However, the USA has no VAT at the central level, and indirect taxes at state level are on the lower side. As such, the US can neither impose an additional tax burden on imports, nor support exporters through rebates on indirect taxes.

However, US companies manufacturing in the US (or producing services for export) face significant DIRECT TAX BURDEN related to corporate and income taxes, including social security contributions made by firms for their workers. WTO rules do not allow for the border adjustment of direct taxes, thus while exports from the US bear the burden of the US income tax, imports into the US do not bear the US income tax burden.* (This argument, of course, ignores the fact that imports do bear the burden of income tax in all exporting countries)

In light of the above, the House Tax Reform Blueprint recommends converting the Business Income Tax into a 'indirect tax' on Cash Flows with a standard rate of 20% for most goods and services industries. Firms in the US would be allowed to exempt all domestically sourced inputs (including social security payments for US employees) from this proposed indirect tax. Further, all revenues earned from export would be exempt from this tax.

This would incentivize firms in the US to not only source their services inputs domestically, but also push them to employ more US labour and reduce their employee-count outside the US.

The measure, though WTO non-compliant, if implemented, would subject Indian cross-border services exporters (that includes all Digitally Delivered Services) to a discriminatory tax in what has hitherto been a tax or duty-free market.

* https://assets.kpmg.com/content/dam/kpmg/pdf/2016/06/16286.pdf

Regulatory Measures that impede DDS

Regulatory measures can refer to a wide range of compliances, requirements or conditions that need to be fulfilled by a service performer and/or provider. Some examples of such measures include the following.

Qualifications

These measures could relate to qualification requirements where only those obtaining local qualifications or degrees would be legally allowed to provide certain services. Such measures typically apply to services that require strict adherence to quality and standards of professional practice, and cover professional services such as engineering, legal, accounting, and architecture services. They also typically apply to health-related services such as medical doctors, nurses or paramedical services. Countries may choose to recognise only local degrees or certain academic programmes for such qualifications and reserve the right of service performance to only those who have such degrees/certification. This would disqualify large pools of otherwise competent professionals from providing services cross-border digitally.

Licensing

Many professional services combine qualification requirements with licensing requirements. In other words, only those professionals who have acquired a licence would be allowed to perform that service. Such licensing requirements often apply to a certain specialised task within an occupational specialisation/service. For example, membership of the local bar council might be contingent on being able to sign off on certain types of legal documents or provide certain kinds of legal advice officially. Similarly, auditing aspects of accounting services might be reserved for those who have acquired the status of chartered accountants. Doctors who are not registered with the national medical council would not be able to sign off on certain types of diagnosis, medical recommendations or medical prescriptions, and these will be not acceptable to insurance companies.

A lack of recognition of qualification or licensing of the exporting country by the importing country would result in scenarios where the individual/firm having access to qualification/licensing would be able to corner the lion's share of value-add in the services value chain, even though bulk of the actual service is performed or delivered from the exporting country and done by professionals based there.

For example, an accounting firm in India wanting to service clients in the US might be restricted due to not being licensed to practice as a Certified Public Accountant (CPA) in the US territory. As such, the Indian firm would partner up with a CPA firm in the US to be able to service US clients. In this case, the substance of the work might be done by the Indian firm,

and the CPA firm in the US might only be signing off on it. And yet, assuming the client pays USD 3000 for the work, the CPA firm would likely pocket USD 2300, leaving only USD 700 for the Indian firm. This is also borne out by real world examples, where Initor Global, an Indian accounting firm servicing US and UK clients, explained that – *"operating on a B2B model (CPA firms generate revenue and then allocate a portion of it to us) means we get a smaller share of the revenue, squeezing our margins."*[33]

We also need to account for the fact that the emergence of new types of service specialisations, which are now technically feasible to be performed remotely, will lead to addressing qualification and licensing issues associated with cross-border delivery of services. For example, remote management of robotic equipment in industrial applications have safety requirements, as does operation of heavy machinery. Such tasks are licensed and subject to stringent and regular tests and qualification requirements. Similarly, certain types of financial tasks might require greater layers of scrutiny and qualification. Addressing such regulatory issues, therefore, will emerge as a key area of progress in ensuring open markets for DDS.

Data Localisation and Restrictions to Cross-Border Data Flow or Access to Data

Countries might require certain categories of data to be stored locally. While theoretically this can impose additional costs on cross-border performance, such costs are operationally minimal and will become increasingly less so. Restrictions on cross-border data flow and access to data are much more cumbersome as such measures will actually interfere with the ability to perform a service.

Such restrictions will become increasingly ubiquitous due to two reasons. Geopolitical tension is one of the factors. Access to data is seen as an economic resource that helps fuel new innovations such as AI (large language models) and algorithms derived from very large datasets with significant commercial value. The emergence of data as a key economic as well as strategic asset for firms and countries would mean that there would be attempts to deny access to data to one group of countries by another group for both economic competition and strategic reasons[34].

The other factor is the emergence of entirely new types of data derived from the internet of things (IoT) that have security implications – for example, visual imagery of key economic assets, operational data of key factories or infrastructure facilities such as power plants, grids or ports, or micro-level commercial data of a large business that can be mined and weaponised commercially by firms in another country supported by state-actors involved in data piracy.

[33] https://thefinancestory.com/accounting-and-tax-outsourcing-firm-focussed-on-us-uk-now-a-team-of-500
[34] For a more detailed discussion on these issues, please refer to the CWS Paper – "The Contours of Digital Trade: Shaping India's Trade Policy in an Evolving Global Landscape"

Managing and securing such data would be critical for the safety, security and commercial well-being of an economy and, therefore, one would expect countries to develop more complicated sets of regulations and firewalls around access to and use of such data. Ensuring access to and use of data, therefore, would become a central theme for success in the DDS exports space.

Local Commercial Presence as pre-requisite for DDS exports

Many countries often require firms engaged in cross-border delivery of a service to have commercial presence in the territory of the importing country as a pre-requisite for cross-border (which would include digital) export of the service. The primary motivation behind such a requirement is to ensure the accountability of the firm to national regulators through its legal presence within their jurisdiction.

This is especially true for services sectors where there are prudential concerns such as banking and insurance and many other financial services. It extends to services where firms act on behalf of clients with regulatory agencies or legal institutions, for example, freight forwarding services. A wide range of new types of services like the remote operation of transport conveyances or industrial equipment would fall under the same category, as would remote inspection and assessment services where reports generated also serve as submissions to regulators responsible for safety or product standards.

The need for commercial presence adds a layer of costs, and many firms, especially smaller, more niche specialised services firms would like to best avoid setting up commercial presence in a large number of countries/locations. This would be especially true in their growth phase where such requirements would put them at great competitive disadvantage vis-à-vis large multinational firms operating in the same sector.

In many cases, such smaller firms including start-ups would be forced to enter into tie-ups with either local firms in the importing country or with large global firms who have a commercial presence in the importing country, resulting in their having to give up a significant share of revenue and business that they could have otherwise kept within. Mechanisms that allow firms to bypass such commercial presence prerequisites for DDS exports, therefore, would go a long way, especially for a country like India which has a dynamic start-up eco-system in a range of DDS. Such relatively smaller firms need support to close the gap with existing global unicorns and MNCs by having the ability to have lower-cost business models and operating costs.

Execution of bond or additional fees for regulatory scrutiny on offshore performance of DDS

Countries might choose to not require a commercial presence as a pre-requisite for offshore performance of DDS. Recognising that the national regulator in the importing country has

limited ability to hold foreign suppliers accountable for regulatory or compliance breaches – and that investigating such breaches or scrutinising their operations would require significantly more resources than for domestic providers – regulators may impose additional fees on offshore performance of DDS. They might also require execution of a bond which can utilised when fines or punitive financial measures need to be implemented due to a breach, or compensation needs to be paid to aggrieved users of a DDS that was performed offshore.

As DDS becomes more widespread and breaches and user grievances rise – including cases of serious misconduct that harm public safety, health, or economic well-being – such measures are likely to become more common. But such additional fees or bond requirements will impose additional costs on market access and can also be used as technical barriers to DDS imports by countries. Addressing such possibilities with effective solutions, therefore, assumes importance.

Part 3: Technological Neutrality and New Services

Technological Neutrality

The concept of technological neutrality primarily refers to GATS commitments by WTO members. As technology evolves, new ways of supplying an existing service emerge. For example, construction services, which could only be provided through the physical presence of workers at the location, can now be performed through 3D printing, and in the near future could be performed entirely by remotely-controlled robots. But this evolution brings up an interesting question about GATS commitments. Let us say that a country had fully committed construction services under GATS across all modes in 1995 at the founding of the WTO. At that time, 3D printing technology did not exist. Nor did remotely-controllable construction robots. If today a foreign service supplier wishes to provide construction services in that country through 3D printing, will this supplier get the benefit of the country's GATS commitment? Or will the existing GATS commitment not apply to such new means of supply, allowing the country to restrict market access and national treatment for the supply of construction services through 3D printing?

The assumption of technological neutrality implies that existing commitments would apply to new ways of supplying a service as the GATS commitments are "technologically neutral". However, there is no consensus for technological neutrality at the WTO. As such, it cannot be taken for granted that the GATS commitments of WTO members will continue to apply to such new means of delivery of services.

Tech neutrality is a critical principle for the future of trade in services, as many services today are being supplied through means that had not existed when the GATS agreement came into existence. This largely applies to DDS, as most DDS being supplied today had not been conceived of at the time of the founding of the WTO, when most countries submitted their GATS commitments.

