

Dear Readers,

Welcome to another issue of MAITWire!

With the unveiling of the Union Budget on February 1, the country's ambitious Make in India programme received another significant boost, with fresh steps being introduced to correct existing anomalies in the indirect taxes structure. Customs duties have also been reduced on several components. In this issue, we have a detailed section covering the salient features of the budget.

A lot more needs to be done in the current ecosystem in order to speed up the manufacturing process. With a strong manufacturing base, exports of IT, electronics and hardware products will increase. MAIT continues to work with the central and state governments to create a more conducive ecosystem and boost manufacturing.

India's dramatic demonetisation has been the other big news, that in our view, will prove to be the stepping stone for India to leapfrog into a digital economy. Our cover story analyses the implications of a cashless economy and chalks out the roadmap for us to get there.

Today, the rate of adoption of technology is high, but we need to ensure that technology moves beyond just mobile phones in rural India. Alongside, we must emphasise on providing the required capacity to use these devices, by focusing on shared infrastructure such as broadband, cloud storage and content. If every government department, small & medium enterprise (SME), enterprise and household in India uses technology, there will be a requirement of 400 million personal computers and at least 500 million smartphones over the next few years. Hence, the importance of IT manufacturing and its future potential is immense.

We look forward to receiving more contributory articles, valuable feedback and your continued support.

Regards,

Anwar Shirpurwala

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IN FOCUS

Questing for a Digit-All Economy: Will India become cashless?

We are in the midst of a fourth industrial revolution, which is being driven by digital technologies that are rapidly altering the way in which we live, work and interact with each other. A substantial shift from cash based transactions to the adoption of a digital platform, is expected to transform the economy as we see it today. The demonetisation decision taken by the Government of India on November 8, 2016, has been showcased as a step taken towards boosting India's journey into becoming a cashless nation. In this issue of MAITWire, we attempt to provide a balanced analysis on whether this massive step will pave the road for a cashless economy in India or not.

Demonetisation - the tool to a Digital Economy?

At the time of the demonetisation announcement by Prime Minister Modi, the two banned notes of INR 500 and INR 1000, accounted for nearly 86 percent of all notes circulated in India's heavily cash dependent economy. The reaction to the announcement was a mixed one. Those in favour felt the demonetisation drive would bring both black, and white money into the banks, which would increase the banks liquidity and bring down the soaring inflation rates. This would further lead to higher expenditure on infrastructure projects - fuelling economic growth and reduced taxes. The move also meant increased financial inclusion, with more and more Jan Dhan Accounts being opened. Supporters of the decision also felt that the step would result in lowering the Government's fiscal deficit and would spur digitisation and impel the digital economy.

Many believe, the entirely cash dependent economy, has led to evils like hoarding of black money - an avenue for counterfeit currency and funding of terrorist activities across the country. Another fallout of India's cash dependent economy is that, only one percent of its citizens i.e., out of the total population of 1.25 billion, only 1.23 million people, are currently paying taxes.

There are several taxes that exist in the Indian economy today. The multiplicity and the high tax rates add to the confusion and is one of the reasons that people avoid paying them. This could be fixed if we became a cashless society.

There were many who opposed the move as well. Many think-tanks felt India's hope of becoming a cashless economy in one such move, would not be possible due to the non-availability of infrastructure to handle transactions, on such a large scale. Also, the fact remains that more than fifty percent of the population do not have a bank account. Another reason that digital systems cannot work in India right now, is because it requires unending power supply - something that is still an immense challenge in most parts of India. Lack of Point of Sales (POS) machines and poor digital literacy would also pose challenges in the effective implementation of the move. A minimum level of literacy is required in order to operate a small phone device, and the literacy rate in India is still a grim 74.04 percent. Another area of concern is the lack of security systems in place to prevent cyber-crimes.





Gearing up for a Digital Economy

India has been in the process of gearing up for a digital economy over the last few years. The Pradhan Mantri Jan Dhan Yojna (PMJDY), which was launched in 2014, increased the bank account penetration from 35 percent to 53 percent. 1.08 billion people have been scanned through biometrics for Aadhar card issuance and as many as 36 crore bank accounts have already been seeded with Aadhar, which has reduced the cost of e-KYC of banks to one tenth. There are currently around 400 million smartphones in India that can be used for e-wallet transactions and about 15 lakh POS machines and 2.5 lakh ATMs in place, to support the transition from a cash dependent economy into a digital one.

The key components of a digital economy include front-end devices and infrastructure - in the form of hardware, software and network. On the legal front, provisions are already in place in the CrPC, IPC and IT Act, which gives legal coverage in case of cyber frauds. The key building blocks of the digital economy include affordable, accessible broadband; next generation infrastructure; innovation in a digital economy; digital citizens and businesses; digital government and communities & digital inclusion.



Ways to Go Cashless

- Debit / credit / pre-paid cards are plastic payment cards that can be used instead of cash when making purchases. In a debit card transaction, the money is debited directly from the user's bank account unlike a credit card transaction. A pre-paid card is generally used when people don't want to carry large sums of money and allows for making purchases as and when needed.
- Unified Payments Interface (UPI) is a payment system that links multiple bank accounts (UPI participating banks only) of a customer, facilitating banking services like fund transfer (P2P), and merchant payments through a single mobile application.

- Unstructured Supplementary Service Data (USSD), is a unique payment platform that allows mobile banking services on a basic mobile handset without the use of internet data facilities. USSD service is devised to bring about the inclusion of the under-banked section of the society into the mainstream banking sector. An individual can get into a banking transaction by dialing *99#.
- Aadhar Enabled Payment System (AEPS) A system that leverages
 Aadhar online authentication and enables Aadhar Enabled Bank
 Account (AEBA), to be operated in anytime-anywhere banking mode,
 by the marginalised and financially excluded segments of the society
 through micro ATMs.
- A digital wallet is a payment platform that allows an individual to make electronic transactions through a smart phone. An individual's bank account can also be linked to a digital wallet. There are many e-Wallets like Paytm, Mobikwik, Oxygen, SBI-Buddy, that are prevalent these days.
- Bitcoin is a digital and global money system (currency). It allows people to send or receive money across the internet.

