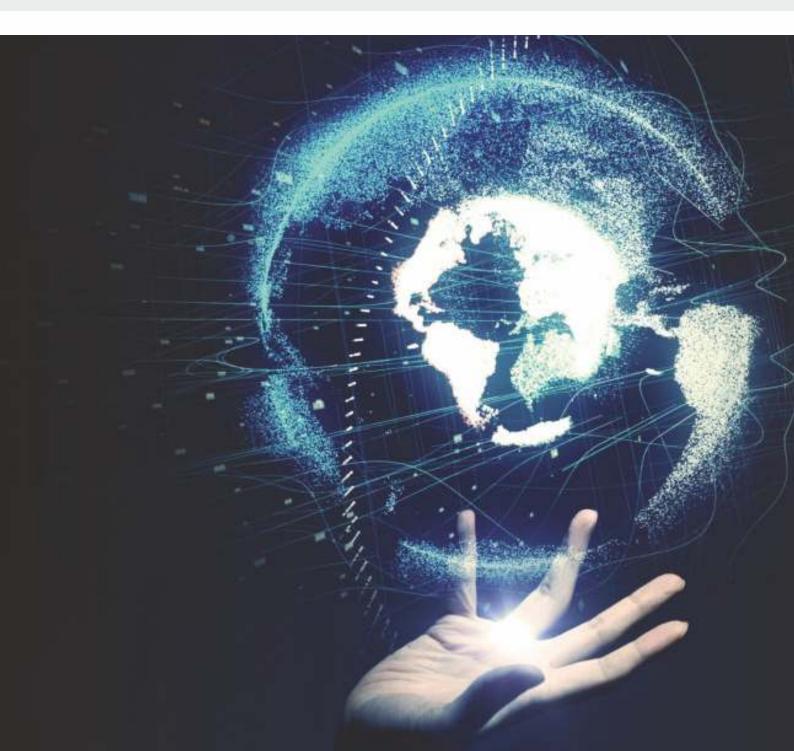






# White Paper





M. Visvesvaraya Industrial Research and Development Centre

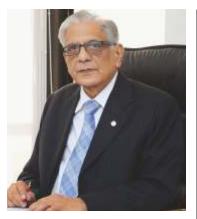


### Bharat Ratna Sir M. Visvesvaraya

(15 September, 1860 - 14 April, 1962)

MVIRDC World Trade Center Mumbai is the realization of the vision of one man - Sir M. Visvesvaraya - engineer, scientist, and a great son of India. Named after him, M. Visvesvaraya Industrial Research & Development Centre (MVIRDC) is a company registered and licensed under Section 25 of the Companies Act, 1956 (currently Section 8 of the Companies Act, 2013). MVIRDC is the promoter of World Trade Center Mumbai, which stands tall as a symbol of excellence in industry and trade services.

## Foreword



Mr. Y. R. Warerkar Director General (MVIRDC)

The **Global Economic Summit** (GES) is an annual flagship event organized by **MVIRDC World Trade Center Mumbai** in partnership with **All India Association of Industries.** 

Since 2010, the Summit has brought together prominent business leaders and policymakers from India and overseas to deliberate upon issues of critical value for the global economy.

This year, the 8th edition of the Global Economic Summit (GES 2019) was focused on the theme **'Services: Enabler of Growth for Trade and Industry'**.

Services account for nearly 70% of global GDP in value added terms, 60% of world employment and 46% of global exports. The emerging spectrum of services encompassing education, healthcare, finance, design and urban planning, logistics, IT, e-commerce, R&D, consultancy and legal services were showcased and discussed at the Summit through panel discussions on the following topics:

- The Fourth Industrial Revolution and its Impact on Services
- Smart Solutions and Smart Cities
- Importance of Services in supporting Agriculture and Manufacturing Sectors
- Productivity in Services: Issues, Trends and Challenges

Key dignitaries who addressed GES 2019 included **Mr.Ibrahim Ameer**, Hon'ble Minister of Finance, Government of Maldives; **Dr. Robert B. Koopman**, Chief Economist and Director, Economic Research and Statistics Division, World Trade Organisation; **Dr. Aaditya Mattoo**, Research Manager, World Bank & Director, World Development Report 2020; **Mr. Scott Ferguson**, CEO, World Trade Centers Association, New York; **Dr. Rupa Chanda**, RBI Chair Professor of Economics, Indian Institute of Management, Bangalore; **Dr. Ganesh Natarajan**, Executive Chairman and Founder, 5F World; **Ms Rasha Omar**, Country Director – India, International Fund for Agricultural Development; **Mr. Vikal Kapoor**, CEO, DAAPS Inc. and **Dr. Pascal Kerneis**, Managing Director, European Services Forum among others.