Further, GATS is not the only agreement missing any provisions on tech neutrality. India's FTAs also do not contain any mention of tech neutrality. This can seriously endanger the future of India's services exports, and India needs to ensure that its existing and future trade agreements contain tech neutrality provisions that will allow India's exporters to benefit from FTA commitments when they exploit new technological means to supply the service.

A popular argument questioning the need for India to secure Mode 1 commitments states that since most developed economies have already made significant Mode 1 commitments in a number of sectors in their GATS schedules, India does not need to worry about future non-tariff measures or cross-border taxes in those sectors. However, the argument relies on the assumption of tech neutrality. Since there is currently no consensus at the WTO on tech neutrality,[35] this assumption is false.

Thus, as of now, neither GATS nor India's FTAs conclusively protect India's Mode 1 interests. As such, there is need for a pre-emptive trade policy on India's part to tackle such possibilities. The next chapter suggests what this policy could look like.

Lastly, there are completely new services being supplied today that did not exist at the time of the founding of the WTO, and cannot be categorised under the existing GATS categorisations. These services are currently being supplied under a legal limbo with respect to international trade. The next section discusses these services in further detail.

New Services

Rapid technological change has given rise to a host of new services that do not fit within the existing classification of services at the WTO. Since most FTAs follow this traditional classification, they lack any explicit commitments on new services.

The core problem with the classification of new digital services is the inherently hybrid nature of such services. Uber, for example, is a digital app and it could be argued that it falls under 'Computer and Related Services'. But it is also a transport service, which could fall under the

[35] No More Strategical Neutrality on Technological Neutrality: Technological Neutrality as a Bridge Between the Analogue Trading Regime and Digital Trade, Dongchul Kwak; and
Technological Neutrality: Implications for Services Commitments and the Discussions on E-Commerce, R.V. Anuradha

‘Road Transport Services’ heading in a GATS schedule. WhatsApp is a communication app that can fall under both computer and related services as well as telecommunication services. It also allows payments and hence, it could be argued to fall under financial services.

The emergence of new services, such as remote manufacturing, app-based health services, drone security, remote maintenance and repair, app-based education, and online architectural, engineering, and construction services presents significant challenges in terms of scheduling and classification under FTAs.

This complexity can lead to regulatory ambiguity, where the lack of clear classification hampers the formulation of precise commitments and obligations in FTAs.

Such ambiguity can impact trade commitments and the treatment of such services by regulators, as countries may struggle to agree on the terms and conditions applicable to these. For India and other countries, this necessitates a re-evaluation of strategies to ensure they accommodate the dynamic nature of new digital services, including when negotiating FTAs.

The problem is most evident in the rise of AI products and services. ChatGPT, for instance, is a chatbot. And thus, a part of computer and related services. But it could also provide a range of services – architectural services, construction services, engineering services, accounting, management consulting, and more – to customers and professionals. Today, there are very few services that cannot be performed by an AI app like ChatGPT in some capacity.

While questions regarding accuracy, reliability, etc., are valid, they do not take away from the fact that ChatGPT is not merely a chatbot. The ability of large language models like ChatGPT, Google Gemini, Claude, etc., to provide a plethora of services creates challenges for the CPC classification system followed in GATS as well as most FTAs.

An example should help illustrate the kind of problems that emerge due to the interaction of GATS with AI services. Let us say a country has made full commitments in GATS under computer and related services, but none under legal services, and prohibits foreign service suppliers from supplying legal services in its domestic market. Classifying an app like ChatGPT under computer and related services would mean that it must be allowed to provide services in that country’s domestic market. However, a large language AI model is capable of performing a host of legal services, ranging from legal research to drafting to providing personalised legal advice.

As India looks to become an exporter of new services, it needs to secure commitments on new services in its FTAs. Most countries have not made Mode 1 commitments for warehousing/ manufacturing/security related services as they were considered technologically unfeasible.

Given that remote performance of many tasks associated with these services are possible today, there is need to ensure that such services are adequately covered for Mode 1 commitments. The following chapter proposes a concrete provision to tackle the issue of new services.

Chapter 3: A Framework on Trade in Digital Services

Given the criticality of DDS for the overall success of India's trade strategy, it is important that policymakers develop a comprehensive approach to address the key issues associated with effective market access for DDS. Such a comprehensive approach will cover issues across modes of supply, recognising the realities of the GDM (the global delivery model) and the practical, business-oriented needs of firms in the DDS space.

Our preceding discussion outlined the possibilities of a host of new measures that could emerge that will act as potential barriers to DDS. We have also underlined the challenge of the emergence of a new menu of services due to technology that hitherto did not exist and, therefore, are not part of the existing classification systems used in trade negotiations.

A related challenge is the unresolved issue of the universal application of the principle of technology neutrality for services and occupations that have traditionally required the physical presence of the service provider, but that can now be provided remotely. A system needs to be put in place to determine whether or not technological innovation has so altered the characteristics of a service and its related occupational specialisation that it cannot be considered to meet the old classification, and is, therefore, a new service that needs to be re-classified (and consequently, re-negotiated for in terms of market access).

We have also considered questions regarding the need to ensure service supplier accountability, and the potential for both discriminatory fees or standards or both that might arise due to this. This includes barriers that might emerge from countries requiring off-site service suppliers to adhere to their domestic qualification and licensing requirements as a precondition to supply service.

Given this context, it becomes critical for a country like India, which has such an important stake in the overall growth of DDS, to proactively anticipate these market access challenges and provide a practical, workable solution to them. We would like to take our reader back to Part 2 and Part 3 of Chapter 1, which underline the rising importance and dominance of DDS, and India's important role in the global exports of DDS. With services accounting for close to 40 per cent of global exports, and DDS accounting for 54 per cent of overall services, a debate around potential challenges to what has been a rather liberal trade regime (when it comes to cross-border services delivery) needs to be initiated.

It is in that context we lay out a proposed framework that provides a comprehensive approach and addresses all the issues raised in the preceding pages. This framework has the following broad objectives:

1. ensuring binding commitments that protect the current level of openness for cross performance of DDS
2. addressing restrictions on the short-term movement of people and investment that supplement cross-border performance of DDS
3. pre-empting emerging or potential protectionism for DDS.

We believe that such a framework can be customised for bilateral agreements, either as a specific stand-alone chapter for DDS in future agreements, or as an addition to existing trade agreements as and when they come up for review.

A multilateral agreement in DDS can also be pursued. WTO provides an existing precedence in the form of the 'Annex on Telecommunication Services' and the 'Reference Paper on Telecommunication Services'. The annex provides guarantees for reasonable access to and use of public telecommunications in a given market by suppliers of all services benefiting from commitments scheduled by the member concerned.

The reference paper provides for a blueprint for telecommunications reform in the form of a set of regulatory principles that is legally binding only for those WTO governments that have committed to it by appending the document, in whole or in part, to their schedules of commitments. The reference paper largely reflected "best practice" in sector regulation at the time.

The reference paper and the telecom annex in combination address both market access related issues and regulatory principles, thereby providing a framework for a comprehensive approach towards effective market access. The sectoral negotiations for a plurilateral maritime services agreement is another example, though this initiative was not successful.

We mention these initiatives to underline that WTO has precedence for focused negotiations for a specific set of services (including across modes) leading to trade policy outcomes that address both market access and regulatory issues. DDS would require its own specialised approach that, while drawing from these earlier examples, would need specific solutions of its own. A particular departure for DDS from these earlier examples would be the fact that while these were focused on a specific service (for e.g., telecom), DDS would go across a number of services sectors, and cover all modes of supply.

There are examples of plurilateral initiatives to address some of the issues and challenges outlined in the earlier section. One example is the push for an agreement on free data flow with trust (DFFT). DFFT was first proposed by Japan at the 2019 G20 Summit,[36] and was later reaffirmed at the 2023 G7 Ministerial Declaration.[37] The DFFT addresses the challenges of cross-border flow and access to data. The G7 declaration led to the establishment of an institutional arrangement for partnership (IAP) under the ambit of the OECD, wherein the OECD has been tasked with designing a concrete proposal for the international implementation of DFFT. However, DFFT addresses just one of the many issues related to trade in DDS, that of cross-border data flow.

Our proposed framework is an attempt to distil the ideas emerging from earlier initiatives to tackle the numerous issues involved in the digital delivery of services. One example of such a recent attempt is the joint statement initiative (JSI) on e-commerce. Many recent FTAs have also incorporated provisions supporting digital delivery of services. But such provisions in FTAs or disciplines that have developed under JSI have been largely piecemeal, and they do not provide solutions for the core issues we have highlighted in the preceding section. Box 4

Box 4: Partial Solutions for the real operational challenges for DDS in FTAs and JSI

An illustrative example of partial solutions would be provisions related to online consumer protection. The e-commerce JSI does have provisions on online consumer protection,* but it does not address the issue of ensuring the accountability of service suppliers digitally delivering services without a local presence in the importing country. In case a consumer is a victim of fraudulent activity or is facing a service issue, the importing country might not be able to redress the problem if the service supplier and the exporting country are unco-operative. Several FTAs today have a provision that prohibits requiring local presence for the supply of cross-border services (fourteen FTAs have such provisions as per the World Bank's Deep Trade Database*), but again, they do not offer an alternative mechanism of ensuring service supplier accountability in the absence of local presence.

Most notably, both the e-commerce JSI and the aforementioned FTAs do not address key issues regarding multimodal delivery of services and the categorisation of new services. As such, the model framework presented below addresses a critical gap in the international regulatory regime on trade in services.