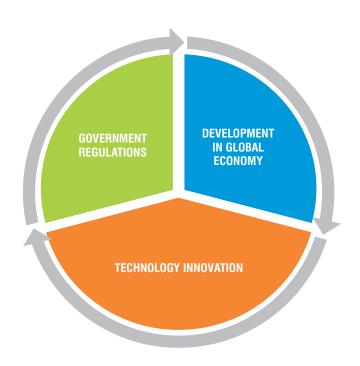




Committee on Digital Payment Systems

In November 2016, the government on its part constituted a 13-member Committee of Chief Ministers, headed by Andhra Pradesh Chief Minister Shri. Chandrababu Naidu, to promote digital payment systems. The members of the committee are the Chief Ministers of Madhya Pradesh, Odisha, Sikkim, Puducherry and Maharashtra. Other members include NITI Aayog Vice-Chairman, Shri. Arvind Panagariya and NITI Aayog CEO, Shri. Amitabh Kant, who will also serve as the Secretary of the Committee. Special invitees include former UIDAI Chairman Shri. Nandan Nilekani, Boston Consulting Group Chairman Shri. Janmejaya Sinha, netCore Managing Director Shri Rajesh Jain, iSPIRIT Co-founder Shri. Sharad Sharma and IIM-Ahmedabad Professor (Finance) Shri. Jayant Verma. The committee was constituted in order to enable all sections of the population to migrate to digital payments and enable India to transform into an advanced digital payment system of global standards.

DRIVERS OF DIGITAL ECONOMY



Advantages of a Digital Economy

If we adopt digital economy as a nation, the government could charge one percent service tax on every transaction. The tax then collected, would be more than the current income and service tax collection and the government, in the long run could abolish the various tax structures all together. A single transaction tax could perhaps be the only tax scheme across the country.

Going forward, MAIT recommends that the following steps be taken by the government to encourage digitisation:

- Draft a specific policy for digital payments
- Encourage consumers to go digital by giving incentives
- Encourage businesses to go digital by giving incentives
- Start pilot projects where digital payments are used
- Further strengthen cyber security
- Adopt cloud architecture
- Conduct awareness programmes on becoming a digital economy
- Build capacity in institutions to handle digital payments
- Advance digital literacy
- Focus on local language interface
- In the area of academics, include Digital Economy as a subject



Category of Recommendation	Recommendations	Implementing Institution	Timeline
Legislative	- Make regulation of payments, independent from the function of central banking	Ministry of Finance	1 month
	 Update the current Payment and Settlement Act, 2007, to include explicit mandate for principles like: Competition and innovation Consumer protection and graded penalties Open Access Regulating systemic risk Regulatory governance Data protection and security 	Ministry of Finance	1 month
Executive	 Promote digital payments within Government - POS and mobile based acceptance infrastructure 	Ministry of Finance, Ministry of Agriculture, Ministry of Corporate Affairs, Government	1 month
Executive	 Promote digital payments within Government - Withdraw charges/ fees/ surcharges, etc. 	Ministry of Finance, State Governments	1 month
Executive	 Promote digital payments within Government - Bear cost of electronic transactions 	Ministry of Finance, State Governments	1 month
Executive	 Promote digital payments within Government - Facility for online payments using cards and wallets 	Ministry of Finance, State Governments	1 month
Executive	- Promote digital payments within Government - Mandating use of TReDS	Ministry of Finance	1 month
Executive	 Promote digital payments within Government - Provide digital alternatives to cheques 	Ministry of Finance, State Governments	1 month
Executive	Promote digital payments within Government - Remove customs and excise duties	Ministry of Finance	1 month
Executive	 Promote digital payments within Government - Service tax input credit for digital transactions 	Ministry of Finance	1 month
Executive`	- Promote digital payments within Government - Utility bills and payments to Government through digital mode	Ministry of Finance	1 month
Executive	Create a fund of savings generated from cashless transactions - Create and utilise Digital Payments Action Network (DIPAYAN)	Ministry of Finance, Ministry of Social Justice, Ministry of Tribal Affairs and DONER	2 months
Executive	 Create a fund of savings generated from cashless transactions - Mechanism to track cash handling and transitioning to digital payments 	Ministry of Finance	2 months

Category of Recommendation	Recommendations	Implementing Institution	Timeline
Executive	- Create a ranking and reward framework	NITI Aayog, State Governments	2-3 months
Executive & Regulatory	- Other Measures - Promote eKYC and paperless authentication	Ministry of Finance, RBI, UIDAI	3 months
Executive	- Other Measures - Implement disincentives for usage of cash	Ministry of Finance	3 months
Executive & Regulatory	- Other Measures - Create awareness and transparency	Ministry of Finance, NITI Aayog, RBI, Ministry of HRD, DoPT	3 months
Executive & Regulatory	- Other Measures - Create parity between cash and digital payments	Ministry of Finance, RBI, UIDAI	3 months
Executive & Regulatory	- Other Measures - Promote USSD based payments	Ministry of Finance, RBI, TRAI, DoT	3 months
Regulatory	- Consider outsourcing of payment systems	RBI	6 months
Regulatory	- Consider updating payment systems to operate on 24*7 basis	RBI	3 months
Regulatory	Allow non-bank PSPs direct access to payment systems	RBI	2 months
Regulatory	- Improve shareholding and governance of retail payment organisations	RBI	2 months
Executive & Regulatory	- Enable interoperability	RBI, NPCI	2 months
Regulatory	- Create formal mechanism to allow innovations and new business models	RBI, NITI Aayog	3-4 months
Regulatory	- Other Measures - Regulations on SIPS and SIFI	RBI	6 months
Regulatory	- Other Measures - Support POS, card based and other digital transactions	RBI	2 months
Regulatory	Other Measures - Enable faster and cheaper credit	RBI	2 months
Regulatory	Other Measures - Develop metric for digital payments	RBI	2 weeks
Regulatory	- Other Measures - Promote cross-border payments	RBI	2 months

Source: Committee on Digital Payments Report, Ministry of Finance, Gol, Dec 2016

PERSPECTIVE

Industry 4.0: Driving Manufacturing Digitisation in India



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Digital manufacturing and design, referred to as 'Industry 4.0' or as the 'Industrial Internet', represents a basket of new, digitally enabled technologies such as, advances in production-equipment (e.g. 3D printing, robotics, and adaptive CNC machines), smart finished products (e.g. connected cars, devices with embedded sensors and software), data processing and analytics tools across the value chain. The first three industrial revolutions came about as a result of mechanisation, electricity and IT-enabled automation. The introduction of the Internet-of-Things and Services into the manufacturing environment, is ushering in a fourth industrial revolution.

