



# The plastic monster

India Inc will have to lead the charge against it

Last week, activists from Greenpeace Africa delivered to the Nestle factory serving East Africa a giant plastic monster made of the company's brand packaging. This was an effective way of conveying that much of the needed action on restricting the prevalence of single-use plastic throughout the world will need to be taken by the big fast-moving consumer goods (FMCG) companies. It is certainly an important and urgent issue — according to the United Nations Environment Programme, over 8 billion tonnes of plas-

tic has been produced since the 1950s and that might increase to as much as 34 billion tonnes by 2050. Plastic production could rise by 40 per cent a year over the next decade, further increasing dependence on fossil fuels. This growth is clearly unsustainable and driven in large part by an unnecessary dependence on plastic products that can only be used once — such as plastic packaging.

India has also taken this issue on board. Prime Minister Narendra Modi has declared that India seeks to be free of single-use plastic by 2022, though this may be

a somewhat ambitious timeframe. Some states, however, have been moving faster than others. It is easier to do so if the state in question is smaller, or if it has a more effective government machinery. More than half of India's states and Union Territories now have legislated or plan to legislate restrictions on single-use plastic. But, as Delhi's failure to crack down on plastic shopping bags has shown, this is not always the most effective way to go about things. Some states, like Tamil Nadu, have the administrative competence and capacity required. Others, especially, in the Gangetic plain, do not.

The Ganga valley creates vast amounts of plastic, much of which finds its way to the river. It was estimated, in a study published in the journal *Nature*, that the Ganga moves 110,000 tonnes of plastic to the sea every year, the second-highest such

amount for any world river — second only to the Yangtze. Nor does India do well enough in recycling or collecting plastic. It is true that India, because of its poverty, has a large informal network of "ragpickers" who are effective recyclers. But there is little demand for thin, single-use plastic in that market. As a consequence, about 40 per cent of the plastic sold in India is neither recycled nor collected.

As a consequence of this set of circumstances, much is expected of larger companies. The state cannot do everything and does not have the capacity to do so. The large informal sector is cost-sensitive and it is difficult to create incentives to change its behaviour. As a result, the responsibility devolves upon the organised private sector — particularly those companies in sectors that create large amounts of single-use plastic, such as FMCG. If the large companies

selling packaged goods and consumables change their behaviour, the informal sector that depends upon them will do so as well. E-commerce will have a major role to play. Currently, packaging charges are an insignificant proportion of the cost — only 3 per cent or so — but do not take into account sustainability. This will have to change.

Food processing as a sector, if it moves to non-plastic solutions, will have to invest in other methods to ensure that food spoilage does not increase commensurately. But the big target will be, as it is for Greenpeace Africa, the FMCG majors. Nestle India says it has reduced the use of plastic by 1,500 tonnes last year. But this is but a drop in the metaphorical bucket. Much more will need to be done by the corporate giants in India, or a giant plastic monster is likely to arrive at their headquarters as well.

# Why telecommunications reforms are vital for India

They can boost both GDP growth and the country's ranking in the ease of doing business index

RAJAN S MATHWES

Sustained reforms to tackle legacy concerns like complex paperwork and multi-layered taxation have helped India jump 23 places in the World Bank's recent Ease of Doing Business rankings, to rank 77 out of 190 countries. The country's aim is to break into the list of top 50 countries in the EoDB rankings. However, to get to there, fundamental changes are required across all sectors, with telecom being at the top of that priority list. Not only is it one of the few sectors where 100 per cent FDI is allowed, it is also the backbone of the economy, connecting and empowering a billion-plus citizens, becoming the vehicle for financial inclusion and digital literacy, playing a key role in improving macro-economic indicators and adding to GDP growth. Every 10 per cent increase in investment in telecom infrastructure can boost India's GDP by 3.3 per cent, according to a study by ICRIER.

Last year, Trai had issued a draft paper on the Ease of Doing Business, aggregating recommendations from the industry for consideration. The telecom sector is extremely distressed in financial terms, with mounting debts and crumbling revenues. However, once it recovers on the back of favourable policy reforms, the positive impact on a myriad of industries would be immense. And, given its cascading impact on the economy, it would also improve India's rankings on the index.