This document is an outcome of their presentations at the Summit. It encompasses a series of recommendations for policymakers and entrepreneurs to derive value from the services sector. If implemented effectively, these recommendations hold the key to unlocking productivity gains and employment generation through services sector growth.

I am certain that readers will find this document strategically useful in their efforts to navigate the expanding contours of an increasingly digitized global economy.

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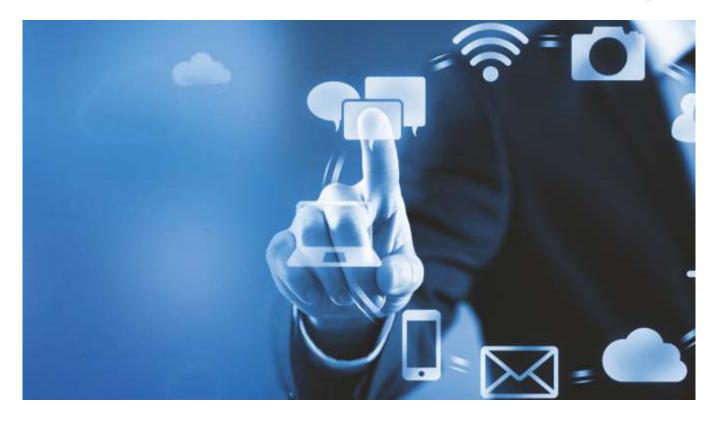
#### Disclaimer:

The purpose of this white paper is to generate useful perspectives for policy discussion and also to generate a well-informed public opinion on economic growth and the services sector. MVIRDC World Trade Center Mumbai has taken utmost care in the preparation of this white paper in terms of validity or authenticity of the information included. However, we hereby declare that we can in no way be held responsible for the legitimacy of the data or information used in this white paper. The information has been sourced from relevant stakeholders and publicly available secondary data.

#### Note:

This white paper is an outcome of the 8th Global Economic Summit 2019. Views expressed reflect the arguments/presentations made by global experts at the conference from March 6 – 7, 2019. The paper places its focus on liberalizing global services markets, promoting inclusive and sustainable urbanization and enhancing cross-sector productivity through services. All data and arguments unless otherwise cited were part of speeches made by experts at the 8th Global Economic Summit.

### White Paper Services: Enabler of Growth for Trade and Industry



#### Introduction

The expanding role of services in the global economy can, in part, be attributed to the unprecedented rate of technological innovation in domains such as IoT, data analytics, artificial intelligence, automation, blockchain etc. These trends indicate that services such as finance, telecommunications, logistics, ITeS and business services play a pivotal role in global value chains and are therefore instrumental in sectors such as agriculture and manufacturing. In addition, these 'modern services' are also transforming traditional service industries such as travel, tourism, healthcare, government services and education.

Consequently, the composition of service trade in the global economy has undergone a shift towards these technology-enabled services. WTO estimates expect trade in services to account for 25 percent of world trade by 2030, up from 21 percent at present. A significant proportion of this activity will originate in emerging markets whose share of global trade is expected to grow from 46 percent in 2015 to 57 percent by 2030<sup>1</sup>.

However, these optimistic expectations are contingent upon the ability of national governments and the multilateral system at large to respond and adapt to rapid rates of disruptive innovation. While trade costs in goods trade have been reduced significantly, the cost of supplying and consuming services across borders has remained at relatively high levels.

The 8th Global Economic Summit (GES 2019) put the spotlight on the services sector. 30 global experts from 25 countries attended the Summit and participated in the conference, exhibition and networking events. This white paper and the chapters that it encompasses is a result of conversations, debates and discussions that participants engaged in at GES 2019.

