DIGITAL TRANSFORMATION OF INDIA BY AND WITH
STARTUPS, SOONICORNS AND UNICORNS

CMA (Dr.) Paritosh Basu
Senior Professor
NMIMS School of Business Management
Mumbai
paritosh.basu@sbm.nmims.edu

Introduction

In September and November 2016, the author in free wheel blogs wrote about his thoughts on startups, innovation, disruption, incubation, etc. Those days some wavy words were buzzing around connecting with startups, viz., hackathons, disruptions, FinTechs, transformational and foundational digital technologies and solutions, IoTs, Apps, etc. When wind blows all plants and trees undulates. Similarly, thoughts of many people were also being undulated by those words, at times turning into storms. The word 'Unicorn', which was coined by venture capitalist Aileen Lee in 2013, was hardly known in India. Unicorns are those startups whose valuation has crossed

USD 1 billion and the word Soonicorn is its derivation to indicate startups which are expected to soon cross that threshold.

One of the popular and understood to be smart phrases even five years before used to be 'Startups burning cash' and questions among finance professionals used to be how come they are being funded by some investors. There were negative perceptions about startups and first-generation entrepreneurs for burning valuable resources and nine out of ten failing. In course of time the words startup and app have become a part of a common man's daily life making difference in many ways. But if each human being recalls childhood the realisation in hindsight would be that she/he was also a startup. It was a process of learning by making mistakes and from cautions sounded by parents and well-wishers around.

Indians lived with patience and encouraged young bright first generation entrepreneurs to make mistakes in the process of actualisation of their dreams and ideas throught sustainable value generating ventures. It was a must for India as her rank was much lower in the list of nations moving ahead with digital transformations with the help of startups creating new digital products and designing unique and complex digital solutions. Aspirations of those startupians gradually converted India into a nation of 'Innoventors' and digital leaders to the world from front. The author means thereby that India is emerging to be a nation of <u>Inno</u>vators, In<u>vent</u>ors and Cre<u>ators</u> of values.

Who can say that today's startups are not tomorrow's MNCs![1 and 2.] What were aspired for years is now a reality!

Objective

This is the thirtieth monthly article in a row under this column 'Digital Transformation' since September 2019. Many variants of eight deep digital technologies have been covered in previous articles along with related aspects of strategy interplays, solution designing, applications in isolation and/or combinations of technologies, risk management, business operations, ERP integrations for accounting reporting and auditing, ROI, humane dimensions, etc. from perspectives of various stakeholders. While covering these, the related status of developments in India have also been covered. This volume is, however, being dedicated for India's startups dealing with digital technologies and transformations.

Indian startups richly deserve some dedicated pages under this column. Their contributions can collectively be considered as invaluable for rebuilding our nation in the present Industry 4.0. They are not only rendering wonderful services to the business ecosystem they have widely spread their wings across world and have made their presence intensely felt across industry sectors, governmental NGO organisations. They have profusely been lauded, commended, and rewarded by recipients of their services across the world. Behind very many successful digital transformations across the world there are contributions of Indian startups and digital scientists.
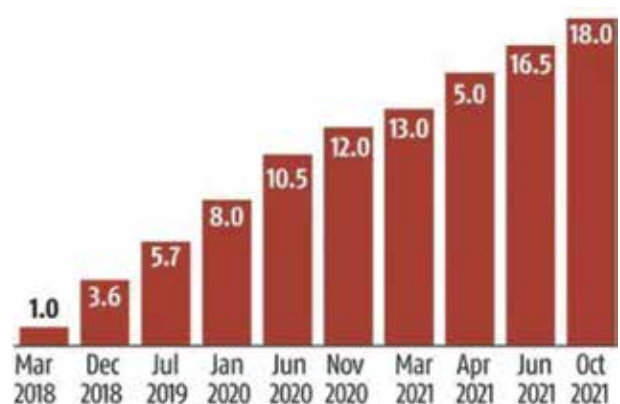
The Startup Journey Continues

In addition to thousands of standalone Indian startups designing and marketing their unique digitally developed and delivered products and services, innoventive 'startupians' are also contributing through many other modes. The author has earlier written about Indian corporates, banks, and other entities particularly in BFSI sector immensely being benefitted through participation in their hackathons by innovative first-generation entrepreneurs of startups. Digital solutions generated in those hackathons being integrated by organisations into their own main framework of digital transformation and building applications. As Andrew Gazdecki, a cerebral entrepreneur and authors says, *"Every billion dollar startup began with zero revenue, zero funding, zero press, zero customers. Keep going".*