Industry 4.0: The Industrial Revolution End of 18th century Beginning of 20th century Early 1970s Today Mechanisation **Electrification:** Computerisation: **Networking:** Use of cyber-physical Use of water and steam Use of electrical power to Use of electronics and power to run mechanical enable work-sharing IT to automate systems to connect, transform production facilities mass production and reimagine business

Industry 4.0 signifies the next phase in digitisation of the manufacturing sector, following the lean revolution of 1970s, outsourcing phenomenon of 1990s and automation wave that took off in 2000s.

Unlike prior industrial revolutions, Industry 4.0 is not about replacing existing assets with new ones, but about mastering the managerial challenges posed by disruptive technologies along different dimensions:

- Achieving the next horizon of operational effectiveness
- Building new business models based on shifting value-pools
- Driving digital transformation across the entire organisation

Data is the core-driver

We are beginning to see enterprises take advantage of the astonishing rise in data-volumes, and emerging forms of human-machine interactions (e.g. touch-interfaces, augmented reality). They are creating tremendous business value by leveraging hundreds of millions of potential connections on the internet.

However, most of the IoT data is not being used currently and there are massive information leakages. For example, only 1% of the data from an

oil rig with 30,000 sensors is examined today. Data is mostly used for anomaly detection and control, and not for optimisation and prediction - which would actually provide great value. Industry 4.0 requires moving from selected, sampling-based measurements, to full coverage of the production process, using inline sensors and measurement devices that collect data about every single work-piece.

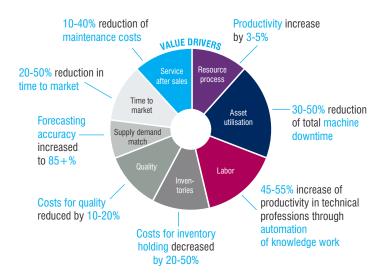
More recently, we're starting to see significant volumes of connected sensors and smart devices being leveraged to transform business models and simplify complex tasks. When these changes are coupled with improvements

in network infrastructure (being put in place through the Digital India initiative), rapidly increasing maturity of Big Data analytics, and proliferation of smart applications- all connected in the cloud- businesses will enter the era of true hyper-connectivity. A McKinsey study estimates, that a big-data/analytics driven-approach can result in 20-25% increase in production volume and up to 45% reduction in down-time.

Additionally, 3D printing has moved from being applicable to only polymers and metals, to a broad range of materials - including glass, biocells, sugar and cement.



Also, technologies like advanced robotics, cost-effective options for storing energy and innovative ways of harvesting energy have all become more relevant, enabled by significant advances in artificial intelligence, machine-vision, and machine-to-machine communications.



Combination of technologies from these clusters, not only enables the translation of the physical into the virtual world, but also facilitates the link back from the virtual to the physical world. Automated feed-back loops are required to ensure that the manufacturing process, produces the required outcome.

Transforming "Made in India" Brand with Rapid Adoption of Industry 4.0

Indian manufacturing sector contributed roughly 15% to the country's GDP in 2014-15 while contributing only 2% to the world's manufacturing output. With increasing digitalisation of the manufacturing industry, India's current cost-advantage of 25-30% over developed nations can diminish to less than 15% (for example, Germany, one of the earliest adopters of Industry 4.0 is expected to achieve $\sim\!14\%$ manufacturing cost reduction and 18% productivity-growth).

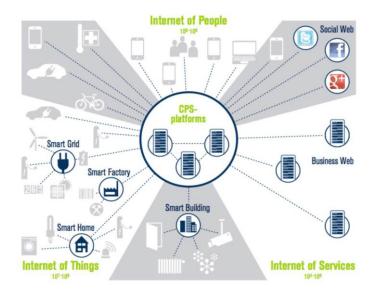
"In the past, enterprise IT was an efficiency driver that enabled the management of complex, global processes. Now, digital transformation is becoming the product or part of the product."

Bernd Leukert, Member of the Executive Board, Products & Innovation at SAP SE.

To boost the manufacturing sector, the Government has set a target to increase the sector's contribution to the GDP by 25% and create 100 million jobs by 2022. In order to achieve this, several flagship programs such as Make-in-India, Digital India, and Skills India have been launched.

India is uniquely positioned to tap into the potential of Industry 4.0. The 'Make in India' vision which converges with Industry 4.0 evolution, marks the next big wave of technology-driven manufacturing.

Adoption of technology (robotics, planning, Big Data & predictive analytics), skilled work-force, and resource efficient systems are key elements for a successful transition to Industry 4.0. By bringing in elements of digitalisation, smart manufacturing will ensure a smooth transition from the traditional, labor-intensive manufacturing process to a sophisticated set of IT-based processes, thereby enhancing the manufacturing sector's contribution to GDP, and enabling Indian manufacturers to become globally competitive.



Activating Industry 4.0 Levers:

Manage, integrate and analyse data - adopt integrated systems with common standards

Close digital gap in production - install sensors and actuators in production equipment and connect them through secure wireless networks

Re-design classical production

systems - employ dynamically programmable production technology while increasing machine flexibility, decentralising intelligence and delegating processes to smaller units (spatial decoupling)

With the introduction of Goods and Service Tax (GST) in India, the transformational potential for supply chain optimisation, can be greatly facilitated through the cyber manufacturing support. This can essentially be a substantial boost to the competitiveness of the Indian industry. Large-scale adoption of Industry 4.0, will improve India's brand image as an innovation-driven technologically-advanced, high-quality, safe manufacturing base. To meet the goals of zero-defect, sustainable manufacturing processes that operate with optimum resources executed in smart factories, and a comprehensive set of manufacturing solutions that form the foundation for Industry 4.0, are needed.

Industry 4.0 for India - Way Forward for a Conducive Policy Environment

A comprehensive partnership among industry, academia and government is required to craft the right Industry 4.0 policy, and create an enabling environment, that will significantly transform India's manufacturing competitiveness. Following key areas may require attention in India based on similar experiences in Germany (reference document: Recommendations for Implementing the Strategic Initiative Industrie 4.0 – Acatech, National Academy of Science and Engineering, Germany) and elsewhere.