* https://datatopics.worldbank.org/dta/table.html

[36]https://www.mofa.go.jp/policy/economy/g20_summit/osaka19/en/documents/final_g20_osaka_leaders_declaration.html

[37]https://g7g20-documents.org/database/document/2023-g7-japan-ministerial-meetings-ict-ministers-ministers-language-ministerial-declaration-the-g7-digital-and-tech-ministers-meeting#section-2

below provides a few examples of how the resolution of critical trade policy challenges to DDS has been partial and piecemeal in FTAs and the JSI on e-commerce so far.

Therefore, it is essential to develop a framework that effectively addresses barriers to market access and trade in DDS. Our proposed framework is a step in that direction. It is important to note that this framework is inspired by the work done in Annex C on Services at the Hong Kong Ministerial Conference. The annex pushed for freezing of services commitments by WTO members at then-existing levels of market access as a means to liberalise services along with specific mode-wise provisions to ease services trade.

Before we delve into the framework proper, we would like to briefly introduce two important concepts. The first is the trusted digital services provider (TDSP), a key element of the proposed trade policy framework. The second is the committee on trade in digital services, which plays a key role in ensuring regulatory coherence and clarity in implementing regulations and laws.

Trusted Digital Services Provider (TDSP): Borrowing from the Structure of the AEO Programme

Our suggestion for the development of a TDSP programme from DDS draws its inspiration from the authorised economic operator (AEO) programme developed by the World Customs Organization (WCO). The AEO is essentially a trusted trader programme, where firms who qualify to become AEOs get additional facilitation and benefits from regulators who manage merchandise trade at the border, which includes customs and other agencies.

Countries develop their own version of the AEO programme, with customisations to address specific economic conditions and regulatory priorities in each country. But the national AEO programmes adhere to the broad principles and programme architecture provided by the WCO. In order to qualify as AEOs, firms are required to meet high standards of compliance and have a good compliance history. They are also expected to have internal management and governance practices that assure regulators of their commitment to comply with the laws and regulations that apply to them, and run their business operations in a transparent manner that ensures accountability.

Another important feature of the AEO programme is that countries can enter into bilateral mutual recognition agreements (MRAs) of their national AEO programmes, by which AEOs of one country are recognised and treated as AEOs or trusted entities in the other.

Developing a trusted trader programme applicable to DDS: TDSP

A trusted trader programme for DDS, based on the AEO programme discussed above, would need to incorporate the following objectives:

1. Develop an international programme structure on which individual countries can develop their own customised programmes
2. Develop qualifying criteria for firms that will assure regulators that these firms will comply with laws and regulations applicable to them, respect their regulatory compact with government(s), and have internal processes and governance structures that make them accountable and transparent. It needs to be pointed out here that the extent and type of qualifying criteria for firms under TDPS would have to be more expansive, given the multiple types of regulations and compliances the DDS trade needs to address. In the case of AEOs, compliances are largely limited to customs and tax authorities. But in the case of TDSP, the range of compliances and associated regulators include tax authorities, immigration authorities, data regulators, consumer protection agencies, etc. It also extends to domain specific regulators covering health, the financial sector, education, professional services, and industrial health and safety among others.

In this context, the suggested broad qualification criteria for TDSP include the following:

Only service suppliers who satisfy the following criteria will be considered for designation as a 'trusted digital service provider':

i. *The service supplier must have adequate commercial history (for example, business activity for at least three financial years).*
ii. *The 'Trusted Digital Service Provider' designation can only be given to a legal entity and not a group of companies.*
iii. *The service supplier must not have been involved in criminal offences related to economic activity, and must be compliant with the domestic regulations of the home country, including having appropriate licences and other authorisations related to the services it is in the business of performing.*
iv. *The service supplier must be financially solvent, have appropriate record keeping, and proven practical standards of competence or professional qualifications where applicable.*

3. Once a national TDSP program has been developed, the next step would be to create a protocol under which countries can bilaterally enter into MRAs, ensuring that TDSPs

in the DDS exporting country are recognised and get the benefits of the programme by regulators in the importing country.

4. These MRAs would also have to be more detailed compared to AEO bilateral agreements as national regulators in the exporting country would have to accept greater responsibility for non-compliant behaviour of their national firms and help ensure they are made accountable to regulators in the importing country in case of any breach of conduct. This would be an essential feature since it is precisely the confidence of regulators to be able to hold firms accountable that allows them to provide special treatment to trusted firms to enable them to access markets more efficiently. These MRAs will help develop the confidence that regulators in one jurisdiction can hold firms remotely providing services from another jurisdiction through digital means accountable.

We take up specific aspects of TDSP for cross-border DDS that could potentially provide assurance to different types of regulators in the detailed discussion on the framework that follows.

One fundamental policy question pertains to the international organisation that can develop and promote a framework TDSP programme. In the case of the AEO, the World Customs Organization played that role, and it was easy to do so given their historical role, expertise and experience in managing cross-border merchandise trade. Given the diversity of issues that would need to be addressed under a TDSP programme, there is no single global agency with either the domain expertise or experience to play such a role.

In this context, it is suggested that UNCITRAL, which is already home to a host of model laws on subjects like e-commerce, electronic transferable records and more, could concretise the framework on trade in digital services by establishing the specific requirements a service supplier will need to fulfil to be declared a trusted digital service provider under the framework. Countries could then develop their own national TDSP requirements that could still be compatible with the TDSP requirements of other countries since they would all be derived from the same UNCITRAL model law framework. As such, every country would be free to recognise the TDSP of another country, with perhaps an obligation that a country must be obligated to give reasons for not recognizing the TDSP of another country when approached by that other country to consider an MRA.

Committee on Trade in Digital Services

Another important recommendation is the setting up of an institutional mechanism – a Committee on Trade in Digital Services – in the proposed framework. Such a committee would be essential to provide regulatory clarity on an ongoing basis on a number of issues associated with DDS and the regulation of trade in such services. All these issues emerge from the concerns and challenges discussed in this paper earlier. Let us outline these concerns.

Decisions related to Classification of Services and Recognition of a services activity as a new type of service that has previously not been classified

The Committee will be tasked with determining whether a service brought to its notice is an existing service under the WTO classification of services, and if so, what would be its classification – for example, whether AI-based analytics of drone images of traffic movement to provide inputs to traffic administrations, develop new plans for urbanisation, and inputs to transport and logistics companies on their vehicle movement on a day-to-day basis can be classified as other business services, urban planning services, or transport services. It could also be considered to be a new service since it integrates AI and uses on-location drones. Clarity in classification would be critical to determine which of the provisions of the framework apply to a specific service specialisation.

Developing principles for regulatory clarity and application of rules for DDS

Such a committee would also have to provide greater clarity on issues related to developing domestic standards for the protection of consumer rights for DDS, including recommendations on which standards, qualification requirements, and licensing rules would apply to DDS when they involve the performance of services in sectors (or services occupations) that are sensitive and are highly regulated under national laws. Examples include medical occupations or new specialisations such as remote operation or maintenance of heavy machinery or equipment.

The committee could be bilateral under an FTA mechanism. On the multilateral front, the formation of such a committee is not outside the realm of possibility in the WTO. Both the Council for Trade in Services (CTS) under the GATS agreement,[38] as well as the Working Party

[38] The Council for Trade in Services established under Article XXIV of GATS performs a host of functions ranging from providing clarity on regulatory matters to establishing procedures for various elements of GATS. For example, the GATS Article VI(4) tasks the Council for Trade in Services to develop disciplines for qualification requirements and procedures. In a 1998 declaration adopted by the General Council, the Council for Trade in Services was also tasked with examining and reporting "on the treatment of electronic commerce in the GATS legal framework". - https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/L/274.pdf&Open=True

on E-Commerce (WPEC)[39] could be considered an appropriate 'institutional' home for multilateral discussions on these issues, and appropriate technical or specialised sub-committees could be formed within the CTS and WPEC.

The discussion on the suggested framework that follows further expounds on the specific role of such a committee. For the purpose of our framework, we expect the operation of this committee to be bilateral and, therefore, the provisions focus on specifics. However, such bilateral committees associated with FTAs would benefit enormously from any international reference, guideline or best practice that might emerge in the multilateral setting of the WTO, whether in WPEC or CTS.

The more specific mandate in a bilateral setting of FTAs for such a committee would include the following:

- Consider any matters related to this framework identified by a party, including for providing clarity on classification of services and the specification of which domestic laws and regulations, qualification requirements, and governmental oversight apply to different services sub-sectors under different modes and, within sub-sectors, which specific occupations/tasks would be covered by these.
- Establish ad hoc working groups to consider and clarify the above-mentioned aspects of domestic regulation and laws.
- Serve as the nodal body to drive time-bound processes for mutual recognition of qualifications or TDSP status.
- Facilitate the exchange of information between the parties in relation to this framework.
- Refer matters to any ad hoc or standing working group or any other subsidiary body related to this framework as it deems appropriate.

Framework on Trade in Digital Services

1. Multimodal Supply of Services

These provisions are aimed at ensuring that there are no market access barriers for firms involved in the digital delivery of services not only in terms of performing a service from remote locations that represents the bulk of their operations, but also in terms of their setting up operations in the importing country that might often be required for effective delivery of

[39] The Work Programme on e-commerce at the WTO is mandated to "examine all trade-related issues relating to global electronic commerce, taking into account the economic, financial, and development needs of developing countries". https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/L/274.pdf&Open=True

services or the ability to move their personnel to the client sites located in the importing country *(refer to earlier discussion in Chapter 2 on the criticality of multi-modal delivery of services in the business model for DDS).*

This section aims to move towards a comprehensive solution for all DDS, including associated Mode 3 and Mode 4 requirements for the supply of such services. It recognises the fact that under the global delivery model today, services are no longer supplied mode-wise, but instead through a combination of modes. The section pushes for multimodal commitments to align with the prevalent multimodal supply of services.