India is continuing to see thousands of such startups being born every year. Many of those are very successful and some of those have made India to be the proud third largest home for Unicorns leaving behind the UK. Many soonicorns are following their footsteps. Government of India has introduced a 7-Step startup registration process.[3] The Department for Promotion of Industry and Internal Trade (DPIIT) has recognised about 50,000 startups till around June 2021. The Economic Survey, presented by the Finance Minister of India on January 31, 2022, highlighted that during April 2019 to December 2021, about 5,000 startups were established in Delhi as compared to about 4,500 plus in Bengaluru. Maharashtra has the highest number of 11,308 startups.

It is amazing to note that despite the draconian ambuscade of Covid-19 Pandemic India has added forty-two Unicorns in 2021. By that India is now the land of eighty-three Unicorns with a total valuation of about USD 278 billion lead by the EdTech giant Byju's whose present valuation is about USD 16.5 billion. It will soon raise about USD 300 million through its Series F compulsorily convertible preferred quasi-equity instrument. This will take its valuation to USD 18 billion. The following graphic demonstrates the quantum leap in valuation of Byju's at an annualised CAGR of 124.2%. Byju's have spread its wing to provide EdTech services to other countries also.

| Mar 2018	Dec 2018	Jul 2019	Jan 2020	Jun 2020	Nov 2020	Mar 2021	Apr 2021	Jun 2021	Oct 2021
1.0	3.6	5.7	8.0	10.5	12.0	13.0	5.0	16.5	18.0

Source: https://www.business-standard.com/article/companies/edtech-giant-byju-s-is-raising-300-mn-valuation-may-touch-18-bn-121100400847_1.html#:~:text=In%20June%2C%20Byju's%20became%20India's,company%20Paytm's%20%2416%20billion%20valuation

The said economic survey has revealed that, *"This knowledge-based sector relies heavily on intellectual property, particularly trademarks. ..... The number of patents filed in India has gone up from 39,400 in 2010-11 to 45,444 in 2016-17 to 58,502 in 2020-21 and the patents granted in India has gone up from 7,509 to 9,847 to 28,391 during the same period,"*[4]. Thus, the cumulative average rate of growth (CAGR) in registered intellectual property rights (IPR) is 14.22% in last ten years as against 4.05%. The CAGR of registered IPRs is about 30.3% if considered from 216-17 to 2020-21.

Such a quantum leap in registered IPRs indicates the second dimension of India evolving as a knowledge-based economy with innovation and digital transformation as the drivers for inclusive value creation. One can hope for

the best in matters of faster reduction in the digital divide between urban India and rural Bharat. This is because larger allocation of financial resources by Government of India for implementing its ambitious plan to swamp every village with data bandwidth and 5G facilities thereafter.

Information and communication technology, powered by eight deep digital technologies, is the predominant drivers of Indian startup ecosystem. They are primarily engaged in digital solution building, 'Software as a Services (SaaS), digitalisation of operating technologies, robotic process automation and so on. Their journey in search of excellence and inclusive growth has attracted attention of global investors. Economic times has reported on January 31, 2022[6] about *"The brisk pace, which has seen over four deals a day and over $115 million in daily inflows in disclosed deal value comes at a time when the private equity and venture capital industry was bracing for a slower 2022 based on global and domestic cues. The total disclosed deal value in January is six times higher than the same month last year, which saw 75 deals with disclosed value of $600 million while in January 2020, Indian startups sealed 65 deals with disclosed value of $1 billion."* The following is a graphical presentation of the same.
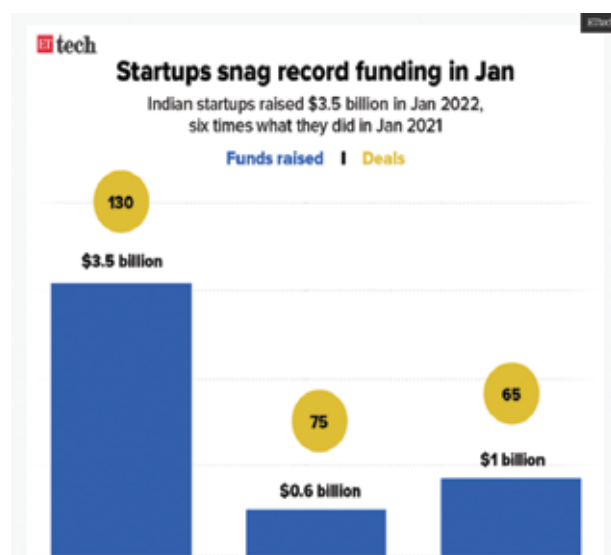
Source: https://economictimes.indiatimes.com/tech/startups/startup-inc-begins-2022-with-a-bang-snags-3-5-billion-in-jan/articleshow/89207698.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