- Enabling Policies on IoT, Cloud and Analytics: Industry 4.0 will require
 an integration of efforts in cyber and physical space and therefore the
 enabling policy environment on IoT, cloud and analytics needs to be
 finalised in an integrated and holistic manner.
- Standardised Reference Architecture: Industry 4.0 will lead to intercompany integration through value networks. This will only be possible, when we have a single common set of standards. Reference Architecture Model for Industry 4.0 (RAMI 4.0) can serve as base-line to define the networking and communications frame-work.
- Modelling Complex Production Systems: With manufacturing becoming complex, there will be a need to equip workforce with tools and techniques for the development of models, for complex production systems.
- Broadband Infrastructure: Quality of communication networks will have a direct bearing on cyber-physical systems. It will, therefore be essential to integrate connectivity with industrial clusters and manufacturing zones, either as part of Digital India connectivity plans or otherwise.
- Cyber-Security and Safety: Cyber-resilience will be a key requirement
 in risk management processes for production-networks. It will also be
 important to ensure that cyber controlled factories do not pose a threat
 to the safety of people and the environment, calling for an integration of
 safety and cyber security standards.



- Work Organisation & Design: Technology is transforming industrial
 workforce. Greater use of robotics and automation may reduce the
 number of jobs in assembly and repetitive production operations but
 this will be offset by the creation of new job opportunities in IT and data
 science. Education systems should seek to provide broader skill-sets
 to close the impending gap.
- Training, Skills and Capacity Building: Industry 4.0 will require professionals with radically different skill sets and competency profiles. This area may require attention from the perspective of skill development policy.
- Regulatory Environment: Adoption of Industry 4.0 will require a supporting, legal and regulatory environment, to ensure the protection of data, effective handling of liability issues, privacy concerns etc.
- Resource Efficiency: Industry 4.0 and its impact on the environment will need to be studied in detail and policies would need to be built around the same.

The journey towards Industry 4.0 will be an evolutionary process. It will deliver greater flexibility and robustness together with the highest quality standards in logistics, engineering, planning, manufacturing, and operating processes. It will lead to the emergence of dynamic, real-time optimised, self-organising value-chains that can be optimised based on a variety of criteria such as cost, availability, and resource consumption.

Using Industry 4.0 as the path to the future of manufacturing, will allow Indian manufacturers to do more than just upgrade their equipment and eliminate inefficiencies to increase production effectiveness. It will give them the freedom to make the right strategic decisions and re-invent their business models, while preparing themselves to gain a competitive-edge globally.

SPOTLIGHT

20th National Conference on e-Governance Vishakapatnam, January 9-10, 2017



The Department of Administrative Reforms and Public Grievances (DARPG), Government of India, in association with the Ministry of Electronics & Information Technology and Government of Andhra Pradesh, organised the 20th National Conference on e-Governance on January 9-10, 2017 in Vishakhapatnam.

Chief Minister of Andhra Pradesh, Shri. Nara Chandrababu Naidu; Union Minister of Urban Development, Housing & Urban Poverty Alleviation and Information & Broadcasting, Shri. M. Venkaiah Naidu; Minister of State for Ministry of Personnel, Public Grievances & Pensions, Dr. Jitendra Singh and Union Minister of State for Electronics and Information Technology, Law & Justice, Shri P. P. Chaudhary, were present during the inaugural session.

Andhra Pradesh Chief Minister N. Chandrababu Naidu, made a strong pitch asking the Centre to declare Andhra Pradesh as a model state for implementing new age technologies like Internet of Things, cloud computing and data analytics. He stated that the Central Government should first implement pilot projects in Andhra Pradesh and then replicate them nation-wide.







The inaugural session was followed by plenary session on sub-themes - Internet of Things (IoT) and Data Analytics; Cyber Security policy for the future; Digital Connectivity to the last mile; Technology led monetary transactions leading to financial inclusion and AP leading Industry 4.0.

The two-day National Conference on e-Governance concluded with the Union Minister of State for Electronics & Information Technology and Law & Justice Shri. P. P. Chaudhary felicitating the winners of e-Governance awards.

8th Source India - Electronics Supply Chain 2017 Chennai, January 2, 2017

Electronic Industries Association of India (ELCINA) and Manufacturers Association of Information Technology (MAIT) organised the 8th edition of Source India 2017- Electronics Supply Chain" on January 2, 2017, at Hotel Green Park, Chennai.

The theme of the conference was 'Leveraging the Market: Time to Target 50% Domestic Content' and focused on localisation and developing the Indian Ecosystem for the ESDM industry. ELCINA and MAIT conducted a half-day session of meetings between buyers and vendors comprising 'One-to-One Buyer-Seller Meetings' which focused on indigenisation of the electronics supply chain, based on the Govt. of India's ongoing 'Make in India' initiative.













The event also included a Mini Exhibition in which some key industry stakeholders, including component manufacturers, service providers and infrastructure companies displayed their products and services. The ESDM Industry was represented by more than 125 participating organisations, 19 large buyer companies, 11 Exhibitors and 200+ delegates.



Union Budget 2017: Summary of key changes

1. Key policy announcements / proposals

- Agenda for 2017-18 is, "Transform, Energise and Clean India" TEC India. TEC India seeks to:
 - Transform the quality of governance and quality of life of our people.
 - Energise various sections of society, especially the youth and the vulnerable, and enable them to unleash their true potential.
 - Clean the country from the evils of corruption, black money and non-transparent political funding.
- Innovation Fund for Secondary Education proposed to encourage local innovation for ensuring universal access, gender parity and quality improvement — to be introduced in 3479 educationally backward districts.
- SWAYAM platform, leveraging IT, to be launched with at least 350 online courses. This would enable students to virtually attend courses taught by the best faculty.
- For creating an eco-system to make India a global hub for electronics manufacturing, a provision of Rs.745 crores has been made in 2017-18 through incentive schemes like M-SIPS and EDF.

2. Direct tax

- No changes in headline corporate tax rates of 30% However, for MSMEs (companies) with turnover up to Rs 50 crores, corporate tax rate is reduced to 25%
- Rationalisation of Section 10AA provisions (SEZ tax holiday) The
 provisions of Section 10AA have been rationalised to clarify, that the
 deduction under this section shall be allowed from the total income of
 the assessee and the deduction shall not exceed the total income.

