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M. Visvesvaraya Industrial Research and Development Centre



All India Association of Industries

8th **GES** | GLOBAL ECONOMIC SUMMIT

Services: Enabler of Growth for Trade and Industry

6 | 7 | 8 March, 2019 | World Trade Center Mumbai

Conference | Exhibition | Meetings | Awards | Field Visits

A Report





MVIRDC

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.



सत्यमेव जयते

प्रधान मंत्री
Prime Minister

MESSAGE

It is a pleasure to learn that All India Association of Industries (AIAI) and World Trade Centre, Mumbai are jointly organizing the 8th edition of the Global Economic Summit on the theme – “Services: Enabler of Growth for Trade and Industry” from 6-8 March, 2019 at World Trade Centre, Mumbai. The theme is indeed appropriately timed and highly relevant.

Today, India is among the fastest growing major economies in the world. In just five years, we have climbed up to a rank of 77 in the ‘Ease of Doing Business’ index. We have reached a stage where poverty is being reduced rapidly and infrastructure is being developed at a faster rate than ever before.

The congregation of global experts will enable a two-way dialogue between policymakers, economists, entrepreneurs, corporate leaders, academicians and experts and MSMEs in the service sector. The deliberations will look at ways and means to increase the contribution of the service sector for value addition across a wide spectrum of economic activities.

The gathering of business leaders from across the world will lead to an increase in investments, transfer of technology and joint ventures. India has a large number of MSMEs that can make a sizeable contribution to the nation’s as well as the world economy.

May the deliberations at the 8th Global Economic Summit come up with new ideas and share latest knowledge as well as best practices to promote the growth of the services sector.

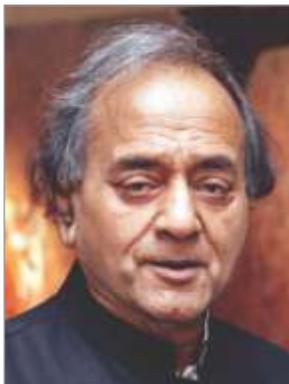
Best wishes for successful deliberations at the 8th Global Economic Summit.

(Narendra Modi)

New Delhi
05 March, 2019

Shri Vijay Kalantri
President, All India Association of Industries
New Excelsior Building, 6th Floor, A. K. Nayak Marg
Fort, Mumbai
Maharashtra- 400001

Chairman's Message



Global Economic Summit is a signature event of MVIRDC World Trade Center Mumbai. Since 2010, the Summit has served as a melting pot for cross-pollination of business ideas and fruitful interactions among industry, academia and multilateral institutions.

The last seven editions of the Summit generated thought provoking discussions and actionable policy suggestions on topics such as global value chain, cluster development, food security, micro, small and medium enterprises, women's empowerment and other issues affecting trade and industry.

The 8th Global Economic Summit, held from March 6-8, 2019, initiated multi-dimensional discussion on the theme 'Services: Enabler of Growth for Trade and Industry'. The relevance of this theme for economic development cannot be exaggerated as a dynamic service sector is necessary to support productivity in agriculture and manufacturing.

If agriculture is popularly known as the backbone of most developing countries, services are the nerve centre that links various activities of an economy. Services such as banking & finance, logistics, transportation, research & development and information & communication technology promote productivity in agriculture and manufacturing sectors. Besides supporting industry, services also improve the quality of human capital by providing education, healthcare, recreation and housing.

This theme is all the more relevant for India, which has gained comparative advantage in the services sector, bypassing the stage of development where manufacturing sector gains prominence after agriculture. The overwhelming response received from trade & industry, academia and government for this Summit bears testimony to the far-reaching relevance of this theme to a wide spectrum of stakeholders.

The three-day Summit drew more than 400 Indian and international delegates representing a wide range of services, manufacturing and agriculture sectors from 27 countries. The three-day Summit offered a unique blend of conference, exhibitions, networking sessions and field visit.

Over two days of the Conference, more than 30 influential speakers exchanged multi-dimensional perspectives on the evolving landscape in the services sector, impact of fourth industrial revolution and smart cities transforming urban communities.

On behalf of MVIRDC World Trade Center Mumbai, I take this opportunity to thank Mr. Ibrahim Ameer, Hon'ble Finance Minister of Maldives for sparing his valuable time to grace the occasion. Mr. Ameer set the tone for the Summit by calling for South Asian countries to strengthen their cooperation in services industry.

I also express my gratitude to the various departments of Government of India, viz. Ministry of External Affairs, Ministry of Commerce & Industry, and Ministry of MSME for supporting this Summit. I am also thankful to the state governments of Maharashtra and Karnataka for their encouraging participation in this Summit.

This report documents the key discussions & deliberations and other highlights of the Summit. The report also carries a highly insightful white paper featuring actionable policy recommendations to strengthen services industry. We are confident that the contents of the report will shape future debate and policy actions, both at the national and multilateral level, on the service industry.

Kamal Morarka

Chairman, MVIRDC World Trade Center Mumbai

Preface



Service sector is witnessing rapid transition in recent years with the advent of information and communication technologies. The exponential growth in the computing power of machines has supported fourth industrial revolution, which is disrupting business models across services. As service sector undergoes rapid transition, its ripple effect is also being felt in the manufacturing and agriculture sectors, which are closely dependent on service industry.

The 8th Global Economic Summit was held on the theme 'Services: Enabler of Growth for Trade and Industry' to reflect on how services are supporting agriculture and manufacturing sectors in this age of unprecedented disruption.

The Summit brought together a galaxy of 30 influential voices from the world of services industry from more than 27 countries. There was an unmistakable consensus among all the speakers that technology enabled services will be the next driver of productivity in manufacturing and agriculture sectors. While advancement in information technology supported new forms of services such as BPOs and KPOs at the end of the 20th century, the current decade marked the next wave of technology disruption in service industry in the form of tele-medicine, e-commerce, tele-education, fintech, blockchain-led supply chain management etc. The most visible manifestation of this wave is the emergence of platform economy in urban transportation (via. Uber and Ola), hospitality (Airbnb and OYO), retail (Alibaba and Amazon), financial services (UPI, Alipay) and advertisement (Google and Facebook), to name a few.

This wave of technology disruption enables micro, small and medium enterprises (MSMEs) compete on par with large corporate houses through medium such as e-commerce and digital marketing. Technologies such as chatbots and blockchain-enabled supply chain management enables MSMEs optimize cost and bring operational efficiency.

Distinguished speakers addressed concerns of job losses from digital technologies and stressed on creating a robust re-skilling system to prepare workforce for the new employment opportunities created by technologies. The Summit also witnessed power packed panel sessions on other topical issues such as smart cities, productivity in agriculture and manufacturing sectors.

Delegates from more than 27 countries benefitted from networking session, involving B2B, B2G and B2C meetings with prospective business partners and clients. The Summit generated more than 3000 business meetings, which will lead to new joint ventures, technology transfers, customer acquisition and lead generation.

The two-day exhibition alongside the Summit offered business organizations a platform to promote their products and services. Governments of other states and trade missions from foreign countries promoted the trade, investment and tourism potential in their regions.

As part of the event, outstanding business organizations and individuals were felicitated for their exemplary contribution to travel, financial services, healthcare, e-commerce, smart cities and other areas of services.

The Summit offered an unparalleled opportunity for delegates to participate in an informative field tour to learn from first-hand experience the best practices followed at Nashik Engineering Clusters and Soma Wines.

This report captures the discussion and deliberation witnessed during the Summit, as also other key highlights of the event. I am confident that the report will not only influence future discourse on this subject, but also promote a well-informed public opinion on policy issues concerning the service sector.

Vijay Kalantri

President, All India Association of Industries (AIAI)

Vice Chairman, MVIRDC World Trade Center Mumbai

Director, World Trade Centers Association Board, New York

Executive Summary

Services sector is a topic of high policy significance as 52% of the global labour force depends on this sector for employment. The 8th Global Economic Summit offered a unique flavor to the deliberation on services industry by reflecting on multiple forces affecting the emerging landscape, chief among them being trade barriers, multilateral regulations, global value chains, technology disruption and skill development.

The Summit brought to the spotlight the significant contribution of services industry to economic growth, foreign trade, and investment. Globally, services account for 70% of world output, 24% of world trade, and 60% of foreign direct investment stock. In fact, the contribution of services to world trade is generally understated at 25% as it does not take into account the value of input services used in manufactured and agriculture goods. When this value addition is captured in the trade data, the contribution of services to world trade becomes 49%, which is nearly half of the total pie.

Trade and services are so closely interlinked that global value chains cannot function without essential services such as logistics, trade finance and information & communication technologies. Emerging trend in multilateral trade negotiations has further strengthened the relevance of services in trade. In recent times, negotiations on free trade agreements increasingly focus on trade liberalization in services, e-commerce, cross-border data flows, topics which are closely related to services industry.

While on the one hand, improvement in digital technologies has facilitated global trade in services, these technologies have also prompted policymakers to erect barriers to trade under the pretext of data privacy and data protection. These complex issues arising from the interplay of digital technologies, trade regulation and services industry were highlighted by dignitaries from World Bank, World Trade Organisation, European Services Forum, Indian Institute of Management, Bangalore.

Apart from these policy and regulatory issues, the Summit also outlined the opportunities for micro, small and medium enterprises in the age of digital technologies. Digital technologies improve ease of access to finance and they also enable MSMEs to reach a wide range of markets through adoption of e-commerce.

The two-day event featured six panel sessions, where thought leaders from industry, academia and multilateral institutions touched upon fourth industrial revolution, smart cities, global value chains, trade barriers and productivity-enhancing services to agriculture and manufacturing.

The Summit witnessed active participation from MSMEs, exporters, importers, startup enterprises, corporate houses, industry clusters, multinational companies, public sector undertakings, women owned businesses, academic and research institutions, financial institutions, government officials and diplomatic corps.

Delegates represented a wide range of service sector viz. tourism, hospitality, education & skill development, information & communication technologies, healthcare, financial services and logistics. Besides, delegates from manufacturing and agro-processing enterprises also participated in the exhibition and networking session.

During the event, MVIRDC World Trade Center Mumbai launched GlobalLinker, which is a digital platform that enables MSMEs to connect with potential business partners and customers from across the world. We are confident that such platforms will enhance the global reach of local MSMEs.

The Summit also served as a platform to felicitate outstanding business organisations and individuals for their exemplary contribution to trade and industry.

As in the past, this edition of the Summit too featured an enthralling culture programme depicting the rich cultural legacy of the country to foreign delegates.

The report provides a detailed account of the proceedings at the Summit so that it can be a useful reference for industry bodies, policymakers, academic scholars and students.

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Mr. Ibrahim Ameer

Hon'ble Minister of Finance, Government of Maldives



Mr. Ameer set the tone for the 2-day Conference at the Summit by outlining his views on how competition and skill development can make service sector an engine of economic growth.

The Hon'ble minister began his speech by thanking the organizers for conducting an event of this dimension with delegates from diverse countries representing wide range of sectors. "It gives me great pleasure to address this audience on the 8th Global Economic Summit. At the outset, I would like to thank the 'All India Association of Industries (AIAI)' for making excellent arrangement and bringing together on a single platform, the captains of industry, policy makers, business and corporate leaders, resource persons and experts to showcase the opportunities and share experiences in services trade," the minister said.

Speaking on the services industry, the minister remarked, "Regardless of where a country is in its development journey, attention to the services sector is required. For developed economies, this is simply because the services sector is the largest contributor. For less developed economies, this is driven by the fact that there would be an increasing need for services to support their industries in the future. If services are not developed, this could be a limiting factor which inhibits the growth of the rest of the economy. Therefore, the services sector is considered as an enabler of growth for trade and industry."

The minister shared his perspectives on the issues and challenges facing the services industry by pointing out,

"One of the main issues that we face today in some less developed countries is low productivity levels in the service sector despite its relatively large share in employment and output. The challenge here is to transition from traditional low-value added service sector activities to higher value-added activities. Investment in human capital is essential to achieve this. Another factor crucial is a healthy level of competition and especially foreign competition. If competition can be promoted, the service sector can become an engine of growth with significant positive spillover effects on other industries as well."

Sharing his views on liberalization, Mr. Ameer said, "Among the most effective ways to develop the services sector, and industry and trade in general, is liberalization. Liberalization increases competition, promotes efficiency and increases economic opportunity. For this reason, I am going to focus heavily on the importance of liberalization and integration. This is relevant for trade in services, but also applies equally to trade in goods."

Highlighting the importance of openness and integration, Mr. Ameer pointed out, "Over the past few decades, we have reached unprecedented levels of integration. The significance of national borders for the purposes of trade, and especially services trade has greatly been diminished, with innovation, technology and mutual trust driving this change. As a result, the world that we live in today is more prosperous than ever before, with the benefits of openness being felt at all levels of society in almost all corners of the world."

The minister further added, "Standards of living have risen, and more than a billion people have been lifted out of extreme poverty over the last thirty years. This underscores the importance of trade, cooperation and integration for sustainable and inclusive growth and expanding economic opportunity for all."

Raising concern about the emergence of protectionism around the world, the minister said, "We are facing challenges to the rule-based global trading system. Despite the enormous progress we have witnessed, today we are observing, if only by a few countries, a gradual retreat away from open markets and international cooperation. But rejecting integration is not a solution, as foregoing the potential gains from trade that can still be reaped equates to condemning millions, if not billions of people to poorer standards of living and possibly poverty."

Mr. Ameer called for constructive dialogue among government leaders of various countries that are affected by the open markets and integration. He said, "Instead, the problems arising from the existing arrangements must be addressed through dialogue to ensure that we all benefit and capitalize on the strengths of each other at a global level."

Reflecting on economic integration among South Asian countries, the minister said, "South Asia, the world's most populous region with 1.8 billion people, presents great opportunity as it also means that this is the world's largest market. We already have in place the South Asian Free Trade Area (SAFTA), and SAARC Agreement on Trade in Services (SATIS). But in practice, we do not see these arrangements working effectively. Therefore, strategic changes are required to utilize the SAFTA and SATIS to full potential."

Elaborating on the scope for integration in South Asia, Mr.

Ameer said, "All eight neighbours of South Asia have gone a long way in liberalizing trade in goods. The sensitive lists that were initially put forward have since been reduced considerably. But we also need a mechanism to address non-tariff barriers that our businesses currently face. Sometimes, these are significant to the extent that businesses bypass the SAFTA arrangement completely to go through the normal channels. So, I believe there is a lot more we can still achieve, even after due consideration to protecting our respective vulnerable domestic industries."

Mr. Ameer asserted that there is huge scope for all the South Asian countries to make commitments and liberalize in the services sector. He said, "The challenges in utilizing the SAFTA mechanism should be swiftly addressed, but I believe that an even larger contribution to trade and industry of this region can be made through a joint effort in invigorating the SATIS framework and promoting trade in services. A lot more work still needs to be done by all of us to make commitments and liberalize on the services front."



Day 1

Inaugural Session: Emerging Services Shaping the New Global Business Landscape

This panel session generated valuable perspectives on trade in services from influential voices representing multilateral bodies, trade support organisations, government departments and academic institutions. Distinguished panelists reflected on the emerging services, technology and regulatory forces shaping the future of international trade and investment.



Caption: Mr. Kamal Morarka, Chairman, MVIRDC World Trade Center Mumbai addressing the inaugural session. Also seen in the photograph are: (from left to right) Mr. Pascal Kerneis, Managing Director, European Services Forum, Mr. Scott Ferguson, Chief Executive Officer, World Trade Centers Association New York, 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, Mr. Jacek Sutryk, Mayor of Wroclaw, Poland, Mr. Vijay Kalantri, President, All India Association of Industries (AIAI), Dr. Harshadeep Kamble, I.A.S. Secretary (Small & Medium Industries) & Development Commissioner (Industries) Government of Maharashtra, Dr. Rupa Chanda, RBI Chair Professor of Economics, Indian Institute of Management Bangalore, Dr. Aadiya Mattoo, Research Manager, Trade and International Integration, Development Research Group, World Bank

Welcome Address

Mr. Kamal Morarka
Chairman

MVIRDC World Trade
Center Mumbai



Mr. Morarka began his address by welcoming Hon'ble Finance Minister of Maldives Mr. Ibrahim Ameer, other distinguished speakers and delegates from India and abroad for the Summit. He said, "I am delighted to note that more than 400 delegates from 27 countries have attended this Summit despite the prevailing border tension between India and Pakistan. I am confident that the two-day Conference will generate useful deliberation on service industry under the able guidance of Dr. Rupa Chanda, who is our esteemed Conference Chair for the event."

Mr. Morarka also thanked Government of India and Government of Maharashtra for supporting this event. He said, "Both the central government and Government of Maharashtra have been supporting this flagship event for the last many years and I am sure we will continue to have their support in our future endeavours as well."

Sharing a brief overview of Global Economic Summit, Mr. Morarka said, "MVIRDC World Trade Center Mumbai, being an organisation dedicated to promote international trade, conceptualized this Summit in 2010 to bring the world business leaders on a common platform. The success of the first Summit inspired confidence in us and we decided to organize it every year."

Speaking about MVIRDC World Trade Center Mumbai, Mr. Morarka informed, "The Center is part of World Trade Centers Association New York, which is a network of more than 320 World Trade Centers across 90 countries or regions. These World Trade Centers leverage their unparalleled network to serve the business community in their cities. Last year, MVIRDC World Trade Center Mumbai

hosted more than 60 trade delegations by arranging various events such as B2B meetings in their sectors of interest, organising luncheon meetings and dinner receptions.”

Reflecting on the attractiveness of Indian economy for foreign investors, Mr. Morarka said, “India offers two major advantages for foreign investors, one is the huge consumer market, which is the second largest after China and the other is sound democracy and prevalence of rule of law. India is a liberal society with rule of law, independent judiciary and free press. These factors are conducive for entrepreneurs to grow in the country. Although businesses may face delay in securing administrative clearances because of the democratic process, the government of the day safeguards the commercial interest of entrepreneurs. The presence of many foreign companies for several decades in the country bears testimony to India’s conducive business environment. These foreign companies are our best ambassadors as they create awareness about India’s business landscape in foreign countries.”

Mr. Morarka concluded his address by suggesting delegates to make use of the networking opportunities available at this event. He said, “We are willing to arrange fruitful meetings for you with your prospective business partners. World Trade Center Mumbai will also be happy to organize B2B meetings for specific sectors based on the needs of the delegates.”



In her Conference Chair Address, Dr. Chanda shared her scholarly perspectives on the high relevance of the theme of this Summit for economic growth and development. Dr. Chanda started her speech by sharing key data on services sector. She informed, “Service sector constitute 70% of world output, one quarter of world exports (at around USD 5 trillion) and more than 60% of the global FDI stock. Services trade has expanded beyond the traditional segments of travel and transport services to modern segments such as business, financial, communication, health, audiovisual and many others.”

Pointing to the significance of service sector to India’s economic growth, employment and exports, Dr. Chanda

remarked, “... the sector has played a very important role in India’s growth and global integration story and will continue to do so. While many have questioned India’s development pattern, leapfrogging from the primary to the tertiary sector, the need of the hour is to tap our full potential in services while we continue to remove constraints to the growth of the other sectors. The aim should be to enable the service sector to contribute in greater measure to growth, competitiveness, jobs, exports and productivity.”

Bringing out the relevance of service sector for policymaking in India, Dr. Chanda said, “Many of the government’s recent initiatives have a direct or indirect bearing on the growth of the service sector. For instance, several services such as IT, wellness, tourism, media and entertainment, and transport are areas that have been selected under the Make in India initiative. Several services, including banking and finance, construction, healthcare and IT feature among the focus areas for the Skill India initiative. Services are a critical component of the Startup and Digital India initiatives which rely on the adoption and integration of information and communication technologies in the economy.”

Dr. Chanda stressed on three issues or considerations that must be kept in mind while developing the service sector in any economy. These three considerations are: 1. Services are not to be seen in isolation. 2. Services can provide an impetus to and can also benefit from the growth of MSMEs. 3. Services will play a critical transformational role in the Industry 4.0 era.

Dr. Chanda explained the first point by referring to the interdependence of services and manufacturing sectors. She said, “Services constitute an integral part of the production and delivery process in manufacturing, from R&D and product design in the initial stages to transport and distribution following production to retailing, repair and maintenance in the final stages.” In this regard, Dr. Chanda emphasized the role of services sector in enhancing competitiveness of manufacturing sector. “In order to increase domestic value addition and technological depth in manufacturing, or to increase the global competitiveness of Indian manufacturing, we need an efficient and competitive service sector,” she argued.

Therefore, the RBI Chair Professor of IIM Bangalore suggested government and business to develop policies and strategies to reap synergies between services and manufacturing sectors. She said, “The service-manufacturing linkage in value added terms is thus weak at present, though the potential is huge. If we look at sectors such as automotive and electronics, there is a lot of scope

to create value through the integration of R&D and IT services in these manufacturing industries. Hence, both government and businesses need to have policies and strategies that enable these synergies between services and manufacturing to be better exploited. This might mean addressing capacity constraints, quality, standards, technological readiness, and other such limitations in both sectors.

Explaining the second consideration, Dr. Chanda suggested that services such as logistics, finance, information and communication technologies must be better harnessed to integrate local MSMEs to global value chains. She explained, “The rise of the service sector, and in particular ICT-enabled business models, in turn create a wide range of entrepreneurial and value creation opportunities for MSMEs. The latter can become part of international markets and production networks, by tying up with larger firms at home and abroad and by providing niche products and services. They can thus benefit from knowledge networks, information flows and upgrading of technology and standards, overcoming some of the disadvantages MSMEs face in these areas.”

Shedding light on the third consideration, Dr. Chanda explained the interplay of services sector and fourth industrial revolution and their transformative impact on manufacturing and agriculture sectors. She said “The government policies and business strategies need to be mindful of the transformational role services can play and how services themselves will become transformed by the Future of Work and the advent of Industry 4.0. The fact that India is well placed in the area of digital and communication technologies could actually give it an advantage as it grapples with these emerging challenges.”



Dr. Robert B. Koopman
Chief Economist and
Director, Economic
Research and Statistics
Division, World Trade
Organization

In his theme address, Dr. Koopman offered an expert account of the various forces shaping the structure of global trade in services. Some of the forces touched upon by Dr. Koopman are advancement in information technology, digitization and trade barriers.

He said, “Advances in information and communications technology, exemplified by the global expansion of the

Internet, have transformed and boosted the tradability of services by making it easier to supply from a distance. A broad range of services can now be supplied effectively over digital networks, for example, professional, business, audiovisual, education, distribution, financial or even health services.”

“Technological advances also significantly modified the structure of trade in services. The weight of travel and transport services diminished considerably, while 'other commercial services' now accounts for 54% (in 2017) of global trade in commercial services (compared with 47% in 2005, and less than 40% in 1995). These 'other commercial services' include some of the most dynamic components of world trade today. This change in the composition of trade in services has also been important for exports of developing countries, with the share of 'other commercial services' increasing from 33% to 43% between 2005 and 2017.”

Dr. Koopman brought to the spotlight the impact of digital revolution on trade in services. “Not surprisingly, services that have experienced strong growth comprise services that can be supplied electronically and that have benefited from the increased efficiency of digital networks. Between 2005 and 2017, exports of the fastest growing subsector, 'telecommunications, computer, and information services', increased at an average annual rate of 13%. Most of trade in this category pertained to computer services, which had grown by 18% per year over the same period.”

Dr. Koopman explained the role of digital technologies in promoting services exports from developing countries. “Many developing countries are taking greater advantage of direct export opportunities offered by new technologies that enable digital supply. Their share of global trade in services increased from 28% in 2005 to 34% in 2017. Exports of developing countries are concentrated in 'other commercial services' (43% in 2017), in contrast to transport (21%) and travel (32%). With 14% of world exports, India ranked as a top global exporter of computer services in 2017, second only to the European Union. Non-traditional' services have also grown in importance in the services exports of developing countries.”

Pointing to the rapidly growing market for services in China, Dr. Koopman said, the country's share in world services imports tripled between 2005 and 2017 to 9% (only behind the European Union and the United States). Services also occupy a more important place in China's total imports, as they accounted for 20% of China's total imports, almost twice as much as in 2005 (11%), he added.

Explaining the role of government policy in trade in services, Dr. Koopman remarked, "Government measures, especially the extent to which competition is facilitated, influence the efficiency of service markets. This enabling environment is strongly influenced by measures that limit trade in services, such as foreign ownership restrictions or barriers to cross-border supply (e.g. quotas or limits to cabotage in road transport)."

Throwing light on different measures for estimating the contribution of services to the economy, Dr. Koopman said, "When trade is measured in value added terms rather than gross terms, services account for 49% of world trade, compared to 15% for the primary sector and 36% for manufacturing. The 49% share of world trade for services in value added terms compares with a 24% share when services are measured in gross terms (2015)."

Dr. Koopman concluded his address by sharing his perspectives on impact of services sector in developing economies. He said, "The role of services has been critical to the continued integration and growth of developing countries into the global economy. Whether the direct contribution through services exports or their important role in making manufacturing more competitive, reducing costs and increasing choice for domestic consumers of both domestically produced and imported goods and services, and thereby raising living standards. But some big challenges remain. Estimated Services Trade Costs are double the costs of trading goods and they are particularly high between developing countries. Reducing these trade costs would likely raise both imports and exports, providing a broad productivity boost to domestic economic activity and greater opportunities for exports to other markets."



Mr. Scott Ferguson
Chief Executive Officer,
World Trade Centers
Association, New York

Mr. Ferguson explained how the theme of this Summit is relevant to the activities of World Trade Centers Association (WTCA) New York. He also highlighted the role of WTCA New York in promoting global trade and investment in this condition of protectionism and geopolitical uncertainty.

He remarked, "WTCA New York is a global network of incredibly diverse members across 328 cities in 90 cities.

Our members cross borders, communities and business models. Our members are unique, follow own business model, reflecting what is relevant and important for their cities. We drive business at city-level. We have a strong presence in Mumbai and India."

Mr. Ferguson pointed out how WTCA New York promotes business partnership among global cities at a time of heightened uncertainty when existing trade deals are being re-negotiated.