The first chapter of this white paper shall make a case for liberalizing trade in services based on evidence and arguments presented at the conference. Chapter 2 assesses processes of sustainable and inclusive urban development from a services-sector standpoint. Chapter 3 takes into account the challenges and opportunities that lie ahead in a global economy that is at the brink of the 4th Industrial Revolution. Thus, the white paper brings into focus the role of services in the modern economy and the possible interplay between GVCs, services and economic growth.

<sup>1</sup>World Trade Report 2018

# Chapter 1 The Case for Liberalising Trade in Services

# "

Technology, particularly digital technology, could erode the effect of national borders on trade in services.

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### The Case for Liberalising Trade in Services



Whilst discussing the expanding footprint of services in the global economy, one must be careful not to overlook the cross-border supply and demand patterns that drive international trade in services.

The WTO expects the share of services in international trade to rise from the current levels of 21 percent to 25 percent by 2030. Over the past 2 decades, trade in services has grown faster than trade in goods, owing in part to technological advancements.

#### Riding the wave of technological innovation

In more ways than one, technology has historically been closely linked to international flows of services. The 'containerization' of international trade in the early 1970s substantially reduced transportation costs. Similarly, gains in communication technology have enabled the crossborder supply of services such as finance, professional services and computer services among others. Therefore, historical trends suggest that technological innovation could possibly reduce trade costs in services and stimulate global services supply.

The World Trade Report 2018 discusses in greater depth the effect of digital technologies such as artificial intelligence, Internet of Things, 3-D printing and Blockchain on the global economy. A key finding of the report is that digital technologies represent not only changes in production techniques but also fundamental shifts in consumption patterns that are now digitally driven. If these innovative technologies bring with them a wave of falling trade costs, the WTO expects a cumulative growth in international trade of 31 to 34 percentage points over 15 years.

Notably, technology is also transforming the composition of international trade in services. Trade in information technology related products and services has grown 3 fold over the past 2 decades. In 2016, the total value of this trade stood at 1.6 trillion USD. Going forward, the trade in digital

Technology has historically been closely linked to international flows of services. The 'containerization' of international trade in the early 1970s substantially reduced transportation costs. Similarly, gains in communication technology have enabled the crossborder supply of services such as finance

services is expected to rise and digital infrastructure, data flows, privacy laws and intellectual property regulation are likely to be seen as sources of competitiveness for national economies. Technology, particularly digital technology, could erode the effect of national borders on trade in services. However, from a consumer protection angle, they throw upon a wide array of policy concerns such as data and privacy protection that must be taken into account.

## Liberalization through Open and Well - Regulated Markets

Liberalizing trade in services can lead to efficiency gains by increasing the contestability of services industries. Structuring and nurturing competitive markets for services can enhance efficiency, reduce costs and provide access to a wide range of sellers (consumer choice). In addition, access to wider markets could provide sellers of services with the opportunity to develop economies of scale and expand into markets based on competitiveness of their respective business models.

Indicators of competitive strength must be revisited to identify possible gains through trade. In India's case, 'Revealed Comparative Advantage' data could indicate possible sources of global competitiveness. India's RCA has most notably been in the export of ICT services and segments of professional services such as management consulting. However, certain segments such as sea transport services have also developed an RCA greater than 1 (an indicator of competitiveness)<sup>2</sup>. RCA data must be monitored to strategically guide policy positions in trade negotiations.

Further, it is crucial to recognise is that liberalization does not imply deregulation. Instead, the success of services liberalization is determined by the extent to which international regulatory cooperation can be achieved. Such cooperation on contentious issues is instrumental in striking the balance between requisite regulation (to protect for instance consumer data) and protectionist agendas (hindering equitable market access).

The SAARC Agreement on Trade in Services (SATIS) offers key lessons. Signed at the 16th SAARC Summit in 2010, the agreement envisions the 'realization of the potential' for trade in services whilst recognising the 'territorial integrity' and 'sovereign equality' of each member state. Building on this principle, it can be argued that regulatory cooperation as opposed to deregulation optimally suits the spirit of SATIS.

De facto regulatory discrimination must be avoided. In the case of SATIS, it has been argued that market structures (monopolies by SOEs) and other beyond-the-border regulations could possibly displace incentives and gains that could accrue from FDI liberalization.

Liberalizing trade in services should thus aim at services markets that are open and well-regulated.