This explanation clearly overrides the principles laid out by the Hon'ble Supreme Court in the recent batch of rulings led by Yokogawa.

 $\mbox{Impact}-\mbox{c/f}$ of losses will be impacted - this will now have to be set off with the SEZ profits

- 3. TDS rate reduction for call centers TDS under Section 194J for payment to call centres reduced to 2 percent from 10 percent.
- 4. Carry forward of losses for startups In order to facilitate ease of doing business and to promote Start Up-India, Section 79 of the Act has been amended to provide, that where a change in shareholding has taken place in a previous year in the case of a company, loss could be carried forward and set off, if all the shareholders of such company, which held shares on the last day of the year or years in which the loss was incurred, continue to hold those shares on the last day of such previous year. The losses incurred during the period of seven years beginning from the year in which such company is incorporated would be eligible.
- 5. Extending the period for claiming deduction by start-ups In view of the fact that start-ups may take time to derive profit out of their business, it is proposed to provide that deduction under Section 80-IAC, can be claimed by an eligible start-up for any three consecutive assessment years out of seven years beginning from the year in which such eligible start-up is incorporated.



- 6. Relaxation in transfer pricing provisions related to specified domestic transactions In order to reduce the compliance burden of taxpayers, inter-company payments between related parties will not be subject to transfer pricing scrutiny. TP scrutiny restricted only to tax holiday claims, for example, cost allocations between tax holiday eligible units and other units. Other situations of transfer pricing scrutiny continues.
- 7. Income from transfer of carbon credits In order to bring clarity on the issue of taxation of income from transfer of carbon credits and to encourage measures to protect the environment, it is proposed to insert a new Section 115BBG to provide that any income from transfer of carbon credit would be taxable at the concessional rate of 10 percent (plus applicable surcharge and cess) on the gross amount of such income (as against 30% tax in the form of business income).



- 8. Rationalisation of Provisions relating to tax credit for Minimum Alternate Tax – MAT credit can now be carried forward upto 15 assessment years, immediately succeeding the assessment years in which such tax credit becomes allowable. Earlier, it was allowed to be carried forward for 10 consecutive assessment years.
- 9. Rationalisation of provisions of section 115JB in line with Indian Accounting Standard (Ind-AS) Section 115JB is proposed to be amended to provide the framework for computation of book profit for Ind AS compliant companies in the year of adoption and thereafter. The changes have been introduced based on the recommendations given by the committee constituted by the Central Board of Direct Taxes, for suggesting the framework for computation of MAT liability for Ind AS compliant companies in the year of adoption and thereafter.
- 10. Rationalisation of provisions related to scrutiny assessments Provisions related to scrutiny assessments and filing of revised return income have been amended to reduce the period during which such compliances could be made (21 months to 18 months for scrutiny assessments and 12 months for revising the return).
- 11. Elimination of SDT from the ambit of TP unless tax holiday/ incentives involved Section 92BA of the Act is being amended to delete from its ambit transactions under Section 40A(2)(b), such that transactions that take place between domestic taxpayers that do not involve a tax holiday unit or a unit enjoying a profit linked tax incentive (Section 10AA, Section 80IA), will no longer be subject to domestic TP. This also takes away the difficulties arising out of a correlative adjustment.

- 12. Secondary adjustment Section 92CE is introduced to provide for a secondary adjustment in order to equate the tax income with the actual income. Such adjustment would apply in case of an MAP settlement, APA, suo-moto, safe harbor or where the TP adjustment is accepted by the taxpayer. The difference between the income as determined for TP and the cash value of the transaction will have to be repatriated within a prescribed period, failing which interest will be computed on the excess income that will be treated as an advance. This amendment applies to adjustments arising from increase in income or reduction in loss from financial year 2016-17 onwards.
- 13. Interest limitation Section 94B introduced in line with BEPS Action 4 to provide for limitation of the amount of interest payable on any loan obtained from an AE, or guaranteed by an AE. Such interest would be limited to 30 percent of EBIT, subject to a carry forward of the excess for a period of 8 years. The move is applicable for interest component in excess of INR 1 crore on loans.
- Penalty on Merchant Bankers, Accountants and Registered Valuers Section 271J introduced to impose a penalty of INR 10,000 on accountants and valuers issuing reports or certificates with incorrect information.

3. Indirect tax

A. Make in India

Manufacture of mobile phone populated PCB

- Notification No.21/2012-Customs, dated 17th March, 2012, provides for exemption form duty under section 3(5) of the Customs Tariff Act (Special Additional Duty).
- Presently, the exemption vide entry 1 is granted in case of imports that are exempt from basic customs duty and countervailing duty. The same has been amended by Notification No. 4/2017-Customs dated February 2, 2017, to prescribe entry 1 would not apply in respect of populated Printed Circuit Boards ('PPCB') of mobile phones.
- Further, entry 85B has been inserted to provide that a concessional rate of SAD at the rate of 2% would now be applicable on PPCB for use in manufacture of mobile phones. The said entry shall be applicable up to June 30, 2017, after which the SAD would be applicable at 4%.

The amendment shall be effective from February 2, 2017.

MAIT Comment

This move would encourage domestic manufacture of PPCB for mobile phones. The same amendment was introduced in the previous Budget but was rolled back. The said levy of 2% SAD on PPCB has been reintroduced and will benefit domestic manufacturing.

Notification No. 4/2017-Customs dated February 2, 2017.



Manufacture of LED lights, LED drivers and MCPCB

Concessional rate of BCD extended on import of the following products:

- Parts for use in the manufacture of LED lights or fixtures including LED Lamps
- All inputs for use in the manufacture of LED (Light Emitting Diode) driver or MCPCB (Metal Core Printed Circuit Board) for LED lights and fixtures or LED Lamps

Notification No. 6/2017-Customs dated February 2, 2017.

B. Digital economy

Encouragement of e-payments/ cashless transactions

BCD, CVD and SAD exemption extended on import of the following products:

- Micro ATMs as per standards version 1.5.1
- Fingerprint reader / scanner
- Iris scanner
- Miniaturised POS card reader for mPOS (other than Mobile phone or Tablet Computer)
- Parts and components for use in the manufacture of the above goods (subject to actual user condition)

MAIT comment

In order to promote cashless transactions and to propel the agenda of digital economy, the aforesaid products are blessed with BCD and CVD exemptions. These exemptions may not aid in boosting the domestic manufacturing industry, as the import of finished goods would be exempt from customs duty as well.