Section 1.1 commits countries to providing market access in Mode 1 and Mode 3, and

Section 1.2 establishes the short-term visa regime discussed previously in the paper (visa to provide intermittent business operations and support to ongoing digital delivery of services operations).

Suggested Text of Provision

1.1 In sectors where market-access commitments are undertaken, the Parties to the agreement shall not maintain or adopt any measures, either on the basis of a regional subdivision or on the basis of its entire territory. Such measures include the following:

(a) Remote Delivery of services across international borders (cross-border delivery)

i. Prohibition of digital delivery of services, irrespective of the location(s) from where the service is being supplied.

Authors' note: In the case of FTAs/RTAs, this will be limited to locations within the national boundaries of the FTA/RTA member states.

ii. As a general rule, requiring commercial presence or permanent establishment as a pre-condition for cross-border performance of services In cases where such commercial presence is essential to meet regulatory requirements, or is required in services and occupational specialisations where performance of services is associated with concerns related to health and human safety or prudential concerns, countries will consider dispensing with this need for commercial presence for firms that are qualified as TDSP under the Party's TDSP programme, or are recognised to be equivalent to the Party's TDSP.

iii. Requiring establishment for cross-border data processing.

iv. Local data storage as a condition to supply services.

v. *International data transfer/access constrained*

(b) *On location operations in country of service delivery (commercial presence for operations related to digital delivery of services)*

i. *Prohibition on foreign entry.*

ii. *Restrictions on maximum foreign ownership*

iii. *Nationality requirements for Board of Directors/Partners*

iv. *Joint venture requirement*

v. *Restrictions on cross-border mergers and acquisitions*

1.2 Mobility of personnel to provide on-location operational functions (Temporary Movement of personnel related to DDS)

(a) *To enable effective multimodal supply of services in sectors where market-access commitments are undertaken, a Party shall offer a specialised short-term visa (with a maximum duration of 365 days) to intra-corporate transferees.*

(b) *This short-term visa shall only be offered to employees of service suppliers that qualify as a trusted digital service provider under the Party's TDSP programme or are recognised to be equivalent to the Party's TDSP.*

(c) *Employees on specialised short-term visas shall not be eligible to apply for any other work visa in the host country for the duration of the short-term visa.*

(d) *The host country shall have the right of refusal to fourth-time renewals (i.e., after continuous visa status beyond 1000 days), irrespective of commitments under this section.*[40]

(e) *Any continuous stay beyond 500 days could be made subject to minimum alternative social security contribution as a financial disincentive to use this mechanism to meet more permanent work-related requirements in the host country*

(f) *The supplier shall be responsible for repatriation in case of any violation of visa conditions – including all legal costs and expenses associated with such repatriation.*

[40] The numbers of allowed visa renewals and continuous number of days are suggestive based on business operational experience gleaned from stakeholders

(g) If the number of such visas requested by a supplier exceeds 1000 full-time employee (FTE) equivalent or 10 per cent of their total FTE headcount outside the Party's jurisdiction, whichever is lower, then the supplier, being a recognised TDSP under the Party's programme, or recognised as equivalent to one, shall also execute a bond with the immigration authorities of the Party. The value of the bond, which will serve as guarantee to its commitment to visa related obligations, shall be 20 per cent of the total remuneration of 1000 FTEs or 10 per cent total FTE headcount outside the Party's jurisdiction, whichever is lower.

2 Technological Neutrality

This section aims to address the uncertainties emerging from situations where services included in the *CPC (Central Product Classification – a unified classification for goods and services approved by the United Nations Statistical Commission and adopted by the WTO)* that were hitherto performed using traditional means are now being supplied through new technological means. As mentioned earlier, uncertainty emerges both in terms of the proper interpretation of the classification in the first instance and, by extension, and in terms of whether existing commitments made either in the GATS or in an older FTA apply to such services being supplied through new means. Thus, clarification is necessary as to the applicability of earlier commitments made under GATS or older, existing FTAs entered into by the parties in question.

The aim of the section is to provide service suppliers certainty that they would continue to be able to benefit from the services liberalisation under GATS and/or various FTAs even as they move to new methods of supplying a particular service. In other words, the section establishes the concept that a commitment for a particular service sector or sub-sector for a particular mode (in this case, especially Mode 1) holds irrespective of technology changes and business model changes.

The suggested text below helps establish technological neutrality as a principle for services, while also allowing countries to suspend their obligations for the supply of services by a new technological means for a limited period of time. The purpose of allowing countries to suspend their obligations for a period of time is to allow them to adapt to the new technology and its various externalities. This period of time is extended for least-developed countries (LDCs) as per the special and differential treatment principles in WTO, as LDCs may need more time to adapt to new technological changes. It is crucial to point out that this section addresses existing

services that fit under the GATS classification of services, and not new services, which are addressed in the next section.

Suggested Text of Provision

2.1 The commitments by a Party in its schedule under this framework shall be technologically neutral, ensuring market access for the supply of a committed service, independent of the technological means used to supply that service, and associated changes in operational and commercial conditions of such supply.

2.2 Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services, a Party may suspend the enforcement of its commitment to the supply of a service through a new technological means for a period of three years in order[41] to adapt its regulatory environment to the supply of that service through the new technological means by giving notice of such suspension to the other Parties.

2.3 Recognising the special needs and requirements of least-developed country Parties, their economic, financial and administrative constraints, and their need for flexibility to create a viable technological base, least-developed country Parties may suspend the enforcement of their commitment to the supply of a service through a new technological means for a period of ten years.

2.4 The Committee on Trade in Digital Services shall determine whether a service being supplied through a new technological means brought to its notice by a Party falls within the existing classification of services under the WTO MTN.GNS/W/120. If the service does fall under the existing classification, the Committee on Trade in Digital Services shall declare it as an existing service.

3 New Services

New services, i.e., services that do not fit under the existing WTO classification of services are currently being traded without any international agreement governing them. As such, there is

[41] The number of years is suggestive and subject to change, based on the specific context of the service and economies in question

no clarity, let alone binding commitments with respect to their market access and national treatment in importing countries. In many cases, the national domestic regulations governing such sub-sectors and associated occupations also do not exist, or do so only partially.

This places the suppliers of such services in a precarious position as their investment and business face constant uncertainty in terms of the application of domestic regulation in the countries where such services are being produced. This is compounded by the fact that their businesses can be jeopardised by loss of market access, or by any restrictive domestic regulations that may come into effect in their export markets.

As such, this section commits countries to provide unrestricted market access for new services. To let countries acclimatise to new or unexpected challenges arising out of the supply of any particular new service, the section allows countries to suspend the enforcement of the commitment for that particular service for a limited period of time. Again, it follows the S&DT principles to give LDCs more time.

Suggested Text of Provision

3.1 Parties will be free to exchange comprehensive lists of services that they consider new services that are not properly classified under the WTO MTN.GNS/W/120. The Committee on Trade in Digital Services shall determine whether a service brought to its notice by a Party falls within the existing classification of services under the WTO MTN.GNS/W/120. If the service does not fall under the existing classification, the Committee on Trade in Digital Services shall declare it as a new service.

3.2 In order to support international trade in digitally delivered new and emerging services, Parties shall provide unrestricted market access to digital delivery and performance of such new services, and shall not impose restrictions that impede the cross-border supply of new services. This would include restrictions on cross-border delivery, as well as associated disciplines in Mode 3 (commercial presence) and Mode 4 (temporary movement of personnel) that support and are essential to the effective digital delivery of such new services to service recipients located in the territory of the parties.

3.3 A Party may suspend the enforcement of the commitment to a new service for a period of five years[42] by giving notice of such suspension to the other Parties.

3.4 Recognising the special needs and requirements of least-developed country Parties, their economic, financial and administrative constraints, and their need for flexibility to

[42] Suggestive numbers of years

create a viable technological base, least-developed country Parties may suspend the enforcement of their commitment to a new service for a period of ten[43] years.

4 Service Supplier Accountability in Digital Delivery of Services

Service supplier accountability in cross-border delivery of services remains a critical challenge for regulators. The proliferation of DDS across a range of services sectors, and occupations and task specialisations, and the fragmentation of services performance divided across tasks that can be performed separately and remotely has added additional layers to this complexity. As underlined in the preceding chapter, the central theme of regulatory concerns is the inability of regulators to hold firms who are not physically located in their jurisdiction accountable and effectively monitor their actions. The text in this sector introduces a number of provisions to ensure that importing countries are able to effectively regulate service suppliers who may not have any commercial presence in the territory of the importing country, in order to protect the importing country consumers. The suggestion outlined in para 4.6 specifically ensures that any regulatory action or punitive measure by the importing country's regulator against a foreign service supplier can be enforced via the co-operation of the exporting country's competent authority. Further, the section provides affected service suppliers a means to appeal against such regulatory action/punitive measure in the importing country.

Suggested Provisions

4.1 To begin or continue supplying cross-border services, service suppliers without 'substantive commercial presence' in the importing country shall be required to submit a bond or security to the relevant regulatory authority in the importing country. The Committee on Trade in Digital Services shall be responsible for establishing what constitutes 'substantive commercial presence' under this framework, as well as the nature and amount of such security with the advice of the relevant regulatory authorities of the Parties.

4.2 The Parties shall encourage co-operation between their respective consumer protection agencies or other relevant bodies including the exchange of information and experience, as well as co-operation in appropriate cases of mutual concern regarding the violation of consumer rights in relation to digital delivery of services in order to enhance online consumer protection, where mutually agreed.

4.3 The Committee on Trade in Digital Services shall be responsible for developing standards on protection against anti-competitive practices, consumer safety and consumer

[43] Suggestive numbers of years

rights, and data protection rights in relation to digital delivery of services. The Parties shall encourage their relevant regulatory authorities to adopt these standards.