He said, "When we see all these disruptions, we also see cities continue to emerge as driving economic force around the globe. Members of WTCA New York are city-based organizations that play the role relevant for their cities. For instance, WTC Louisiana imparts skills to youth on those areas where the city faces scarcity of manpower. WTC Santiago, in Chile, offers concrete solutions in the areas of education, consulting and international business."

Mr. Ferguson further informed, "WTC Harbin is not only the largest World Trade Center in the world with 2 million sq ft. area, it is also spearheading an agriculture innovation hub. WTC Harbin has demonstrated its leadership in the area of farm innovation to other World Trade Centers as well. On a regular basis, around 50 World Trade Centers come together to discuss innovative practices in agriculture."

Speaking about other members of the WTC network, he said, "World Trade Center Montevideo, in Uruguay, operates free trade zone to promote international trade in the city. WTC Mumbai, on the other hand, offers a rich portfolio of real estate services, research and international trade events to its members."

Mr. Ferguson elaborated the impact of World Trade Centers on the economy of the cities they serve. He also highlighted the importance of collaboration among WTCs in creating mutually beneficial commercial partnership.

He said, "The true value comes from those World Trade Centers that are working together by leveraging the unprecedented global network."

He further added, "In 2018, we released our first report on Foreign Policy magazine, which documents the rise of cities across the world. The report detailed the network effect. Because of geopolitical uncertainties and unprecedented global leadership, networks are creating local stakeholders. Local stakeholders in cities are taking their role in shaping diplomatic and commercial engagement, driving bottom-up economic growth and prosperity."

Mr. Ferguson explained, "By facilitating direct connections,

these networks are providing explicit trade support, that we need more than ever today.”

Drawing attention to the role of World Trade Centers in supporting local SMEs, Mr. Ferguson said, “SMEs in OECD countries contribute 50-60% of gross value added, 70% of employment, but they account for only 10% of global trade. SMEs drive business at home, they are our members and we promote their business across borders. So, WTCs are first and foremost global network; we find global business opportunities for SMEs by working through our global chain.

Mr. Ferguson underscored the values of trust and partnership embodied by the global network of World Trade Centers. He remarked, “World Trade Centers embody the true spirit of global collaboration, they are working with fellow members in an important global connection throughout the world. So, they help navigate global uncertain environment. For more than 50 years, WTCA has developed trust and confidence among its members.”

Mr. Ferguson concluded his remarks by inviting the participating business organizations to take advantage of the services offered by World Trade Centers located near their cities.



In his address, Dr. Mattoo eloquently explained India's comparative advantage in the services sector and the role of skilled labour, communications infrastructure and the regulatory environment in supporting this comparative advantage. Dr. Mattoo ended his speech by calling for an innovative, out-of-the box approach to global regulatory cooperation to promote trade in services.

He began his speech by observing four pertinent points on services sector. 1. The global services market is showing remarkable dynamism, 2. India is well placed to take advantage of emerging opportunities, 3. However, India faces policy challenges, both domestically and globally, 4. Through a combination of deep domestic reforms and innovative international cooperation, many of these challenges can be overcome.

Referring to the recent trends in global trade, Dr. Mattoo said, “Global trade in services posted strong growth after the global financial crisis of 2008 even as trade in goods was sluggish.”

Drawing attention to India's services sector, he remarked, “Within the services sector, India has strong comparative advantage in business services, which is most dynamic segment.”

Explaining the three major drivers of services sector, he pointed out, “Demographics, digitization and deregulation are the three major drivers of global services market.”

Speaking about demographics, he mentioned how the ageing population in western countries and Japan are demanding healthcare and personal care services, while the young populations in India, China and other developing countries are demanding education and entertainment services.

Countries with young populations have the opportunity to meet the demand for healthcare and other services demanded by the ageing population in Japan and Europe, Dr. Mattoo pointed out.

Digitization is the second driver of global services market because digital technologies enable cross-border trade in services. Improvement in information and communication technologies (ICT) enables fragmentation of production across borders. ICT also enables outsourcing of services across borders.

Dr. Mattoo referred to noted economist Dr. Richard Baldwin, who once remarked that the fast pace of technological development will make the entire world a unified market. Growth in technology will enable India to offer a range of services to other countries even without the need for moving labourers across borders.

The third big driver is de-regulation. Services such as telecom, transport, personal services and banking are heavily regulated. However, these sectors have witnessed the emergence of service providers at the periphery of regulation. For instance, instant messaging services (in telecom), ride hailing services (in transportation), mobile wallet and payment services (in the banking sector) have disrupted their respective sectors and are posing new challenges for regulators.

Sharing his views on the comparative advantage of countries in service sector, Dr. Mattoo said, countries

export services both directly and indirectly. Direct export of services includes trade in business process outsourcing, tourism, education and other services. Indirect export of services include services that have been used as inputs in exports of manufacturing and agriculture goods.

Drivers of services trade 3: Deregulation and technology



* "Over-regulation" is leading to the emergence of new services and posing new regulatory challenges

He explained, "Countries such as Greece and Turkey have relatively underdeveloped service sectors, which means they export services very little directly and very little indirectly. Countries such as the Netherlands have a well developed services sector and hence they export lot of services directly and indirectly."

Drawing comparison with India, he said, the country is unique in this respect as it is remarkably successful in exporting business services (direct export), while its domestic agriculture and manufacturing sectors have been laggards in using these services.

This phenomenon, where a country's services sector caters predominantly to foreign markets rather than supporting the domestic industry, evokes the notion of "premature de-industrialization" or rather that India's services sector has in some ways developed ahead of its manufacturing and agriculture sector.

Dr. Mattoo called India's relative comparative advantage in services sector, when the country is well endowed with unskilled labour, as 'a puzzling phenomenon'.

He attributed India's comparative advantage in services sector to factors such as endowment (capital, skills, land, natural resources), infrastructure (roads, ports, telecom), regulatory institutions and policy approach. He explained this as follows: the growth of the business service sector has been aided by the flexible regulation of the skilled labour market; on the other hand, the manufacturing sector has not grown comparably because of rigid labour

laws governing industrial workers. Also, development of soft infrastructure such as telecommunications have supported growth in services sector, while under-developed infrastructure such as road, ports, railways have hampered growth in the manufacturing sector. Similarly, the regulatory institutions governing services sector such as Telecom Regulatory Authority of India (TRAI), Reserve Bank of India and NASSCOM are well developed, the regulatory institutions of manufacturing sector such as customs authority and export processing zones are relatively under-developed.

Dr. Mattoo spoke about the ability of service sector to create indirect employment in the unskilled sector. He noted that it was not correct to argue that the services sector cannot generate employment in the unskilled sector the way manufacturing sector can. He argued, "Service sectors such as software services, telecom services are more skill intensive than manufacturing sector. However, development of these services creates jobs for unskilled labourers in the form of demand for more canteen services, transportation, construction etc." In fact, he showed that every USD 1000 export of business services create more employment for unskilled labourers than a comparable value of exports of manufactured goods in both India and China.

Dr. Mattoo called for strengthening education and training institutions to produce more skilled labourers. He said, the employment problem is linked to 'skill scarcity', rather than 'skill intensity'. India's education system must generate more skilled labourers to support growth of the service sector. Development of service sector will, in turn, create job opportunity for unskilled labourers. Unskilled labour is a complementary resource that supports the service sector."

The need for re-skilling workers is particularly important in this age of automation and emergence of artificial intelligence, which can potentially displace low-skilled workers, he stressed.

Dr. Mattoo concluded his remarks by reflecting on emerging landscape in the regulatory environment for services industry. He said, "Many fast growing economies in South Asia and South East Asia have restrictive policies in the service sector. Economists are debating the cause of the rapid growth in these economies; whether these economies are growing fast because of these restrictive service sector regulations or inspite of these restrictive regulations."

Dr. Mattoo further remarked, “I would like to argue that Indian economy would grow faster if it did not restrict trade and investment in service sectors such as retail, insurance, accounting and legal services. These support services will strengthen the dynamism of manufacturing sector. Research studies have shown that growth in India’s manufacturing sector is due not only to the end of license raj, but also due to the improved access of MSMEs to services such as transport, finance and communication.”

protectionist measures to safeguard the losers of globalization; digital trade creates legitimate privacy concerns, financial globalization creates worry about financial instability; policymakers also worry about the growing market power of big online platforms such as Amazon and Google.”

In this complex environment, the old model of negotiating reciprocal market access is not an effective strategy. “We need an innovative approach for service trade negotiation.

Binding constraint on job-creation is not high skill intensity of services production but low availability of skills

The surprisingly high unskilled labor value added in services exports



Source: Joint work with Alen Mulabdic based on Cali et al (2016), “The Labor Content of Exports Database.”

Under this approach, services exporting countries must commit to the regulatory standards of services importing countries. On the one hand, India, which is an exporter of data-processing services, can commit to respect the data protection laws of a specific importing country for exports to that destination. In return for this commitment, India can obtain reciprocal

He pointed out how Indian farmers and consumers are suffering (from wastage of food) because of poor quality of logistics and distribution services in the country. Dr. Mattoo, thus, argued that a strong service sector will promote growth in manufacturing and agriculture sector. Therefore, an effective industrial policy will also focus on reforms in services sector, he remarked.

commitments from the importing countries not to restrict access its exports or impose unduly burdensome regulatory requirements on its exporters. On the other hand, India can obtain assurances from foreign countries that they will help to address any anti-competitive behavior but their e-commerce players or online digital platforms in India. Similarly, India can also obtain an assurance from foreign financial regulators to ensure that foreign financial services firms will not hurt its depositors and financial stability.”

Speaking about the global negotiation on service sector regulation, Dr. Mattoo appealed to policy makers to adopt innovative, out-of-the box approach to promote mutual trade in services. He said, “The old way of negotiating reciprocal market access is no longer applicable to the increasingly complex regulatory environment of services sector. Regulation such as data privacy norms and mandatory health insurance by employers are hindering trade in services by inhibiting cross-border movement of data and labour.”

Dr. Mattoo described the complex environment in which regulation on trade in services is being negotiated at the multilateral fora. He remarked, “The world we are living today is characterized by several complexities; employees are worried about automation and job losses, policymakers in developed countries are resorting to



Mr. Kerneis began his address by highlighting the importance of service sector for economy and concluded by inviting India to WTO’s negotiating table for removing barriers on e-commerce and digital services.

Mr. Kerneis said, "Services are very essential for our existence and yet we do not understand its significance because the sector is too broad. Services include banking, telecom, information technology (IT), asset management, distributions, logistics, professional services, environment services and energy related services. While compiling data on trade in services, a large set of services are categorized under 'business services', which is the major component of services trade in the European Union."

Mr. Kerneis explained the correct method of calculating share of services in world trade to understand its significance in world economy.

"Services contribute around 63% to the GDP of India, 73% in Europe and 80% in USA. Despite this, international trade in services does not reflect the importance of services to the economy. This is because trade in services contributes only 23% to world trade, if measured in terms of balance of payment. This method of calculation does not include the contribution of value added services such as R&D, design, branding, logistics, finance, insurance, transport, advertisement, after-sales services, maintenance and repairs to the manufacturing and agriculture sectors. When we include the contribution of these value added services in traded goods, trade in services contribute more than 50% to world trade."

Mr. Kerneis also explained how foreign direct investment (FDI) by financial services companies is an indirect way of participating in global trade in services. He said, "The best way for companies to engage in global trade in services is through FDI. When a financial company invests in another country, it contributes to the GDP of the host country. However, the service rendered by this company in the host country is not captured in global trade in services. This is another reason why share of services in world trade is much lower than its contribution to GDP."

In this regard, Mr. Kerneis emphasized on multilateral negotiation to remove barriers to FDI in services sector.

Speaking about the major trading nations in services sector, he said European Union is the largest export of services, with USD 2 trillion of annual exports, followed by USA at USD 700 billion and India at USD 184 billion.

Mr. Kerneis raised concern about the protectionist measures taken by some countries in this age of trade in digital services. He warned that India must liberalise trade in ecommerce if it has to maintain its market leadership in exports of IT services. He said, "This is the age of digital

economy, which is characterized by information technology, smart cities, technologies of fourth industrial revolution etc. Many countries, such as China, Russia, Indonesia and now India, are raising barriers to protect their markets in this digital economy. For example, the recently released draft e-commerce policy of India aims to protect the local market from foreign e-commerce companies."

Mr. Kerneis further remarked, "If India erects protectionist barriers, other countries will also follow suit. By protecting access to its 1.3 billion consumer market, India is depriving its local companies of access to 7 billion consumers of the global market. Therefore, India must explore the 7 billion world consumer market by liberalizing access to its 1.3 billion consumer market."

Mr. Kerneis suggested India to take part in the e-commerce negotiation of World Trade Organisation (WTO) to arrive at a mutually agreeable solution. "Developed nations such as USA and European Union are set to begin negotiation on trade in e-commerce. We welcome India, South Africa and other African countries, who are not part of this negotiation, to participate actively to evolve a mutually agreeable solution."



In his remarks, Dr. Kamble explained the salient features of the New Industrial Policy 2019 of Government of Maharashtra and how this policy will position the state as a premier manufacturing and technology hub of India. He said, "Maharashtra is the leading industrial state of India, with a contribution of 15% to the country's GDP. The New Industrial Policy 2019 aims to enhance the size of the state economy to USD 1 trillion by 2025 from the present level of USD 400 billion. The policy envisions transforming Maharashtra into a manufacturing and technology hub of India by offering various fiscal incentives and improving ease of doing business in the state."

Dr. Kamble pointed out that the New Industrial Policy focuses on promoting the global competitiveness of MSMEs in the state. He said, "Maharashtra has many millions of MSMEs across various districts. The aim of this

policy is to transform these MSMEs into engines of job creation and exports. The state will support MSMEs by providing common facility centers and facilitating adoption of latest technologies.”

The New Industrial Policy 2019 also aims to promote frontier technologies of fourth industrial revolution in the state of Maharashtra, he added.

Speaking further about the measures envisaged under this policy, Dr. Kamble said Government of Maharashtra will be the first state in India to set up a state-level export promotion council, to be headed by the state industry minister. Government of Maharashtra will also set up a Global Investment Promotion Council to be headed by the Hon'ble Chief Minister of Maharashtra.

Dr. Kamble assured that his government would actively implement all the measures announced in the policy in time-bound manner.

He concluded his remarks by thanking MVIRDC World Trade Center Mumbai for collaborating with Government of Maharashtra in promoting the export potential of SMEs in the state.

Vote of Thanks

Mr. Vijay Kalantri
President, All India
Association of Industries



In his vote of thanks, Mr. Kalantri expressed gratitude, on behalf of MVIRDC World Trade Center Mumbai and All India Association of Industries (AIAI), to distinguished speakers and delegates for sparing their valuable time to attend the event.

Mr. Kalantri thanked Mr. Ibrahim Ameer, Hon'ble Minister of Finance, Government of Maldives for gracing this occasion and sharing his valuable perspectives on cooperation in services sector among South Asian countries. Mr. Kalantri said Maldives is not only an attractive tourist destination, but it also has tremendous business potential in areas such as construction, communications, transport and fisheries. The country has

been a development success story as it witnessed remarkable growth in per capita income to USD 10,675 in 2017 from USD 200 in 1978.

He acknowledged the valuable presence of Mr. Jacek Sutryk, Mayor of Wroclaw, Poland, whose participation in the Summit demonstrates his commitment to promote ties between Mumbai and the city of Wroclaw.

He thanked Dr. Rupa Chanda for extending valuable assistance as knowledge partner of the event and for also sharing her expert perspectives on the evolving landscape in the services sector.

Mr. Kalantri mentioned his gratitude to Dr. Aaditya Mattoo for participating in this session and making an impressive presentation on service sector in India.

Mr. Kalantri appreciated Dr. Koopman for participating at the event all the way from WTO Geneva and enlightening the audience about the emerging opportunities and challenges in trade in services. Mr. Kalantri informed that MVIRDC World Trade Center Mumbai participates in WTO Public Forum and facilitates discussion on issues such as intellectual property rights, sustainable development, as also issues affecting MSMEs and large corporate houses. He mentioned the list of research studies and knowledge programmes conducted by MVIRDC World Trade Center Mumbai on issues related to world trade since the days of GATT, which is the precursor of WTO.

Thanking Mr. Ferguson for his participation, Mr. Kalantri said, “Mr. Ferguson has always been helpful in getting necessary cooperation and support from World Trade Centers Association. His prominent role in steering cooperation among all World Trade Centers across 90 countries deserves appreciation.”

Mr. Kalantri extended his gratitude to Mr. Pascal Kerneis for his thought provoking speech and for suggesting India to participate in the WTO negotiation on e-commerce.

Mr. Kalantri offered special thanks to Government of India, state governments of Maharashtra and Karnataka for supporting this event. He also mentioned gratitude to all the outreach partners, exhibition partners, support partners for their valuable cooperation.

Finally, Mr. Kalantri thanked all the delegates, including Ambassadors, High Commissioners, Consular Corps, senior officials from central government and various state governments and representatives from trade, industry and academia for participating in this Summit.

Panel Discussion: Industry 4.0 and its Impact on Services

This session generated an engaging discussion with technology entrepreneurs and thought leaders about the transformative effect of fourth industrial revolution. Distinguished speakers shared their perspectives on how business models are being disrupted by Industry 4.0 technologies in manufacturing and services sectors.



(From Left to Right) Mr. Adhil Shetty, Founder and Chief Executive Officer, Bankbazaar, Mr. Mariusz Kura, Executive Director, Billennium, Mr. Gautam Dutta, Senior Director - Marketing, Siemens Industry Software India, Digital Factory Division, Mr. Žiga Vavpotič, Co-Founder Simbioza and Board Member and Former Chairman, Outfit7 Limited, Mr. Vikal Kapoor, Chief Executive Officer, DAPPS Inc., Dr. Ganesh Natarajan, Executive Chairman and Founder, 5F World, Capt. Somesh Batra, Vice Chairman, MVRDC World Trade Center Mumbai



Mr. Vikal Kapoor
Chief Executive Officer
DAPPS Inc.

Mr. Vikal Kapoor, in his opening address, remarked about the unsustainable pollution levels in Indian cities and that 30 per cent of this air pollution can be attributed to automobiles, despite the fact that the auto sales penetration rate in India is only three per cent i.e. only three per cent of the population in India owns cars. He suggested that if this percentage rises to six, it will have a huge environmental impact. So we need to reduce global consumer consumption, not just in automobiles, but also in retail and ecommerce and think of a future that can save the environment. He believed that as a response to this situation, electric vehicles may become prominent in the next 10-12 years. Even sooner than that we may have shared electric fleets and we may be travelling by electric shuttles, saving the environment.

Talking on digitisation, he said, in the near future, India will have the option of picking an operating system for all its vehicles and people will care about the designer of the operating system that powers these vehicles, and whether to buy an American software or a Chinese software to operate the same rather than about the parts in them i.e. digital trade wars will supersede physical global trade wars. As a casualty of digitisation, unemployment rate may grow to 20-25 per cent, but people will find other aspects of spending their lives and their free time.

He iterated that technology is a value-driven system and we have to identify that in the next 30 years what kind of values we want to introduce to our family's dinner table, to our country and to the world. Talking about unleashing the potential of our youth, he said they have a completely different paradigm shift on consumption i.e. their focus is on experience and quality, and not quantity. So the economic models that we currently have will not work.

He emphasised that Industry 4.0 is about the distribution of wealth. Today, 0.01 per cent of the population in the US holds about 90 per cent of the wealth in the US. We are dealing with such a huge income inequality gap and this is

unsustainable. So we need to devise a better system which concentrates on a happy environment where people share values and we have a greater distributed system of wealth rather than on physical consumption, taxing the environment and environment degradation.

Sharing his ideas on Industry 5.0, he said it has to do with automated transactions and the automatic transmission of the transacted data. However, he said, “We need to own our data and we need to protect it which can be done through private blockchains. Private blockchains are a protected, encrypted and shared ledger”.

Citing an example, he said, if governments were to create a digital platform where one can automatically get his licence and auto insurance renewed, and his driving habits can be automatically transmitted to his auto insurer, all this information can be hosted on a protected public-private-platform (PPP) such as a private blockchain platform. Healthcare, financial services and insurance sectors, which make up the largest sectors of our GDP and are also the least adopters of cloud computing considering the need to protect data, should be considered as potential protected PPPs where the government and private sector can work together.

Emphasising on the need to develop indigenous technologies, he said, “No one is addressing the root of the situation where the high quality youth are quietly leaving the nation due to better quality of life and/or economic and educational prospects. In fact, the exact opposite was true for thirty centuries when India peacefully ruled the world with its values, culture and economic models — except the last three centuries which have been British and American centuries. India can again become the destination all the world seeks to come to, learn from and be a part of.

Here, early in the 21st century, we have a binary decision to make in building an India-first model supported by intelligence technologies, or adopt technological solutions by foreign companies and governments. If we do the former, we can safeguard the values we most cherish as a people. If India allows for the latter, we will be significantly behind for centuries to come, yet again”.

Speaking further, he said India’s values, culture and philosophies are in direct vector of attack by technology providers because Indian citizen data is used to serve the desires of the hosts. Even in the private sector, big data companies, social media companies, and the like use their values to deliver the products, platforms and ideas that originated in foreign land. The consumption of technology by India’s people on a daily basis does influence the

geopolitical and economic landscapes. Countries like Russia, China and the US realised this decades ago, and their current public, private companies and partnerships illustrate the national moats they have created.

Mr. Kapoor also highlighted the importance of intelligence technologies in creating sustainable development. He said Intelligence technologies can enable private public partnerships to lift each child in a flourishing society or it can put growth at risk if we are followers. Thus, we are at a pivotal moment in history with a unique opportunity to regain a double digit contribution to global economic growth, gain geopolitical capital on par with the US, China and Russia; and if done correctly, to better distribute wealth without pockets of wealth concentration at the top. If India is smart to create its own self-sustaining model, it can grow without the environmental degradation experienced by the western consumption-based growth model.

Highlighting the role of human capital development in technological progress, Mr. Kapoor said, “I encourage India to look within for the thought leaders to strategise and execute that multi-century vision of achieving greatness at the global level of human contribution that includes leadership in thought, philosophy, values, medicine, sciences and quality of life. India must consider creating a national council that understands the power of intelligence technologies. Wars will no longer be fought with arms but software, trade negotiations will breakdown not at physical supply chains, but digital supply chains”.

He further remarked that India must consider a unique growth model that incentivises its youth to employ intelligence technologies for profit and purpose by building organisations that respect society, environment, without funneling control and profits to foreign entities. Data residency and data localisation laws are a good thing for each child born in India. Personal data is sovereign and India must devise sovereign governance rules at all levels.

Calling for immediate policy action in this regard, Mr. Kapoor said, “Immediately, India can increase its productivity in the private sector and public sector, without marginalising society if the Indian nation took a national perspective to adopting intelligence technologies. Farmers, under educated, under served, honest tax payers, and Indian citizens at-large could benefit from a strategic plan, executed by nation’s brightest minds with the guidance of an Indian National Technology Council (INTC).

The INTC must be mandated with a national

transformation where productivity gains accelerate, wealth creation and distribution manifest, while controlling risks of environmental degradation and crisis in values and consciousness. To achieve these mandates, the INTC must be diverse in thought and opinion, age and gender and include well-wishing NRIs as well as leaders from within India. I firmly believe, India can reverse retain its most precious asset — its creative youth who create the intellectual property the public and private sectors need. The INTC can help reverse the brain-drain and capital flight India is quietly experiencing of its most precious assets.”

Reflecting on the potential of technological disruption in changing market structure, Mr. Kapoor said that technology is moving at breakneck speeds, creating billion-dollar companies faster than the world has ever experienced. Why aren't these companies flourishing in India? Why aren't the mechanisms in place to incentivise, capitalise and accelerate knowledge transfer to new and hunger companies. The oligopolies atop India's industries must breakdown by disruption supported by the government which is implicitly of and by the people.

Mr. Kapoor concluded his remarks by pointing out that India can attain global leadership by adopting digital technologies. He remarked, “India must realise the gravity of adopting technology across all of its public and private sectors to compete on a global level with the US, China, Russia and Japan in order to preserve and cultivate its own values, culture and economic situation.

By achieving organic growth model that employs tools like digital ecosystems and Intelligence technologies and best practices from around the world, India will transform itself into a global destination, educator and values-based society”.



Sharing his views on Industry 4.0, Dr. Ganesh Natarajan suggested that it is a combination of cyber and physical systems. In his opinion, it's a man-machine interface - the ability of human beings to work closely with technologies on the shop floor and in the ecosystem and value chain. He expressed that there is tremendous innovation happening in the cyber, physical and digital worlds. “Digital is all about

a completely different user experience and user interface technology. So when you look at retail services, the design of the store may change. The customer journey might start at home on a mobile phone or a laptop/desktop; he may then go to the retail store for getting a physical experience; and buy online. The manufacturer has to be very clear at which stage the user will take the purchasing decision”, he said.

Elaborating on the subject, he said then come SMAC stack (social interactions, mobility, analytics driven by big data and cloud technology) or the core technologies that define everything else. In a smart world, one is communicating all the time with every device that is in his possession. So, one is directed towards a mixed reality i.e. augmented reality, virtual reality, IoT and many other such solutions and finally, cyber security, since unless these interactions are fully secured and data is private, it is extremely difficult to be confident that one will be truly digitally transformed.

Dr. Natarajan further remarked that we are all dealing with a set of completely aware customers, the younger generation, who will very soon be digital natives.

He questioned if we are prepared to offer these digital natives the kind of services that their very low attention span and high need of interactivity will permit. He emphasized, “Many of us are digital immigrants; we were not born with digital technology. Nevertheless, we have migrated into being very proficient users of digital technology. So whether it's a digital immigrant or a digital native, whether it's manufacturing or services, irrespective of whether you are doing a banking transaction or insurance, buying something, availing healthcare, interacting with your municipal corporation or your local government, the future is all about taking Industry 4.0 principles and seeing how they can apply to the neo world”.

Speaking on the impact of Industry 4.0 on employment, he said although employment will be impacted with the adoption of AI and automation, several new jobs will be created in the IT sector itself.

These jobs will come up in new areas such as visual arts, sound design, storytelling etc. Unless one can tell powerful stories and communicate well, the future will fail to exist.