Apart from reforms targeted at making the regulatory ecosystem more in tune with the changing times, doing away with burdensome and expensive litigation is equally necessary for building a commercial environment, conducive to the sector's growth. Major concerns that need to be addressed relate to licences, tariffs, accounts and finance. Further, spectrum pricing and management needs immediate redressal to ensure the sector's long-term sustainability.

It is heartening that the principle of "input line credit" has been formally approved in the National Digital Communications Policy 2018 by the Union Cabinet. This approach is similar to the principle adopted for GST and VAT, where such a levy payable at each step of input services is set off against the levy payable by the recipient of such services. This will ensure that there is no double taxation at any stage.

Further, we believe that DoT should accept and adopt the Trai recommendations of January 2015 on "Definition of Revenue base (AGR) for the Reckoning of Licence Fee and Spectrum Usage Charges", in regard to the methodology suggested by the regulator for determining the adjusted gross revenue (AGR).

On licence fees, the industry believes that the assessment of the Gross Revenue/AGR should be conducted at the central rather than the circle level. Currently, assessments are done at the circle level, on the basis of instructions on the principles to be used for GR/AGR assessment laid out by the department of telecommunications (DoT). The Controller of Communications Accounts (CCA) in the DoT is responsible for conducting circle-level assessments.

This results in the industry facing various issues of inconsistencies in the overall process. As the applicable principles vary from circle to circle, it results in piling up of litigation cases. A centralised filing sys-



tem will promote operational efficiency and bring in consistency of principles. It will also free up resources currently being used up in litigation.

Also, there are permissible deductions under the licence from gross revenue to arrive at AGR for determining the licence fee and spectrum usage charges (SUC) to be paid by the licensee. These deductions include payments of interconnect usage charges and roaming between operators. The industry believes that the process for verification of deduction claims is extremely complex and leads to disputes for which there is no process of appeal in the DoT. As recommended by Trai in its January 2015 recommendations, a system of licence fee deduction at source should be implemented, which will entail automation of LF/SUC verification like TDS TRACES to simplify the verification process.

Licence fees should be payable through an online portal, so that payment can be made by licensees directly to the credit of DoT. The set-off of the licence fee paid on input services against licence fee payable on output services should be allowed.

Another concern is the multiple audits that telecom companies have to undergo regularly, apart from the statutory audits required under the Companies Act, 2013. Conducting an audit is a time-consuming exercise involving substantial resources. TSPs already have their quarterly and annual audits by statutory auditors, as they follow the highest standards of corporate governance. We believe that these audits are sufficient and there should not be a duplication of efforts by multiple audits in a given financial

year. This will cut duplication of effort, and wastage of time, manpower and precious public resources.

It is recommended that the functioning of the Standing Advisory Committee on Radio Frequency Allocation (SACFA) should be made paperless and a web portal like Tarang Sanchar, which is currently being used for EMF compliance, should be created. This will not only reduce unnecessary expenditure but will also act as a harbinger of optimised and enhanced operational efficiency and faster approvals.

Moreover, free movement of equipment across the country should be facilitated. At present, import licences are provided on a LSA-wise basis and once the equipment is imported, it is mandatory for TSPs to use that equipment only in that LSA. There are various reasons why there may be a need to shift equipment from one circle to another, including increase in rollout in a LSA or lesser usage of equipment in a particular circle owing to business needs. In such scenarios, free movement of equipment should be allowed from one LSA to another.

The industry is working with state governments for the development of an online portal for granting Right of Way (RoW) permission in a time-bound manner. The RoW Portal has been operational for Haryana and Jharkhand, and discussions are underway with the governments of Assam, Odisha, Uttar Pradesh, Rajasthan, Maharashtra and Uttarakhand.

The telecom industry and the government need to work together to bolster the country's economic strength and usher in an inclusive, connected and digitally empowered India. This is a pre-requisite if the country wants to break into the top 50 in the Ease of Doing Business index.