## Updating the Multilateral Rules-Based Trade System for Modern Services

Technology has fundamentally impacted the composition of global services trade. A wide array of services are now exported across digital networks for instance, finance, education and professional services. In fact research shows that greater internet penetration is positively associated with higher levels of trade in services. The share of 'other commercial services' has risen to 54 percent of 'commercial services' trade in 2017 from 47 percent in 2005. This indicates the emergence of new segments of 'tradable' services driven by advancements in digital technology.

This growth in services also has a geographical component; 64 percent of EU exports of services are within the EU and 52 percent of Asia's service exports are headed for Asian markets. While such regional trade in services can be beneficial for regional value chains, there is a need to provide a multilateral framework to support and facilitate trade in modern services.

The optimistic expectations of global growth that hinge on technological progress are contingent on the ability of national governments and the multilateral system at large to respond to changes in services trade composition. This change in composition has brought with it a range of

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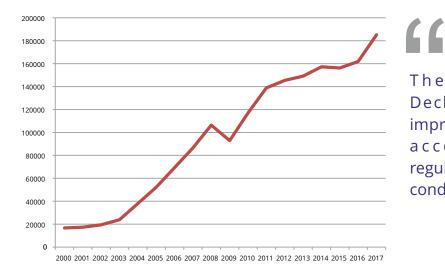
contentious issues such as data protection, privacy and intellectual property regulation that must be brought under a rules-based system that ensures that the ensuing economic growth is sustainable and inclusive.

As the World Trade Report 2018 finds, the WTO framework and the General Agreement on Trade in Services (GATS) are particularly pertinent to digital services trade. In this context, it is useful to revisit the Hong Kong Ministerial Declaration of 2005 that called for improved commitments on market access, non-discriminatory regulations and removal of existing conditions on commercial presence. Annex C of the declaration outlines the modalities of liberalizing services trade under a rules-based framework.

<sup>2</sup>Singhal, A., Hoekman, B. Harnessing Benefits from Services Trade for India's MSMEs. GES 2019 Handbook.



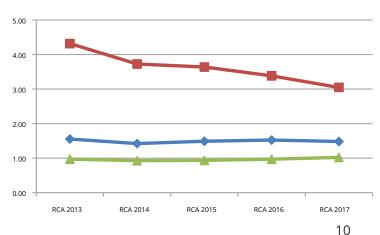
India's RCA in It services has been supplemented by comparative strengths in business and recreational services.



India's Exports of Services. Source: OECD

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India; Services with RCA > 1 Source: calculations based on ITC data

> RCA is calculated using the following equation: RCA= (Xij/Xwj)/ (Xi/Xw) where Xij : India's export of service j , Xwj : the world's export of service j, Xi: India's total service exports, Xw : total world service exports

- Other business services
  - Telecommunications, computer, and information services

Personal, cultural and recreational services

# Chapter 2 Intelligent Urbanism

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Smart Cities envision the fast paced implementation of innovative projects that facilitate urban growth.

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### **Intelligent Urbanism**



According to the census (2011) 31 percent of India was urban. However, the next census will possibly reveal a much higher figure. By 2030, more than 40 percent of India's population will reside in cities which will generate 70 percent of total employment. These figures have crucial implications for economic growth at the national level. Cities tend to exhibit what economists refer to as 'agglomeration' effects; as more people reside in close proximity, economic activity, wages and hence productivity is boosted. This is evident in diversified economic profiles of global metropolises such as Chicago.

However, while cities can provide higher wages and increased productivity driven by proximity, they also tend to create negative externalities such as pollution, income inequality and crime. These represent risks that must be mitigated in order to create inclusive and sustainable development.

In June 2015, the Government launched the 'Smart Cities Mission' to address the rise in demand for urban services. 'Smart cities' encompass the sustainable and inclusive development of urban spaces. The development plan comprises 3 components or goals; provision of core infrastructure, improved quality of life for citizens and minimized environmental impacts. 100 cities have been identified under the project of which 68 cities have a population of more than 1 million<sup>3</sup>.

Essentially, smart city development can be either brown field or green field; the strategy includes plans to either develop new cities or expand/redevelop the existing ones.

In fact, the strategic components identified by the government are: city improvement, city renewal and city extension. This indicates that in India's shift towards smart cities, most projects will be brown field. However, the green field aspects of urban growth must not be ignored, for instance, the mandate of the Delhi Mumbai Industrial Corridor Development Corporation (DMICDC) is to develop new green field smart industrial cities.