In his words, “Our children are smart enough to dream the impossible. It's our job as parents, grandparents and builders of the society that we build an environment conducive to make that happen”.

Dr. Natarajan also shared his perspectives on the future

landscape of industrial revolution by illustrating it with the example of how the multinational firm ABB has adopted flexible manufacturing.

He said, “ABB, which is a global industrial technology leader, is operating a factory in Southern China. The factory uses robots to manufacture another robot. The facility produces around 1,000 robots a month. The interesting fact is that this entire factory was set up on fluid shopfloor, which means the entire manufacturing facility can be modified to suit the kind of goods produced.”

According to ABB, industry 5.0 may be about flexible manufacturing system, where the factory system can be changed to suit the kind of goods produced.



Mr. Gautam Dutta, in his remarks on the importance of Industry 4.0, mentioned that at present Industry 4.0 technologies are being mostly adopted by the top companies. But it's going to seep into MSMEs, which form the vast majority of the businesses, and this is where the opportunity lies for India.

He suggested that Industry 4.0 is not only a combination of multiple technologies, but it is also about system integration. The first automobile was adopted for mass production several decades after it was patented owing to lack of infrastructure such as roads and highways.

Similarly, the electric bulb was adopted by households several years after it was invented due to lack of grid connectivity to supply electricity. “So essentially, it is not about the technology, it is about integration. Integration is when multiple functions and multiple owners interact with each other. And innovation takes place at the intersection of these roles and functions.”

Mr. Dutta added, “The success of Industry 4.0 depends on how companies adopt these technologies and integrate them to solve their business values and propositions. Business challenges are changing very dynamically. Every day, the product calls for a change. Every day, the service needs to be updated. It is only by digitalisation that you can keep up to these dynamics”, he emphasized.

Further elaborating on the importance of Industry 4.0 for SMEs, Mr. Dutta expressed that digitalisation helps a small company form a level-playing field with a big one because it is no more about economies of scale.

Today, the demand is for customized goods and services which means that batch sizes are getting smaller. SMEs can harness the Industry 4.0 technologies that are available, bring in innovation and deliver new values of products and services.

He mentioned that in the process, new business models are getting evolved and will continue to evolve. Giving an example of a typical manufacturing value chain wherein a product is designed, manufactured and supplied as per the choice of the customer, he said, Industry 4.0 can create a virtual world of this physical value chain which is called the digital twin. The digital twin can replicate each and every aspect of the value chain and conduct tests on the virtual world in order to save the costs and time incurred on the physical prototypes.

This is an area where the new services will emerge and experts with their specialised services will provide last-mile connectivity.

Interestingly, he said, with the help of predictive maintenance through IoT and data analytics, we probably will not be buying anything in the future. He concluded by pointing out, “Industry 4.0 technologies and services can help improve the productivity of our manufacturing and agriculture. There is no ‘One size fits all’ solution in today’s businesses. We have to know our problems of today, our plans for tomorrow and then map these technologies to see how they can be adopted to bring about business transformation”.



Speaking on economic development, Mr. Žiga Vavpotič explained that in the last 120 years, humankind has been able to lift a majority of its population out of extreme poverty, life expectancy has doubled and per capita income has tripled. However, he said, the world is changing at a much faster pace now than ever before. With regard to access to technology, what we are able to access for free today would have required a much higher amount of

resources and investments a few years ago. Probably, only the affluent would have been able to afford it.

However, over two-thirds of the world population today holds only three per cent of global wealth. Across the world, about 63 million girls are not enrolled in school which is equivalent to almost the entire population of the United Kingdom.

According to the World Economic Forum, at the current rate of change in the global economic gender gap, it would take another over 200 years to close this gap.

Sharing his views on Industry 4.0, he expressed that we are living in an era of ideas - wonder, exploration, inspiration, discovery, creativity, engagement and innovation.

Therefore, there is a critical need for increasing investments in R&D. Industry 4.0 will open up many opportunities. The world is now more connected than ever before. Still, the society holds a huge responsibility of the future. Better future will not be attributed to technology, but to human talent.

He said, "Here, I am not betting on the smartest minds, but on those great minds, with great hearts, who understand feelings, value relationships and are driven by a purpose".

He reiterated, in Industry 4.0 and all the forthcoming revolutions, what is important is to bet on people, not technology. This is why the topic of values should be more discussed. And, education should be very important on the priority list of governments, international organisations and even on our lists as individuals. Drawing upon the quotes on Mahatma Gandhi, he said "In a gentle way, you can shake the world. We, human beings, will shake this world the most. And history has been a live example that we are doing it!"



Focusing on the domain of access to financial products like credit and insurance, Mr. Adhil Shetty mentioned "Among the many pillars on which the future might exist, the two pillars which will drive financial services in India are being

mobile and being paperless. To put this in context, in the old world, when one wanted a financial product like a loan or a credit card or an insurance, he had to go to a branch or approach an agent. It ended up with submitting many pieces of paper such as six months' bank statements, three years' income tax returns, driving licence, PAN card etc. The entire process took about 5-10 days. Whereas, what is happening now is that the new consumer is imagining a world wherein that is not what one goes through to access a financial product. He is expecting a service that is similar to e-commerce and ticket booking. He wants to get a loan approval on his mobile phone in five minutes. He is willing to authorise and engage, but he wants to access the financial product on his mobile phone, instantly and in a paperless way without having to run around".

He further elaborated on what is playing in the consumer's and the bank's mindsets. In the consumer's mindset, he said, the consumer is thinking that while he can access several services online instantly in today's times, why does he have to draw a cheque, sign several forms, attach KYC documents, courier them, get them verified and get the product a week later while buying a mutual fund? Why can't the experience be unified? This reflects a clear consumer expectation that he wants these services on the mobile in minutes. What one will witness in fast developing momentum is that consumers will expect that what used to happen in the physical world will now happen on the mobile and that they will get a wow experience.

On the other hand, from the bank's side, collecting papers, verifying them and identifying fraud committed in the paper work is expensive, time consuming as well as cumbersome.

The bank would prefer if one is automatically able to authenticate himself and the bank is able to verify his income based on the permission he gives to the bank to access that information. The bank would actually prefer that the entire credit underwriting process is carried out instantaneously in real time by replacing the human interface with an auditable machine.

Moving to an electronic instantaneous process from a paper-based process will benefit the bank not only in terms of cutting costs, but also improving fraud management. He suggested that the pain points faced here will be building an extremely convenient and consolidated platform.

He explained that BankBazaar gives a unified experience to consumers so that they do not have to browse ten different bank sites. From the bank's perspective, acquiring new

customers is expensive. It would have to build a platform and spend huge amounts of money on customer acquisition in order to make people aware that there is a new way of consuming financial products.

BankBazaar provides this technology platform readymade to banks and has over 400 million visitors visiting the platform every day. The number of financial transactions will only accelerate in future, he expressed.

Analysts project that what is today a 10 per cent digital market for financial services will soon reach 60 per cent. The phone is going to be the new bank branch. And this creates huge business opportunities.

So, the two pillars defining Industry 4.0 economy in financial services will be being mobile and paperless. It is a disruption driven by the consumer, but will ultimately benefit financial institutions. And as this transition takes place, it will open up new business opportunities with new players like BankBazaar stepping in to help fast track the conversion, he concluded.



Mr. Mariusz Kura opened his remarks comparing the technologies that were prevalent nine years ago and those that are prevalent now.

Citing an example, he said, nine years ago, when he was working as a developer, he had developed an application for a university, a product that helped doctors in collecting data and supported them in preparing reports about Hashimoto's disease.

The case was that the doctors were deciphering the pictures on the scan as they needed to decide which object was bigger and ultimately, prepare proper prescription based on the interpretations.

So, he used technologies such as C++ and others, and prepared solutions to give metadata to doctors so that they can easily prepare prescriptions for the Hashimoto's disease.

Last year, his company prepared similar solutions for its customers, an application which is based on image recognition. What it achieved was that it was able to provide the metadata faster and with better results. Based on the two projects, one can see that with the help of Industry 4.0 and AI, one can react faster and better.

He explained that a senior official from Microsoft highlighted the meaning of Industry 4.0 as "Many companies focussing on their business, are looking for bigger and faster computers to provide data early or on real time basis. The future is to predict what will happen with the help of data. And Industry 4.0 and IT services do just that".

Sharing his views on the impact of Industry 4.0 on employment, he said that many people are afraid of Industry 4.0 because they fear that they will lose jobs.

However, he opined, that it is not true because one is constantly adapting. It is important to note that IT services providers are here to help people.

He emphasized that his company is focussing right now on T-shaped people. What it means is that people in his organisation are open minded. They are really open to the horizon of the business around, yet they are like a vertical focussing on technology.



Panel Discussion: Disruption to Collaboration: FinTech Transforming the Service Landscape

This panel session shed light on latest technologies transforming the financial services industry and its sub-segments, viz. banking, insurance, financial planning and merchant payments. The session was addressed by co-founders of various fintech companies that are working closely with traditional financial institutions and government agencies to transform this industry.



Caption: (From Left to Right) Mr. Jose Thattil, Founder and Chief Executive Officer, PhilCommerce, Mr. Arpit Ratan, Founder, Signzy, Ms. Tanvi Vakil, Consultant, Deloitte Touche Tohmatsu Services, Ms. Manisha Pandita, Co-Founder and CEO, Easyplan, Mr. Kamal Kishor Das, Founder Director, Pentation Analytics



Ms. Tanvi Vakil

Consultant, Deloitte Touche Tohmatsu Services

Ms. Vakil opened the panel session by highlighting the key trends shaping the financial services ecosystem. She remarked, "Realising the potential of technology in transforming financial services industry, Government of Maharashtra established 'Mumbai FinTech Hub'. The Hub aims to promote a vibrant fintech ecosystem in the state by encouraging innovation and entrepreneurship."

Ms. Vakil illustrated how technology has transformed the role of banks from just a service provider to offering enhanced customer experience.

Moderating the panel session, Ms. Vakil discussed with other panelists how new age fintech companies are collaborating with traditional financial institutions to serve

customers better and improve operational and financial efficiency.

Ms. Vakil also raised other pertinent issues such as the readiness of traditional financial institutions to face emerging challenge of cyber attacks, allowing fintech companies to access government data, role of fintech companies in promoting financial inclusion, use of technology to model financial risks and so on.



Mr. Kamal Kishor Das

Founder Director, Pentation Analytics

Mr. Das shared his perspectives on the evolving insurtech industry, where technology-led companies are disrupting products, pricing and operation models in the insurance sector.

India does not have insurance score for individuals or institutions to profile their vulnerability to risk, on the lines of credit scores that reflects the creditworthiness of customers.

He informed how insurtech companies generate analytical insight based on big data and how this insight can be helpful for insurance companies and underwriters in understanding the risk profile of clients. Mr. Das pointed out that this insight will help insurance companies price their products better.

Insurtech companies analyse data of existing and potential insurance clients generated from their social media, emails and other online sources.

This data analytics can help insurance companies identify the individual needs of different customers and accordingly provide customized insurance solutions.

Mr. Das emphasized that regulators must provide insurtech companies access to big data so that they can come out with such insights.

He said, "India is one such market where all insurance data is stored in one repository, which is insurance information bureau. If regulators allow insurtech firms to access such data and build data products for industry, this will be useful."

Mr. Das pointed out how this industry has matured in USA, where insurtech companies offer data products (customer insights) to insurers so that they can underwrite their insurance products better.

He informed that this data analytics service helps insurance companies reduce losses. Mr. Das also explained about the evolving segment of cyber security insurance, where insurance companies underwrite the cyber-related risks of business organisations and individuals.

This segment is at its evolutionary stage, as at this moment not much data is available to understand the susceptibility of clients to cyber risks. Sharing more detail about this segment, Mr. Das said,

"Cyber risk insurance is a flow concept, unlike insurance of a building, which is a stock concept. Cyber risk profile is a flow concept because it keeps changing with the flow of new data streams into the system and with more and more people accessing this data.

Similarly, credit card risk is also a flow concept. Insurance companies need to update the risk profiling of customers based on insights such as whether the system is foolproof, can it be hacked anytime? etc.

Currently, India does not have customized insurance products available for cyber risk because data is not available to quantify the risk profile of clients."

Therefore, in the absence of robust data available to quantify cyber risks, insurance companies offer only stop-loss products (where coverage of loss is limited), is instead of offering full insurance cover.



Ms. Pandita shared her perspectives on the emerging sub-sector of technology-enabled financial advisory, within the broad sector of investment management.

She said, "There are two types of players in this industry, one is the creator of investment products, while the other player is financial advisor who offers advisory and product distribution services to investors."

She further informed, "Financial advisors can be broadly defined as one who not only select right investment avenues for clients but also advises them on finance, in general. Easyplan is a technology-assisted financial advisory firm or new-age financial advisory firm that is licensed by AMFI (The Association of Mutual Funds in India) and SEBI."

Ms. Pandita said both the players have sustainable business models as the role of one player supports or complements the role of other.

Speaking about the possibility of technology-enabled financial advisors obtaining license to create investment products, Ms. Pandita said, "These days regulators are willing to offer license to technology enabled fintech companies who demonstrate ability to acquire and retain customers. For example, Paytm, which began its journey as a payment app, was given banking license by Reserve Bank of India after it became popular among merchants and customers."



Mr. Arpit Ratan
 Founder, Signzy

Mr. Ratan offered his views on the evolving relationship between traditional financial institutions and new age fintech companies.

He said new age fintech companies offer support services to traditional financial institutions instead of competing with them as the former do not have license to create and sell financial products.

Explaining this point, Mr. Ratan said, "Fintech companies provide services such as distribution of financial products or advisory services or technology support services to traditional financial institutions. New age fintech companies cannot compete with traditional financial institutions as the latter have license to create financial products."

Mr. Ratan also pointed out how in some cases both traditional financial institutions are stepping into the business of new age fintech companies. For instance, DBS, which is a traditional bank in Singapore, is competing with fintech companies by adopting innovative technologies to serve its customers better.

Similarly, BajajFinserv, which is a consumer finance company, has been agile in adopting innovative technologies. On the other hand, Paytm, which is a new age fintech company, has started competing with traditional banks by securing banking license from RBI.

Mr Ratan remarked that technology will be an enabler in the financial services industry. He said, "Banks did not adopt core banking solutions 10 years ago. It is only in recent years that core banking has become popular among banks. Similarly, in the next few years, banks will start adopting blockchain, which improve efficiency of their operations."

He hinted at possible transformation in the competition landscape of the banking industry in India with the entry of new players.

He said, "In future, a new, technologically agile company

may enter the banking industry and acquire existing player. Therefore, the list of top 10 banks may change in future and this may shift the banking structure."

Mr Ratan also pointed out how verification of KYC of a client is undergoing change in this digital age. He said, "In this digital era, internet (namely social media and emails) is the permanent address of a client. Therefore, financial institutions should rely less on information such as permanent address, date of birth and name of their clients for verifying their KYC."

Mr Ratan added, "... financial institutions must establish the identity of their clients using information such as IP (internet protocol) address, IMEI (International Mobile Equipment Identity) number, GPS location of the client etc."

Therefore, Mr, Ratan suggested financial institutions to make use of the digital footprint created by their clients on online channels such as social media, with the consent of the clients.

He said, "Financial institutions must explore ways to collect valuable data on their clients from internet and use the data for profiling their identity and risk factors. This is a more meaningful approach to KYC verification rather than depending on government database such as Aadhar and Pan Card for verifying name, postal address and date of birth."

Mr. Ratan concluded his remarks by suggesting traditional financial institutions to deploy latest technologies such as machine learning and artificial intelligence not only for customer service but also for financial risk management.



Mr. Jose Thattil
 Founder and Chief
 Executive Officer
 PhilCommerce

Mr. Thattil outlined the avenues for mutually beneficial collaboration between new age fintech companies and traditional financial institutions.

He started by pointing out the strengths of both the players. He said, "Banks and other traditional financial institutions have the advantage of long experience in market and customer loyalty. On the other hand, fintech

companies have the agility to leverage cutting edge technologies to transform business models.”

There is tremendous scope for collaboration between new age fintech companies and traditional financial institutions as both of them bring different advantages.

Mr. Thattil said there are three different stages of collaboration between fintech companies and traditional financial institutions.

Under the first stage, a fintech company enters into a non-exclusive partnership with a traditional financial institution to offer supplementary services. The fintech company can enter into similar partnership with other financial institutions as well as this deal is non-exclusive.

Under the second stage, fintech companies enter into exclusive partnership with traditional financial institutions. The partnership will be exclusive for a certain period of time, as mentioned in the agreement.

In some instances, traditional financial institutions launch incubation programmes for supporting new age financial institutions in areas such as blockchain, artificial intelligence and machine learning etc.

The third stage of collaboration is more deep engagement, where traditional financial institutions invest in new age fintech companies and at times they may also acquire the latter.

Mr. Thattil also pointed to some of the concerns of traditional financial institutions in this age of rapid growth of fintech companies.

He said, “There is suspicion among traditional financial institutions that fintech companies may one day outcompete them because of their agility and rapid growth.”

In this regard, he mentioned how technology-enabled payment solution provider Paytm, with a customer base of 200 million, is competing with mid-sized banks.

He also raised another concern related to sharing of data among financial institutions. He said, “In India, financial institutions have huge amount of data about their customers. But they are wary of sharing it with fintech companies or other players. In advanced countries such as USA and UK, the emergence of open banking models has led to sharing of data between financial institutions and

fintech companies to achieve objectives such as better customer service, financial inclusion and so on.”

Mr. Thattil concluded his remarks by saying that it will take some more years for the players to change their mindset and start collaborating by sharing data with each other.

The launch of open banking system, as in some advanced countries, will accelerate sharing of data through application programming interface (API). Sharing of data with fintech companies will enable the latter to offer premium services to customers, he remarked.

Question & Answer Session:

1. What is the Key Performance Indicator (KPI) of the companies you have co-founded?

Mr. Arpit Ratan: “We are not a fintech company. We provide software products to fintech companies. So, we are a SaaS (Software as a Service) company. Therefore, our KPI is to increase usage of our SaaS products by fintech companies to onboard more customers.”

Mr. Kamal Kishor Das: “Our clients are insurance companies. Therefore, our KPI is the business benefit that we can offer to insurance companies. It means how our service enables insurance companies to realize policy renewals from their customers on a monthly basis. In terms of financial metrics, our KPI can be measured by the amount of value realized by insurance companies through retained premium.”

Ms. Manisha Pandita: “We are new age financial advisors. Our KPI is to build sustainable user base and retain their trust in us. Our performance also depends on our ability to cross sell other financial products besides savings and investments. We earn commissions for selling financial products to customers.”

Mr. Jose Thattil: “We are a payments processing company and we work with large banks. We focus on large unaddressed use cases where digital payments are not adopted. Our KPI is promotion of digital payments among government sector and tier II, tier III towns and villages.”

Mr. Thattil further replied, “Typically, payments are offered as one-size-fits all solution. This is where we differ verticalizing payments and going after use cases. Our KPI is to generate more digital transactions and revenue associated with these transactions.”

Day 2

Panel Discussion: Smart Solutions and Smart Cities

This panel session generated multi-dimensional perspectives on urban governance, healthcare system, waste management, quality of life and quality of human interaction in smart cities. The panel session generated valuable ideas and suggestions for policymakers, urban planners and architects on how to develop sustainable urban communities. All the panellists unanimously agreed that people are the centre of any smart city and hence smart cities must be so planned as to enhance the overall quality of life and quality of interaction among its residents.



Caption: (From Left to Right) Mr. Aditya Vora, Director, Adytum Designs Pvt Ltd., Mr. Aditya Sharma, Senior Vice President - Asia, Boson Energy, Mr. Vijay Kalantri, President, All India Association of Industries (AIAI), Ms. Sui Jin Kon, Director - Global Alliances, WTC Harbin, Mr. Dharmendra Pratap Yadav, IAS, Secretary, MSME Department, Government of Tamil Nadu, Mr. Stanislav Baša, Member, Toshiba European Business Partner Advisory Council, Mr. Abhishek Chaudhary, Vice President - Corporate Affairs & HR, DMICDC

Ms. Sui Jin Kon

Director - Global Alliances,
WTC Harbin



Ms. Kon opened the panel discussion with a brief remark on the issues and challenges involved in development Greenfield and brownfield smart cities. she said, "We are living in a time when smart cities are the norms in some countries and in other countries such as India, smart city is a dream of utopia. There are many challenges and opportunities in developing smart cities. The implementation challenges involved in smart city projects differs from small countries to large countries. Today, we have with us a multi-disciplinary panel to shed light on their experience and lessons learnt on different aspects of smart cities right from design, implementation, healthcare, financial structuring, demographics, greenfield and brownfield projects etc."

Mr. Abhishek Chaudhary

Vice President - Corporate
Affairs & HR, DMICDC



Mr. Chaudhary gave an overview of India's policy approach to develop greenfield smart city projects in the Delhi Mumbai Industrial Corridor. He began his comments by introducing his organisation, Delhi Mumbai Industrial Corridor Development Corporation Ltd. (DMICDC), the mandate of which is to develop new greenfield smart cities where manufacturing will be the key drivers of growth.

Speaking about the imperatives of smart cities, Mr. Chaudhary said, "Smart cities are needed to cater to build sustainable urban communities in this age of rapid urbanization. According to a report, by 2030, around 68 cities will have a population of more than 1 million in India and close to 70% of net new employment will be generated

in these cities; further, cities will account for 75% of economic production. Every single minute, 40 Indians are moving from rural areas to urban centers in search of livelihood."

Mr. Chaudhary further remarked, "In this context of huge rural-urban migration, policymakers have two choices: to have planned urbanization or allow unplanned urbanization with sprawling slums."

He mentioned that the upcoming industrial corridors in India will reduce pressure of the huge rural-urban migration on existing cities. He said, "In order to prepare for the rapid urbanization, Government of India has planned new industrial corridors as magnet for attracting new industries, where cities will be set up on world class standards."

Sharing information about the Delhi Mumbai Industrial Corridor (DMIC) project, Mr. Chaudhary said, "DMIC is the first industrial corridor announced in India and it will use the dedicated western freight corridor (new railway line between Delhi and Mumbai) as a backbone.

DMICDC will develop 24 industrial smart cities over the next three decades. Out of the 24 smart cities, construction activities have started in four cities. Out of these four cities, process of allotting land to industries has started in a short span of the last five years.

Shedding light on the governance framework for these proposed 24 smart city projects, Mr. Chaudhary informed, "Government of India has departed from its earlier practice of offering grants to state governments for funding urban development projects. Instead, state governments will be funded by the central government in the form of equity or debt as these instruments carry the element of financial discipline."

Speaking further about the governance framework, he said, "The central government has compelled state governments to sign shareholder agreement (SHA) and state support agreements (SSA) and also mandated the establishment of special purpose vehicles (SPV) with 50% shareholding each from the state government and central government."

Under this governance framework, the responsibility of the state government is to acquire land for the smart city project, while the responsibility of the central government is to offer financial support for developing world class trunk infrastructure, he said.

Sharing his experience in dealing with state governments, Mr. Chaudhary said, "It took 3-4 years for signing the first SHA and SSA for Greenfield smart city project in India. The reason it took so many years for signing these agreements was because under the new governance framework the planning, development and municipal functions must be delegated from state government to the new SPV. Further, the delegation of these functions must be supported through legislative backing by enacting new legislations or amending existing legislations."

Mr. Chaudhary further informed, "Out of the six states involved in the DMIC project, three have enacted new legislations, while two states have amended industrial development act, executed SHA and SSA and established the SPV. In these two states, relevant construction activities have been completed and we are now ready to allot land to companies."

Sharing further detail about the progress of smart city projects in DMIC, Mr. Chaudhary said, "So far, DMICDC has spent close to Rs. 6,000 crore on developing greenfield smart cities and these cities have attracted investment worth Rs. 8500 crore from industries. So far, we have sold hardly 1-2% of industrial land in DMIC and we are confident of monetizing the entire land parcel as we offer high quality infrastructure to industries."

Mr. Chaudhary added, "DMICDC has roped in world leading consultancy firms such as AECOM and Surbana Jurong for executing master plan for its smart cities. World renowned companies such as Cisco and IBM have been involved in preparing digital master plan for its smart cities."

He added, "The utilities in every smart city will be controlled and managed by a central command and control centre. The first command centre will be operational in Aurangabad, where we are constructing a new smart city called Shendra - Bidkin."

Mr. Chaudhary concluded his remarks by explaining the revenue model of these proposed 25 smart cities. He said, "The smart cities in DMIC are planned on a self-sustainable financial model. Under this model, cities will not have to depend on government agencies for financial support beyond the initial 5-7 years. After 5-7 years, these smart cities will generate enough revenue to support development of the next phase of these cities. A few years after the initial 5-7 years, the revenue generated from these smart cities can also be used for developing other smart cities."



Mr. Sharma highlighted the need for adopting smart and sustainable solutions for treating municipal solid waste in smart cities. According to him, a sustainable and smart solution is one which does not harm our future generation.

Speaking about waste management in India, Mr. Sharma pointed to the harmful environment consequence of incineration, which is the existing practice of treating municipal solid waste (MSW) in India. Mr. Sharma proposed gasification of MSW using high temperature, which is an eco-friendly way of treating solid waste, while also generating energy from the waste.

He pointed out, "India has been struggling to adopt appropriate waste-to-energy solution for the last 25 years. India generates 174,000 tonne of MSW every day. Huge amount of energy can be generated by appropriately treating this waste."

Mr. Sharma further explained that the energy generated through waste can be used for air conditioning. Demand for cooling in India is expected to grow eight times in the near future. India depends on costly coal and crude oil for the purpose of cooling, he informed.

Speaking about the current practice of treating MSW in India, Mr. Sharma said, "Incineration or burning of solid waste pollutes air, soil and water bodies in India. The ash generated from incinerating solid waste is dumped on open ground, exposing it to rain water. This not only contaminates the soil, but also water bodies as the polluted rain water mixes with water bodies."

Therefore, Mr. Sharma suggested gasification of MSW as a sustainable solution for treating MSW. He said, "Gasification of MSW involves treatment of MSW under high temperature using plasma torches in the absence of oxygen. Such a treatment produces vitrified slag, which is an inert and solid material that can be used for construction of roads and buildings."