The writer is Director General, COAI

# How to outwit cyber criminals in a rapidly changing world

MUKUL SHRIVASTAVA

The world has come a long way since the first computer viruses — Creeper, Wabbit and Elk Cloner — were unleashed on the ARPANET (forming the technical base of today's internet) close to half a century ago. Initially self-replicating and somewhat harmless programmes, these viruses and worms gradually turned complex, vicious and persistent. The internet is a goldmine for cybercriminals and they can easily release malware for a price, bringing businesses as well as nations to a crashing halt.

Millions of systems have been compromised worldwide over the years as cybercriminals stole money, credentials and information, or just caused intense turmoil. Most recently, for instance, the "Cookie Miner" malware was discovered that could potentially steal user information (credit card, passwords, etc.) from the browser's cookies linked to crypto currency exchanges and wallets. In Australia, cybercriminals hacked the systems of a health care company and an auto enterprise, holding the data for ransom.

The last two years have seen a massive rise in cybercrime. Cisco's 2018 Asia-Pacific Security Capabilities Benchmark Report highlighted the fact that India recorded the second highest number of real cyber threats, followed by Australia, in the Asia Pacific region. The year 2019 will continue to see incidents on a global scale, with cybercriminals attempting to exploit vulnerabilities, breaching confidential data and hacking security systems. As we talk

about cyber security becoming an integral part of the boardroom agenda, organisations can take note of some areas as they strive to protect their critical assets in 2019. The artificial intelligence (AI) "opportunity" will be big in 2019. However, the rapid advancement and adoption of AI can turn out to be a double-edged sword. On the one hand, AI can help organisations ramp up their technology systems to new levels of sophistication, predict attacks and correspondingly take quick corrective action; on the other, it can also be misused by cybercriminals in avoiding detection and evading security.

Recently, there was an uptick in "Deepfake" videos that were created using deep-learning AI and involved creation of fake videos showing real personalities. In 2019, cybercriminals are likely to exploit the power of AI to a significant extent for nefarious purposes, circulate fake news and spread malware through phishing attacks. With security solutions yet to be developed as a counter, the only remedy available is to raise awareness and set up training for all stakeholders.

Smart contracts, which use Ethereum blockchain to maintain a decentralised ledger and subsequent contract between parties, have been implemented by some of the leading financial institutions. Increased usage is expected in financial transactions, including money transfers and protection of intellectual property rights. However, there have been flaws associated with this AI that may be exploited by cybercriminals. One of them is the "re-entrancy attack" that may see hackers accessing user's funds and extracting them without complying with contract requirements or without the knowledge and/or approval of the respective users.

Cloud computing, used extensively to store company data on servers, is another area at risk. In 2019, hackers will focus their effort to breach organisations' systems, resulting in a radical shift from malware stored on the desktop to being stored within the data, making the same redundant. Investments in enhancing cyber security and incident response capabilities and hiring talent will be crucial.

Voice-controlled digital assistants are expected to be another area that will be targeted by cybercriminals, as they are used frequently by individuals as well as businesses. Hackers will further develop malicious codes and commands to target the Internet of Things (IoT) devices and their voice assistants. These assistants are also likely to be used in digital/financial payment applications, which will further augment risks.

While the threats continue to escalate, governments across the globe are launching initiatives and enhancing greater cross-border collaboration to fortify cyber security measures. The year 2019 will see India taking rapid strides to counter growing cyber threats by institutionalising a Defence Cyber Agency, under the supervision of the Integrated Defence Staff, inauguration of a national cyber forensic lab (NCFL) and Delhi Police's cyber-crime unit, 'CyPAD'. A National Centre for Artificial Intelligence is also on the anvil under the aegis of the ministry of electronics and information technology.

The EY Global Information Security Survey (GISS) 2018-19 highlights cyber security gaining prominence among the board. However, it also notes that more than three-quarters (87 per cent) of organisations do not yet have sufficient budgets to provide the levels of cyber security and resilience they want. Protection is patchy, relatively few organisations are prioritising advanced capabilities, and cyber security too often remains siloed or isolated. The cyber threat that stands before us is as real as it can get. In 2019, organisations will have to buckle up their cyber seatbelts for the bumpy ride ahead.