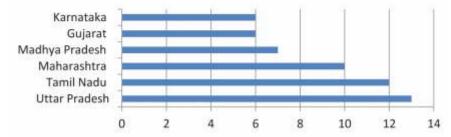
## Smart Cities should reflect fiscal discipline over the longrun

Smart Cities envision he fast paced implementation of innovative projects that facilitate urban growth. In order to do so, it is critical that their governance models are strategically placed for the medium and long term. This expansion of scope has implications on how smart cities should be governed and financed.

Urban development in the past has been financed through grants from the central and/or state government under different project schemes. However smart cities require a financing model that is not a drag on the fiscal footprint of development. The DMICDC financial model is a reflection of this realization. Under this model, finance by the central government is released to the state government as equity or debt. This creates incentives for fiscal discipline in urban development over the long term. This also creates a division of administrative responsibilities between the centre and state government (where the centre provides the fiscal resources and the state is entrusted with the provision of land). In addition, the timely execution of projects also provides the ability to monetize land parcels and generate cash flows to sustain future capital expenditure.

The creation of SPVs or Special Purpose Vehicles to implement smart cities is a welcome reform in this regard. Under the smart cities development plan, SPVs (set up as LLCs under the Company Act 2013) are jointly promoted through a 50:50 equity shareholding by state governments and ULBs (Urban Local Bodies). SPVs are charged with the task of implementing smart city proposals and creating project implementation reports. These SPVs also contribute to cooperative federalism in urban growth by becoming part of the governance framework through

> Uttar Pradesh (13) hosts the highest number of smart cities followed by, Tamil Nadu (12), Maharashtra (10), Madhya Pradesh (7), Gujarat (6) and Karnataka (6)



delegated responsibilities such as implementation, planning and associated municipal functions. The requisite legislative changes to support this governance structure must be expedited.

### Each Smart City requires its own M&E framework that includes Human Capital Development indicators

Keeping the smart city development plans in mind, optimizing the implementation of these projects in a manner that delivers ideal solutions is crucial. For the purpose of which, it is of value to set up a 'Monitoring and Evaluation' framework that captures both quantitative and qualitative aspects of urban growth.

M&E efforts are systematic, long term solutions that create essential feedback mechanisms regarding the efficacy of projects in achieving desired objectives. These efforts must be shaped by a set of variables that a smart city comprises of. Since each smart city is indeed different, each set of variables will differ as well.

In order to derive such variables, policymakers must recognize both physical aspects of smart cities (infrastructure) and human capital components of smart cities. Therefore, the M&E framework must include indicators of human capital development. The first 'Human Development Report' released by the UNDP in 1990 captures this argument succinctly; it posits that there needs to be a clear distinction between the 'means' and 'ends' of development. In the case of smart cities, the physical or core infrastructure are the 'means' while citizens are the 'ends'. For this reason, project development reports should be accompanied with reports that capture data on human development by drawing on the methodology developed in the HDRs.

This means that factors such as health, skills and education also enter the development agenda for smart cities. Source: Ministry of Housing and Urban Affairs, Government of India.

#### Smart Cities can alter demand and consumption patterns by incentivizing the circular economy

While urban growth in general and smart cities in particular includes numerous macro-level changes, they can also be expected to lead to micro-level changes. These changes can be felt in the day-today experiences of citizens who inhabit these urban spaces.

Of crucial value for businesses looking to

capture value from smart cities is the fact that urban growth must not be viewed in isolation. That is to say that technological innovations are a crucial part of urban transformations. Consequently, one could argue that there will be direct and indirect changes in what type of goods and services are demanded and how they are consumed.

The direct impact of smart urban transformations is that products or services that are part of the circular economy will experience a rise in demand. Since a key cornerstone of smart city strategy is to reduce negative externalities such as vast urban carbon footprints, investments in areas such as waste and energy solutions will rise.

In addition, businesses that wish to tap into opportunities will benefit from transitioning into 'Circular Economy Business Models' that not only reduce the environmental impact of economic activity but also include a structural shift away from resource-intensive sectors. This transition can be facilitated through fiscal incentives.