"Further, the excess heat generated from this treatment can be used as fuel for cooling purpose. Thus, gasification of MSW can also reduce demand for conventional energy such as electricity and petroleum oil," Mr. Sharma concluded.



Mr. Yadav touched upon the governance issues in urbanisation and also shared his perspectives on the concept of smart city. He said, "Tamil Nadu is the most urbanised state in India. But it has its own challenges. One of the challenges is the growth of slum areas and its impact on quality of life. For instance, a study on sleep patterns in slum areas found that slum dwellers who have less sleep, suffer from high stress level, low productivity and mental agitation."

Speaking about the governance challenge in smart cities, Mr. Yadav said, "Urban local bodies form the lowest tier of the governance structure in India. Unfortunately, the top layers of the governance structure (viz. central and state governments) do not want the lower layers to become more powerful and smart. Also, revenue mobilised through taxation is not enough to provide improved service delivery, as often, politicians avoid imposing high rates of taxes to win support of the electorate. Despite this unfortunate fact, urban governance is improving in India. In recent years, public private partnership (PPP) model is being adopted to improve service delivery. Government of India's smart cities programme emphasises on PPP and user pay model."

Highlighting other challenges in urban policy and governance, Mr. Yadav said, "As population in a city increases, there is greater pressure on the municipal administration to meet the growing need for drinking water, electricity, garbage disposal, provide pedestrian friendly roads, avoid cluttered development and provide sustainable transportation. The ever growing population in urban areas also poses other challenges such as ecological sustainability and economic inequality. Appropriate land use policy plays an important role in meeting housing needs and many other needs of the growing population. The concept of smart city aims to provide sustainable solution to these problems of an urban area. Smart cities also offer huge business opportunities for companies involved in civic amenities." Sharing his perspectives on the concept of smart city, Mr. Yadav said, "The concept of smart city includes various factors such as ease of living, commuting and communicating. This can be achieved through transformation in physical, ecological and technological intervention, such as internet of things (IoT) etc."



Mr. Stanislav Baša

Member, Toshiba European
Business Partner Advisory
Council

Mr. Baša explained how a smart healthcare system in a smart city can aggregate valuable data on lifestyles of individuals, which can then be used by civic authorities to improve urban amenities.

Mr. Baša emphasized on smart healthcare system as an integral part of smart cities. He said, "Smart cities are the future of our society. The central theme of smart cities is sustainability, both economic and environment. An unhealthy population cannot ensure economic sustainability of a society as they cannot actively participate in productive activities. Thus, smart cities must have a sound wellness and healthcare system to take care of the wellbeing of people."

Mr. Baša pointed to the need for better wellness and healthcare system in smart cities to address the stressful lifestyle that is characteristic of any urban area. He explained his concept of wellness system by sharing the example of Mayo Clinic in Rochester, Minnesota, USA. He informed, "The centre of every community is its people. Modern society brings huge expectation on individuals, which in turn builds stress and leads to lifestyle diseases. Mayo Clinic cares for its people by offering community healthcare service for the last more than 150 years. The Clinic is the last resort for patients suffering from incurable heart diseases."

Speaking about the importance of wellness service to develop a healthy community, Mr. Baša said, "Mayo Clinic has been offering personal assistance for wellbeing on 12 focus areas. These 12 focus areas have been identified as characteristic features of healthy people. Some of these 12 areas are good nutrition, sound sleep, regular exercise."

Mr. Baša explained the concept of smart wellness service offered by Mayo Clinic through apps on smart devices. He said, "Mayo Clinic offers its personal assistance service through apps on smart devices. As part of its personal assistance programme, Mayo Clinic offers training to individuals on maintaining a relaxed mind, coping with stress in life, developing goals in life and prioritizing these goals."

Mr. Baša elaborated how Mayo Clinic generates huge personal level data that can be used by government agencies to improve civic services. He said, "By providing wellbeing assistance on smart devices, Mayo Clinic could aggregate huge amount of personal data on the lifestyle of individuals. The aggregated data is then shared with government agencies and policymakers to help them improve civic amenities in smart cities."

Mr. Baša also pointed out that the data is aggregated and shared in such a way that it does not breach the privacy of individuals.

Mr. Baša concluded his remarks by pointing out how retail industry is witnessing huge transformation to offer premium service for residents in smart communities. He said, "Today, the shopfloor of retailers is witnessing complete transformation to provide customized solutions to individuals in smart cities. Today, the shop floor format of retailers is shrinking and density of retail stores is increasing. This means, people in the smart cities do not need to travel far to buy their daily requirements. Also, retailers have started selling customized and value added items such as prepared food meal for the convenience of customers. Consumers in a smart city can order their goods online from the nearby retail stores and these goods will be delivered at their doorstep. This is the contribution of the retail industry to a better quality life in a smart city."



Mr. Aditya Vora

Director, Adytum Designs
Pvt Ltd

Mr. Vora shared his ideas about how smart city projects should be used as a policy measure to control migration. According to him, a smart city is one which features smart public infrastructure and smart buildings which together ensure high quality of life for its residents. Residents in a smart city must be able to give more time for themselves and for their family than they could give in conventional cities. Such a high quality of life in a smart city will prevent residents from migrating to other cities.

Sharing more perspective on smart cities, Mr. Vora said, "The meaning of the word 'smart' has evolved over a period of time to denote something that is intelligent and fashionable; A smart city is one which has a cluster of smart ideas. However, longevity is a defining feature of a smart

city. Unlike other smart objects such as a smart phone or a smart car, which become out-of-fashion in a short span of time, a smart city must be sustainable in the long run. Such a city must offer sustainable living condition for the future generations of its residents.”

Mr. Vora further described a smart city as a self-contained or self-integrated community with easy access to workplace, hospitals, schools, public infrastructure and other amenities.

Speaking about the challenges and opportunities in a smart city, Mr. Vora pointed out that migration is a major challenge in smart cities, while the major opportunity is cross-pollination of ideas among its residents.

In order to control migration of youth from cities, Mr. Vora suggested policymakers and urban planners to design smart cities in such a way that it improves the quality of life for its residents.

The session generated extremely valuable interaction between the speakers and delegates in the form of question and answer session:

Question and Answer Session:

1. How can we ensure that the technologies used in smart cities do not become obsolete after some years?

Answer: (Mr. Aditya Sharma) Smart cities must be centered on the principle of sustainable development rather than on technology. We must consider technology as an enabler to meet the 17 sustainable development goals (SDGs) of the United Nations.

All these years, we were centering our solutions on technology. For instance, all these years, most cities depended on automobiles as a means of transportation. However, now cities such as Barcelona (in Spain) are developing superblocks, which promotes walking and cycling instead of using motorized vehicles.

Such a model of urban mobility envisages all facilities such as schools, hospitals, workplaces, retail shops etc in close neighbourhood to reduce use of motorized transport. Thus, instead of centering our solutions on technology, we must use them to meet sustainable development goals.

2. Urbanisation generally causes huge social, environmental and energy cost. How can future smart cities address these adverse impacts of urbanisation?

Answer: (Mr. Abhishek Chaudhary) DMICDC has taken utmost care to reduce the social, environmental and energy costs in its proposed 24 smart cities. The corporation is developing water treatment plants, sewerage treatment plants and common effluent treatment plants in all its smart cities to reduce the environment cost and protect the health of its residents.

In order to reduce energy cost, DMICDC is designing smart cities to promote the concept of walk-to-work so that residents can reduce the cost of commuting to their workplace.

The corporation is also promoting mixed use development, where residential buildings will be developed closer to commercial establishments. Also, around 15-20% of land is allotted for green open spaces in smart cities. There are also facilities for capacity building and skill development centres to meet these requirements of industry.

Before allotting land to industries, DMICDC will complete planning and reservation of land and also secure necessary administrative approvals. Therefore, investors do not need to wait for the necessary approvals such as pollution clearance or other environmental clearances. This will save cost and time for industries to construct plants and start commercial production.

3. What are incentives government must provide to residents for better implementation of smart city projects?

Answer: (Ms. Sui Jin Kon) Government of Singapore adopted the smart nation initiative in 2011. Before that, the government conducted intensive public consultation to understand the needs of the residents and make them aware of this smart nation initiative.

As part of this initiative, the first step taken by the government was the rolling out of electronic health record. By rolling out this programme, every citizen of the country could access their health records through any public hospital or public clinic without a fee.

This facility of accessing our personal health record in any clinic is not a monetary incentive, but a ‘quality lifestyle’ incentive. People are the center of any smart city project. Therefore, policymakers in future smart cities must customize their solutions to enhance the quality of life of its residents and to improve the quality of interaction among its residents.

Panel Discussion: Importance of Services in Supporting Agriculture and Manufacturing Sectors

This panel session generated insightful perspectives on how services form the pillar of agriculture and manufacturing activities. An eclectic mix of speakers from academics, industry and multilateral institutions engendered a balanced discussion featuring substantial research insights and industry experience. The session was moderated by Dr. Arpita Mukherjee, Professor, Indian Council for Research on International Economic Relations (ICRIER).



Caption: (From Left to Right) Mr. Milind Kulkarni, General Manager - Manufacturing, Kansai Nerolac Paints, Mr. Khalid Ahmed Mohammed, Head, Private Sector & Trade Finance Division, Arab Bank for Economic Development in Africa (ABEDA), Capt. Somesh Batra, Vice Chairman, MVIRDC World Trade Center Mumbai, Dr. Arpita Mukherjee, Professor, Indian Council for Research on International Economic Relations (ICRIER), Ms. Rasha Omar, Country Director – India, International Fund for Agricultural Development (IFAD), Mr. Pascal Kerneis, Managing Director, European Services Forum, Mr. Himanshu Goyal, India Business Leader, The Weather Company, an IBM Business



Dr. Pascal Kerneis
Managing Director
European Services Forum

In his opening remarks, Dr. Kerneis explained how services account for a sizeable share in the value added of an agriculture and manufacturing product. Referring to the popular smile curve of global value chain, Dr. Kerneis said, “Services such as research and development, design, testing and certification occupy a large share of the total value added of most manufacturing products. Similarly, marketing and distribution services, involved at the end of a product cycle, account for a sizeable share of the total value added in any marketable product. On the other hand, the actual manufacturing or assembling of products contributes comparatively less to the total value added of most products.”

Dr. Kerneis further explained the value addition of services

to agriculture and manufacturing sectors. Quoting data from the OECD’s trade in value added, Dr. Kerneis said, “Various input services together contribute 39.1% to the total value added of agriculture and manufacturing goods exported by the European Union. The level of services value addition differs from sector to sector. For instance, contribution of services to the total value addition is the highest in the food and beverages sector, with a share of 40%. On the other hand, services account for 34% of the total value added in the textile and apparel sector.”

Speaking about India, Dr. Kerneis explained why services value addition in agriculture sector is lower than its value addition in the manufacturing sector. He said, “In India, input services contribute 25.1% to the value added of manufacturing and agriculture goods. Compared to the manufacturing sector, services value added is lower for the agriculture sector. One reason for this variation is that India’s agriculture may be consuming less of value added services such as logistics, transportation and technology services.”

Drawing reference from the studies conducted at the National Board of Trade Sweden, Dr. Kerneis said,

“Business services such as legal, accounting, medical and computer services form valuable inputs even in the machinery manufacturing sector. Other services such as research and development, technical and testing, leasing, financial services, warehousing also account for significant value addition in the machinery manufacturing sector.



Dr. Mukherjee set the tone for the panel session by shining the spotlight on services that support agriculture and manufacturing activities. Specifically, she mentioned services such as professional services, banking and insurance, logistic and supply chain, digital marketing, which are critical for the functioning of manufacturing and agriculture sectors.

Some of the value added services, namely data analytics and digital marketing helps companies serve their customers better. Professional services such as market research and consultancy enables companies to understand the customer needs and diversify their product offerings, Dr. Mukherjee remarked.

Technology-enabled services such as e-commerce enable small businesses and small farmers reach global markets and raise their scale of operations. IT and software services bring efficiency and productivity improvements in business organizations.

Dr. Mukherjee emphasized the importance of technology adoption by MSMEs and farmers to enhance their operational efficiency and productivity. In this regard, she also brought out the significance of progressive policies such as Digital India, technology upgradation fund scheme, Start-up India policy and others that promote adoption of technologies by industry.

Dr. Mukherjee pointed out that industry uses services such as banking, logistics and information technology as inputs for their manufacturing. She made a case for the industry bodies to lobby with government for providing subsidies on these input services. She explained, “World Trade Organisation (WTO) does not prohibit governments from providing subsidies to the service sector. Therefore,

instead of seeking general subsidies, exporters can seek subsidies for the input services used in their manufacturing process. This will enhance their global competitiveness without violating the rules of the WTO.”



As a senior representative of IFAD, Ms. Omar explained how access to last mile services can help small farmers and livestock holders reduce cost and enhance productivity. IFAD is an international financing institution under the United Nations and it offers concessional loans to governments for agriculture and rural development projects.

Within the UN family, IFAD has a special mandate as it works towards alleviation of rural poverty. IFAD is present across 124 countries and it has presence in India for the last 40 years. India is a leading donor of IFAD and it is also a large borrower of the fund.

Ms. Omar shared details of how IFAD helped small farmers and livestock rearers access last mile services to reduce cost and improve productivity. Explaining this in detail, Ms. Omar said, “IFAD has brought veterinary service to small farmers and livestock rearers by roping in community health workers. These community health workers offer first aid, training, castration, deworming and fodder & feeding services to livestock rearers. These services help farmers reduce mortality rate among their livestock, multiply the herd and earn more income. Livestock rearing is a major risk coping strategy for small farmers in drought-prone areas.”

Ms. Omar also stressed on the importance of insurance service in the fisheries sector by narrating how the work of IFAD has benefitted small scale fishermen. IFAD has helped small fishermen access fishing asset insurance. IFAD works with the rural development department and the fisheries department of Government of Tamil Nadu to customize asset insurance products for small fishermen. It has also designed customized insurance products to protect fishermen against accidents or loss arising from natural calamities. Through this initiative, fishermen could access insurance service by paying just 1% premium as against the

market rate of 4-5% premium. This initiative has also fast-tracked insurance claim settlement for fishermen.

Speaking further about the delivery of these services, Ms. Omar pointed out, "These last mile services are provided through community based organizations or producers' collective. These organizations rely on social capital for efficient delivery of services to its members. Farmers are also willing to pay to access these services, especially when they are closely linked to value chains."

Ms. Omar concluded her remarks by stressing on the need to build a strong platform as an interface between farmers, government and private sector. This platform can become an effective or trusted partner by all parties enabling small holders to reap some opportunities in the market. At the same time, it allows market to source quality and reliable food from farmers.



Mr. Himanshu Goyal

India Business Leader,
The Weather Company, an IBM
Business

Mr. Goyal discussed how advanced weather services, based on digital technologies, can help farmers and food companies make informed decisions.

Mr. Goyal explained how farmers and food companies can benefit from digital technologies, which enable traceability of food in the supply chain as well as access to latest market prices for food commodities.

He said weather advisory service is important not only at the farming stage, but also during the distribution of agro-commodities where suitable cold storage facilities need to be provided based on weather conditions.

Explaining the significance of weather advisory service at the farming stage, Mr. Goyal said, "Farmers across the world are still struggling to make right decisions because of lack of reliable weather information. Over 65% of calls made by farmers to the Kisan Call Center in India are related to weather queries. Changes in weather patterns affect the soil condition and hence farm productivity."

Mr. Goyal remarked that forecasting weather with precision can be made through advancement in digital

technologies such as Internet of Things (IoT) and Artificial Intelligence (AI). Therefore, in order to harness the benefit of these technologies, he recommends that farmers digitize their landholding. "By digitizing their land, farmers can access data on soil conditions, data on the prevailing weather conditions (including air moisture, humidity and other parameters) and also benefit from the weather forecast for the next three days or the next 15 days."

Mr. Goyal also mentioned that advanced digital technologies can predict weather conditions better than the electromagnetic devices used in weather stations.

Explaining the significance of weather advisory service at the distribution stage, Mr. Goyal said, "India is a major exporter of Psyllium husk, which is a fibrous food product grown largely in northern Rajasthan, to USA. This product is highly vulnerable to air moisture condition and can easily rot if the air moisture level goes up. Therefore, appropriate storage infrastructure will help preserve this product during transit. Digital technologies can offer accurate and timely weather insights on prevailing weather conditions during transit so that transporters can adjust the storage conditions accordingly."

Sharing information about The Weather Company, Mr. Goyal said the organisation which is headquartered in Atlanta, Georgia, provides some of the world's leading technology platforms and services leveraging weather and related data.

He added, "We enable businesses and their customers to make informed decisions — and take action — in the face of weather. Three years ago, the company was acquired by IBM, which is one of the world's leading information technology services company."

The Weather Company is able to predict weather conditions based on physics, observation and computing power of digital technologies. IBM has launched a decision platform known as the Watson Decision Platform for Agriculture, which provides AI-driven insights for the agriculture ecosystem.

Mr. Goyal concluded his remarks by sharing another example of how cutting edge technology can support agriculture sector. He said IBM has launched IBM Food Trust™ which uses blockchain technology to create unprecedented visibility and accountability in the food supply chain. It is the only network of its kind, connecting growers, processors, distributors, and retailers through a permissioned, permanent and shared record of food system data aimed at improving food for all, he added.



Mr. Milind Kulkarni

General Manager -
Manufacturing, Kansai
Nerolac Paints

Mr. Kulkarni explained the transition of industrial paint manufacturers from just being the suppliers of paints to providers of a bouquet of premium services to automobile companies. Mr. Kulkarni mentioned how paint suppliers are offering premium customer service and supply chain solution to automobile manufacturers with agility and responsiveness using digital technologies.

Kansai Nerolac Paints is a subsidiary of the 100-year old Kansai Paints Group, which is one of the top 10 manufacturers of industrial paints in the world. Kansai Nerolac Paints produces automotive paints (used in cars and other vehicles) and decorative paints (used in buildings and construction).

Mr. Kulkarni elaborately described the transformation that has taken place in the automotive paint industry in the last 30-35 years. He said, "Three decades ago, the colour of paints used in automobiles were limited to black and white. But today, paint suppliers offer many choices of shades for customers, based on the model of the car and other factors such as latest trends, aesthetics and safety of the body. Also, the shelf life of paint has declined in recent years as car owners want to change the look of the vehicle by experimenting with new colours."

With the evolution of colouring choices, Mr. Kulkarni explained how paint manufacturers are supporting automobile manufacturers through value added services.

He mentioned how advancement in digital technologies has enabled paint suppliers to develop new shades and make visual presentations to automobile manufacturers. With digital technologies, paint suppliers can also educate automobile manufacturers on the past trends and upcoming trends in shading.

In this scenario of changing customer choice, Mr. Kulkarni explained the premium services offered by paint manufacturers to automobile companies and end consumers (in the case of decorative paints).

He said, "Today, automobile companies want paint

suppliers to take accountability for quality of their paints. Therefore, paint manufacturers are offering complete quality management service to car manufacturers. With the evolution in service offering, the industry has also witnessed change in the pricing model. While earlier the price of paint was fixed on per litre basis, today paint suppliers charge prices based on the number of vehicles painted."

Mr. Kulkarni also pointed out how paint manufacturers have used cutting edge technologies to reduce time taken to paint a car.

He elaborated, "By adopting nanotechnology, paint makers have reduced the time taken to paint a car. This has helped automobile makers to reduce their takt time significantly. Takt time is the average time between the start of production of one unit and the start of production of the next unit. The decline in takt time has resulted in energy conservation, reduction in operating cost and enhanced capacity utilization of automakers."

As part of their service, Mr. Kulkarni also mentioned how paint suppliers are collaborated with automakers in managing their inventory better through Vendor Managed Inventory (VMI). He said, "Paint suppliers are using digital technologies such as GPS and vehicle tracking systems in their efforts to manage the inventory of automakers better."

For the last 20 years, Kansai Paints has been adopting IT-enabled solutions such as Customer Relationship Management (CRM), Supplier Relationship Management (SRM) and Enterprise Resource Planning (ERP) to ensure timely availability of products and services to automakers.

By completely digitizing its manufacturing sales and dispatch operations, Kansai has been able to offer premium services to its customers, Mr. Kulkarni pointed out.

He concluded his address by sharing the value added service offered by Kansai Nerolac in the decorative or architectural paints segment.

He said, "Earlier, architects and home owners used to have difficulty in choosing the right shading for their building or room. Today, with the use of digital technologies, customers of decorative paints can visualize the appearance of their living room when different shades are applied. Kansai Nerolac offers customers the facility to check various shading options and choose their preferred shade with a click of a button."



Mr. Khalid Ahmed Mohammed

Head, Private Sector & Trade Finance Division, Arab Bank for Economic Development in Africa (ABEDA)

Mr. Mohammed began his address by sharing a brief overview of his organisation. He informed, "Arab Bank for Economic Development in Africa (ABEDA) is a multilateral lending institution formed by 18 member countries mainly from the Middle East and North Africa. The mandate of the bank is to promote economic development in African countries, especially sub-saharan Africa. The bank has financed projects in 45 of the 56 African countries."

Speaking further about the operation of the bank, Mr. Mohammed said, "In terms of finance, the bank has two windows of operations. Under the first window, the bank provides concessional loans to government projects, especially in areas such as rural development, education, healthcare, power, logistics, transport etc. Under the second window, ABEDA lends to private companies in the form of trade finance or by offering short term, medium term and long term credit."

Sharing details of how his organisation supports MSMEs and microfinance institutions, Mr. Mohammed said, "Our bank offers indirect funding support to MSMEs. Under this approach, we extend lines of credit to other financial institutions, such as regional banks, national development banks and local commercial banks for on-lending to MSMEs. ABEDA also partners with institutions and agencies that directly support micro finance institutions. Micro finance is a crucial part of the national development agenda of most sub-saharan African countries. The bank has also offered technical assistance for capacity building in order to promote formalization of MSMEs operating in the informal sector."

Mr. Mohammed concluded his remarks by calling for more government and multilateral initiatives to fund small and marginal farmers. He said, "Agriculture is the major source of employment and economic development in many less developed countries. Globally, there are more than 500 million small holder farm households, representing 2.5 billion people or one third of the world population. These small farmers have limited or no access to formal source of finance. Therefore, there is a need to enhance flow of formal credit to these farmers to improve their productivity."



Capt. Somesh Batra

Vice Chairman, MVIRDC
World Trade Center
Mumbai

Capt. Batra shared his perspectives on how services support various stages of agriculture value chain, right from cultivation to post-harvest distribution.

He said, "Agriculture services are embedded in various stages of activities, namely weather forecasting, soil testing, irrigation, storage and logistics. Leasing of containers to store farm commodities is an essential service at the post-harvest stage. An efficient warehousing service contributes to the food security of a country as excess produce of a bumper year can be stored to meet shortage during crop failure or drought in future."

Capt. Batra specifically emphasized the need for better storage and supply management services to minimize the adverse impact of production shocks on market prices. "In India, prices of commodities such as sugar, lentils, onions and tomatoes changes considerably depending on production. Therefore, we need to manage their storage and supply efficiently to protect the interests of the farmers and consumers."

Capt. Batra concluded his remarks by pointing to other support services (such as logistics), which are crucial for agriculture sector.

Question and Answer Session:

1. "Small and marginal farmers need to be supported to adopt latest technologies for farming, cold storage and marketing. Can private sector technology solution providers collaborate with International Fund for Agricultural Development (IFAD) to scale up their projects and reach a large community of farmers?"

Answer: (Ms. Rasha Omar) "IFAD is willing to partner with private sector firms to support small farmers. We offer loans to state governments for carrying out capacity building projects for small farmers. State governments use this loan to provide capacity building for farmer producer organizations. This way, our funding programme impacts the lives of around two million farmers in India. Private sector technology solution providers can work closely with state governments and farmer producer organizations."

Panel Discussion: Productivity in Services: Issues, Trends and Challenges

This panel session brought diverse perspectives from industry leaders representing education, financial services, legal services, digital marketing and international trade. All the panelists advanced a common argument that skill development will be a critical determining factor of productivity in services in this age of digital transformation.



Caption: (From Left to Right) Mr. Scott Wang, Vice President - Asia Pacific, World Trade Centers Association, Mr. Gopal Devanahalli, CEO, MeritTrac, Mr. Kalyan Basu, CEO & MD, A.Treds Limited, Mr. Firoze B. Andhyarujina, Senior Counsel, Supreme Court of India, Mr. Sauvik Banerjee, CTO-TataCLiQ and Vice President, Digital Initiatives - Tata Industries, Ms. Viktoria Lopatina, Founder and Managing Director, Kat.El International Trade Consulting and President, Tuscany-India Association, Ms. Sangeeta Godbole, IRS, Director General, Services Export Promotion Council (SEPC), Mr. Vivek Bhargava, CEO, DAN Performance Group



trade in services. She said, "There is not any acceptable tool or index to measure productivity in services and we have to work it out. Especially if we talk about export data on services, we realise that we do not have any good comparable data on services. We don't know whom we are selling to, what we are selling to and how much we are selling to? We are only dependant on RBI Balance of Payments Data which do not give a wider picture though."

In her opening remarks, Ms. Godbole highlighted the strengths of India's service industry and some of the issues facing this industry. Ms. Godbole said, "Services account for 40% of exports of India, compared to 9% in China, 28% in USA and 20% in Japan. The high share of services sector in India's exports shows that the country is highly productive and has huge potential in services as compared to other developed countries. India is not only an exporter of IT & ITes Services, but also many non-traditional services such as animation, VFX, Gaming and this industry is expected to grow very fast. Despite the emergence of advanced technologies such as artificial intelligence, jobs will continue to grow in this sector."

Ms. Godbole suggested exporters from service sector to take advantage of incentives offered by government. She pointed out, "Government of India is providing incentives at the rate of 5-7% on the Net Foreign exchange earned under the SEIS Scheme to the services exporters. I would like to request all companies who are into services exports to become the member of SEPC to avail these incentives."