Notification No. 6/2017-Customs dated February 2, 2017, and Notification No. 6/2017-CE dated February 2, 2017.

C. Others

 Research and Development Cess Act, 1986 (32 of 1986) is proposed to be repealed. Levy of R&D cess was not available as credit and hence was a cost. This amendment should aid the domestic manufacturers.

Disclaimer

Based on preliminary inputs from our knowledge partners BMR & Associates LLP. This note does not constitute an opinion and prior professional advice should be obtained on any aspects covered in this note.

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Union Budget 2017-2018

FM's announcements related to digital economy

- Promotion of a digital economy is an integral part of the Government's strategy to clean the system and weed out corruption and black money. It has a transformative impact in terms of greater formalisation of the economy and mainstreaming of financial savings into the banking system. This, in turn, is expected to energise private investment in the country through lower cost of credit. India is now on the cusp of a massive digital revolution.
- A shift to digital payments has huge benefits for the common man. The earlier initiative of our Government to promote financial inclusion and the JAM trinity were important precursors to our current push for digital transactions.
- Already there is evidence of increased digital transactions.
 The BHIM app has been launched. It will unleash the power of mobile phones for digital payments and financial inclusion.
 125 lakh people have adopted the BHIM app so far. The Government will launch two new schemes to promote the usage of BHIM Referral Bonus Scheme for individuals and a Cashback Scheme for merchants.
- Aadhar Pay, a merchant version of Aadhar Enabled Payment System, will be launched shortly. This will be specifically beneficial for those who do not have debit cards, mobile wallets and mobile phones. A Mission will be set up with a target of 2,500 crore digital transactions for 2017-18, through UPI, USSD, Aadhar Pay, IMPS and debit cards. Banks have targeted to introduce additional 10 lakh new PoS terminals by March 2017. They will be encouraged to introduce 20 lakh Aadhar based PoS by September 2017.
- Increased digital transactions will enable small and micro enterprises to access formal credit. Government will encourage SIDBI to refinance credit institutions, which provide unsecured loans at reasonable interest rates, to borrowers based on their transaction history.

- The digital payment infrastructure and grievance handling mechanisms shall be strengthened. The focus would be on rural and semi urban areas through post offices, fair price shops and banking correspondents. Steps would be taken to promote and possibly mandate petrol pumps, fertilizer depots, municipalities, block offices, road transport offices, universities, colleges, hospitals and other institutions to have facilities for digital payments, including the BHIM App. A proposal to mandate all Government receipts through digital means, beyond a prescribed limit, is under consideration.
- Government will strengthen the Financial Inclusion Fund to augment resources for taking up these initiatives.
- Government will consider and work with various stakeholders for early implementation of the interim recommendations of the Committee of Chief Ministers on digital transactions.
- The Committee on Digital Payments constituted by Department of Economic Affairs has recommended structural reforms in the payment eco system, including amendments to the Payment and Settlement Systems Act, 2007. Government will undertake a comprehensive review of this Act and bring about appropriate amendments. To begin with, it is proposed to create a Payments Regulatory Board in the Reserve Bank of India, by replacing the existing Board for Regulation and Supervision of Payment and Settlement Systems. Necessary amendments are proposed to this effect, in the Finance Bill 2017.
- As we move faster on the path of digital transactions and cheque payments, we need to ensure that the payees of dishonoured cheques are able to realise the payments.
 Government is therefore considering the option of amending the Negotiable Instruments Act suitably.



OUTLOOK

Citizens should feel incentivised to make digital transactions



Interview with Shri. R. S. Sharma Chairman, TRAI

In a candid interaction with Sameer Sachdeva, the Chairman of the Telecom Regulatory Authority, Shri. R. S. Sharma advocates that there should be nil or negligible MDR and other charges, so that digital transactions also become cost effective.

1. In the past you have defined the 3C's of Digital Economy as 'cost', 'convenience' and 'confidence'. Can you please elaborate on that?

This is something I had explained at a seminar on 'Demonetisation to Digital Remonetisation', organised by the Federation of Indian Chambers of Commerce and Industry (FICCI). Let me do it once again.

When a citizen transacts with cash, he does not have to pay any transaction charges, although there is a cost to the system for managing this cash. In order to ensure that there is a sustainable digital economic system in the country, citizens should feel incentivised to make digital transactions, rather than paying those who enable these transactions banks, NPCI etc. In my view, the principle of work-done, being employed in the telecom sector to attribute the cost to an activity should be applied here too. I feel that there should be nil or negligible MDR and other charges so that the digital transactions become cost effective. Similarly, the transactions in a digital economy should be interoperable and we should make provision for effective digital infrastructure so as to provide convenience to the users. The digital transaction should become as easy as making a phone call. This is my idea of convenience.

Lastly, we have to ensure that such transactions are safe from a cyber security angle, because only then will it boost people's confidence in the digital transaction eco system. Thus, these three elements — cost, convenience and confidence are very important for implementing a digital payment system across the country in the post demonetisation era, to create fully-operational and sustainable digital 'less-cash' economy.

2. What opportunities or challenges do you see before Government, Regulators and ICT industry after demonetisation?

Opportunities are enormous but the path is not going to be easy. The battle of life is, in most cases, fought uphill; and to win it without a struggle is perhaps winning it without honour. If there were no difficulties there would be no success; if there were nothing to struggle for, there would be nothing to be achieved.

As technologies are rapidly evolving, this can present challenges for policy makers and regulators. While Governments need to ensure consumers and workers are reasonably protected, our laws and regulations should stimulate the growth of the digital elements of the economy. It will require sustained and co-ordinated efforts on the parts of governments (Centre, States and local bodies), regulators and ICT industry.

Some of the challenges are: developing a national digital identity strategy to help streamline digital transactions, clarifying and re-thinking regulators' powers afresh to ensure they regulate the complex issues related to digital economy (including digital frauds), as they emerge and try to de-stabilise the system. There may be a need to re-visit existing legislations to address the current and emerging challenges.

We will also have to review the existing financial regulations to make them technology driven, and to facilitate innovation and competition in the financial system.