An example of this is the practice of 'net metering'. Net metering allows businesses that generate their own energy through solar power to sell excess energy back into the grid. These net metering laws have been passed in numerous countries such as Belgium, Denmark, Italy, Brazil and Tunisia among others. These laws generate demand for solar energy production and create growth in the renewable energy industries.

<sup>&</sup>lt;sup>3</sup>For more information on India's smart city plan visit http://smartcities.gov.in/content/

India has also attempted net metering. For instance, in 2015 the Maharashtra Electricity Regulatory Commission (MERC) introduced a net metering policy that allowed a 'distribution licensee' under Section 14 of the Elecricity Act 2003 to enter into a 'net metering connection agreement' with a consumer through which Solar PV systems installed by the consumer could deliver excess energy to the 'distribution licensee'. In 2016-17, only 4% of total power generation came from renewable sources. The MERC has also taken steps to promote the use of renewable energy. In 2011 the RPO (Renewable Purchase Obligation) target was 11% and for 2019 – 2020 it has been set at 15%. The implementation of such incentive structures must be strengthened and the National Action Plan on Climate Change must be viewed as an input for policy making for smart cities.

<sup>4</sup>The HDR methodology can be accessed at http://hdr.undp.org/sites/default/files/oc12.pdf

<sup>5</sup>Maharashtra Electricity Regulatory Commission. Annual Report 2016 -17.

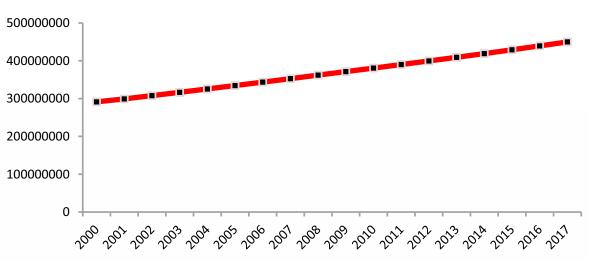
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#### India's Urban Population. Source: World Bank



# Chapter 3 Industry 4.0: Bracing for Impact

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Historically, industrial revolutions have been at the forefront of revivals in productivity growth.

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### **Industry 4.0: Bracing for Impact**

In the decade following the financial crisis, the global economy entered a phase of low productivity growth. This slowdown was visible not only in developed markets but also emerging economies. The underlying causes have generated fierce debate. Possible explanations range from the low impact of technological innovation on nation-wide productivity to weak demand and lower capital expenditure. Some even cite the role of deeper structural factors such as education and inequality<sup>6</sup>.

Historically, industrial revolutions have been at the forefront of revivals in productivity growth. These industrial revolutions encompass a deeper, structural shift in the global economy. This means that they significantly alter production methods and consumption patterns<sup>7</sup>. More importantly, they also stimulate gains in productivity, incomes and output. The first industrial revolution harnessed steam power for mechanized production. The second industrial revolution moved production methods towards efficient mass production through electricity while innovation in electronics and the Internet of Things (IoT) formed the foundations of the third industrial revolution.

fact, some analysts point to the '9 pillars' namely; big data, robotics, simulation, horizontal and vertical systems integration, IoT, cyber security, cloud, additive manufacturing and augmented reality <sup>®</sup>. In addition, there are also technologies such as artificial intelligence and blockchain that are core components of Industry 4.0. These disruptive technologies have redefined production techniques, consumption behaviour and contours of competitiveness.

These technologies have had a particular impact on the supply of services. They impact the ability of service providers to remain competitive, minimize costs and respond to dynamic customer preferences. They provide opportunities to radically transform business models to derive value from growth by enhancing the efficiency of service provision. They also impact the quality of human capital in terms of what skills are required to provide certain services. Therefore, for the services sector, Industry 4.0 represents an unprecedented opportunity for growth while simultaneously presenting SMEs with a broad range of risks and challenges.

#### Levelling the playing field

One of the core impact of Industry 4.0 is the ' platform' effect. These technologies change the way buyers, sellers and other participants in the value chain interact with one another. As a result, the competitiveness landscape across

the value chain is set to transform. Traditionally, the 'economies of scale' argument was used to determine how competitive a business was. If a business could cut costs while expanding production and diversifying across segments and markets, it was deemed competitive. Industry 4.0 will reduce to role of economies of scale in determining business competitiveness. Businesses such as Airbnb, Uber, Amazon and Facebook are epitomes of firms that challenged the foundations of industries such as hospitality, financial services, logistics, marketing and so on.