Ms. Godbole pointed to the need for adopting indicators to measure productivity in services and creating database on

Speaking about the future initiatives of SEPC, Ms. Godbole said, "The Council is looking forward to start an IP Helpline on SEPC portal with the support of Department of Commerce. We are also looking forward to make a proposal on IP fund to support our Industry so that we do not only restrict ourselves to outsource work rather we will work towards creating our own IP's for our content. Productivity is excellent; India is already exporting a good

fraction of services to the globe. What is needed is we have to come out from the outsourcing services mode and focus resources on creating IP's for our own selves."

She concluded her remarks by pointing out that services has huge contribution in exports as well as GDP but it remains a hassle area owing to less clarity and many regulatory deficits. More and more such conferences and panel discussions need to be organised to have clarity on services and its potential for the growth of the economy, Ms. Godbole added.



Mr. Wang opened the panel discussion by offering an overview of the issues, challenges and trends shaping the global services sector.

Underlining the significance of the theme of this panel session, which is productivity on services, Mr. Wang said, examination of issues, challenges and trends in services productivity will offer a basis for determination of public policy and corporate strategies.

He further added "With the majority of workforce engaged in service sector today, the enhancement of productivity in services industries, such as financial services, transportation, telecommunications, tourism, healthcare, education etc. is increasingly important to the competitiveness, sustainability and quality of life for global and regional economies."

Mr. Wang remarked, "Intermediate services such as design, marketing, logistics, ICT etc. add tremendous value to the end products. It is estimated the service sector represents 23% value of the sales of industrial sector in the United States. The improvement of productivity in these service sectors will directly impact the competitiveness of manufacturing firms."

Speaking about the potential of Asia Pacific region in services industry, Mr. Wang said, "The region has been a major player in services trade. According to United Nations, the Asia-Pacific region accounted for 28% of world exports and a third of world imports in services in 2017. Given the

size of population and the relatively lower services trade ratio to gross trade volume of the region, there is no doubt that services trade is going to be a bright spot of regional development moving forward."



Mr. Devanahalli shared his perspectives on how productivity in education and skilling services industry has improved with the emergence of digital technologies. He said, "Education and skilling industry has witnessed remarkable shift in the last few years, that has not only enhanced productivity in the industry but also offered new opportunities for trainers and trainees. Before the onset of digital technologies, education and skill training were delivered in classrooms for a limited set of students. However, the emergence of online education has ensured the reach of skilling and education to a large set of students and beneficiaries the worldover. Today, MeritTrac conducts online skilling programmes, where instructors, sitting in one part of the world, can deliver live tutoring to students across wide geographies. This method of education, which is operating like a gig economy, has brought a major shift in productivity in this industry."

Mr. Devanahalli explained the improvement in productivity in insurance industry through another real life example. He said, "Insurance companies employ thousands of sales persons to sell insurance products to their potential clients. Quite often, insurance companies launch new insurance products or make changes in their existing products. MeritTrac has developed a mobile app to facilitate sales executives of insurance companies to update their knowledge on all the latest insurance products before meeting their clients. This mobile app provides updated information on all the latest insurance products launched by the company to its sales executives in the form of videos. The mobile app also facilitates the HR department of the insurance companies to monitor the performance of its sales executives."

Mr. Devanahalli concluded his remarks by sharing an example of how artificial intelligence is promoting productivity in healthcare sector, especially in the treatment of cancer patients. At a time when there is lack of

sufficient oncologists for treating the growing number of cancer patients in India, advancement in digital technologies is helping hospitals overcome the shortage of talent.

He said, "Medical experts in Manipal Hospitals are using 'IBM Watson for Oncology', which is an artificial intelligence platform of IBM, to identify right treatment options for cancer patients. This platform suggests various treatment options for cancer patients based on its interpretation of the medical data and lab tests reports of the patients. This artificial intelligence platform predicts the probability of success for various treatment options. This platform also enables oncologists of Manipal Hospitals offer tele-consultation to cancer patients seeking expert second opinion from any part of India."



In his address, Mr. Basu explained how the trade receivable discounting platform 'Invoicemart' has improved efficiency and productivity in the financial services industry, especially in the segment of working capital financing for MSMEs.

'Invoicemart' is a trade receivable discounting platform launched by A.TREDS Ltd., a joint venture between Axis Bank and mjunction. MSMEs who supply goods to large corporate houses on credit can obtain immediate cash by raising this invoice on 'Invoicemart'.

'Invoicemart' is a dynamic and digital platform that facilitates efficient discounting of invoices or trade receivables within 48 hours from the time of raising invoices.

Explaining the procedure for discounting bill on this platform, Mr. Basu said, "The platform has onboarded MSME suppliers, large corporate buyers and financiers. Large corporate buyers are onboarded on this platform after fulfilling KYC procedure and signing an agreement."

He explained further, "After delivering goods to large corporate houses on credit, MSMEs can raise the invoice on this platform. The large corporate buyer accepts this

invoice, following which the invoice is sent to financial institutions. Different financial institutions offer their bids on the rate at which they are willing to discount the invoice. MSMEs can choose among the discount rates submitted by various financial institutions. The entire process is completed in a time bound manner and MSME sellers receive cash within 48 hours from the time of raising invoice on this platform."

Highlighting the importance of this platform in meeting the financial needs of MSMEs, Mr. Basu said, "While MSMEs in India contribute more than 30% to the GDP, their share in total outstanding bank credit is hardly 20-25%. The formal financial sector meets only 5-6% of the total credit needs of MSMEs, with the remaining portion met by informal sources. Around 120 million people are employed in MSME sector, the largest source of employment after agriculture. Availability of collateral-free credit at reasonable interest rate is crucial for the survival of MSMEs."

Mr. Basu explained how the trade receivable platform has benefitted MSMEs, large corporate buyers and banks. This platform offers immediate liquidity to MSME sellers without any collateral and thereby reduces any stress on their working capital situation.

Banks can benefit because by discounting invoices on this platform, they can meet their mandatory priority sector lending targets. Large corporate buyers benefit from this platform because discounting of their invoices in this platform is treated as acceptances in their books instead of it being classified as loans.

Sharing more information about 'Invoicemart', Mr. Basu mentioned, "Since its launch in July 2017, the platform has discounted more than 200 thousand invoices amounting to Rs. 2250 crore. Government has also made it mandatory for all companies with a turnover of more than Rs 500 crore to be registered with trade receivable discounting platforms. Thus, this platform is the way to go for MSME financing."

Mr. Basu concluded his remarks by sharing the example of how the vendors of Apollo Hospitals are benefitting from its receivable exchange platform.

He informed, "Vendors of Apollo Hospitals upload their invoices and get it discounted at attractive rates on this platform. Even invoices worth as low as Rs 700 is discounted efficiently on this platform. Thus, this platform serves MSMEs better than any other formal modes of financing."



Mr. Firoze B. Andhyarujina

Senior Counsel, Supreme Court of India

Mr. Andhyarujina eloquently put forth the productivity challenge faced by India's legal service industry and offered multi-pronged suggestions for speedy and equitable dispensation of justice. Mr. Andhyarujina pointed to the huge backlog in court cases as a reflection of the poor productivity in India's legal system. He said, "Today, across subordinate courts in India, more than 2.61 crore legal cases are pending, out of which 22.67 lakh cases have been pending for over 10 years, of which 20% cases have been filed by women, while 10% by senior citizens."

Mr. Andhyarujina also brought in the issue of delay in appointment of judges as a factor impacting productivity of the legal system. He said, "The pendency of appointment of judges in the subordinate courts is 26%, while the corresponding figure for high courts is 36%. Across 24 high courts in India, appointment of 392 judges has been pending as of date."

With this background information on India's judicial system, Mr. Andhyarujina proposed some actionable suggestions to enhance productivity in the legal services industry. He recommended, "India must set up fast-track e-courts with facilities such as e-filing of cases and minimal paper work. Secondly, government must promote alternative dispute resolution mechanism such as mediation, reconciliation. Disputes or cases below a specified monetary threshold must be assigned to alternative dispute settlement mechanism."

Mr. Andhyarujina suggested that disputes or cases below a specified monetary threshold must be assigned to tribunals, which are quasi-judicial authorities. Promoting tribunals across various sectors of economic activity will ensure speedy dispensation of justice, he remarked.

Mr. Andhyarujina also called for setting up a robust human resource development system in India's judicial system to train high quality judges with professional integrity and expert lawyers to handle cases. Referring to best practices in other countries in this regard, he pointed out the example of Germany's Heidelberg University, which offers specialized courses for training judges. He suggested the

setting up of a human resource cell in the judicial system of India to train professional competent lawyers and judges. Mr. Andhyarujina stressed on the importance of having progressive and unambiguous legislation which can be easily understood by common man. In this regard, he mentioned the example of Insolvency and Bankruptcy legislation recently introduced by Government of India to expedite recovery of bad loans in the banking system.

Lastly, Mr. Andhyarujina suggested the adoption of latest technologies wherever possible for speedy and equitable dispensation of justice.

He concluded by pointing out that the best way to enhance productivity in legal services is to reduce litigation. People must realize how to settle disputes through mutual negotiation or conciliation, without approaching courts, he remarked.



Mr. Sauvik Banerjee
CTO-TataCLiQ and Vice President, Digital Initiatives - Tata Industries

Mr. Banerjee introduced his organisation as part of the 150-year old corporate group that contributes to nation building. He represents a team in Tata Industries which is responsible for growing the new age internet business of Tata Group.

Mr. Banerjee outlined some of the constraints hindering productivity in services sector, especially e-commerce. These constraints are poor internet connectivity infrastructure and prevalence of pin code system. He emphasized that India must have high quality optical fibre connectivity if the number of e-commerce users has to grow from the current 30 million to 100 million in the next few years. He also called for availability of 80 GgHz of airwaves (which is true 4G) in all tier two and tier three cities to support the growing number of e-commerce users in these cities.

Another constraint mentioned by Mr. Banerjee is the pin code system in India, where a unique pin code covers a radius of 5 sq km, unlike in USA and UK where every household has a zip code or post code.

Mr. Banerjee explained how TATACLIQ is setting new benchmark in productivity improvement in e-commerce

industry even while facing the above mentioned constraints. The company addresses productivity in e-commerce by focusing on product quality, timely delivery and premium customer experience.

Speaking about product quality, Mr. Banerjee emphasized that in the midst of fake products being sold across various e-commerce platforms in India, TATACLIQ has differentiated itself by selling authentic goods. As a result, TATACLIQ has created a brand-obsessed online platform rather than a price-discounted platform.

Shedding light on the strategy of TATACLIQ to provide premium customer experience, Mr. Banerjee informed that his organisation follows the globally benchmarked customer obsession index. This index is a better way of capturing customer experience than Customer Satisfaction (CSAT) or Net Promoter Score (NPS), which is usually followed by other online retailers.

TATACLIQ also provides premium customer experience through other ways such as personalization of service, offering product or service recommendations and creating algorithms to cater to expectation, he mentioned.

Mr. Banerjee concluded his remarks by emphasising, "In e-commerce sector, the biggest needle mover of productivity is meeting the customer needs in quickest possible time. Retailers must be able to adopt technology to deliver goods to customers at the least possible time."



Mr. Bhargava highlighted the impact of digital technologies on advertisement industry and emphasized on the need for skill development for workforce to stay relevant in this rapidly evolving industry.

Narrating his rich experience in the advertisement industry, Mr. Bhargava said, "I started my digital marketing company 20 years ago, when most people in the country did not have access to internet. In these 20 years, the advertisement industry has undergone tremendous transformation led by digital technologies. Today, digital technologies are a major catalyst for business operations, whether it is customer acquisition, brand building, cross-selling or up-selling."

Highlighting the challenge of artificial intelligence replacing humans in the advertisement industry, Mr. Bhargava said, "Advertisement industry employs more than 45,000 professionals globally who are from science, technology, engineering and mathematics (STEM) background. In India, there are more than 2000 digital marketing professionals serving various clients. The emerging technology of artificial intelligence has the potential to replace these professionals in the coming years. The Optimisation Engine of Facebook and Google perform better than digital marketing professionals in solving the marketing problems of companies."

Therefore, Mr. Bhargava suggested a responsive education and skill development system that caters to the needs of the rapidly evolving industry. He remarked, "We need a sound education and skill development system that imparts creative, problem solving and communication skills among youth and mid-career professionals in this industry. The rapid transition in the industry will make the existing skills outdated and hence marketing professionals must constantly reinvent and retrain themselves to remain relevant. Marketing professionals must be able to identify the problems of their clients and find creative solutions in record time."



Ms. Lopatina shared her perspectives on productivity in services industry and its impact on the competitiveness of the overall economy. In order to enhance productivity in services, she stressed on the need to create a culture of innovation by investing in human capital. Ms. Lopatina said, "The main tools for competitiveness are innovation, skill development and investment in young population, which is the future of our nation. The current trends of digitization and globalization have transformed the landscape of the service sector. In this era of digitization, the link between economic growth and services sector is growing stronger."

Speaking about the opportunities and challenges of employment in service sector, Ms. Lopatina said, "Service sector is the major employer in most advanced countries. as of 2017, service sector accounts for more than 70% of

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labour force in the OECD countries. even in Italy, service sector plays an important role in job creation.”

Underlining the significance of skill development for employability in service sector, Ms. Lopatina said, “Government and industry must come together to create an efficient system for skill development and training. Particularly, the service sector needs trained staffs with proficiency in linguistics and information technology. Youth and senior industry professionals must be trained and retrained to prepare them for the changing nature of work in this era of technological revolution.

Ms. Lopatina concluded her remarks by pointing to the recently introduced training programme in Italy, where students of high schools are given opportunity to work and

get trained in the industry. This equips students with the skills demanded by the industry when they enter the job market.

Question and Answer Session:

What is the role of e-courts in enhancing productivity in the judicial services sector?

E-courts can function independently in commercial disputes. However, in criminal and civil cases, where there is a need for investigation, examination and cross-examination of witnesses and evidences, e-courts can function only as a supplementary body to assist the main courts.



Release of Handbook

Hon' ble dignitaries at the inaugural session released the Handbook of the 8th Global Economic Summit on 'Services: Enabler of Growth for Trade and Industry'.

The Handbook is a joint publication of MVIRDC World Trade Center Mumbai and All India Association of Industries (AIAI). The publication brings together rich perspectives on service sector from a galaxy of influential voices in the fields of international trade, fourth industrial revolution and smart cities.

The articles published in the compendium carry insightful thoughts on global trade in services supported by meticulous analysis of data on various relevant parameters.

At the global level, World Trade Organisation is working on trade facilitation in services industry to promote cross-border trade in the services sector. The importance of service sector has prompted governments to redesign their trade agreements to include services such as e-commerce, easing barriers to movement of professionals, students and tourists. This Handbook brings expert perspectives on multilateral trade negotiation, with special reference to services industry.

Experts from World Trade Organisation, Asian Development Bank, United Nation, World Trade Centers Association and other prestigious organizations contributed their views on services to the Handbook.

Officials from multinational companies and trade support institutions have offered interesting case studies on how weather services and trade support services can support trade and industry.

As the world economy is embarking on an incredible journey of digital transformation, business organizations are deploying robotics, artificial intelligence and other technologies associated with fourth industrial revolution. Industry 4.0 technologies are redefining business models in traditional services such as transportation, wholesale and retail trade, education and healthcare.

The Handbook explores the disruptive effect of these technologies on agriculture, manufacturing and services sector.

The wealth of information contained in the Handbook will serve as a useful guide for policymakers and officials from industry bodies, think tanks, academic institutions and students.

A soft copy of the Handbook can be accessed from the following weblink of MVIRDC World Trade Center Mumbai.

<http://www.wtcmumbai.org/wp-content/uploads/2019/03/GES-2019-Summit-Handbook.pdf>



Distinguished dignitaries releasing Handbook at the 8th Global Economic Summit in MVIRDC World Trade Center Mumbai. (From Left to Right) Mr. Pascal Kerneis, Managing Director, European Services Forum, Mr. Scott Ferguson, Chief Executive Officer, World Trade Centers Association New York, Mr. Ibrahim Ameer, Hon'ble Minister of Finance, Government of Maldives, Dr. Robert B. Koopman, Chief Economic and Director, Economic Research and Statistics Division, World Trade Organisation, Mr. Jacek Sutryk, Mayor of Wroclaw, Poland, Mr. Vijay Kalantri, President, All India Association of Industries (AIAI), Dr. Harshadeep Kamble, I.A.S., Secretary (Small & Medium Industries) & Development Commissioner (Industries), Government of Maharashtra, Dr. Rupa Chanda, RBI Chair Professor of Economics, Indian Institute of Management Bangalore, Dr. Aaditya Mattoo, Research Manager, Trade and International Integration, Development Research Group, World Bank

Felicitation Ceremony

The 8th Global Economic Summit recognized the outstanding performance of start-up enterprises, MSMEs, multinational companies and government organizations in a diverse range of service sectors. Organizations were felicitated for their extraordinary role in technological innovations, adopting eco-friendly business practices, promoting financial inclusion and supporting trade & industry in various other ways.

Society for Electronic Transactions and Security



Dr N. Sarat Chandra Babu, Executive Director, SETS (second from left) being felicitated by Mr. Ibrahim Ameer, Hon'ble Minister of Finance, Government of Maldives (second from right)

Inspired by the vision of Bharat Ratna Dr APJ Abdul Kalam, Society for Electronic Transactions and Security (SETS) is an initiative of the Office of the Principal Scientific Advisor (PSA) to Government of India. The Society was formed to develop cyber security solutions that can protect the information wealth of India. The organisation provides solutions for information security problems which are of national importance.

Society for Electronic Transactions and Security (SETS) is being felicitated in recognition of its commendable contribution in the areas of Cyber Security and Cryptology.

MapmyIndia



Mr. Shivalik Prasad, Executive Director, MapmyIndia (third from left) being felicitated by Mr. Jacek Sutryk, Mayor of Wroclaw, Poland (third from right)

Founded in New Delhi in 1995, MapmyIndia is a frontrunner in empowering diverse sectors such as financial, healthcare, ecommerce, transportation and billions of Indians through maps, GPS navigation systems and internet of things. During the days of demonetization, the company developed an app to help people locate ATMs, nearest bank branches and Cash Point of Sale etc. The company has also supported an alert app to prevent fisherman and coast guard from straying beyond Indian waters.

MapmyIndia is being felicitated for its laudable mission to make the world a better place to live through maps and location technologies.

BagForEver



Mr. Manish Kelshikar, Director and Chief Creative Officer, BagForEver (DSGN Inc.) [extreme left] being felicitated by Dr. Harshadeep Kamble, I.A.S., Secretary (Small & Medium Industries) & Development Commissioner (Industries) Government of Maharashtra (2nd from left right)

BagForEver was founded by Mr. Manish Kelshikar & Ms. Rupali Kelshikar with a mission to transform India into a plastic-free country. The company manufactures and supplies convenient, durable and fashionable multi-utility bags made out of ReCycled PET bottles which have become popular among all aged women in urban and semi-urban areas.

BagForEver is being felicitated for promoting reuse of carry bags and preventing people from using polybags while creating employment opportunity for Person with Disabilities through its retail model BagForEver / CartWithHeart.

Dr. Paul Pallath, Head – Big Data & Advanced Analytics, Vodafone Idea Limited



Dr. Paul Pallath, Head – Big Data & Advanced Analytics, Vodafone Idea Limited (left) being felicitated by Dr. Ganesh Natarajan, Executive Chairman and Founder, 5FWorld (right)

Dr. Paul Pallath is responsible for defining the big data and machine learning strategy for India's leading telecom service provider Vodafone Idea Limited. Dr. Pallath is driving the transformation and cultural change of the organization to a more Data Driven organization, by evangelizing every part of its business.

Dr. Pallath is being felicitated for deploying Machine Learning and Analytics to understand customer behavior and serve them proactively.

Arya.ai



Mr. Vinay Kumar Sankarapu, Founder, Arya.ai (left) being felicitated by Dr. Ganesh Natarajan, Executive Chairman and Founder, 5FWorld (right)

Arya.ai is a fast growing Deep Learning startup that offers Autonomous 'AI' Operating System to banks, insurance companies and other financial institutions to automate and augment their key decisions and processes. Arya.ai through its operating system, enables banks, insurers and lending institutions to operate in cost effective manner and deliver differential customer experience by automating complex decisions like Claims, Underwriting. Designed to be diligent, Arya's artificial intelligence can trace suspicious activity with high precision in all the key financial processes like claims, underwriting, loan disbursement, trade finance etc, making the operations to be risk averse and still be automated. Arya.ai is being felicitated for its admirable vision to transform financial services industry through artificial intelligence and machine learning technologies.

Forum of Industry and Academic Knowledge Sharing



Mr. Vikas R Panditrao, Co-Founder, FIAKS and Ms. Anuradha V Panditrao, Co-Founder, FIAKS (both left) being felicitated by Dr. Ganesh Natarajan, Executive Chairman and Founder, 5FWorld (right)

Forum of Industry Academic Knowledge Sharing (FIAKS) is an innovative knowledge sharing platform for professionals from Banking, Fintech, Payment and E-Commerce.

Started by veteran bankers Anuradha Panditrao & Vikas Panditrao, the platform has pioneered innovative use of social networking channels & messaging app for skilling and re-skilling.

FIAKS is being felicitated for its outstanding contribution in the area of education and skill development.

GoApptiv Private Limited



Mr. Rajasekhar Parcha, Co-founder, GoApptiv Private Limited and Mr. Sreeram Venkitaraman, Co-founder and COO, GoApptiv Private Limited (both left) being felicitated by Mr. Dharmendra Pratap Yadav, IAS, Secretary, MSME Department, Government of Tamil Nadu (right)

Mumbai-based GoApptiv was founded by two visionary youngsters Mr. Rajasekhar Parcha and Mr. Shriram Venkitaraman with a vision to transform India's healthcare sector by developing smart digital platforms. The shared digital platforms developed by the company addresses the unique challenges faced by the Indian healthcare industry. The platform optimizes pharma operations, enables better engagement between physicians and patients and assists channel partners in supplying quality medicines to rural villages.

GoApptiv is being felicitated for addressing the unique challenges of India's healthcare industry by introducing digital platforms.

Cisco Systems India Pvt. Ltd.



Mr. Ravi Koulagi, Global Director, Internet of Things and Smart City Solutions, Cisco Systems India Pvt. Ltd. and Mr. Umang Arora, Enterprise Account Manager, Cisco Systems (both left) being felicitated by Mr. Abhishek Chaudhary, Vice President, Corp. Affairs, HR & Company Secretary- Delhi Mumbai Industrial Corridor (DMIC) (right)

Cisco India is actively partnering with the Union government's Smart Cities initiative and is closely working with the state governments like Maharashtra, Rajasthan and Andhra Pradesh etc. in implementing the same.

Cisco has close to 70-80% share of the total Smart Cities projects rolled out and is increasingly forging alliances with several other state governments to turn their cities smart.

Cisco India is being felicitated for its outstanding contribution to India's smart city programme driven by various initiatives through its Country Digital Acceleration programs by creating Centre of Excellence, Innovation Labs and Golden Miles across the country for Smart Cities.

Apollo Hospitals Enterprise Limited



Dr. Narendra Trivedi, Chief Executive Officer, Apollo Hospitals Enterprise Limited and Dr. Prasad Muglikar, Director Medical Services, Apollo Hospitals Enterprise Limited (both left) being felicitated by Mr. Stanislav Baša, Member, Toshiba European Business Partner Advisory Council (right)

It was in 1983, that Dr. Prathap C Reddy made a pioneering endeavour by launching India's first corporate hospital - Apollo Hospitals. Now as Asia's foremost and trusted integrated healthcare organization, every four days, the Apollo Hospitals Group touches a million lives, in its mission to bring healthcare of international standards within the reach of every individual. In a rare honour, the Government of India had issued a commemorative stamp in recognition of Apollo's contributions, the first for a healthcare organization. Apollo Hospitals is being felicitated for its leadership in medical innovation, world-class clinical services and cutting edge technologies. Apollo Hospitals is being felicitated for its leadership in medical innovation, world-class clinical services, for being at the forefront in introducing contemporary medical technologies and also for encouraging preventive healthcare in India.

Aprazer Infotech Pvt Ltd.



Mr. Anurag Dwivedi, NSM, Aprazer Infotech Pvt Ltd. (right) being felicitated by Mr. Pascal Kerneis, Managing Director, European Services Forum (left)

Aprazer Infotech Private Limited has introduced an innovative app 'Aapka Chemist' to connect consumers with nearby retail pharmacists. By onboarding on this app, retail pharmacists are able to cater to neighbourhood customers cost-efficiently. This enables retail pharmacists to provide discounts & cash-backs and compete with online pharmacies.

Aprazer Infotech is being felicitated for its vision to empower retail pharmacies across India and improve customer experience with the use of digital platform.

vPhrase Analytics Solutions Pvt. Ltd.



Mr. Neerav Parekh, Founder & CEO, vPhrase Analytics Solutions Pvt. Ltd. and Ms. Alka Tank, Project Manager, vPhrase Analytics Solutions Pvt. Ltd. (both right) being felicitated by Ms. Rasha Omar, Country Director - India, International Fund for Agricultural Development (left)

vPhrase Analytics Solutions is a Mumbai-based firm founded by technology leader Neerav Parekh. The company's cognitive analytics and natural language generation platform summarizes data into a few bullet points to make understanding easier.

The clientele of vPhrase includes some of the renowned organisations such as Fidelity International, Unilever, HDFC Bank, Kotak Bank, ICICI Lombard Insurance, Motilal Oswal Securities and Sony Entertainment.

vPhrase Analytics Solutions is being felicitated for its outstanding contribution in the field of data science.

SaffronStays



Mr. Devendra Parulekar, Founder, SaffronStays (right) being felicitated by Mr. Khalid Ahmed Mohammed, Head Private Sector & Trade Finance Division, Arab Bank for Economic Development in Africa (left)

SaffronStays is a startup organisation that is disrupting vacation homestay industry by partnering with home owners to monetise their dead assets.

In a short span of three years, the firm has curated 100 boutique homes across six states and managed their hospitality operations, branding, marketing and reservations.

SaffronStays is being felicitated for its vision to become the one-stop solution for vacation rental home industry in India by sticking to its roots (which are: luxury of certainty and exclusivity).