3. How will the trinity of JAM help in building a digital economy?

JAM (Jan Dhan-Aadhaar-Mobile) trinity creates a robust system for digital inclusion with 1.1-billion Aadhaar users and mobile connections across the country. As a trinity of the government's initiative for financial inclusion, JAM links accounts of all the unbanked individuals with their Aadhaar and mobile numbers, thus providing an unparalleled opportunity to reach the financially excluded.

4. What will be the role of Aadhaar in a digital economy and how will the nation benefit from it?

Aadhaar will play a pivotal role in India's digital economy. Take the example of Aadhaar Enabled Payment System or AePS (the Indian payment system developed by National Payments Corporation of India). Its working is based on the unique identification number for individuals, also referred to as 'Aadhaar'.

The system allows an Aadhaar-holder to carry out financial transactions on a micro-ATM provided by the banking correspondent. The use of Aadhaar will be helpful in better monitoring and targeting of social benefits and employment programmes. Further, it will pave the way to have synergies among various ID initiatives i.e. Voter ID, Passports, Ration Cards, Licenses, Fishing Permits, Border Area ID cards etc. It is also an initiative towards providing improved social security benefits to the marginalised and under-privileged sections of society. Aadhaar can be used for many more such facilities that require unique identification and authentication. Aadhaar is already playing an important role in Direct Benefit Transfers (DBT), where Aadhaar linked with bank accounts is used as a financial address. One can also build another product where peer to peer transfers can take place using Aadhaar numbers as the financial address.

"Interoperability and interlinking are key requirements for reaping the maximum benefit of digitisation."

5. Banks apply a convenience charge on digital transactions. How fair is that? After all their costs are lesser in digital transactions as compared to physical transaction?

The issue is dealt by another regulator and therefore I would not like to comment further. However, in line with the government's objective of promotion of payments through cards and digital means over payments in cash, the Reserve Bank has recently rationalised customer charges for digital transactions. Further, in my opinion the cost savings to the banks, in the long run, will eventually be transferred to the consumer in a direct or indirect way.

6. Are there different Digital Wallets? How can the government intervene to make them interoperable and interlinked? Can TRAI play a role in that?

As I stated earlier, interoperability and interlinking are key requirements for reaping the maximum benefits of digitisation. TRAI has no direct role in that. This comes under the jurisdiction of the RBI.

7. Free data services will boost Digital economy but will it come at a price of net neutrality? What is your take on that?

The issue is still at a consultation stage. TRAI has issued a consultation paper on the subject on 4th January, 2017. As the consultation process is underway, I would not like to further comment.



8. Is the BHIM App launched by the Government, different from other wallets? What makes it stand apart from other apps?

BHIM, which stands from Bharat Interface for Money is not a wallet but is a mobile application (App) to promote and make digital transactions easier between account holders of various banks. What I know about the App, is that it allows one to make quick payments using a Unified Payment Interface (UPI). As per my understanding, it stands apart from other apps because it facilitates the transactions between account holders of different banks and one needn't have a mobile banking-enabled account in order to use BHIM. All payments are instant and 24x7, and even if the person is not registered on BHIM, payment can be made via IFSC, account number, MMID or mobile number. Further, the BHIM App itself won't charge the customer for transactions on its platform, but the respective bank might levy a nominal amount as BHIM is not a wallet but a mobile application.

9. How will Aadhaar help in addressing the credit related problems of the people at the bottom of the pyramid, i.e. the rural population?

Enabling access to all sections of the society - to the economy, its infrastructure, and its institutions - that is a challenge primarily due to the absence of an identity document that is accepted across all domains. Individuals need to verify their identity so as to access a host of government and non-government services. The absence of an easily verifiable and nationally portable identity document, has contributed towards the exclusion of the rural population, as the person is unable to prove his/her identity, preventing the individual from accessing benefits and subsidies.

Thus, Aadhaar has been envisioned as a means for residents to easily and effectively establish their identity, to any agency, anywhere in the country, without having to repeatedly produce identity documentation to agencies. Aadhaar would ensure that residents across India including the poorest and the most marginalised, can access the benefits and services that are meant for them. Aadhaar would thus be critical to the government in achieving its goals of social justice and inclusion. It is an initiative which is primarily aimed for providing improved social security benefits and financial inclusion of the under-privileged people.



10. Will Bharat Net boost the digital economy? How crucial is it for the success of a digital economy?

Yes, it will surely boost a digital economy, as it seeks to connect all of India's households, particularly in rural areas, through broadband. It will form the backbone of the government's ambitious Digital India programme.

11. Which departments need to be in sync for the success of digital economy?

All the departments need to be in sync so that the whole system is unified. The Ministry of Finance and Ministry of Communication and IT need to take a lead role towards facilitating the transition to a digital economy.

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SOLUTIONS FOR DIGITAL INDIA

The Tablet Market is Declining: Survival depends on form factor/convergence and productivity

Recent statistics have shown that tablet sales are declining and people are buying fewer tablets. (Refer Annexure -1). In order to understand the key reasons for this, we must realise that consumption depends on usage/utility of a device in terms of delivering value to the customer.

With the availability of different price points and form factors, the productivity, value proposition and intended usage of the device is the driving factor determining the buying decisions of customers.

The key reason for drop in Tablet sales are:

- Tablet couldn't replace PC's Laptops and desktops are necessary device providing a powerful interface which enables multi-tasking.
 It's a device which promotes content creation as much as content consumption, which makes it ideal for broad usage.
- Change in form factor from slate to detachable Now with consumers seeking more productive form factors, companies /vendors have started refocusing their product lines accordingly. There is a shift from slate tablets to different form factors such as detachable/two-in-one/hybrid. This is evident from the recent growth and availability of such form factors in the market. As of today, the detachable category accounts for 16% of the market and as per IDC forecasts, it's expected to reach 31% by 2020.
- Positioning The tablet as a device did not bring in a clear differentiated proposition and positioning vis-a-vis a smartphone or a computer. With the growth of smartphones and the phablets, the tablet market has been adversely impacted. Also, tablets haven't been able to deliver to the learning and growth opportunities catered to by PCs as compute devices.

 Rise of the phablet as sweet spot - The users today are buying smartphones with bigger screens, known as 'phablets' (a hybrid of phone and tablet), rather than going in for a separate tablet. The tablet's biggest differentiator based of being a device with a large screen got faded, as a smartphone is almost the same size and carries the same and in some cases more features.