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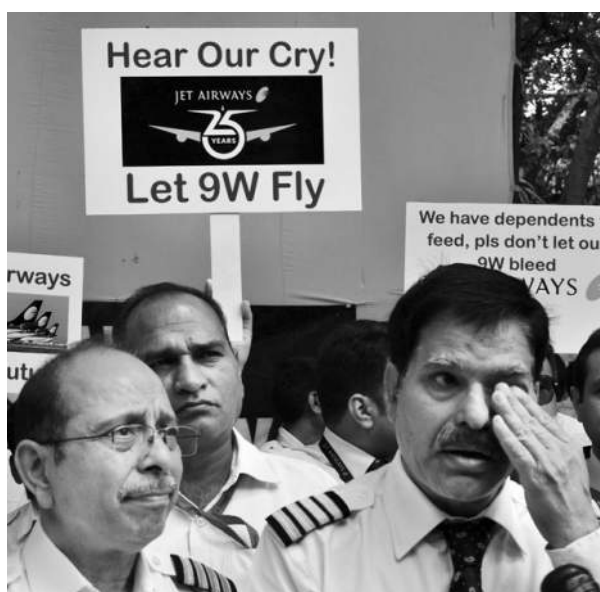
## OTHER VIEWS

### Grounding of Jet a moment of truth for Indian aviation

Failure to revive it will mean a reversal of the gains from liberalisation

From operating a 120-aircraft fleet and being India's second largest passenger carrier as recently as January, to possibly flying for the last time on Wednesday, it's been a literally grounding-to-a-halt for Jet Airways. The company's financial difficulties were public from around March 2018, when it started deferring disbursement of salaries, which was followed by defaulting on aircraft lease rentals and loan repayments towards October-December. The fault lay with the lenders for failing to see these signs of trouble.

Only this month have banks finally acted and called for expression of interest from investors. It is unlikely that they would want to take over the ailing airline without the lenders agreeing to a substantial write-off of its outstanding dues. The company needed emergency funding from banks in order to be able to run. The latter declined the request. They had no choice really, as doing so would have risked more money going down the drain. Such a situation could have been avoided had the lenders forced Mr Goyal to step down earlier and sounded out other carriers, both domestic and foreign; they may have been more willing even about six months back. Whether Jet Airways — a symbol of the 1991 economic reforms much like



Airtel or Infosys — will fly again will be known only when the current bid process concludes on May 10. It is in the consumer's interest that no airline gets to monopolise the skies and reverse the gains from liberalisation.

The Indian Express, April 19

### Classic case of crony capitalism

India's *neta-babu*-business nexus

The Reserve Bank of India has revealed that banks have been writing off bad loans as non-performing assets. During the last three years alone, banks have written off ₹2.4 trillion worth of such sour loans. The total write-off during the last 10 years has been ₹7 trillion. Banks are stuck with ₹10 trillion worth of NPAs.

There are a number of obvious implications of these high-value write-offs. First, when a bank writes off a loan, its asset side of the balance sheet is reduced, meaning that its liabilities become higher than its assets. Hence it must provide for such loans from reserves, profits or provisions from the government. This is taxpayers' money from the government or public

The Telegraph, April 19

### Where are the jobs?

Govt must look beyond existing schemes

The Azim Premji University report that at least five million Indian men lost their jobs between 2016 and 2018, after the demonetisation of ₹500 and ₹1,000 currency notes, confirms the serious crisis on the jobs front. The study's authors said the figures would be much higher if women were included, and even discussed the quality of jobs being created. The university's findings should cause sleepless nights for Mr Modi, who had promised two crore jobs annually in 2014, which means over eight crore jobs should have been created by 2019. Instead, according to Niti Aayog CEO Amitabh Kant, a measly 7.8 million jobs were created.

As Mr Modi's term ends in a few weeks, this seems

meagre compared to the two crore jobs a year he promised. Mr Kant was literally scraping the bottom of the barrel, citing the number of jobs created by taxi aggregators Ola and Uber, and quoted the 7.2 per cent GDP growth figure to bolster his premise. The next government has the arduous task of creating jobs for the unemployed, with unemployment among educated youth at over 15 per cent. An estimated seven million people enter the job market yearly, and providing for them needs programmes that go beyond Make in India, Skilling India and suchlike. None of these have taken off, and the PM doesn't talk about it any longer.