SRL Diagnostics



Dr. BR Das, Advisor & Mentor - R&D Molecular Pathology, SRL Diagnostics and Dr. (Col) Prabal Deb, Senior Histopathologist, SRL Diagnostics (both right) being felicitated by Mr. Scott Wang, Vice President - Asia Pacific, WTCA (left)

Established in 1995, SRL is the largest medical diagnostics company in India with a mission to 'help people on their path to better health'.

Recently, SRL Diagnostics partnered with Microsoft to jointly develop AI (Artificial Intelligence) based solutions for clinical diagnostics. This will aid its clinicians in giving better, more accurate results, much faster.

SRL Diagnostics is being felicitated for its pioneering efforts in the field of medical diagnostics.

Quikr India Pvt. Ltd.



Ms. Sonali Madbhavi, Head - Corporate Communications, Quikr India Pvt. Ltd. (right) being felicitated by Dr. Arpita Mukherjee, Professor, ICRIER (left)

Founded by Mr. Pranay Chulet in 2008, Quikr India Pvt. Ltd. is the country's largest and broadest online classifieds platform that is shaping the future of trading and e-commerce in India.

The company has built different transactional marketplaces for goods, services, automobiles, homes and jobs on top of its classifieds base. Quikr brought the convenience of ecommerce to pre-owned goods by facilitating price negotiations, payment, pickup and delivery, making it the first and only platform to complete all steps of the transaction online across the country.

Quikr is being felicitated for its vision to connect independently every person in the country with buyers and sellers online for their unique needs across multiple categories.

MakeMyTrip



Mr. Sumit Mehta, Director-Technology Development, MakeMyTrip (right) being felicitated by Ms. Sangeeta Godbole, IRS, Director General, Services Export Promotion Council (left)

MakeMyTrip is India's largest and pioneering online travel company which is listed on NASDAQ. The company was founded in the year 2000 by Mr. Deep Kalra and it started India operations in 2005. The company offers a bouquet of travel services viz. air ticketing, hotel and alternative accommodations bookings, holiday planning and packaging, rail ticketing, intercity bus ticketing, car hire and ancillary travel requirements such as facilitating access to third-party travel insurance and visa processing.

MakeMyTrip is being felicitated for its commendable mission to provide customers a one stop shop solution for all their travel needs.

Felicitations of Distinguished Women on the Eve of International Women's Day 2019

Ahead of International Women's Day 2019, distinguished women were felicitated for their outstanding contribution in the field of arts, science, healthcare, trade and commerce.

Ms. Viktoria Lopatina, President, Tuscany-India Association & Founder and Managing Director - Kat.El International Trade Consulting



Ms. Viktoria Lopatina (right) being felicitated by Mr. Scott Wang, President - Asia Pacific, World Trade Centers Association (left)

Ms. Viktoria Lopatina has been actively engaged in promoting trade and investment relations between India and Italy.

She is involved in the study of the Indian market, local culture and ease of doing business in the country. As a result of her work, the Tuscany - India Association was established with the aim to create a bridge between City of Florence, Tuscany Region and India, promoting institutional, cultural, educational and commercial relations.

In the past, Ms. Lopatina has worked with countries such as Russia, Azerbaijan, the Baltic countries and others to promote their relationship with Italy. She was born in Lithuania and currently lives in Italy.

On the occasion of the International Women's Day, Ms. Lopatina is being felicitated for her outstanding contribution in promoting bilateral cooperation between India and Italy.

Ms. Suniti Gupta, Managing Director, Lateral Praxis



Ms. Suniti Gupta (right) being felicitated by Mr. Scott Fergusson, Chief Executive Officer, World Trade Centers Association, New York (left)

Under Ms. Suniti Gupta's dynamic leadership, Lateral Praxis has introduced innovative technological products to help small and medium enterprises and farmers manage their supply chain.

Lateral Praxis has also developed product suite to help companies navigate and manage controls and compliances confidently.

On the occasion of the International Women's Day, Ms. Suniti Gupta is being felicitated for her vision to create India's first traceable produce aggregation platform that will seamlessly connect farmers with buyers.

Ms. Suniti Nanda, Fintech Officer, Government of Maharashtra



Ms. Suniti Nanda, Fintech Officer, Government of Maharashtra (right) being felicitated by Dr Malini V. Shankar (IAS)

Ms. Suniti Nanda has been working with Government of Maharashtra since July 2018 to make Mumbai the Global Fintech Hub. Ms. Nanda has more than 17 years of experience in the Financial Services industry. Ms. Nanda is passionate about change and optimistic about results.

On the occasion of the International Women's Day, Ms. Suniti Nanda is being felicitated for her active role in operationalising the Fintech Policy of Government of Maharashtra.

Ms. Nalini Gupta, Managing Director, Lotus Destinations, GSA Costa Cruise India



Ms. Nalini Gupta, Managing Director, Lotus Destinations, GSA Costa Cruise India (right) being felicitated by Mr. Ibrahim Ameer, Hon'ble Minister of Finance, Government of Maldives

Mrs. Nalini Gupta has more than four decades of hands-on experience in a wide spectrum of travel and hospitality industry in India. Mrs. Gupta founded Lotus Destinations, which represents Europe's leading cruise liner Costa Cruise in India. Mrs. Gupta has been working with governments and ports to develop the untapped potential of cruise liner industry in India, which has the third largest coastline in the world.

On the occasion of the International Women's Day, Ms. Nalini Gupta is being felicitated for her commendable contribution to the development of India's cruise liner industry.

Dr. Shilpa Desai, MD and Founder, C4 Integrated Wellness Pvt. Ltd.



Dr. Shilpa Desai, MD and Founder, C4 Integrated Wellness Pvt. Ltd. (left) being felicitated by Mr. Pascal Kerneis, Managing Director, European Services Forum (right)

Dr. Shilpa Desai is a well-qualified nutritionist & fitness mentor, counselor and psychologist. Over the past five years, Dr. Desai has impacted the lives of more than 5000 individuals through her entrepreneurial venture C4 Integrated Wellness. Dr. Shilpa is also a Research Consultant known for developing organic food recipes and has published several papers & journals on healthcare. She is also a part of several groups as a Trustee and Board Member.

On the occasion of the International Women's Day, Dr. Shilpa Desai is being felicitated for her exemplary contribution in the field of healthcare.

Launch of WTC Mumbai GlobalLinker



Caption: Mr. Sameer Vakil, Co-founder - DigiVation Digital Solutions Pvt Ltd and GlobalLinker making presentation about the online platform during the Summit

During the 8th Global Economic Summit, MVRDC World Trade Center Mumbai announced its strategic partnership with GlobalLinker, which is a fast expanding online network of more than 250,000 small and medium enterprises (SMEs), where members can find buyers, sellers, customers and clients.

Through this partnership, MVRDC World Trade Center Mumbai launched WTC Mumbai GlobalLinker, which will digitize and connect SMEs and make their business growth simpler, more profitable and enjoyable. SMEs can open an account on WTC Mumbai GlobalLinker free of cost and connect with a large global community of businesses, receive up-to-date industry news and enjoy exclusive offers to save on cost.

By onboarding on this digital platform, SMEs can create a unique electronic business card (eBiz) to network with more than 250,000 SMEs.

A key feature of this online platform is LINKER.store, where businesses can create their online store through a few easy steps without incurring any cost and start selling their products online. SMEs can select their store name and personalized theme, add products and build product inventory, share banking and shipping details and finally start selling products online.

LINKER.store also offers value added services such as insights on customer demand, integrated payment solutions, inventory management, refunds and so on.

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LINKER.store
 Creating an online store in few minutes

GLOBALINKER

CREATE, MANAGE & PROMOTE
 your online store for free!

An online store for every kind of business

Create your store in 5 simple steps

- 1 Sign up on GlobalLinker for free access to LINKER.store
- 2 Store setup select your store name & personalized theme
- 3 Add products and build your product inventory
- 4 Share banking & shipping details
- 5 Start selling your products /services

Get started now!
 Log on to wtcmumbai.globallinker.com

Why LINKER store?

We handle Security, Site Hosting, and Backend Logistics so that you can focus on your business

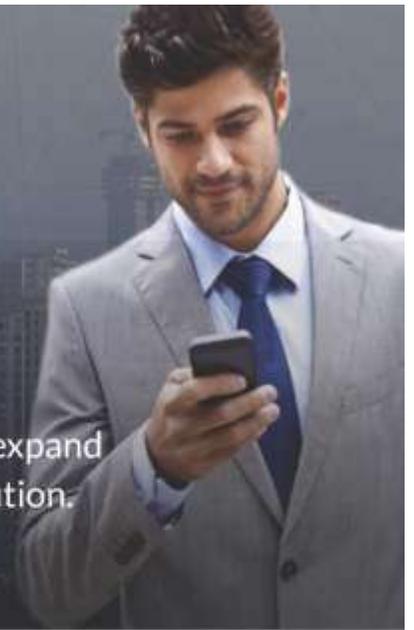
- FREE, DIY & EASY**
 It doesn't matter what you're selling, anyone can use LINKER store to sell their products online. No prior technical knowledge is needed. And, the fastest store was made in 20 minutes!
- CUSTOMISABLE TEMPLATES & THEMES**
 Our templates are mobile-friendly and work on all device types. This is your website, where you can choose the colour and theme that suits your brand identity best. You can even select a personalized domain name to boost your business online.
- GROW YOUR CUSTOMER BASE**
 LINKER.store supports third party analytics tools like Google Analytics & Facebook Pixel, giving you great insights such as which products sell most, who your most valuable customers are, and more!
- BUILT-IN PAYMENT OPTIONS**
 LINKER.store comes with an integrated online payment setup, so your order and user details can be accessed all in one place.
- ORDER & INVENTORY MANAGEMENT**
 Our robust inbuilt inventory management system makes orders real easy! Schedule for courier pickups from the order page itself. Track your deliverables, send customer notifications, handle refunds and more.

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Grow your business network

Connect with new suppliers, clients & advisors & explore business opportunities. Manage all your business contacts in one place.

By signing up, you'll find new suppliers and customers; gain insights from like-minded SMEs, and become a member of a global business network

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Networking Session

Distinguished delegates at the Summit engaged in a fruitful networking session to explore opportunities for joint ventures, transfer of technologies and identify new suppliers & customers. The networking session featured Business to Business Meetings (B2B), Government to Business Meetings (G2B) and Business to Consumer Meetings (B2C).

Delegates from a wide range of services, agriculture and manufacturing sectors participated in these meetings to explore new avenues of partnerships and also gather useful business leads. Ambassadors and consular corps from foreign countries held discussions with the participating delegates to explain investment and trade opportunities and policy regulations in their countries.

Senior officials from World Trade Centers in Sydney, Harbin, San Marino, Taipei and other regions engaged with delegates interested to explore markets in their regions. Trade and investment promotion agencies of Jordan, Poland and Estonia met companies exploring commercial presence in these countries.

The networking session on both the days of the Summit generated more than 3000 B2B, B2C and G2B meetings involving 400 Indian and foreign delegates. Senior officials from corporate houses, multinational companies, MSMEs, start-up enterprises, women-owned businesses and industry clusters participated in the networking session.



Exhibition

The exhibition at the 8th Global Economic Summit brought together officials from trade & industry, commercial divisions of diplomatic missions and state governments to display and demonstrate their products and services or trade and investment opportunities in their regions.

The Summit hosted more than 64 exhibitors representing start-up enterprises, rural industries, MSMEs, women-owned business, large corporate houses, financial institutions, foreign trade missions and state governments. The exhibition received overwhelming response from

visitors and delegates participating at the Summit. Established players and new entrants in sectors such as hospitality, skill development, healthcare and financial services showcased their unique service offerings to potential clients.

Start-up enterprises displayed their latest brands or product offerings to visitors and delegates. Manufacturers and distributors of food and beverages promoted their products by distributing free samples to prospective customers.



Cultural Programme 'Maya's Dream'

Distinguished delegates of the 8th Global Economic Summit were treated to a marvelous dance performance by the troop of Ms. Sohini Roychowdhury, Dancer, Choreographer and Founder-Director of Sohini Moksha Dance Productions.

Ms. Roychowdhury has served as distinguished ambassador of Indian culture in various countries for the last several years. Her majestic dance performance with the multinational troop 'Sohini Moksha' has been garnering enormous appreciation and rave critical reviews from fans across the globe. Ms. Roychowdhury is a visiting professor of dance across 12 universities in various parts of the world. The ace dancer is a winner of Mahatma Gandhi

Pravasi Samman given by the House of Lords, British Parliament. She is also the proud recipient of the Priyadarshini Award from President's Office for outstanding achievement in arts. She has been an Ambassador of India to Europe for India Tourism and Incredible India Campaign.

Ms. Roychowdhury's troop performed a thematic dance opera, 'Maya's Dream', celebrating the eternal spirit of women and their dual roles as mothers and warriors. Universally multitasking and nurturing, the opera rejoices in the spirit of Goddess Kali, Joan of Arc, Frida Kahlo and all womankind, from the beginning of time to present day.



Ms. Sohini Roychowdhury (3rd from left) being felicitated by Mr. Ibrahim Ameer, Hon'ble Minister of Finance, Government of Maldives (4th from left) at the Cultural Programme. Also seen in the photograph are: (from left to right) Mr. Scott Ferguson, Chief Executive Officer, World Trade Centers Association New York, Mr. Vijay Kalantri, President, All India Association of Industries (AIAI), Capt. Somesh Batra, Vice Chairman, MVIRDC World Trade Center Mumbai, Mr. Sharad Upasani, Vice Chairman, MVIRDC World Trade Center Mumbai



Field Visit

As part of the 8th Global Economic Summit, delegates were invited for a field trip to Nashik, a city in the western state of Maharashtra, India on 8th March 2019. The field trip was attended by 22 delegates from seven countries, namely Slovenia, Poland, Ghana, Afghanistan, Mauritius, South Africa and India participated in the field trip.

The delegates were taken to the Nashik Engineering Cluster (NEC) and 'Soma Vinevillage' to learn the operations taking place in these units through first-hand experience and personal interactions with officials.

Mr. S.K. Mathur, CEO, NEC introduced the delegates to the cluster through a brief presentation.

Delegates were warmly welcomed at the NEC where officials from the NEC introduced them to the projects undertaken at the NEC. The NEC is a Special Purpose Vehicle (SPV) company registered under section 8 (Not For Profit Company). The stakeholders include: Department of Industrial Policy and Promotions (DIPP), Government of India, Nashik Industrial Co - Operative Estate Ltd. (NICE) and Nashik Municipal Corporation.

The objective of the NEC is to facilitate the transfer of technology to engineering industries and thereby enhance their global competitiveness at an affordable cost. In an economy where rapid and disruptive innovation is

transforming production processes across industries, the NEC performs a catalytic role in the advancement of such transformations.

Participants were given demonstrations of products and services that the NEC offers. Many technology solutions offered at the NEC have been developed in partnership with overseas expertise from countries such as Germany and Japan. The NEC also hosts a skilling centre that runs training programs that ensure that the supply of skilled labor complements the supply of innovative technologies that demand a higher standard and wider range of skills. Delegates were thus introduced to a dynamic organization that facilitates the growth of Indian industries in the era of fourth industrial revolution.

After NEC, the delegates were taken to 'Soma Vinevillage'. Nashik is a premium location in India for production of wine because of its favourable soil and climatic conditions for harvesting grapes and the accumulation of highly sophisticated technology in a competitive market for wine. At Soma Vinevillage, participants were introduced to the complex stages of production, from farm to the bottle. Thereafter, participants were invited for a tasting session where experts from the vineyard demonstrated the process of professional consumption such that participants were able to successfully discern and grasp the underlying flavour of wine.



White Paper



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.

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 2030¹.

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.

¹World Trade Report 2018

NOTE: All data and arguments unless otherwise cited were part of speeches made by experts at the 8th Global Economic Summit.

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 on 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 cross-border 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 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)². 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.

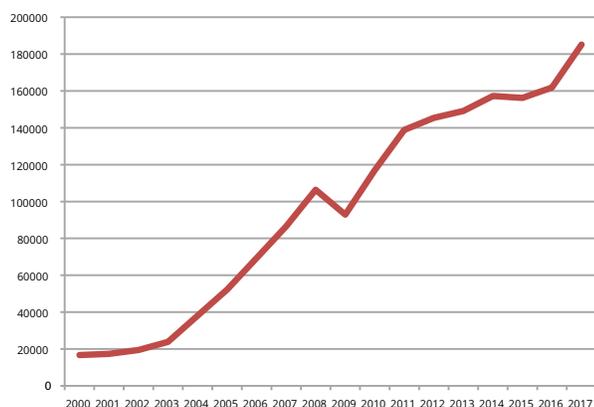
This growth in services also has a geographical component; 64 percent of EU exports of services are within the EU and 52 percent of Asia's service exports are headed for Asian markets. While such regional trade in services can be beneficial for regional value chains, there is a need to provide a multilateral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

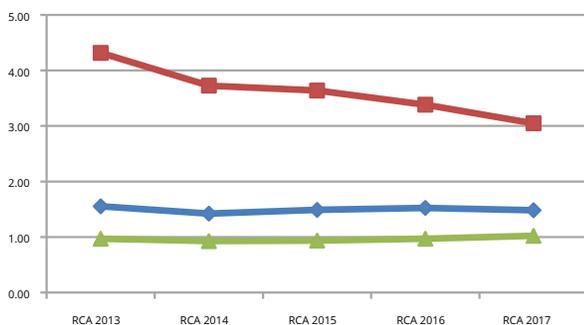
As the World Trade Report 2018 finds, the WTO framework and the General Agreement on Trade in Services (GATS) are particularly pertinent to digital services trade. In this context, it is useful to revisit the Hong Kong Ministerial Declaration of 2005 that called for improved commitments on market access, 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.

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

India's Exports of Services. Source: OECD



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



The Hong Kong Ministerial Declaration of 2005 called for improved commitments on market access, non-discriminatory regulations and removal of existing conditions on commercial presence



RCA is calculated using the following equation:
 $RCA = (X_{ij}/X_{wj}) / (X_i/X_w)$ where X_{ij} : India's export of service j , X_{wj} : the world's export of service j , X_i : India's total service exports, X_w : total world service exports

- ◆ Other business services
- Telecommunications, computer, and information services
- ▲ Personal, cultural and recreational services

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 million³.

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 long run

Smart Cities envision the 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 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.

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

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.

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-to-day 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.

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 Electricity 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.

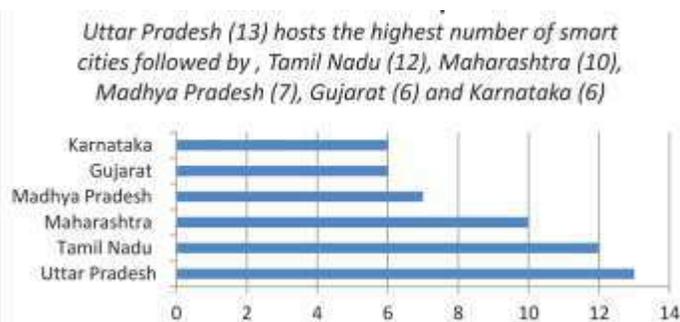
⁴The HDR methodology can be accessed at <http://hdr.undp.org/sites/default/files/oc12.pdf>

⁵Maharashtra Electricity Regulatory Commission. Annual Report 2016 - 17.

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Smart cities will lead to direct and indirect changes in what type of goods and services are demanded and how they are consumed.

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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 inequality⁶.

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 patterns⁷. 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. Industry 4.0 is a combination of multiple technologies. In 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 reality⁸. 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.

⁶United Nations. The Slowdown in Productivity Growth: A view from International Trade. Development issues No.11.2017.

⁷Schwab., K. The Fourth Industrial Revolution: What it means, How to Respond. World Economic Forum 2016.

⁸Boston Consulting Group. Embracing Industry 4.0 and Rediscovering Growth. The report can be accessed at <https://www.bcg.com/en-in/capabilities/operations/embracing-industry-4.0-rediscovering-growth.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.

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

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 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'⁹.



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 and 74% of surveyed employers would base those decisions on labor market considerations. Additionally, the division of labor between machines and 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'

⁹World 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 goods¹⁰. 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 percent¹¹.

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.

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.

¹⁰McKinsey Global Institute. Globalization in Transition: The Future of Trade and Value Chains. 2019.

¹¹Source: RBI, Services Trade Data Release. December 2018.



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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

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Annexure Photo Feature



Programme Schedule

Day 1: Wednesday, March 6, 2019

Time	Agenda
8.00 a.m. - 10.00 a.m.	Registration
10.00 a.m. - 10.30 a.m.	Inauguration of Summit Exhibition Inauguration of Summit Conference Lighting of the Lamp Ceremony and Felicitation of Hon'ble Guests
10.30 a.m. - 1.00 p.m.	<p>Inaugural Session:</p> <p>Welcome Address:</p> <p>Mr. Kamal Morarka, Chairman, MVIRDC World Trade Center Mumbai</p> <p>Conference Chair Address: Emerging Services - Shaping the New Global Business Landscape</p> <p>Dr. Rupa Chanda, RBI Chair Professor of Economics, Indian Institute of Management Bangalore</p> <p>Theme Address:</p> <p>Dr. Robert B. Koopman, Chief Economist and Director, Economic Research and Statistics Division, World Trade Organization</p> <p>Mr. Scott Ferguson, Chief Executive Officer, World Trade Centers Association, New York</p> <p>Dr. Aaditya Mattoo, Research Manager, Trade and International Integration, Development Research Group, World Bank</p> <p>Mr. Pascal Kerneis, Managing Director, European Services Forum</p> <p>Keynote Address:</p> <p>Mr. Ibrahim Ameer, Hon'ble Minister of Finance, Government of Maldives</p> <p>Special Address:</p> <p>Dr. Harshadeep Kamble, I.A.S., Secretary (Small & Medium Industries) & Development Commissioner (Industries) Government of Maharashtra</p> <p>Vote of Thanks:</p> <p>Mr. Vijay Kalantri, President, All India Association of Industries</p>

Time	Agenda
	<p>Guests of Honour</p> <p>Mr. Jacek Sutryk, Mayor of Wroclaw, Poland</p> <p>Release of Handbook</p> <p>Awards Ceremony</p> <ul style="list-style-type: none"> • Society for Electronic Transactions and Security • MapmyIndia • BagForEver <p>Question and Answer Session</p>
1.00 p.m. – 2.30 p.m.	<p>Networking Lunch</p>
2:30p.m. – 4.00 p.m.	<p>Panel Discussion: Industry 4.0 and its Impact on Services</p> <p>Felicitation of Guests</p> <p>Opening Address:</p> <p>Mr. Vikal Kapoor, Chief Executive Officer, DAPPS Inc.</p> <p>Moderator:</p> <p>Dr. Ganesh Natarajan, Executive Chairman and Founder, 5F World</p> <p>Panellists:</p> <p>Mr. Gautam Dutta, Senior Director - Marketing, Siemens Industry Software India, Digital Factory Division</p> <p>Mr. Žiga Vavpotič, Co-Founder Simbioza and Board Member and Former Chairman, Outfit7 Limited</p> <p>Mr. Adhil Shetty, Founder and Chief Executive Officer, Bankbazaar</p> <p>Mr. Mariusz Kura, Executive Director, Billennium</p> <p>Moderated discussion</p> <p>Awards ceremony</p> <ul style="list-style-type: none"> • Dr. Paul Pallath, Head – Big Data & Advanced Analytics, Vodafone Idea Limited • Arya.ai • Forum of Industry and Academic Knowledge Sharing <p>Question and Answer Session</p>

Time	Agenda
4.00 p.m. -- 5.00 p.m.	<p>Panel Discussion: Disruption to Collaboration: FinTech transforming the Service Landscape</p> <p>Felicitation of Guests</p> <p>Moderator: Ms. Tanvi Vakil, Consultant, Deloitte Touche Tohmatsu Services</p> <p>Panellists:</p> <p>Mr. Kamal Kishor Das, Founder Director, Pentation Analytics</p> <p>Ms. Manisha Pandita, Co-Founder and CEO, Easyplan</p> <p>Mr. Arpit Ratan, Founder, Signzy</p> <p>Mr. Jose Thattil, Founder and Chief Executive Officer, PhilCommerce</p> <p>Question-Answer Session</p>
5:00 p.m. – 6.30 p.m.	B2B/B2C/B2G/G2G Meetings
7.00 p.m. – 9.00 p.m.	Welcome Reception

Day 2: Thursday, March 7, 2019

Time	Agenda
9.55 a.m. – 11.35 a.m.	<p>Panel Discussion: Smart Solutions and Smart Cities</p> <p>Felicitation of Guests</p> <p>Moderator:</p> <p>Ms. Sui Jin Kon, Director - Global Alliances, WTC Harbin</p> <p>Panellists:</p> <p>Shri. Abhishek Chaudhary, Vice President – Corporate Affairs & HR, DMICDC</p> <p>Mr. Aditya Sharma, Senior Vice President - Asia, Boson Energy</p>

Time	Agenda
	<p>Mr. Dharmendra Pratap Yadav, IAS, Secretary, MSME Department, Government of Tamil Nadu</p> <p>Mr. Stanislav Baša, Member, Toshiba European Business Partner Advisory Council</p> <p>Mr. Aditya Vora, Director, Adytum Designs Pvt Ltd</p> <p>Moderated discussion</p> <p>Awards</p> <ul style="list-style-type: none"> • GoApptiv Private Limited • Cisco Systems India Pvt. Ltd. • Apollo Hospitals Enterprise Limited <p>Question and Answer Session</p>
<p>11.40 a.m. – 12.57 p.m.</p>	<p>Panel Discussion: Importance of Services in Supporting Agriculture and Manufacturing Sectors</p> <p>Felicitation of Guests</p> <p>Moderator:</p> <p>Dr. Arpita Mukherjee, Professor, ICRIER</p> <p>Panellists:</p> <p>Ms. Rasha Omar, Country Director – India, International Fund for Agricultural Development</p> <p>Mr. Himanshu Goyal, India Business Leader, The Weather Company, an IBM Business</p> <p>Mr. Pascal Kerneis, Managing Director, European Services Forum</p> <p>Mr. Milind Kulkarni, General Manager - Manufacturing, Kansai Nerolac Paints</p> <p>Mr. Khalid Ahmed Mohammed, Head Private Sector & Trade Finance Division, Arab Bank for Economic Development in Africa.</p> <p>Moderated discussion</p> <p>Awards</p> <ul style="list-style-type: none"> • vPhrase Analytics Solutions Pvt. Ltd. • SaffronStays <p>Question and Answer Session</p>

Time	Agenda
1.10 p.m. -2:34 p.m.	<p>Panel Discussion: Productivity in Services: Issues, Trends and Challenges</p> <p>Felicitation of Guests</p> <p>Opening Address:</p> <p>Ms. Sangeeta Godbole, IRS, Director General, Services Export Promotion Council</p> <p>Moderator:</p> <p>Mr. Scott Wang, Vice President - Asia Pacific, World Trade Centers Association</p> <p>Panellists:</p> <p>Mr. Gopal Devanahalli, CEO, MeritTrac</p> <p>Mr. Kalyan Basu, CEO & MD, A.Treds Limited</p> <p>Mr. Firoze B. Andhyarujina, Senior Counsel, Supreme Court of India</p> <p>Mr. Sauvik Banerjee, Vice President Digital Initiatives, CTO, TATACLIQ</p> <p>Mr. Vivek Bhargava, CEO, DAN Performance Group</p> <p>Ms. Viktoria Lopatina, Founder and Managing Director, Kat.El International Trade Consulting and President, Tuscany-India Association</p> <p>Awards</p> <ul style="list-style-type: none"> • SRL Diagnostics • Quikr India Pvt. Ltd. • MakeMyTrip <p>Question and Answer Session</p>
3:00 p.m. - 5.00 p.m.	Networking
7 pm onwards	Cultural programme

Day 3: Friday, March 8, 2019

Time	Agenda
	Field Visit

Profiles of Speakers

Inaugural Session:

Dr. Rupa Chanda, RBI Chair Professor of Economics, Indian Institute of Management Bangalore

Dr. Chanda teaches Macroeconomics and International Trade across various programs at IIM Bangalore.