These trends not only provide opportunities for entrepreneurship in a digital economy but also provide methods for businesses in other sectors to widen market access, reduce operational costs and conduct data driven performance evaluations to guide strategic decisions.

However, the real challenge for SMEs lies in integration. While some technologies transform certain segments of the business model such as production or distribution, Industry 4.0 encompasses multiple technologies that can transform the business model itself. Therefore, for firms and in particular SMEs, it is vital to strategically plan their transition into these technologies so as to allow all segments of the business to gain from efficiency and productivity boosts. By doing so, SMEs can ensure that the value from the fourth industrial revolution is not restricted to a niche set of firms.

## All structural shifts pose downside risks that must be mitigated

As mentioned earlier, Industry 4.0 is fundamentally transformative. From a historical standpoint, all fundamental shifts in the global economy have posed downside risks with significant implications. Consider for instance the 'globalization' effect that began in the late 1980s. Subsequent decades witnessed the spatial segregation of production driven by considerations such as cost of labor and distance to market. The global economy benefitted through strong growth in the pre-crisis decade in addition to greater regional integration particularly in the Asian economies.

<sup>&</sup>lt;sup>6</sup>United Nations. The Slowdown in Productivity Growth: A view from International Trade. Development issues No. 11. 2017.

<sup>&</sup>lt;sup>7</sup>Schwab., K. The Fourth Industrial Revolution: What is means, How to Respond. World Economic Forum 2016.

<sup>&</sup>lt;sup>8</sup>Boston Consulting Group. Embracing Industry 4.0 and Rediscovering Growth. The report can be accessed at https://www.bcg.com/enin/capabilities/operations/embracing-industry-4.0-rediscoveringgrowth.aspx

Globalization produced both winners and losers. This fact is evident in the anti-globalization wave that has manifested itself in protectionist rhetoric in the political arena. These views are also emboldened by rising income inequality across the world. The challenge then, is to make the shift as sustainable and inclusive as possible.

In the case of the latest structural shift i.e. Industry 4.0 the challenge is similar. Policymakers must delve deeper into issues such as access to technology, provision of core infrastructure and supply of skills if they intend to successfully mitigate risks posed by yet another fundamentally transformative shift in the global economy. These will also determine the global competitiveness of economies.

India already exhibits some viable responses to these challenges. One such response is the 'cluster' model. A cluster is traditionally defined as 'a critical mass of enterprises located in geographical proximity' to each other. Clusters have been globally recognised as 'drivers' of

Industrial Revolutions significantly alter production methods and consumption patterns. More importantly, they also stimulate gains in productivity, incomes and output.

innovation. More importantly, in the economic development narrative of economies, clusters are seen as vehicles of inclusive growth owing to their objective of facilitating broad based growth through agglomeration effects. However, agglomeration by itself cannot ensure inclusive growth. Policy support through targeted funding and the development of viable PPP models for creating clusters is vital in this regard.

In terms of competitiveness, one of the core challenges for SMEs is their inability to access the latest technological innovations owing to the high costs attached with the technology that can be easily sought out by larger firms. This creates a challenge of inclusiveness in Industry 4.0. Therefore, creative policy interventions such as cluster development in a wide range of sectors is critical in determining the economic impact of the fourth industrial revolution.

Yet another challenge related to the inclusiveness debate is the issue of supplying skills at the rate at which they are demanded. In their 2018 'Future of Jobs' report, the World Economic Forum found that global labor markets are undergoing 'major transformations' that pose threats of 'skills gaps, greater inequality and broader polarization'<sup>9</sup>. These transformations are driven by the fourth industrial revolution. These labor market shocks could determine which economies are seen as competitive destinations for global capital flows. The 'Future of Jobs' 2018 report finds that 59% of employers indicated their intentions to significantly alter the geographical composition of their supply chains and 74% of surveyed employers would base those decisions on labor market considerations. Additionally, the division of labor between machines and

The real challenge for SMEs lies in integration. While some technologies transform certain segments of the business model such as production or distribution, Industry 4.0 encompasses multiple technologies that can transform the business model itself.

humans is set to shift. By 2022, 42% of task hours will be automated. In 2018 that figure was 29%. Similarly, 2022 will see the introduction of 133 million new roles that are more in sync with the above mentioned division of labor.