4.4 Each Party shall adopt or maintain a legal framework that provides for the protection of the personal data of users of DDS.

4.5 The Committee on Trade in Digital Services shall develop standards on protection against anti-competitive practices, consumer safety and consumer rights, and data protection rights in relation to digital delivery of services.

4.6 Each Party shall ensure that its competent authorities co-operate effectively with the competent authorities of the importing country for the enforcement of any regulatory action or punitive measure against the trusted digital service provider in the importing country, and to that effect

(a) Each Party shall maintain or institute judicial, arbitral, or administrative tribunals or procedures which provide, on request of an affected trusted digital service provider, for the prompt review of, and where justified, appropriate remedies for any regulatory action or punitive measure taken against the trusted digital service provider.

(b) Where such procedures are not independent of the agency entrusted with the administrative decision concerned, the Party shall ensure that the procedures provide for an objective and impartial review.

(c) Nothing in paragraph 4.6 (a) shall be construed to require a Party to institute such tribunals or procedures where this would be inconsistent with its constitutional structure or the nature of its legal system.

5 Qualification Requirements

The section mandates publication of the qualification requirements in a country applicable to service suppliers supplying services within that country, as well as information regarding the process that foreign service suppliers may use to fulfil such qualifications. It ensures transparency and helps service suppliers in digital delivery of services.

Suggested Text of Provision

5.1 Each Party shall promptly publish or otherwise make publicly available the qualification requirements imposed on service suppliers supplying services within its territory, including educational degrees, professional certifications, licensing, registration, etc., as

well as information on the mechanism through which foreign service suppliers may fulfil such requirements.

5.2 The Committee on Trade in Digital Services shall establish a technical committee on mutual recognition of qualifications for professional services. Relevant bodies regulating licensed or regulated professions and associated services tasks will be members of this technical committee.

5.3 The Technical Committee on Mutual Recognition of Professional Qualification shall be given a mandate to negotiate and conclude an MRA on professional services within a definite time period. The Committee on Trade in Digital Services shall have oversight over the technical committee and monitor the progress on their mandate on a regular basis.

5.4 The Technical Committee on Mutual Recognition shall develop an implementation plan to ensure that all qualification related exams or assessments are available in English, and where possible in the primary official language of both the parties. The Committee on Trade in Digital Services shall have oversight and be responsible for the time-bound roll-out of this implementation plan.

5.5 The Technical Committee on Mutual Recognition shall develop an implementation plan to ensure that all assessments and exams associated with acquiring the status of a regulated professional or obtaining a licence of certification for the same shall be available online wherever possible, and there would be no requirement for physical travel by aspirants of one party to the other in order to appear for such exams or assessments. Where online examination or assessment is not possible, parties shall co-operate and find the means to offer such assessments and exams physically in each other's territory, thus negating the need for physical international travel by aspirants of one party to another. The Committee on Trade in Digital Services shall have oversight and be responsible for the time-bound roll-out of this implementation plan.

5.6 The Technical Committee on Mutual Recognition shall, to the extent practicable, accept the equivalence of the other party's pre-qualification requirements necessary to appear for examination or assessments associated with acquiring the status of a regulated professional or obtaining a licence of certification. Such prequalification requirements would cover both academic awards as well as professional experience. In case such equivalence is not accepted, parties shall be obligated to provide clear, objective criteria under which such equivalence was not accepted.

5.7 The Committee on Trade in Digital Services shall establish a Technical Committee on Educational Qualification Standards that would include members drawn from the

independent bodies and regulatory institutions responsible for certification and accreditation of degrees, diplomas, certificate or any other academic award related to undergraduate, graduate and post-graduate studies in the field of natural and social sciences, humanities, languages, applied sciences and engineering, medicine, law and business.

5.8 This Technical Committee on Educational Qualification Standards shall, where applicable and practicable, provide clear guidelines on equivalence of such degrees, diplomas, certificates and other academic awards within the distinct higher education systems in operation in the respective parties.

5.9 If request for equivalence with a specific academic award of one party is rejected by another party, the party rejecting such a request shall be obligated to provide clear, objective criteria under which such equivalence was not accepted.

5.10 The Committee on Trade in Digital Services shall have oversight and be responsible for the application of the obligations outlined in the above paragraphs related to establishing equivalence between academic awards of one party with another.

6 Insurance Portability

There exist various regulatory barriers in countries which currently prevent insurance coverage in areas like health, security, fire safety, maintenance, accident, etc., from applying to cross-border digital delivery of services. This can make digital delivery of services challenging and deter service suppliers from offering such services in foreign markets. To resolve this, the section prohibits parties from enacting or maintaining rules, laws or regulations which prevent cross-border insurance coverage for digital delivery of services.

Suggested Text of Provision

A Party shall not maintain or adopt either on the basis of a regional subdivision or on the basis of its entire territory, measures that prohibit insurance providers from providing insurance coverage for DDS.

7 Denial of Benefits

The first provision of this section allows a party to deny the benefits of this framework to a service supplier not designated as a 'trusted digital service provider'. The remaining provisions of the section are analogous to a rules-of-origin requirement, and prevents third countries not party to the framework from taking undue advantage of the commitments in the framework.

Suggested Text of Provision

Subject to prior notification and consultation, a Party may deny the benefits of this framework:

(a) to the supply of a service, if it establishes that the service supplier has not been designated as a 'trusted digital service provider' under this framework, or has lost that designation

(b) to the supply of a service, if it establishes that the service is supplied from or in the territory of a country that is not a Party to this framework

(c) in the case of the supply of a maritime transport service, if it establishes that the service is supplied:

i. by a vessel registered under the laws of a non-Party, and

ii. by a person who operates and/or uses the vessel in whole or in part but which is of a non-Party

(d) to the supply of a service through commercial presence, if the Party establishes at any time that persons of a non-Party own or control, or have acquired ownership or control over the service supplier.

8 Exceptions

This section allows countries to deviate from their commitments under the framework according to the exceptions provided for in GATS.

Suggested Text of Provision

The GATS Article XII (Restrictions to Safeguard the Balance of Payments), Article XIV (General Exceptions), and Article XIV bis (Security Exceptions) are hereby incorporated into and form part of this framework as exceptions to the commitments made under the framework.

9 Definitions

This section defines what constitutes a new service, as well as what constitutes the supply of a service through new technological means.

Suggested Text of Provision

9.1 'New Services' – Services that do not fall under the WTO MTN.GNS/W/120, as ascertained by the Committee on Trade in Digital Services.

9.2 'Supply of a Service through new technological means' – The supply of a service that falls under the WTO MTN.GNS/W/120, through technological means that did not exist at the time of the entry into force of this framework.

Chapter 4: Demand-driven Mode 4 – Issues and Suggestions

The temporary movement of workers from developing and least developed to the advanced countries is one of the burning issues of contemporary global political-economy. This has been occasioned by several developments: Demographic shifts in the richer industrialized economies with rapidly ageing populations have created a demand for talent and labour from developing and least-developed countries in both high-end mechanical and electronics engineering, robotics, and advanced code and algorithm development as well as in the lesser skilled labour-intensive occupations like housekeeping and construction; Relocation of manufacturing jobs from industrialized economies to developing countries coupled to increasing automation and digitalization led to further elimination of jobs in the rich economies. This 'missing middle' forced many workers to seek new employment in lower paying jobs and precipitated a wage-gap between highly skilled occupations that paid well and less-skilled occupations that paid much less; Migration crises precipitated by wars and instability in Africa, West and Central Asia intensified the exponential growth of foreign populations in EU, USA and Canada which were already reeling under the weight of foreign-born populations; Economic migration through illegal channels further exacerbated this on-going migration crisis.

Consequent upon the diminution of jobs and a depression of wage rates, locals nurse staunch resentment against foreign 'alien' domination of urban spaces, and are particularly apprehensive about the perceived threats to economic security of their next generation. This brewing anti-immigrant sentiment in the advanced economies is overwhelming the distinction between longer-term immigration and temporary short-term movement of workers as well as between legal and illegal migration. Consequently, trade negotiators from advanced countries are wary of making any significant commitment on temporary movement of workers. In fact, FTA concessions on work visas across India's FTAs have been largely notional, and do not constitute substantive increase in market access for Indian workers, providing only an assurance against future barriers, without any actual expansion of opportunities per se; nonetheless, they serve as a check against reduction in the number of work visas as a result of rising anti-immigrant feelings.

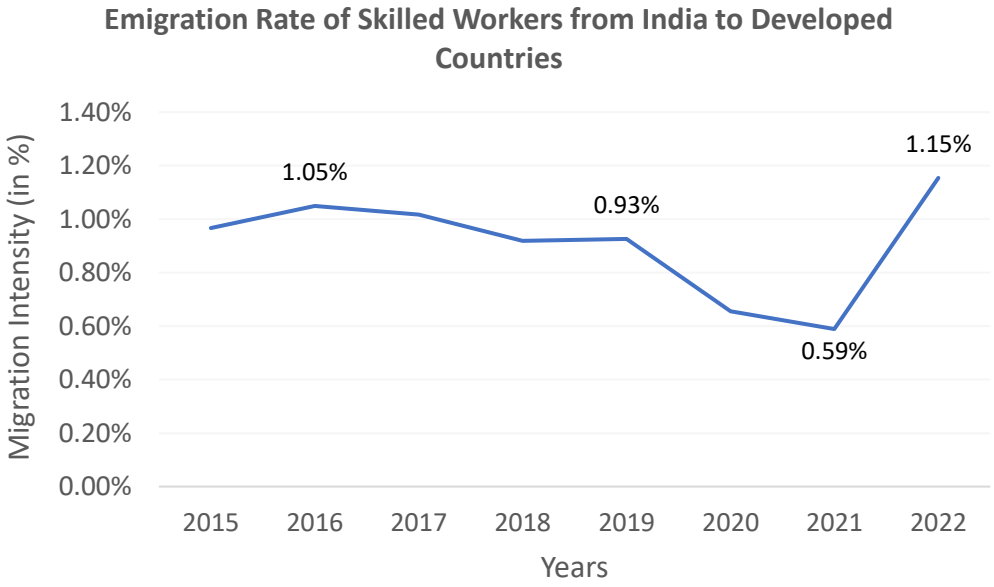
Work visas are demand induced and most Indian workers go to economies with which India has neither FTAs nor visa regime agreements. These include the Gulf Cooperation Council (GCC), USA, UK, and EU. This contradiction between economic necessity and political uncertainty necessitates a review in approach to Mode 4 in Trade Policy.