Innovation is the buzz word - devices need to evolve

The thought process based on 'Price Proposition' of providing a low priced, economical tablet is inherently flawed, as it does not enable the government in building a digital economy. With nearly 2/3 of Indians under 35 years of age, India shall be the youngest country in the world by 2020. The vision to transform India, into a digitally empowered society and knowledge economy will only be accomplished if we are able to create a 'digitally' skilled young India. In order to do that, the focus needs to be on PC like solutions that enable the utilisation of technology that significantly increases skill development, co-creation and holistic learning.

Facts & Figures- Global

The tablet market has been on a decline for six quarters in a row. IDC's Worldwide Tablet Assembly (ODM) Research Report 2016 Q1, shows the global tablet shipments (including slate and detachable) have dropped a massive 40% from the previous quarter and the 2016 Q2 figures have been the same.

 2016 saw a 14.7 percent year-over-year decline: 38.7 million units were shipped worldwide compared to 46.4 million units that shipped the same quarter last year.

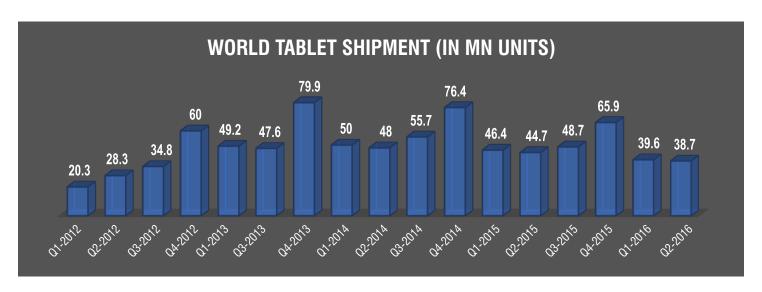


An independent study carried out by Greyhound Research - 'The PC User Trends of Emerging India' - across 40 Indian Tier 1 to Tier 4 cities, among 4 core user groups (i.e. students, youth, young workforce and parents) validates our belief in the continuing importance of the PC in our citizen's lives.

(Refer http://www.huffingtonpost.in/2015/06/12/10-key-insights-on-pc-usage-in-india/)

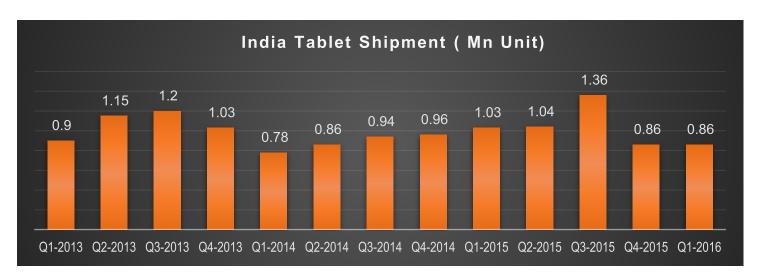
 Q2 2016 saw a 13.4 percent year-over-year decline: 39.6 million units were shipped worldwide compared to 44.7 million units that shipped the same quarter last year.

Worldwide tablet shipments will drop to 195 million units in 2016, down 5.9% from the 2015 figure of 206 Million units, according to a new International Data Corporation (IDC) Worldwide Quarterly Tablet Tracker forecast.



Facts & Figures-India

As per IDC, India's tablet market for Q1 2016, remains flat with a total of 0.86 million units (including slate and detachable form factors) getting shipped. IDC says shipments grew by a marginal 1.3% over the same period last year, thanks to declining consumer interest. Declining consumer interest in the slate tablet form factor and rapid growth of large-screen smartphones (phablets) caused the tablet market to slow down.



TECH TRENDS

Wearable Devices are electronic devices that perform the same computing tasks, as mobile phones and laptop computers, and are usually incorporated into items of clothing or accessories. Often, wearable devices are more sophisticated than handheld technologies and can outperform handheld devices entirely. For the most part, wearable technologies have sensory and scanning features and are also armed with a communications capability that allows the wearer access to information in real time. Local storage and data input are also a given with most wearable devices. Wearables enable a constant, seamless, portable, hands-free access, to electronics and computers and can be in the form of smart fabrics, e-textiles, bracelets, watches, contact lenses, glasses, caps etc.

Robotics is a combination of several areas of engineering and skill sets, and the term refers to the science and technology behind the design, manufacture and application of robots – programmable mechanical devices that can perform tasks and interact with its environment, without human intervention. The use of robotics in industry, helps perform jobs such as packaging, palletising, assembly and painting, all which need a great degree of skill, precision and speed. Industrial robots today, can even make decisions based on complex sensor feedback. Robotics is also used extensively in the area of research, as they can access locations that are beyond human reach.

NASA for instance, has used landers, rovers and probes to provide us with extensive information on outer space and the planets in the solar system. With robotics, the education world is revitalising its curriculum allowing students to use their hands and minds to create - like a technician, artist and engineer all at once. What is unique about robotics is that it is a combination of Science, Technology, Engineering and Math (STEM).

3D printing, also referred to as 'additive manufacturing', is the creation of a three dimensional solid object from a digital file, in which successive layers of the material are added to create the object.

Today it is possible to 3D print pure metals, metal alloys, thermoplastics, thermoplastic composites, ceramics and even types of food!

MAIT WOULD LIKE TO CONGRATULATE



Shri. Dharmendra Sharma, Principal Secretary, GAD in Delhi Government, has been relieved to join as Chief Secretary, Government of Goa. He is a 1988 batch IAS officer of AGMUT cadre.



Shri. Sanjay Kumar Rakesh has been appointed as Joint Secretary, Ministry of Electronics & Information Technology. He is a 1990 batch IAS officer of Tripura cadre.



Shri. Rajneesh has been appointed as Joint Secretary, Department of Commerce, Ministry of Commerce & Industry. He is a 1997 batch IAS officer of Himachal Pradesh cadre.



Shri. Hardik Satishchandra Shah has been appointed Private Secretary to Shri. Anil Madhav Dave, Minister of State for Environment, Forest and Climate Change. He is a 2010 batch IAS officer of Gujarat cadre.



Dr. M. M. Kutty has been appointed as Chief Secretary of Delhi Government. He is a 1985 batch IAS officer of UT cadre. Dr. Kutty was the Additional Secretary, Ministry of Environment, Forest & Climate Change, and has now been given premature repatriation to his parent cadre.

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