The efficiency with which skills are supplied and the quality of human capital is therefore of significant value for the medium/long term economic outlook for economies. The ability of firms and governments to respond to changes in the labor market will determine whether the fourth industrial revolution is 'job creating' or 'job displacing'.

<sup>9</sup>World Economic Forum. Future of Jobs 2018. The report can be accessed at http://www3.weforum.org/docs/WEF\_Future\_of\_Jobs\_2018.pdf



#### Summary

Over the past 2 decades, services have emerged as the most dynamic segment of the global economy and by 2030 services will account for 25 percent of global trade. By some estimates cross border trade in services is growing 60 percent faster than trade in goods<sup>10</sup>. Further, there is a growing realization that traditional trade statistics do not capture the full impact of services on global commerce. Services are invaluable components of global value chains and advancements in AI, blockchain, IoT and data analytics indicate that global value chains are becoming more service intensive. Services such as finance, professional services, retail and e-commerce, logistics etc are expanding their value as determinants of economic growth. Technological innovation is thus reshaping global value chains and redefining the role of services in the global economy. Services are the frontiers of growth in a digitally connected global economy.

In India, the narrative is similar. From April – December 2018-19, India exported 149 billion USD of services. Between 2006 and 2016, India recorded the world's second highest rise of services in GVA (Gross Value Added) terms of 7.1 percent<sup>11</sup>.

However, in order to tap into growth and value creation governments and firms must assess a set of dynamic variables ranging from trade barriers to changes in production methods and consumption patterns. While technology has presented entrepreneurs with opportunities to disrupt traditional services business models, it has also posed significant risks. The 8th Global Economic Summit addressed these concerns and global experts presented their views on how policymakers and SMEs should respond to an expanding services sector.

This paper builds on these deliberations to argue that liberalizing trade in services is a requisite step towards global growth. Liberalizing trade in services can lead to efficiency gains by increasing the contestability of services industries. Structuring and nurturing competitive markets for services can enhance efficiency, reduce costs and widen consumer choice. In addition, access to wider markets could provide sellers of services with the opportunity to expand into markets based on competitiveness of their respective business models.

The role of services in urban growth and development is also worth noting. While traditional models of urban development have focused on the provision of core infrastructure. However, urban development also focuses on service industries such as transport, mobility, energy and waste management, environmental services and public services. In addition, education, skills and healthcare are also vital components of smart city development that ensure that the economic gains from urban growth are sustainable and inclusive.

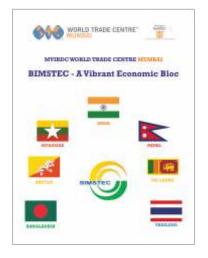
Technological innovation is thus reshaping global value chains and redefining the role of services in the global economy. Services are the frontiers of growth in a digitally connected global economy

Finally, the expanding global footprint of the services sector is facilitated by the advent of the Fourth Industrial Revolution. The technologies that form the core of Industry 4.0 (AI, blockchain, big data etc.) have increased the tradability of services. In addition, Industry 4.0 has enhanced the efficiency of production while simultaneously altering consumption patterns. However, innovation also poses risks most notably in the realm of data protection and widening income inequality. Therefore, the ability of Industry 4.0 to deliver gains in productivity will be determined by the degree to which government and firms are able to respond to disruptive innovation and facilitate integration.

<sup>&</sup>lt;sup>10</sup>McKinsey Global Institute. Globalization in Transition: The Future of Trade and Value Chains. 2019.

<sup>&</sup>lt;sup>1</sup>Source: RBI, Services Trade Data Release. December 2018.

### MVIRDC World Trade Center Mumbai Research Publications



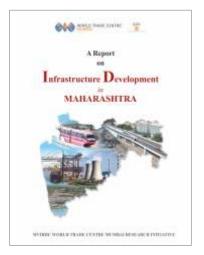




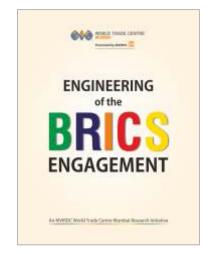












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