With regard to **Short-term support on-site for offshore work in respect of technical and professional occupations,** the strategy is to link short-term movement of people to specific

on-site client needs to facilitate the effective integration of the off-site services being performed remotely across borders. With regard to **Demand led short to medium term work** three categories are considered: (i) demand for higher technically skilled talent; (ii) demand for large numbers of workers induced by shortages in occupations for supporting a large number of elderly and overall domestic needs in rich countries; (iii) demand for workers in manufacturing and agricultural fields where shortages result from demographic shifts and reluctance of rich country citizens towards physically demanding occupations.

India has a comparative advantage in terms of both depth and scale in all three categories, and the needs of the advanced industrialized countries compel them to hire workforce from India, irrespective of trade agreements. Even without an FTA with any of these countries currently, India has witnessed a steady flow of skilled workers to developed countries like USA, Australia, UK, and Germany – primarily because of higher wages, more career opportunities, and better living standards. The fact that despite continued enactment of anti-immigration policies in many of these countries, emigration rates from India rose significantly post-Covid confirms the genuine and rising need for immigrant workers in these countries, an economic demand spurred by demographic pressures and worker shortages. This is presented in the following figure:

Figure 13



Data Source: Authors' own calculation based on data from ILO Stat

But in view of the rising resentment against foreign alien encroachment, developed countries are cleverly using the narrative of their political compulsions and controversially linking temporary movement of workers to permanent immigration, and leveraging trade negotiations

to extract concessions from India in other sectors. The fact however is that there is little chance of these countries restricting worker access for India given their demographic situation and need for such HR. Policy makers in India must facilitate hiring of Indian workers.

The value of a Mode 4 commitment won in an FTA will remain significant for that brings the assurance that even if the partner country reduces visa categories and restricts temporary work visas in future, this will not extend to India given the partner country's binding commitment to maintain status- quo in the FTA. Since demand for workers reflects a 'pull' for workers by foreign employers as opposed to a 'push' for workers by Indian firms, mobility for such types of occupations would be best served by **Comprehensive Mobility Agreements (CMAs)** outside of FTAs that address a number of areas associated with end-to-end management of such cross-border labour mobility. Such CMAs will not be restricted by WTO limitations that apply to limited ambition FTAs, and India can choose to individually pursue them with all OECD countries and other potential destination markets which have expressed interest (such as Taiwan).

However, India should **continue negotiating Mode 4 as part of its FTAs** rather than in CMAs, since the visa issues that hamper Mode 4 negotiations with developed countries do not apply for the aforementioned developing countries. Such FTAs could include specific side-letters for specialized occupations like nurses, caregivers, plumbers, electricians, port workers etc. as also for a range of services including high-end professionals in design, architecture, law, traditional medicine, Ayurveda and entertainment. Retaining relevant categories of Mode 4 for these specific areas should also be part of the overall strategy.

Simultaneously, one must be mindful that since several less-technical services represent a higher level of physical interaction with a wider population, their preferred sources would be countries that have a general reputation of trust and cultural affinity in the country importing such workers. It is therefore imperative that Indian workers are seen as credible, trusted and culturally acceptable in that market. The **key challenge lies in assuring host countries** that Indian workers will neither overstay nor convert temporary stays into permanent migration rights which may adversely impact demographic and cultural balances in their societies.

In this context, India must prioritize developing an **'AEO' (Authorized Economic Operator)** like regime for firms and agencies involved in the recruitment and management of such workers along the lines of 'trusted digital service provider' systems proposed under the framework for trade in digital services. Such agencies would need to ensuring worker quality and skills, the safety of their clients, their access to insurance, worker rights appropriate to the country where workers travel for work, and proper repatriation when work visas expire. Such

programs would have to be first developed nationally, and then pushed for bilateral recognition within FTAs. India could simultaneously push for a global regime at the WTO (GATS).

Such a global regime will not eclipse the **role of the government**: Key governmental interventions would include development of a single-window portal to manage visas, immigrations, certifications of skills acceptable abroad and should also include a mobile based app through which Indian workers can seek help during crises.

Conclusion

Cross-border trade in services has been one of the important underlying reasons that led to India's middle-class growth in the first two decades of this century. The digital revolution is now deepening and expanding the range of services that can be performed remotely here in India and delivered digitally to clients across the world. Everything from medicine to education, finance to factory inspections, security to gaming have digital applications which can implemented and performed in India.

The so-called Global Capability Centres with specializations across finance, R&D, product development, quality management, content creation and many more areas demonstrate the wide range of occupational and sectoral opportunities being created in the services sector. India is the global hub of the GCC phenomenon with immense job creation possibilities. The growth of 'apps' and increasing servicification of manufacturing will only add tailwinds to the growth of digitally delivered services.

It needs to be noted that unlike the earlier IT/ITES-led services export growth, the growth in digitally delivered services is creating demand for a much wider range of specializations. It is not limited to engineering, technical or professional services backgrounds but requires social scientists, designers, animators, machinists, chemists, radiologists and many more such professions. In other words, it presents a once-in-a-lifetime opportunity for export-led employment growth across a vast range of skills and education levels in India. It is therefore important that policymakers in India ensure that the country does its best to find optimal trade policy solutions that will serve the needs of the digitally delivered services eco-system in India.

It also needs to be underlined that while India stands as a global leader, and by far the leading developing economy when it comes to digitally delivered services exports, many other developing economies will also profit from the growth of this sector. Thus, best practices developed by Indian policymakers and their learnings gleaned from the development and execution process of such best practices will be of enormous benefit to other developing countries.

This paper is an attempt to develop such an optimal policy design. CPTPP and most FTAs involving developed countries such as EU, US, UK etc. have a dedicated chapter on Cross-Boder Trade in Services (i.e., Mode 1). But these chapters do not comprehensively address the fact that whatever may be the dominant mode of service performance and delivery, most services exports are multi-modal.

This paper develops the policy solution with full understanding that while the bulk of work will be done in offices in India for digitally delivered services exports, Indian firms would still

need some of their employees to able to move back and forth from their client locations across the world. In many cases they would need to establish commercial and operational offices in those countries where they export to.

Thus, a trade policy package that serves the needs of digitally delivered services exports would have to cover all modes of services supply. This means ensuring full market access and national treatment for Cross-Border or Mode 1 across as many as possible services sub-sectors concerned. But it also means ensuring that supplemental needs for very short period temporary movement of workers to client sites abroad linked to the cross-border performance of services (Mode 4), and investment rights (Mode 3) are also addressed through binding commitments.

But simply securing market access and national treatment is inadequate. Several other regulatory issues will need to be addressed. As competitive pressures increase due to the rising tide of digitalization, allowing skilled workers in developing countries like India to directly compete with skilled workers in developed countries across an increasingly wider range of sectors and occupational specializations, the demand for protectionism would increase. It therefore becomes important to pre-empt such protectionism to the extent possible through FTAs.

The possible protectionist interventions have been discussed in detail in Chapter 2 Part 2 of the paper. Essentially, such protectionist interventions fall under six broad categories:

1. Rejection of existing GATS commitments by demanding review of such commitments due to substantial change in scope and quality of services arising from digital transformation, or considering many such services to be completely new and deserving of re-classification;
2. Introduction of discriminatory or effectively discriminatory taxes on imported cross-border services or service providers, that can be considered to be compliant with the letter if not the spirit of National Treatment under GATS, or can be argued to be allowed exceptions on the grounds of safeguarding interests of consumers of services, labour rights etc.;
3. Discriminatory standards, licensing requirements, qualification requirements etc. that create an effective barrier or add transaction costs to performance of digitally delivered services by professionals and digital systems based outside the importing country;
4. Limitations or restrictions to access to data, or extremely strict data localization requirements that prevent the performance of cross-border digital services or add transactions costs to the business model;

5. Regulatory concerns in the importing country of inadequate jurisdiction to regulate and have oversight of operations, leading to additional requirements of due diligence and/or compulsory need for commercial presence that makes the cross-border digitally delivered services model commercially less viable or even unviable;
6. Limitations on providing a dedicated visa for short-term visits to client sites for operational, technical and commercial reasons in order to effectively perform and deliver cross-border digital services to the satisfaction of clients.

Our recommendation is for a comprehensive chapter dedicated to digitally delivered services to be included in India's FTAs with developed countries, as well as with large developing economies with growing demand for services and international services mediation hubs such as the UAE. For existing FTAs, India could proactively attempt to do this during the review process.