During April-July 2018, Prof. Chanda briefly served as the Head, UNESCAP Subregional Office for South and South-West Asia in New Delhi, while on leave from IIMB.

She received her PhD in Economics from Columbia University, USA and her Bachelors from Harvard University, USA. She is a recipient of several teaching awards and distinctions.

Before joining IIMB, she worked as an economist at the IMF in Washington, DC.

Her research interests concern the WTO, international trade in services, regional integration and migration. She is a member of several committees and councils in India and was appointed as a member of the WHO's Expert Committee on International Health Regulations in 2015-16.

She has published extensively and has presented her work at conferences, workshops, and seminars, both nationally and internationally.

Dr. Robert B. Koopman, Chief Economist and Director, Economic Research and Statistics Division, World Trade Organization

Dr. Koopman is the Chief Economist and Director of the Economic Research and Statistics Division at the World Trade Organization and a Professor at the Graduate Institute in Geneva.

As Chief Economist at the WTO, Dr. Koopman provides the Secretariat and Member Countries with analysis and information that promotes a deeper understanding of trade and trade policy's role in economic growth and development.

At the Institute, Dr. Koopman teaches courses on international trade and conducts research on trade policy and on the various mechanisms and sources of adjustment to economic development and trade policy. Dr. Koopman also serves as the WTO representative to the G20 Trade and

Investment Working Group. He is a research associate of CEPR, London and an editor of the Springer Series on Advances in Applied General Equilibrium Modeling.

Prior to his move to Geneva, he served as the Director of Operations and Chief Operating Officer for the United States International Trade Commission.

Dr. Koopman oversaw the Commission's trade policy research and negotiation assistance to the President, the U.S. Trade Representative, and Congress; antidumping, countervailing duty, and safeguard; investigations; intellectual property investigations; maintenance and analysis of the Harmonized Tariff System, as well as the agency's strategic planning and performance measurement initiatives.

He also previously served as the Chief Economist and Director of the USITC Office of Economics, and numerous leadership and research positions at the Economic Research Service of USDA.

Mr. Scott Ferguson, Chief Executive Officer, World Trade Centers Association, New York

A senior executive with a concentration in building sustainable business models, Ferguson brings more than 30 years of experience in international business and the WTC Network to the role of Chief Executive Officer.

Most recently, he was President and CEO of Trade Centre Limited, an Atlantic Canadian organization that operates "World Trade Center Halifax" in Halifax, Nova Scotia.

During his tenure at WTC Halifax, Scott received international and national recognition for his ability to innovate and foster organizational growth, most notably with the development of the largest convention center in Eastern Canada, the Halifax Convention Centre.

He was also the lead in developing an operational model for WTC Halifax with an emphasis on membership growth, events, and the delivery of trade education services.

Scott is credited with securing many corporate partnerships to support revenue generation for the WTC Halifax operations, including a 10-year naming rights partnership, and substantial funding from three levels of government to construct the region's premier convention facility.

With an MBA from Saint Mary's University, Scott holds a Bachelor of Arts (Economics) from Acadia University and an ICD.D Designation from the Canadian Institute of Corporate Directors.

He has been a guest speaker on business strategy at regional and international industry events.

Scott's professional affiliations include the following: Director, Convention Centers of Canada; Member, AIPC (International Association of Convention Centres); Member, International Association of Venue Managers; ICCA (International Congress and Convention Centre Association) , UFI (Global Exhibition Association) TEC Canada, Tourism Industry Association of Nova Scotia, Maritimes Energy Association, Destination Halifax board member, Hotel Association of Nova Scotia board member; the Canadian Institute of Corporate Directors, Maritime Chapter, board member; Connect Nova Scotia Leadership Team member.

In 2015, Scott was named one of Atlantic Canada's top 50 CEOs by Atlantic Business Magazine for the second time.

Past accomplishments include co-chairing the 2011 Canada Winter Games Bid committee and serving as the Halifax Chair for the 2008 World Hockey Championship, an event that won the 2009 Canadian Sport Tourism Alliance PRESTIGE Award for the Sport Event of the Year.

Dr. Aaditya Mattoo, Research Manager, Trade and International Integration, Development Research Group, World Bank

Dr. Aaditya Mattoo is Research Manager, Trade and Integration, at the World Bank. He specializes in trade policy and international trade agreements, and provides policy advice to governments.

He is Director of the World Development Report 2020 on Global Value Chains. Prior to joining the Bank in 1999, Dr. Mattoo was Economic Counsellor at the World Trade Organization.

He holds a Ph.D. in Economics from the University of Cambridge, and an M.Phil in Economics from the University of Oxford.

Dr. Pascal Kerneis, Managing Director, European Services Forum

European Services Forum (ESF) is a business organisation

that represents the European services industry in the international trade and investment negotiations.

Dr. Kerneis was a legal expert in the European Commission in Brussels, before serving the European Banking Federation as international affairs adviser.

He participated at all WTO Ministerial Conferences as the European Commission's advisor. Dr. Kerneis is also a regular speaker in conferences and he is an author of many articles in various books and publications. He holds a Ph.D. in European Law from Rennes University in France.

Panel Discussion: Industry 4.0 and its Impact on Services

Mr. Vikal Kapoor, Chief Executive Officer, DAPPS Inc.

Mr. Kapoor is a fin-tech executive accelerating digital and organizational transformation using intelligent technologies.

Mr. Kapoor believes people are a company's number one asset and builds inspirational teams to listen hard, think fast and work smart to fuel growth.

Currently, Mr. Kapoor leads Dapps Inc., a Silicon-Valley based B2B tech co. that is leading and defining the enterprise blockchain computing (EBC) industry for Strategic CRM.

Dapps products fuel operational profitability and digital resilience with the most accurate view of their customer, product and service journey using Blockchain or DLT (distributed ledger technology) on CRM. Dapps operates globally as a strategic Salesforce partner.

Previously, Mr. Kapoor led the successful growth, turnarounds and exits of Private-Equity, Family-Office and LP backed FinTech, Financial Services and Marketing companies including Bank of America's Fixed Income Prime Brokerage to BNP (2009); Gild (2013); Adminex (2014); EquityNet (2016).

Mr. Kapoor led venture development at Proton. His serial entrepreneurship was groomed through the dynamics of Wall Street (Bloomberg, JPMorgan, Deutsche Bank and Bank of America).

Mr. Kapoor completed an MBA from ESADE Business School where he was voted Co-Class President; dual

Bachelors of Science in Decision Information Systems and Finance from University of Maryland, College Park and the prestigious Stuyvesant HS in NYC.

Mr. Kapoor has lived and worked in the US and Europe. He has a deep understanding of multitude of sectors and an extensive global network.

Specialties: Financial Services, Technology, Digital Transformation, Emerging Technologies (Blockchain, AI, CRM, Data & Analytics); Geopolitics, Agendaless Conversations, Deep Listening and Interpersonal Dynamics.

Frameworks: Venture Development, SMB Turnarounds (TMA), Digital Transformation using Emerging Tech.

Dr. Ganesh Natarajan, Executive Chairman and Founder, 5F World

Dr. Ganesh Natarajan is Executive Chairman and Founder of 5F World, a platform for Digital Start-ups, Skills and Social Ventures in the country.

He is also Founder of Global Talent Track and Skills Alpha and co-founder of two Indo-US Joint Ventures - Kalzoom Advisors and the Center for AI and Advanced Analytics.

Dr. Natarajan is Global Board Director and Chairman of the India Board of Social Venture Partners and Chairman of Pune City Connect, a unique collaborative platform that enables corporations to work with the Government on social and city innovation.

Dr. Natarajan has received the Distinguished Alumnus Award of IIT Bombay and NITIE and has been recognized by EY and the Asia Pacific HR Forum for excellence in entrepreneurship and people-centric leadership.

He has two successful CEO tenures over twenty-five years at APTECH and Zensar Technologies. Harvard Business School has written and teaches two case studies on Dr. Ganesh Natarajan and his success through Vision Communities.

Mr. Gautam Dutta, Senior Director - Marketing, Siemens Industry Software India, Digital Factory Division

Mr. Dutta has more than 30 years of experience in IT and PLM industries and has held leadership roles in organizations like TCS, IBM, Silicon Graphics, PTC and ANSYS.

Currently, he is Senior Director Marketing with Siemens PLM Software in India and is part of the leadership team involved with the emerging value chains of - Electrification, Automation and Digitalization.

Mr. Dutta has been the face for Industry 4.0 initiatives of Siemens in India and represents his organization at various industry associations.

Mr. Žiga Vavpotič, Co-Founder Simbioza and Board Member and Former Chairman, Outfit7 Limited

Outfit7 Limited is one of the world's fastest-growing multinational family entertainment companies, best known for its global phenomenon 'Talking Tom' which grew from an instant app success into a full-fledged media franchise in the years since its launch.

Outfit7's highly successful portfolio now includes free mobile apps and games, a CGI animated series and web shorts, a global licensing and merchandising program.

Mr. Vavpotic is responsible for chairing the company's board, supervision of the company's performance, relationship with the owner and main partners, exploring new business opportunities and aligning with management on strategy of the company.

Panel Discussion: Disruption to Collaboration: FinTech Transforming the Service Landscape

Ms. Tanvi Vakil, Fintech Consultant, Deloitte

As a Fintech consultant at Deloitte, Ms. Vakil has been assisting Government of Maharashtra in its initiative - Mumbai Fintech Hub, by managing and operationalizing the hub policies.

She has more than four years of experience in consumer strategy and data analytics. Ms. Vakil holds a graduate degree in management from IMT Ghaziabad.

Mr. Kamal Kishor Das, Founder Director, Pentation Analytics

Mr. Das is a seasoned professional with more than 15 years of experience in analytics and insurance. He founded Pentation Analytics with the focus on solving business problems for insurers and insurance intermediaries by leveraging analytics and machine learning algorithms.

Ms. Manisha Pandita, Co-Founder and CEO, Easyplan

Ms. Pandita holds a bachelor's degree in economics and governance from Harvard University. Ms. Pandita has served at various positions in prestigious organizations such as Bain & Co, The Abdul Latif Jameel Poverty Action Lab, Dalberg Global Development Advisors etc.

She founded Easyplan to simplify savings and achieve finance health for the young professionals.

Mr. Arpit Ratan, Founder, Signzy

The financial services sector has made huge strides in going digital. Yet, one process that remains, by and large, entrenched in the offline mode is KYC (Know Your Customer) or identifying and authenticating a client.

On a mission to crack this problem, Mr. Ratan started Singzy. Mr. Ratan is a graduate from ILS Law College, Pune.

Mr. Jose Thattil, Founder and Chief Executive Officer, PhilCommerce

Mr. Thattil is the CEO and Co-founder of Phi Commerce. He has more than 20 years of experience in retail payments industry. Prior to founding Phi Commerce, Jose has worked at MasterCard, ElectraCard Services (ECS) & ICICI Bank.

At MasterCard & ECS, Mr. Thattil was responsible for business strategy and he headed global solution sales and alliances for the Electra payments suite.

Additionally, Mr. Thattil has led cross functional teams across product management, solutioning and delivery. Mr. Thattil holds a bachelor's degree in electronic engineering and a masters degree in finance from Mumbai University.

Panel Discussion: Smart Solutions and Smart Cities

Ms. Sui Jin Kon, Director - Global Alliances, WTC Harbin

Ms Kon's global career spans six continents and over a period of nearly 20 years, she has amassed a wealth of business expansion experience in a diverse array of industries including infrastructure to Agro-Bio-Sciences.

Her passion for developing innovative solutions for today's business and societal challenges has propelled her to the

forefront of the business, frequently leading her teams to the cutting edge of technology in their practice areas.

Ms. Kon spent a significant part of her career successfully developing and acquiring assets in infrastructure: Over a span of 15 years, her projects have run the gamut of telecommunications facilities in North Asia, container ports and railway in Australia and Europe on behalf of Hutchison Whampoa, and healthcare facilities including Southeast Asia's first Proton Therapy Centre.

She started her career in the global port cities of Singapore and Rotterdam working for AP Moeller Maersk; the largest shipping company in the world, in management reporting and profit center management.

Most recently, Ms Kon has championed the interests of agribusiness globally through the establishment of an extensive network of global agricultural resources that span from developed economies in North America to countries on the ascent in Africa.

Today, Ms Kon is active in maintaining her global network of resources that informs her insight into the various genres of investment opportunities ranging from real estate deals to innovations in the fields of agriculture and healthcare.

Ms Kon holds a Bachelors degree in Marketing from the Nanyang Technological University in Singapore and a MBA in Finance from the Hong Kong University of Science and Technology.

She is a frequent speaker at industry events worldwide, invited for her business experience and cultural insights and doing business in Asia. She also takes time to mentor start-up entrepreneurs in the areas of fundraising and market-entry strategies.

Mr. Abhishek Chaudhary, Vice President – Corporate Affairs & HR, DMICDC

Mr. Abhishek Chaudhary is associated with Delhi Mumbai Industrial Corridor Project for the last nine years and is presently working as Vice President- Corporate Affairs, HR & Company Secretary of the Company.

Apart from various secretarial and legal functions in the organization, he is discharging multi-functional roles in finance, HR, Marketing and administrative activities.

The Delhi Mumbai Industrial Corridor (DMIC) is being developed by the Government of India as a global

manufacturing and investment destination supported by world class infrastructure and enabling policy framework.

In essence, the DMIC project is aimed at the development of futuristic, smart industrial cities in India which will converge and integrate new generation technology across sectors.

In addition to new cities, the project envisages development of infrastructure linkages like dedicated power plants, assured water supply, high capacity transportation and logistics facilities, as well as softer interventions like skill development programme for employment of the local populace.

The DMIC cities will address not merely the urbanization requirements of India, but with manufacturing as the main economic base, will also contribute significantly to the overall economic growth. The project is being developed in partnership and collaboration with Government of Japan.

Mr. Chaudhary is actively involved in the strategic aspects of the projects and has been interacting with the participating DMIC States & Ministries of the Government of India and presenting the project to the various Government bodies and international organizations.

He is also interacting with various Japanese agencies like JBIC, JICA, NEDO, JETRO etc. for Japanese participation in the project.

Mr. Chaudhary is a fellow member of the Institute of Company Secretaries of India and is a law graduate. He has worked in different domains and with various multinational companies in his over 16 years of experience.

He has wide experience in the field of strategic planning and management, secretarial and legal matters, project financing, private-public partnership projects, corporate governance and exposure of dealing with various Government departments or organizations.

Mr. Aditya Sharma, Senior Vice President - Asia, Boson Energy

Mr. Aditya Sharma is responsible for developing Asian market for clean, distributed energy solutions, using high temperature gasifiers, from local solid fuels, in stressed urban or coastal areas while meeting UN Sustainable Development Goals (SDG 17s).

Mr. Sharma is also responsible for designing solutions to deliver performance over life-cycle at a competitive price

compared to the current solutions. Standard features include on-grid or off-grid in the range of 1-5MWe and 2-10MWth with final energy efficiency of 70%.

He is also incharge of identifying and entering into Strategic alliances for matching caseload thermal energy generated with corresponding reliable market demand; creating local supply chain network to build capability; attracting impact financing; setting up local entities and building-up local delivery organisations with identification of talents.

Mr. Sharma's priority market focus are - India and Indonesia. He brings more than 26 years of experience in design, execution and monitoring of strategy, process re-design, optimisation and delivery while minimising risks, including financial.

Mr. Sharma is passionate about learning emerging technologies, approach through active participation in conferences across globe covering a wide range of domain.

Mr. Dharmendra Pratap Yadav, IAS, Secretary, MSME Department, Government of Tamil Nadu

Mr. Dharmendra Pratap Yadav is an IAS officer of Tamil Nadu cadre belonging to 1996 batch. He has held various important assignments in the Government of Tamil Nadu including District Collector of Vellore, Managing Director of Tamil Nadu Housing Board, Inspector General of Registration Department, Secretary to the Government, Housing and Urban Development Department.

Currently, he is working as Secretary to Government, Micro, Small and Medium Enterprises Department.

While discharging his duty in various assignments, his effort has been to promote public welfare, development and improve connect between Government and public.

As District Collector, Vellore he was instrumental in promoting Destination Tourism and making "Primary Health Centers" functional 24X7 with facility to conduct cesarean operations which became a national model under National Rural Health Mission besides making Vellore district a lead district in prohibition of Child Labour.

As Inspector General of Registration, he worked towards bringing transparency in the registration process and arrest fraudulent registration through computerisation and framing of new registration rules. Substantial increase in stamp duty revenue was also made.

As Secretary, Housing and Urban Development

Department, approval of the state legislature was obtained for the new tenancy Act Rules for functioning of Real Estate Regulatory Authority”.

A Shelter fund as category-I social venture fund registered with SEBI was also created to promote affordable housing and for slum redevelopment and rehabilitation. Process for submission of planning permission applications and architectural drawings with planning authorities was made online.

As Secretary, Micro, Small and Medium Enterprises department, Tender Transparency Act of Tamil Nadu was amended to make mandatory procurement of at least 25% of the requirement of the goods and services by various State Government Departments and Public Sector Undertakings from domestic MSMEs besides introducing Innovation Voucher Scheme and announcement of “Tamil Nadu Startup and Innovation Policy” to promote innovation.

Mr. Stanislav Baša, Member, Toshiba European Business Partner Advisory Council

Mr. Basa graduated from the Faculty for Electrical Engineering in Ljubljana and specialized in industrial electronics.

He was engaged for more than 10 years with corporation Gorenje, specializing in developing industrial computers, collaborating on large projects (new steel mill at Jesenice, central bakery in Moscow...) and working in technology group on automatic test procedures for mass production of electronic devices.

Later, he joined Mikropis Holding and became purchasing and relationship manager for international partners. At Mikropis, he is focused on solution for the retail industry, especially on self-service in stores.

He was involved with IRUG (International Retail User Group) and he is a member of TGCS / IBM Self-Checkout Focus Group.

In 2011, he joined RC IKTS and took over the role of development group manager.

He actively participated in Self-Checkout or Self Service projects for retail industry in Slovenia, Germany, Turkey, Uruguay, China and South Korea.

Recently, he has been focusing on marketing activities for MBS product portfolio (www.mikropis.com) in the role of

VP Relationships & Marketing for the company 24alife (<https://www.24alife.com/home>)

He is a member of Toshiba European Business Partner Advisory Council.

Mr. Aditya Vora, Director, Adytum Designs Pvt Ltd

Mr. Aditya Vora is an Architect and Urban Planner. He has a Bachelors of Architecture Degree and a Masters of Architecture Degree with a majors in Urban Design from University of Colorado (USA).

He is currently pursuing Ph.D. Research in Town Planning for Satellite cities. Amongst various accolades and achievements received by him and his organisation, M/s. Adytum Designs Pvt. Ltd., the key mentions are:

- 1) Architect of the Year by ET NOW in 2015
- 2) Young Entrepreneur and Indian Leadership Award for Excellence in Town Planning and Industrial Development by All India Achiever's Foundation, (Government of India) in 2016
- 3) Pradhan Mantri Aawaaz Yojana Award for Research and Excellence in Low Cost Housing in 2017
- 4) Best residential high rise tower in entire East-Africa region for Skynest apartments

Mr. Vora is headquartered in Mumbai and has design centers in Kolkata, Dubai and Nairobi. They are a team of 80 professional architects managing a global portfolio of more than 20 million square feet.

Panel Discussion: Importance of Services in Supporting Agriculture and Manufacturing Sectors

Dr. Arpita Mukherjee, Professor, ICRIER

Dr. Arpita Mukherjee is a Professor at ICRIER. She has over 25 years of experience in policy-oriented research, working closely with the government in India and policymakers in the European Commission and its member states, United States (US), Association of Southeast Asian Nations (ASEAN) and in East Asian countries.

She has conducted studies for international organizations such as Asian Development Bank (ADB), ADBI, ASEAN

Secretariat, International Labour Organisation, Department for International Development (DfID) and Foreign and Commonwealth Office (FCO), of the UK government, Italian Trade Commission, Organisation for Economic Co-operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), World Bank and the World Trade Organization (WTO).

She has worked as advisor/academic expert to Indian and foreign companies, industry associations, academic and research organisations and non-government organisations.

Her research areas include trade and investment; special economic zones; economic corridors; food supply chain; start-ups and entrepreneurs; retail, ICT, food processing and other sector studies; labour mobility; bilateral and regional trade agreements.

She specialises in sector and product-specific market trends, go-to market strategy, and government policies.

Dr Mukherjee has a PhD in Economics from the University of Portsmouth, UK. She has over 70 publications including national and international referred journals, books and book chapters and government reports.

Ms. Rasha Omar, Country Director – India, International Fund for Agricultural Development

Ms. Omar is currently the IFAD Country Representative in India. She is an agricultural economist and has been working in the field of agricultural and rural development since 1992.

At the beginning of her career, she worked with agricultural extension workers and social workers to improve their communication and organization skills.

Her work on gender mainstreaming paved the way for stronger involvement in the design and supervision of projects and programmes.

Prior to joining IFAD, she worked in the Kuwait Institute of Scientific Research as Research Assistant and in the Center for Development Services in Egypt as training and technical assistance manager.

She joined IFAD in October 2001, and since then, she has participated in the management of country programmes focusing on natural resources management, community development and rural finance as means to alleviate rural poverty and foster social equity in countries as diverse as

Lebanon, Yemen, Tunisia, Sudan, South Sudan, Djibouti, Democratic Republic of Congo and Republic of Congo.

She managed large IFAD investment portfolios, exceeding 100 million USD, in the Sudan and the Democratic Republic of Congo.

She holds a Diplome d'Ingenieur from the Institut National Agronomique de Paris-Grignon and a MSc degree in Rural Environment and Planning from Wye College, London University.

Mr. Himanshu Goyal, India Business Leader, The Weather Company, an IBM Business

Mr. Goyal is India Business Leader for The Weather Company, which is an IBM Business. The company is the world's largest private weather enterprise, helping people make informed decisions - to take action - in the face of weather.

Mr. Goyal is an entrepreneurial leader having a track record of building and leading high impact, high performance organisations to lead in new markets and deliver growth.

He has been a co-Founder of two Start-ups, delivered and led four product launches and managed one acquisition.

He has performed multiple roles for more than a decade at IBM. His previous experience includes working in organisations such as Wipro, Digite and Adobe.

Mr. Milind Kulkarni, General Manager - Manufacturing, Kansai Nerolac Paints

Mr. Kulkarni has 33 years of experience in areas such as manufacturing, sales & marketing, plant management, outside processing cell management, TPM, Six Sigma, Supply Chain (APO), ERP (SAP, BaaN) implementation, Production planning & Control, Materials, Subcontracting, Manufacturing etc.

At Kansai Nerolac Paints, Mr. Kulkarni is heading manufacturing operations for four plants, Outside Processing Centres and other functions such as Central Production Engineering and Business Excellence.

He is also leading a strong work force of 1500 employees across India.

Mr. Kulkarni is the head of West Zone for Industrial Coating division (Auto), which has an annual sales turnover of approximately Rs. 250 crore.

He is also in charge of the state of the art plant at Bawal, which caters to esteemed companies such as Maruti Suzuki Ind. Ltd, Honda SIEL, HMSI, Honda Moto Corp etc.

Mr. Kulkarni is championing Manufacturing Excellence Initiative across all plants using enablers such as Lean, Total Productive Maintenance, Six Sigma and various problem solving tools.

Mr. Kulkarni also led Supply Chain Solution Implementation project SAP- APO (Advanced Planner & Optimizer) at five plants, 10 RDCs, 66 Depots. He was responsible for implementation of e-learning software, Knowledge Management tool. He was also the head of Supply Chain Planning Cell for Industrial segment.

Before joining Kansai Nerolac Paints, Mr. Kulkarni worked for Bharat Bijlee Ltd, where he was responsible for BaaN ERP project, with expertise in Project Control System, PCF, Product codification system etc.

He also handled production planning and control, out sourcing, subcontractor development, leading high skilled team of engineers, foremen and operators and advanced CNC machines.

Mr. Kulkarni is a guest faculty at various Business Schools, including Welinkars, Chetana's and ISBM. He has guided several management students during their course of management education.

Mr. Khalid Ahmed Mohammed, Head Private Sector & Trade Finance Division, Arab Bank for Economic Development in Africa

Mr. Mohammed has 16 years of diversified experience, attained through working with academic institutions, central banks and multilateral development financial institutions in Africa.