Two Unique Fronts for Indian Startups

Readers may refer the 15th Article of the author published in November 2020 under this column of The Management Accountant on Indian startup ecosystem[7] for more information about industry-wise registration of startups in India. Certain pervasive initiatives of the Government of India, as briefly outlined in that article, have started yielding

results at an accelerated pace. Before this article gets into the analyses of what all those forty-four Unicorn startups are engaged and contributed for digital transformation, which have entered the Unicorn club in 2021, it would be worthwhile to write about two more new areas into which Indian startups are making inroads with lots of potentials and promises for success.

India's Own Operating System (OS)

It is a longstanding debate, particularly keeping in view 1.35 billion population and more and more netizens adopting smart phones, tabs and computers, whether India should have its own operating system (OS) at least for smart phones to start with. This debate on OS has assumed further critical importance due to India achieving another unique feat of becoming the second largest smart phone producer of the world, including for Apple. Such a debate is despite competition being very severe from ioS of Apple and Android developed by 'The Open Handset Alliance' and commercially sponsored by Google.

It is an established position that a group of engineers from the Indian Institutes of Technology have created in 2012 the Indian OS called the 'Indus OS'. The system is continuing to exist. This is neither mandated nor supported by government of India. The world acknowledges that hundreds of Indian talents have contributed for success of smart phones and thousands of Apps across the globe. One must not doubt their talent and capabilities. If that OS complies with provisions of GDPR and related code of standards of the USA and India, the author is of the view that there should not be any doubt about the success of Indus OS?
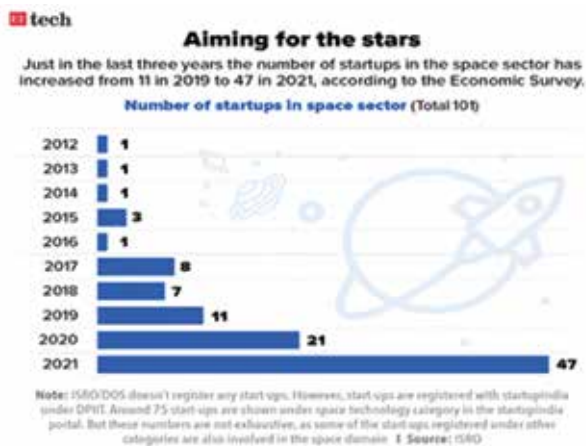
Kevin Colleran wrote in Tech Live[8] wrote that the firm of Indus OS *"In November 2021, the firm claimed that its app store, the Indus App Bazaar, had over 200 million users. There are other isolated examples too, like Paytm's mini app store, which was launched in September 2020."* Koo is already an alternative for Twitter for microblogging. UPI is the world's largest interface for common people to make payments through digital mode. Exemplary success of India in Aadhar for creating a unique digital national identity for every citizen and CoWIN software for tracking vaccination against Covid-19 have set scintillating example before the world. The maxim says good beginning is half done. However, Indus OS is required to be encouraged so that this OS is also developed further with more unique features and coupled with similar APPs, if not more versatile and powerful, which were earlier offered with the said OSs of Apple and Google.

Let us not cast aspersions that Government will take undue advantage of the users' personal data by its interference. This has been proved to be a non-issue as we have seen in cases of Aadhar, Arogya Setu and CoWIN. Such an anxiety is not relevant in today's world of

democracy and transparency. Only exception could be for cases involving critical national security and safety matters. The author is strongly of the view that Indian ICT scientists must be encouraged to go ahead with Indus OS. The author is hopeful to see more success of it in near future. India should also start research-based work for 6G telecom technology.