Traditionalists might argue that this will go against the grain of the positive list approach or complicate the current structure of mode-wise schedules. We take on board such criticism. But our counter-argument is that the old structure is inadequate to address the inter-linked market access, national treatment and domestic regulation (both behind and at the border) related issues across modes that's needed to provide effective resolution for global delivery model (GDM) of large Indian firms in this digitally delivered services space, or for the Global Capability Centres that are rapidly emerging to drive the next phase of services exports revolution.

This paper provides a broad structure of such a dedicated chapter for digitally delivered services, outlined as a framework under Chapter 3. It includes three broad policy pathways to address this wide range of potential protectionism. These are:

1. Provisions providing comprehensive commitments on Market Access and National Treatment, with additional clarificatory language that pre-empts the scope of non-discriminatory measures related duties or taxes discussed under 'Multimodal Supply of Services' in Chapter 3 . This can be considered almost identical to what was intended in the Services Annex of the WTO Hong Kong Ministerial, i.e., ensuring that the existing level of openness and lack of discriminatory measures already available in the de-facto autonomous regimes of partner countries is converted into binding commitments to prevent future backsliding in terms of market access, or discrimination against imported services.

While that the Services Annex at the Hong Kong Ministerial was attempting to do this multilaterally, we are recommending achieving the same outcome bilaterally with countries with whom India has core offensive interests in digitally delivered services. Our recommended provisions go beyond the intended outcome of the Services Annex as they include more detailed language that pre-empts more contemporary concerns related discriminatory at-the-border or behind-the-border taxes and domestic regulations.

2. Provisions that provide for a proactive system of regulatory co-operation with binding commitments on defined outcomes of such co-operation to address potential regulatory barriers related to qualification requirements, licensing requirements, and standards. They also include development of mutually recognized protocols on data management and data protection. All of this is to be driven by the institution of the Committee on Trade in Digital Services that will be responsible for coordination and implementation of the binding commitments on regulatory co-operation. This Committee shall also have the key responsibility of resolving issues related to mutually agreed classification of services and associated clarifications in terms of which specialized occupations or services activities lie under which precise sectors.

3. Provisions that ensure that a trusted set of firms that qualify for the benefits under the framework (on the basis of objective criteria) get the maximum level of facilitation possible. Given genuine regulatory and political economy concerns, all firms would not qualify for getting facilitated access to short-term visas for client site visits, or access to all forms of data with minimum scrutiny of their systems. Similarly, extending a light touch approach by regulators on issues related to consumer safety, especially given the jurisdictional challenge of regulating an entity performing services from another country, will only be possible for trusted entities. The recommended TDSP provides the institutional framework and is inspired by the World Customs Organization's Authorized Economic Operator or AEO model. Like the AEO, our suggestion is for an internationally agreed basic framework for TDSP, which is adopted and customized into national TDSP programs. And like in the case of AEOs, two countries can choose to mutually recognize their TDSP programs as a part of their DDS Chapter in FTAs.

Finally, we end this paper with an appeal to policymakers to consider the fact that Mode 4 is a declining mode in services in terms of value and employability. We provide empirical evidence in Annex 1 that it is also sub-optimal in terms of share of value-addition and share of value-added retained in India (or any other developing country exporting services). Inordinate focus

on visas for our professionals, while pandering to the Indian middle-class aspiration of working and eventually settling down in a developed country, makes little sense from a strategic services export development point of view.

But this is not to suggest that demand for Indian workers induced by demographic shifts and ageing in developed countries is trivial, and that remittances earned from such movement of workers unimportant. We make the case that such demand for Indian workers is not seriously addressed in the Mode 4 provisions of FTAs. Instead, it requires Comprehensive Mobility Agreements (CMAs). Such CMAs can be standalone or part of an FTA. In addition, like in the case of digitally delivered services, developing protocols for trusted manpower services agencies and other facilitation arrangements would play a critical role in making India a preferred choice for meeting such international demand for workers.

Our paper is an attempt to provide out-of-the box, non-traditional suggestions that takes a closer look at the reality of how services business is conducted, especially by firms involved in the digitally delivered services space. We hope that it initiates a debate and leads to greater deliberation, resulting in even better and more comprehensive policy solutions that address the contemporaneous challenges outlined in this paper. Even more importantly, such solutions pre-empt serious impediments to digitally delivered services trade that are likely to arise in the future. The indications of some of these protectionist trends are already visible in the policy debates taking place in the EU and US.

It is clear that continuing with the business-as-usual approach from the last century and adopting the same model and trade policy structures inherited from those times is inadequate. This inadequacy is still not being felt largely because autonomous regimes for cross-border trade in services in most economies remain open. To an extent, autonomous regimes also provide sub-optimal and inefficient solutions to the multi-modal needs of cross-border digital services exporters, but firms are willing to live with such solutions due to lack of credible alternatives. But policymakers cannot allow themselves to be lulled into a false sense of security. If recent developments in international trade that have up-ended long held assumptions about the global trade policy regime are any indication, we are entering a phase of serious churning, and holding on to existing certainties will only lead to rude awakenings and rough landings.

Annex 1

Cost Component Analysis

Rise in IT exports from India

The General Agreement of Trade in Services WTO came into force in 1995 and is the only set of multilateral rules covering trade in services. The agreement focuses on promoting transparency among member countries, ensuring non-discrimination and reducing barriers to market entry for foreign service suppliers to leverage the potential of trade in services due to advancements in technology and rapid globalisation. One of India's major sectors of interest is communications, IT and information services. As India opened up its economy in the 1990s, the IT sector saw a rapid boom over the years and has now become one of the major contributors to India's GDP and employment.

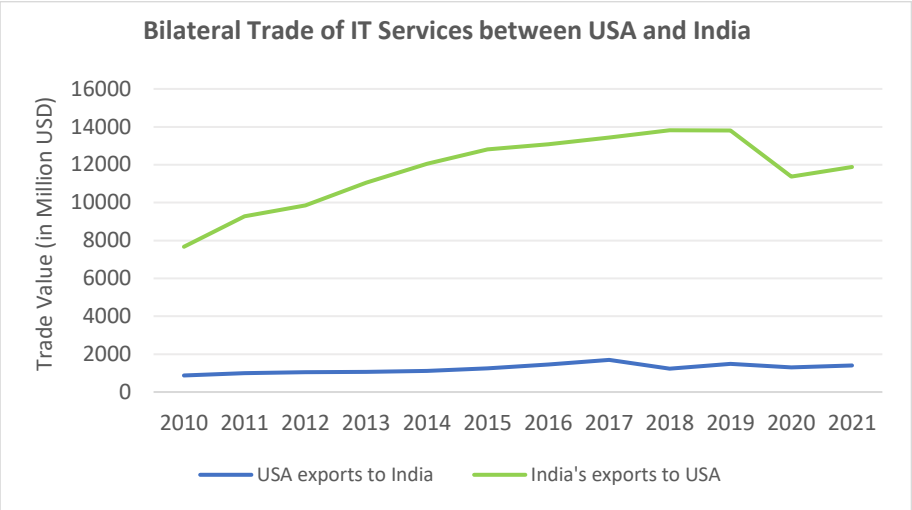
The revenue generated by the IT and telecommunication industry mostly comes from IT and related services exported to developed countries. Indian IT giants like Wipro, TCS and Infosys mostly deal with work related to software development, maintenance, testing and consultancy offshored from clients in countries like the UK and the USA. The service offered by these companies is mostly through remote work or transferring skilled workers temporarily for onsite work. GATS defines trade in services through four modes of supply. India's interest in free trade negotiations is mainly in commitments relating to Mode 1, which is cross-border supply of services, and Mode 4, which covers the transfer of human resources between two countries.

The United States, being one of the largest R&D and manufacturing centres for electronics, demands a constant supply of skilled workers and IT services to run its multimillion-dollar tech companies, and most of these demands are met by offshoring companies in India at a much cheaper rate due to the availability of a large pool of skilled workers.

Figure A1 shows the bilateral trade in computer, information, and communication services between the USA and India. US exports to India have remained the same over the last decade. On the contrary, India’s export of IT services to the USA had reached around 13.8 billion by 2018, with a dip in 2020 because of COVID-19. According to data released by WTO, in 2021, India was the third largest exporter of telecommunication and IT services with an export share in total world exports of 7.7 per cent.[44]

[44] Author’s estimation using services trade data from WTO STAT.

Figure A1

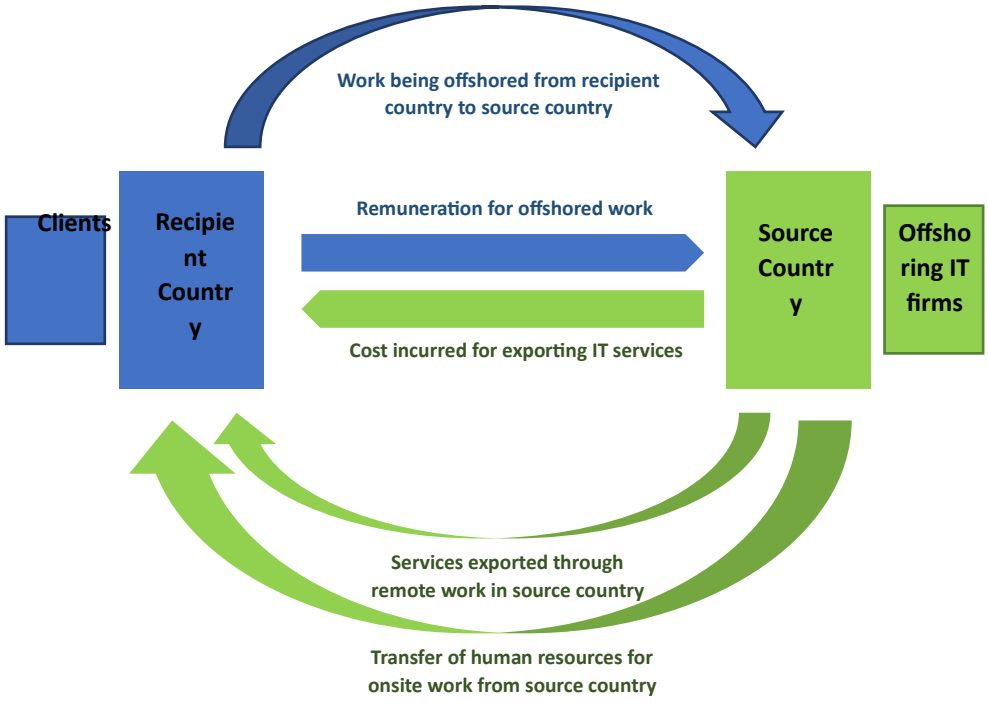


Data Source: WTO STAT

The Offshoring Cycle in IT industry

Offshoring firms mostly export their IT services either through remote work or by transferring human resources for onsite work. For example, tech companies in the USA mostly outsource their work to low-cost countries like India, as it is much cheaper to import that service rather than perform it in their own country (Hira Ron, 2018).[45] The work may include developing, testing, data analysis and consulting for clients in developed countries. Figure A2 tries to explain the offshoring of work between the recipient country and the source country.