In his current role, he oversees BADEA's Private Sector & Trade Finance Team responsible for origination and execution of project, corporate and trade finance deals in 44 countries within the Sub-Saharan Africa.

Mr. Mohammed has extensive track-record in project finance, corporate finance, trade finance and equity investment; including business development & deal origination, negotiation, deal structuring, syndication, appraisal & due diligence and documentation.

He has sourced and executed project, corporate, trade finance and equity investment deals in a number of countries within the Sub-Saharan Africa, including South

Africa, Botswana, Sudan, Ethiopia, Seychelles, Mauritius, Nigeria, Liberia, Gambia, Ghana, Mozambique, Kenya, Uganda, Rwanda, DR Congo, Zambia and Zimbabwe, among others. He has also overseen the sourcing and execution of over 55 deals in North Africa and Sub-Saharan Africa regions.

He has handled key sectors such as power, agribusiness, manufacturing, hospitality & tourism, financial services, property development and health care, among others.

Mr. Mohammed has experience as a Lead Arranger, raising debt capital from multilateral development financial institutions, local and international commercial banks, both in local and foreign currencies. He is proficient in financial modeling and deal structuring.

Mr. Mohammed is well-versed with PPP (PPAs, Concessions), international procurement, EPC contracts, credit enhancement instruments and consultants' engagement.

He has the ability to penetrate the Sub-Saharan Africa capital market, with good knowledge of the business environment and dynamics of the region.

Mr. Mohammed has academic and professional exposure to finance, business law, accounting, economics, banking regulation and supervision, microfinance and Islamic Finance, among others.

Panel Discussion: Productivity in Services: Issues, Trends and Challenges

Ms. Sangeeta Godbole, IRS, Director General, Services Export Promotion Council

Sangeeta Godbole is an expert on tax and revenue services. Armed with a Masters degree in French, Ms. Sangeeta Godbole joined the Indian Revenue Service in August 1990.

She is currently serving as Director General of Services Export Promotion Council, under Ministry of Commerce and Industry, Government of India.

She has rich experience of 28 years of service and has contributed to various areas such as Search and Seizure, Assessment and Training through her dynamic leadership.

Ms. Godbole spearheaded the taxpayer's services delivery in the Income Tax Department with the 'refund banker' and 'E-Tax payment' as early as 2008.

The quick and efficient refunds that taxpayers receive are due to her piloting the Refund Banker project which infinitely improved the taxpayer's comfort in getting IT refunds. The E-Tax payment in the IT Department enables payment of tax from the comfort of a home or office or even on the go.

Prior to joining SEPC, Ms. Godbole has served as the Director, Department of Commerce. She was a part of European Division and the West Asia North Africa (WANA Division) and has contributed substantially in developing India's negotiating position in the free trade (FTA) negotiations with the EU and EFTA countries.

In this capacity, she has gained a wide experience of working closely with the developmental programmes of the government. A work-enthusiast, an avid reader and an amateur badminton player, Ms. Godbole lives in Delhi with her husband.

Mr. Scott Wang, Vice President - Asia Pacific, World Trade Centers Association

Mr. Wang draws from his twenty years of expertise in businesses relations and trade in the U.S., China and other Asian countries to lead WTCA's efforts in developing business relations in Asia Pacific region.

Prior to his appointment to WTCA, Mr. Wang served as Vice President of the World Trade Center San Diego. During his tenure, he organized 19 trade missions to Asia with participation of companies and senior State and local government/business leaders, and provided thousands of small and medium-sized companies with assistance in information, communications and connections for doing business in Asia.

Mr. Gopal Devanahalli, CEO, MeritTrac

Mr. Devanahalli has more than 24 years of professional services experience. As a CEO, he drives the Business, Delivery, Technology and People strategies at MeritTrac.

A sound understanding of impact of technology coupled with experience of driving Enterprise and Consumer businesses for large corporates help him power the future growth of MeritTrac.

Mr. Devanahalli earned a degree in Computer Science from BITS, Pilani and a Post Graduate Diploma in Management from IIM, Calcutta.

Before joining MeritTrac, Gopal headed Digital Initiatives as well as Consumer business across Manipal Global. Prior to this stint, Gopal was with Manipal Health Enterprises where he was responsible for operating its hospital units & incubating new growth engines which include Technology based Healthcare Delivery.

Prior to Manipal Group, Gopal spent more than 15 years at Infosys and seven years in Kotak. At Infosys, Gopal has played various roles ranging from managing a business, developing corporate strategy and business development. He is part of the executive team of Beyond Carlton an NGO focused on Fire Safety.

Mr. Kalyan Basu, CEO & MD, A.Treds Limited

Mr. Kalyan Basu is the MD & CEO, A.Treds Ltd. (A joint venture of Axis Bank Ltd. and mjunction services Ltd.), the holding company of the digital invoice discounting platform Invoicemart.

He comes with more than three decades of experience across banking sector, starting his career with Central Bank of India, moving on to ICICI Bank and then to Axis Bank.

During these years, Mr. Basu worked across functions and segments. He worked at various branches for more than seven years, moving on to Head Forex and Trade Finance at ICICI Bank, Main Branch Kolkata.

He has also worked with Product Team of ICICI Bank at Mumbai for a year and has been a key member on the team developing new current account products.

During his more than 14 years of service at Axis Bank, he has been Head of Trade Advance and Forex for New Delhi Main Branch and also headed Corporate Banking Operations.

He was a part of Large Corporate Credit (North) for more than five years and SME Head for North for more than four years. Before moving to head A. TREDs LTD, he was Head of Supply Chain Finance at Axis Bank.

Prior to heading Invoicemart, Mr. Basu held leadership roles at Axis Bank including Head, Supply Chain Finance, Head - SME franchisee for the North Region and Relationship Manager for large corporates, handling sectors like Steel, Cement, Rubber, Glass, NBFCs.

Mr. Basu has been a part of the banking industry in India for decades and has seen the industry go through monumental changes. With banks adopting technology in

late 90s, to the advent of Core Banking Systems, the rise of private sector banks and development of specialised and dedicated products for SME and corporates.

His in depth knowledge and experience of adopting to new technology and riding the next wave of growth in the BFSI sector puts him in a commanding position to steer Invoicemart in the new era of FinTech revolution witnessed by the country.

Mr. Basu is driven by the idea of financial inclusion of MSMEs.

With his rich experience across various corporate banking functions, he acutely knows the pains faced by millions of MSMEs in obtaining timely credit. Whether it is due to lack of financial literacy or a lack of adequate credit or collateral profile, with Invoicemart he wants to bridge the gap between the working capital requirements of MSMEs and the financiers.

Mr. Basu believes that biggest challenge of employment generation which the country faces today can only be addressed through accelerating growth of MSMEs.

At Invoicemart, he leads his team with the ethos of nation building based on the highways of tech and innovation leading to an inclusive growth for the MSME segment.

Mr. Basu who was born in Kolkata city has experienced life closely across various cities of the country. He did his schooling from Frank Anthony Public School, Kolkata and his graduation from the University of Kolkata.

Later, he became a Certified Associate of Indian Institute of Bankers (CAIIB). International Chamber of Commerce (ICC) has also certified him as a Documentary Credit Specialist (CDCS).

Mr. Firoze B. Andhyarujina, Senior Counsel, Supreme Court of India

Born on 17th January 1950, Mr Andhyarujina is the son of Mr. Beharamashah Bhikaji Andhyarujina. Mr. Firoze Andhyarujina passed S.S.C, from St. Mary's High School, Bombay.

He obtained B. Com with Honours in 1971 from HR. College of Commerce & Economics and in 1974, LLB. from Government Law College.

He is the Rev. Father Hennessy Scholar, the Gustap K. Kanga Scholar in the Indian Contract Act in the First LLB.

examination, and in Second LLB. examination, he was awarded the Justice Arnold scholarship for securing highest marks in Hindu Law.

Mr. Andhyarujina participated in a number of debates, elocution and discussion competitions. He has represented twice the Bombay University and won the All India Debating competitions at Ranchi and Madras.

He was awarded the Rotary Foundation Scholarship of the Rotary International to study Post Graduate Law at the University of Miami, Coral Gables, U.S.A. In 1976, he completed LLM, in International Law at the University of Miami, Coral Gables, USA.

In 1976, he completed LL.M, in International Law. He was also awarded scholarship in International and Comparative Law at Paris, France. He has also written a thesis on "the Law of Outer Space". During his entire academic career, Mr. Andhyarujina has won more than seventy prizes and trophies both at School, College and University Level.

He was part time professor at H.R College in Mercantile law, the Honorary Professor at St. Xavier's Institute of Management Studies & visiting Professor at the K.C. College of Tax Management.

In 1976, while on a Rotary Scholarship to the USA he acted as an 'Ambassador of Goodwill' travelling across the U.S.A. In 1983, he went on a professional visit to U.S.A, and addressed a number of clubs and associations on Indian Culture and Law.

In 1985, he was the leader of student delegation to Switzerland, organized by the Indo-Swiss Society. While in Switzerland, he paid official visit to the Swiss Parliament and Swiss Industries.

Mr. Andhyarujina has attended the International Conference in Atlanta and also in Canada in 1983, He is a widely travelled man having toured the five continents.

He started his career as junior in the Chambers of Mr. R.J. Kolah and Mr. B.A. Palkhivala. His basic practice is connected with tax matters and company law.

He is mainly engaged in tax Litigations and has participated in some of the important and outstanding cases that have Laid down and interpreted the tax laws of India.

He has also argued some of the important trademarks and patent cases at Bombay and Delhi High Courts. Important

cases in which Mr Andhyarujina appeared, were: MODVAT credit, Status and Taxability of Trust, Taxation of Shipping Industry, Provisional Attachment, Stay and Attachment of Shares and demand of tax and application of insurance Act to Income Tax Act. In 2001, he was designated as “Senior Counsel” by the Bombay High Court.

Since 1994, Mr. Andhyarujina has been delivering speech on “The Union Budget” every year in Mumbai. His budget speech analyses various provisions and critically examines the impact it would have on industry, trade and the common man.

His Budget speeches have been well—received and acknowledged in various forums at Ahmedabad, Bangalore, Chennai, Hyderabad, Pune, Mangalore, Rajkot and Tirpur.

In August 2006, Mr Andhyarujina was invited to Singapore to be a panelist on Intellectual Property Rights International Convention Organized by IP Academy, U.K. In November 2006, Mr Andhyarujina was also invited to be a speaker at the Global Information Infrastructure Commission, hosted at Bangalore.

International Tax Review, World Tax 2006, has rated Mr Andhyarujina amongst the five leading individual tax counsel in India.

Mr. Sauvik Banerjee, Vice President Digital Initiatives, CTO, TATA CLIQ

Mr. Sauvik Banerjee is currently the chief technology officer at Tata Cliq. Tata Cliq is the e-commerce platform of Tata Unistore.

Mr. Bannerjee has more than 20 years of experience in digital innovation across a range of sectors such as Retail, Telecom, Manufacturing, Fintech and Agritech and Healthcare. He also serves as Vice President, Digital Initiatives at Tata Industries.

He has been responsible for disruptive innovation ideas in technology and omni-channel commerce that have earned him the distinction and title of being one of the only six people (the only person of Indian origin) in the world to have worked on all global Omni channel platforms.

Mr. Vivek Bhargava, CEO, DAN Performance Group

A digital marketing veteran with a two-decade experience, Mr. Vivek Bhargava is the Chief Executive Officer of DAN

Performance Group, wherein he heads and is responsible for all the digital performance agencies of Dentsu Aegis Network.

An early frontrunner in the digital revolution in India, Mr. Bhargava believes that 'digital' is much more than a mere marketing medium, playing the role of a catalyst and multiplier across every aspect of business. He consults an impressive roster of clients and advises them on the most effective digital strategies for their brands.

Prior to this, Mr. Bhargava was the CEO at iProspect India, a part of the Dentsu Aegis Network.

Mr. Bhargava has donned the role of an investor in the reality television show The Vault which funds innovative start-ups by promising entrepreneurs on the merit of their business idea instantly.

Ms. Viktoria Lopatina, Founder and Managing Director, Kat.El International Trade Consulting and President, Tuscany-India Association

Ms. Lopatina was born in Vilnius, Lithuania and currently lives in Italy. She holds two University degrees in Law: In Moscow, Russia and in Florence, Italy. She specialized in International Commercial Law.

Ms. Lopatina has always been involved in international trade, promoting relations between Italian and foreign companies.

For several years, she worked with countries such as Russia, Azerbaijan, the Baltic countries and others. Recently she has focused on the Indian market, devoting much time to the study of the market and the culture of doing business in India. Main sectors involved are: real estate, solutions for smart cities, furniture & design, fashion and tourism industry.

Currently, Ms. Lopatina is the founder and managing director of Kat.El International Trade Consulting, a company that offers the following services: Customer research in Italy and abroad; Analysis and market research; Assistance in partnership selection; Negotiations; Contracts monitoring; Logistics management; Translation.

Ms. Lopatina has also taken care of relations with some institutions, promoting international relations. Ms. Lopatina is President of Tuscany-India Foundation, which promotes bilateral relationship between India and Italy. In the past, she organized some conferences, dedicated to the promotion of Doing business in some countries.

Testimonials

"World Trade Center Mumbai must be congratulated on the remarkable and timely Global Economic Summit on services. The profound developmental significance of services remains poorly understood and underappreciated. The Summit took a brave step in remedying this imbalance. Apart from highlighting how agriculture and manufacturing performance depends crucially on services, sessions tackled frontier issues such as the role of services in the fourth industrial revolution and in developing smart cities. This superbly organized event brought together leading thinkers, doers, and policy-makers in the type of exchange that leads to a greater mutual understanding, informed policy and better opportunities. The Center deserves all our support in playing a powerful catalytic role and providing a valuable public good."

Dr. Aaditya Mattoo, Research Manager, Trade and International Integration, Development Research Group, World Bank

"Thank you very much for inviting us to this excellent Summit. It was great to see experts from India and abroad speak on various subjects related to services, fourth industrial revolution, smart cities etc. The cultural programme was marvelous and the food served was delicious. This reflects the hard work of staffs at WTC Mumbai and All India Association of Industries (AIAI). I enjoyed the Summit. Thank you once again!"

Mr. Minkoo Subedar, Investment Advisor, Subedar Consultancy

"It was pleasure attending GES 19 as I got a chance to meet many delegates. The whole discussion during the session was quite thought-provoking and there were lot of takeaways for all of us. Let us be connected and keep us posted if any such events are coming up in Mumbai."

Mr. Sanjay Sinha, Life & Business Coach, Conscious Coaching

"The event was well organised and was attended by senior dignitaries from many foreign countries. It helped us gain good exposure for our technology and build awareness about what we do. Thank you to the World Trade Center Mumbai team."

Mr. Neerav Parekh, Founder & CEO, vPhrase Analytics Solutions

"The Summit was organized very professionally, congratulation and big thank you to the WTC Mumbai team. My suggestion is related to the panels. I would prefer one panelist less in the session and a bit more time for initial explanation for others. Also, the audience would follow easier, if initial panelist speeches were supported with slides. Otherwise, the event went perfectly fine."

Mr. Stanislav Baša, Member, Toshiba European Business Partner Advisory Council

"On behalf of WTC Kochi, I wish to thank you for being a wonderful host and congratulate the entire WTC Mumbai team for the success of the event. This visit was also a learning experience for new entrants like us to understand how events can be organised and executed at this level."

We also thank you for providing us a forum to sign memorandum of understanding (MoU) with WTC Pune."

Mr. Vivek George, - Deputy Manager - World Trade Center Kochi

"It was indeed a great pleasure and honour to participate at the Cultural Reception and Felicitation Ceremony, organised by WTC Mumbai during GES 2019 - their most important annual event. GES is a place to be, it represents a very important international platform for business networking and gives you excellent occasion to meet Government organizations, Business community and to get good experience."

Ms. Viktoria Lopatina, Founder and Managing Director, Kat.El International Trade Consulting and President, Tuscany-India Association

"We are really thankful to you for inviting us to the 8th Global Economic Summit (2019) in Mumbai. All our delegates and accompanying persons appreciated the high level of the Summit and enjoyed their participation in it. Our special thanks to the concerned officials of WTC Mumbai for their perfect organisation of our transfers and accommodations in Vivanta President Hotel. We also thank the officials for arranging a very useful B2B meeting and for assisting us in many other ways. We request you to inform us about your plans regarding next year Summit? We hope to participate next year as well."

Mr. Tiit Tammemägi, PhD., Chairman, Volikogu esimees, ICC Estonia

Media Coverage

The 8th Global Economic Summit was promoted on national and regional newspapers, electronic and social media to draw delegates from multiple sectors and wide geography. Pre-event advertisements about the Summit appeared on prominent English business newspapers and regional dailies in Gujarat, Karnataka, Delhi, Tamil Nadu, Andhra Pradesh, Goa, Jaipur, Bhubaneswar and other states.

A dedicated website for the 8th Global Economic Summit was launched to enable online registration of the participants. The website was frequently updated with information on latest speakers, support partners and new developments in the world of services and technologies.

MVIRDC World Trade Center Mumbai created awareness about the theme of the Summit through insightful write-ups in the form of Summit briefs and Summit Newsletters.

Awareness among the intended participants was also created through precursor events in Mumbai, Navi Mumbai, Pune, Nashik and other parts of the country to promote the Summit in these regions. The precursor event received wide coverage from various print and online media agencies.

Online tools such as Social Media, Search Engine Optimisation and E-marketing flyers were optimally utilized to promote the event among the online community.

Content relating to speakers, themes, panel discussions and other important announcements were released on Twitter, LinkedIn and Facebook. All the panel sessions were telecast live on Twitter and Facebook.

In addition, video messages from thought leaders and influential speakers were posted on social media to engage with the online community. Information about the Summit was also disseminated through word-of-mouth.

Outdoor promotion was carried out in prominent locations to reach out to the local business community and consumers of various products and services. As part of the outdoor promotion, banners, standees, posters of the Summit were distributed at various events in India and abroad. The Summit was publicized through large hoardings at prominent locations in Mumbai.

The Sessions of the Summit received wide coverage in English and vernacular newspapers, magazines, radio and television channels. Some of the media that reported the event are National Herald News, Orient Publication, APN News, Afternoon, Web News Wire, Business News Trends, News Patrolling, Startup Wonders, Kannada Prabha, Vijayavani, Samyukta Karnataka including online media news agencies.

Edited videos of the entire event have been uploaded on the Youtube Channel of MVIRDC World Trade Center Mumbai to archive the proceedings of the Summit online.



ମାର୍ଚ୍ଚ ୬ ରେ ଅଫନ ବିଶ୍ୱ ଅର୍ଥନୈତିକ ସମ୍ମେଳନା ୨୦୧୧

ଦୁଇଦିନିଆ ୨୦୧୧ ବିଶ୍ୱ ଅର୍ଥନୈତିକ ସମ୍ମେଳନା ୨୦୧୧ (GES) ୨୦୧୧ ମାର୍ଚ୍ଚ ୬-୭ ତାରିଖରେ ମୁମ୍ବାଇରେ ଅନୁଷ୍ଠିତ ହେବ।

ଶେଷାଠିକ ମିତ୍ରତା ୫ ବର୍ଷ ଉଲ୍ଲେଖନୀୟ ଘୋଷଣାପତ୍ର ଉପରେ ଆଧାରିତ

ଶେଷାଠିକ ମିତ୍ରତା ୫ ବର୍ଷ ଉଲ୍ଲେଖନୀୟ ଘୋଷଣାପତ୍ର ଉପରେ ଆଧାରିତ ହେବ।

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8th GLOBAL ECONOMIC SUMMIT logo and introductory text in Odia.

ଶେଷାଠିକ ମିତ୍ରତା ୫ ବର୍ଷ ଉଲ୍ଲେଖନୀୟ ଘୋଷଣାପତ୍ର ଉପରେ ଆଧାରିତ

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8th Global Economic Summit on Services: Enabler of Growth for Trade and Industry scheduled at World Trade Centre, Mumbai

Mumbai, 06 March 2011: The 8th Global Economic Summit (GES) is a high-level international forum on the theme 'Trade and Industry: A Key to Growth' to be held in Mumbai on 6-7 March 2011.

ସାଧିକାର: ହନେଟର ଓକ୍ସ ଟ୍ରାକ୍ ଟ୍ରେକ୍ ଏଣ୍ଡ ହିକ୍ସଟ୍ରି ପର ଉପାଦାନ ଘାଟିକା ବିକାଶ

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ମୁମ୍ବାଇ ବିଶ୍ୱ ବାଣିଜ୍ୟ କେନ୍ଦ୍ରରେ ଅଫନ ବିଶ୍ୱ ଅର୍ଥନୈତିକ ସମ୍ମେଳନା (ବିଦେଶ) ୨୦୧୧ ମାର୍ଚ୍ଚ ୬-୭ ତାରିଖରେ ଅନୁଷ୍ଠିତ ହେବ।

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୫ ବର୍ଷ ଉଲ୍ଲେଖନୀୟ ଘୋଷଣାପତ୍ର ଉପରେ ଆଧାରିତ ହେବ।

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Mumbai to host 8th GES

Mumbai: The World Trade Centre Association of India has announced to host the 8th Global Economic Summit (GES) from March 6-7, 2011 at the World Trade Centre in Mumbai.

Acknowledgement

An event of this dimension is not possible without active involvement of various Indian and international partners, government agencies, including diplomatic corps.

MVIRDC World Trade Center Mumbai and All India Association of Industries (AIAI) wish to place on record deep sense of gratitude to all the delegates and partners for making the 8th Global Economic Summit a grand success.

We are honoured by the gracious presence of Mr. Ibrahim Ameer, Hon'ble Minister of Finance, Government of Maldives and we are grateful to him for sharing his valuable perspectives on partnership among South Asian countries in the services sector.

We are grateful to our Knowledge Partner, Indian Institute of Management Bangalore, for its valuable assistance in designing the overall structure of the Conference, including adoption of the theme for the Summit, preparing the topics and flow of the panel sessions and identifying key speakers.

We gratefully acknowledge the invaluable contribution of distinguished speakers, international and Indian delegates, exhibitors, central and state governments of India, support partners, sponsors, media partners and audience for their overwhelming response to the Summit. We thank the Ministry of External Affairs, Government of India for generously sponsoring the Summit. We also thank the support partners from other ministries of Government of India, namely the Ministry of Commerce & Industry, Make in India Initiative and the Ministry of Micro, Small & Medium Enterprises.

Our sincere appreciation goes to Government of Maharashtra's Single Window Cell MAITRI and Government of Karnataka for partnering with us in this event.

We are thankful to the Indian Exhibition Industry Association (IEIA) for collaborating with us in the exhibition at the Summit.

Our heartfelt gratitude goes to our esteemed international partners, namely Indian Business Chamber of Luxembourg (IBCL), International Chamber of Commerce Estonia, Polish Investment & Trade Agency, SAARC Chamber of Commerce & Industry, World Trade Center Dresden and World Trade Center Algiers.

We are extremely grateful to our outreach partners Yangpoo Career Mentors, Forum of Industry and Academic Knowledge Sharing, Nashik Information Technology Association, World Trade Center Navi Mumbai and Bombay Management Association.

Our special thanks go to the experts who contributed their valuable perspectives on services sector in the form of articles and case studies to the Summit Handbook.

We congratulate all the business organizations and outstanding individuals who were felicitated at the event for their exemplary contribution in the area of services sector.

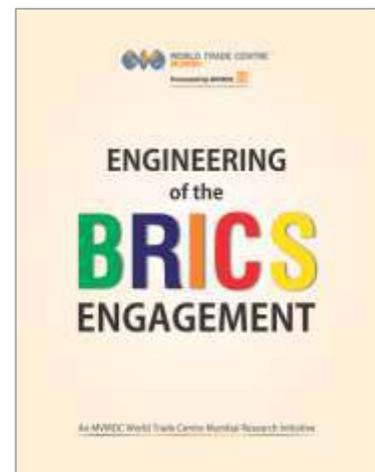
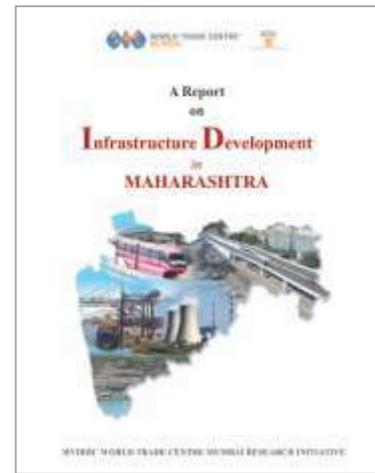
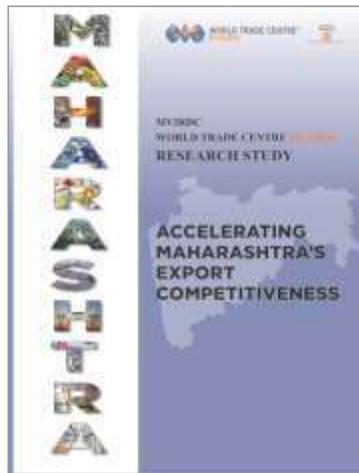
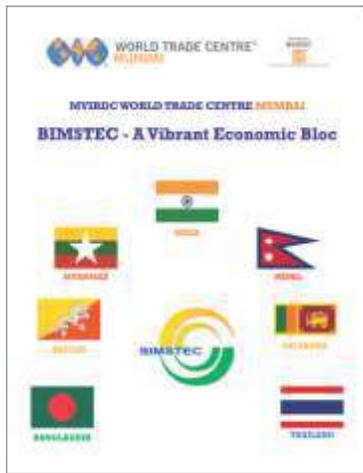
We sincerely thank Nashik Engineering Cluster (NEC) and 'Soma Vinevillage' for extending warm welcome to the Summit delegates at the Post-event field visit.

We appreciate all the artists who participated at the Cultural Programme of the Summit for enthralling the audience with their marvelous performance.

Finally, we acknowledge the efforts of the team at MVIRDC World Trade Center Mumbai, All India Association of Industries (AIAI), World Trade Center Goa, World Trade Center Bhubaneswar and World Trade Center Jaipur for their dedicated efforts to make the event a grand success.



MVIRDC World Trade Center Mumbai Research Publications



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