Figure A2



[45] Hira, Ron. "Bridge to permanent immigration or temporary labor? The H-1B visa program is a source of both." *US Engineering in a Global Economy*. University of Chicago Press, 2017. 263-283.

The recipient country is the country to which the IT services are being exported. The offshoring companies in the source country, which are basically low-cost countries, receive the outsourced work from clients located in the recipient country. The service is provided by the offshoring companies either remotely (through Mode 1) or by transferring their skilled employees to the client temporarily till the project is completed (through Mode 4). Offshoring firms have to bear the cost of sponsoring work visas, higher salaries and other remuneration for their workers working for clients in other countries. A 2018 study showed that for Indian offshore outsourcing firms like Tata Consultancy Services for its USA office, the cost of employing a worker from India under an H1B work visa is far lower as compared to hiring an American worker for the same position (Hira Ron, 2018). So, offshoring work in low-cost countries is a win-win solution for both the client and the offshoring firm.

The offshoring Cost

Moreover, services provided remotely are way cheaper than transferring human resources as the offshoring firms do not have to incur the cost of migration of human resources to other countries. Developed countries often impose high visa application fees and quotas for sponsored work visas to restrict the flow of immigrants and protect their domestic labour market. The reason is that immigrants are often paid less than domestic workers, making it profitable for firms to employ immigrants under sponsored visas. This, in turn, creates a dampening effect on the wage rate of the domestic labour market and an increase in unemployment among domestic workers. Developed countries provide better standards of living and opportunities than developing countries, and with an increase in higher education in STEM subjects, along with better fluency in English among Indians, barriers to migration have significantly reduced over the years.

Offshoring firms generate huge revenue by exporting services, but when exported through Mode 4, which is the movement of resource persons from one country to another, the firm has to bear higher costs compared to the same services being exported through Mode 1. These costs include (i) sponsorship license fee for sponsoring a work visa, (ii) visa processing fee, (iii) other government charges that are levied to reduce the surge in visa applications, (iv) minimum salary slab in accordance with the current market wage rate and (v) health insurance which has

to be covered by the sponsoring firm. Table 2 shows the minimum cost burden on offshoring firms for sponsoring work visas in the USA and the UK.

Table A1: Visa Processing Cost Incurred by Offshoring Company

USA (in USD)		**UK (in USD)**	
Petition Fee	460	Sponsor licence application fee (validity 10 years)	1908
Application Fee	190	Certificate of Sponsorship	309
American competitiveness and workforce improvement act charges	1500	Immigration Skill Charge (per year)	1292
Fraud Prevention and Detection fee	500	Skilled worker visa fee	929
Added fee for companies with more than 50 employees where half are foreign nationals	4000		
Total (in USD)	**6650**	**Total (in USD)**	**4438**

Source: USIC, UK.gov

The Indian Context

The paper analyses the expenditure incurred by Indian offshoring firms TCS, Wipro, and Infosys on the salaries and other remunerations of its onsite and offsite employees. For comparing the cost difference between supplying a service either through Mode 1 or Mode 4, job roles were selected based on the minimum salary offered to onsite employees of the same company working under an H1B visa. To estimate the expenditure incurred by the offshoring

firms, the salaries for the same job roles the company offers its domestic employees have been considered. The processing fee for the H1B visa category has been considered a cost incurred by the offshoring firms towards exporting services through Mode 4. Besides, the essential requirements for providing an IT service, such as a laptop and internet, have been included in the cost burden analysis for the offshoring firms. The allowances on internet bills for onsite employees have not been included as a cost to firm on the assumption that the client would provide the internet facility necessary for the work. Other benefits and remuneration provided to an employee, which also comes under cost burden, were not considered due to the unavailability of data. The difference in cost incurred in the onsite (Mode 4) and offsite (Mode 1) modes of work for a particular task will show how much more it costs to provide an onsite services as compared to an offsite one.

Methodology

Job roles were selected based on the minimum salary offered to onsite employees of the same company working under an H1B visa. To estimate the expenditure incurred by the offshoring firms, the salaries of the same job roles the company offers its domestic employees have been considered. The processing fee for the H1B visa category has been considered a cost incurred by the offshoring firms towards exporting services through mode 4. Besides, the essential requirements for providing an IT service, such as a laptop and internet, have been included in the cost burden analysis on the offshoring firms.

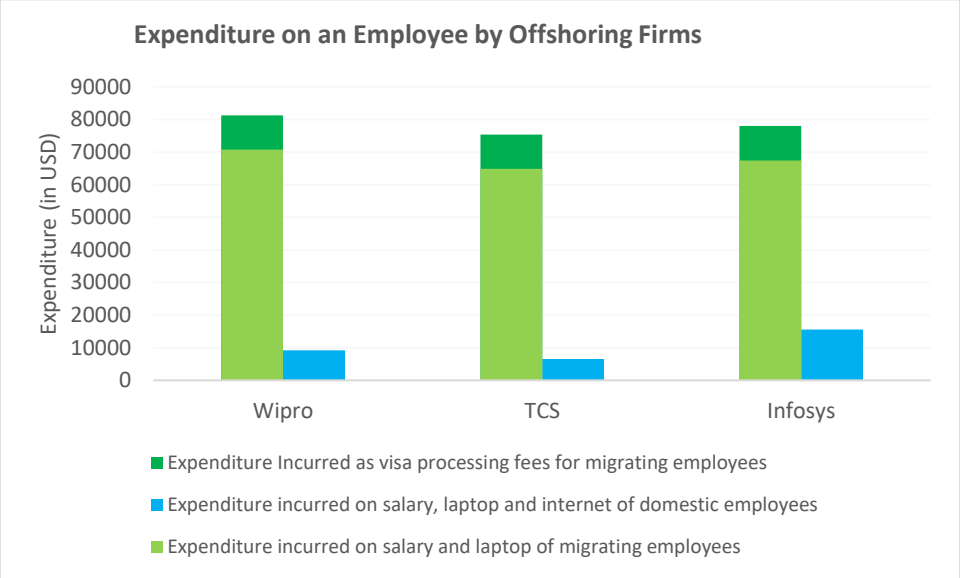
Equation A

$$Expenditure\ on\ Mode\ 4 = \sum_{i=1}^{n} (Visa\ Processing\ Fee + Salary\ of\ onsite\ employee + electronic\ gadgets\ (laptop))$$

Equation B

$$Expenditure\ on\ Mode\ 1 = \sum_{i=1}^{n} (Salary\ of\ employee\ in\ India + electronic\ gadgets\ (laptop) + internet\ allowance)$$

Figure A3



Source: Analysis based on author's own calculation using Glassdoor data.

Figure A3 suggests that the cost of sending employees for onsite work is much higher than the same work done remotely in India. The analysis indicates that the expenditure on onsite employees is around eight times higher than that on offsite employees because of the minimum wage criterion (in the US, this amounts to USD 60000 annually, which is much higher than the wage rate in India), the cost of sponsored skilled work visas, sponsorship licence fees, and visa processing fees. Developed countries like the USA deliberately keep high visa processing fees to limit the number of applications and migration inflow.

Offshoring firms might recover some of the expenditures from their clients by charging higher fees when a service is exported through Mode 4. However, the IT service market is highly competitive, comprising large and small firms across all South Asian nations, which invariably makes offshoring firms price takers rather than price makers. As a result, exporting services through Mode 4 might yield lower returns than exporting through Mode 1 (Das Prosenjit, 2019).[46]

Another major problem in Mode 4 is the poaching of onsite employees. Foreign clients often hire Indian nationals at lower wages, tempting them with permanent residency instead of hiring domestic employees, and the hired employees are often those who go on a work visa sponsored by an Indian offshoring company. This results in a resource loss for the offshoring firm after investing in recruitment and training and a welfare loss for the country due to brain drain.

[46] Das, Prosenjit. "An Assessment of Competition in Indian Information Technology and Information Technology-Enabled Services (IT-ITeS) Industry in the Post Globalization Era."

Often, emigrants under skilled work visas represent the higher end of the skill distribution in the source country, as developed countries often create a kind of selection mechanism through their visa application process, such as creating different categories based on educational qualification and skill sets and restricting the positive spillover effect of acquired skills by these emigrants in the source country (Commander Simon et al., 2004).[47]

[47] Mayer, Frederick W. "Challenges to Globalization: Analyzing the Economics." (2005): 466-470.

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