Space Technology

Government of India has issued in recent years several national policies covering Blockchain Technology, Drone, Space, GIS, etc., simultaneously with opening of defence and space sector for private entrepreneurs. Economic times reported on January 31, 2022[9] that according to ISRO 75 startups have been reported in Startup India Portal for space technology category, which may not be comprehensive because product domains of certain other registered startups may be indirectly associated with space technology.

Aiming for the stars

Just in the last three years the number of startups in the space sector has increased from 11 in 2019 to 47 in 2021, according to the Economic Survey.

Number of startups in space sector (Total 101)

Year	Number
2012	1
2013	1
2014	1
2015	3
2016	1
2017	8
2018	7
2019	11
2020	21
2021	47

Note: ISRO/DOS doesn't register any start ups. However, start ups are registered with startupindia under DPIIT. Around 75 start ups are shown under space technology category in the startupindia portal. But these numbers are not exhaustive, as some of the start ups registered under other categories are also involved in the space domain. **Source:** ISRO

Source:https://economictimes.indiatimes.com/tech/startups/india-can-capture-a-larger-share-of-global-space-tech-pie-economic-survey/articleshow/89251049.cms

As a sequel to the same, the above graph represents that according to the Economic Survey, presented before the budget session of Indian Parliament on January 31, 2022, the number of registrations by startups for space sector has increased from 11 in 2019 to 47 in 2021 with total increasing to 101. Keeping in view stellar success of Indian startups in other sectors, the readers may agree with the author that India is certainly poised for claiming a larger share of global business in space technology sector, which was reported to be around USD 447 Billion in 2020.

Ever Growing Indian Netizens and Digital Network

Some digital enthusiasts prefer to say that *"It is raining Unicorns in India."* The statistics presented above about startups and Unicorns speaks volume and perhaps justifies this statement. If anyone attempts a conservative estimate

by extrapolation of the growth in number of registered startups vis-a-vis growth in successful startups, there are more probability for him to conclude that Unicorns will continue to rain. This probability being converted reality can further be justified by the following statement published by the Office of Science and Innovation of 'Sweden-India Innovation Initiative' on October 2020[10]: "*Exciting research by the Progressive Policy Institute India shows that India is likely to overtake the US as world's largest developer population center by 2024. India currently boasts over 1.674 million app economy jobs, a growth of 39% from 1.208 million in 2016. By comparison, the US had 2.246 million similar jobs in 2019.*"

The other side of the story also justifies that the above would in all probabilities happen. India is continuing to witness ever growing community of netizens who are the prospective users of all Apps and other digital solutions developed/to be developed by Indian startups. The Economic Times reported on October 26, 2021, quoting Mr. Ram Sewak Sharma, CEO of National Health Authority of India that, *"Today we have 1.18 billion mobile connections, 700 million Internet users, and 600 million smartphones, which are increasing 25 million per quarter. We have a strong connectivity base today. ……. India has the highest data consumption which is about 12 GB per person a month. Fortunately, in our country, in the last 6-7 years, we have seen immense progress in the connectivity side.*"

India's New Unicorn Club Members of 2021

At this stage the author would like to briefly itemize and list the nature of engagements of those forty-two startups that have entered the Unicorn Club of India in 2021. Readers will be able to appreciate their innovative applications of technologies and interplays with business strategies for various sectors. One would be able to gage enormity of their contributions for India's digital transformation journey by ensuring cost optimisation, reduction of intermediation and minimisation of value destruction.

The following graphic has been borrowed from a report of Inc42.com, which is one of the most credible reporting organisations for Indian startups. The graphic captures in one frame all these forty-two startups. It aptly signifies the characteristics of these startups by making their brands to ride on the most powerful and fastest moving animal under the sun. Several information about these Unicorns have also been referenced from their publications in addition the authors own research. One of the objectives of the itemised listing, as enumerated below, is to provide readers with some senses of respective business models of these new Unicorns. Young first generation Indian entrepreneurs would certainly be inspired by their success stories .

Source: https://inc42.com/buzz/indian-startups-that-entered-the-unicorn-club-in-2021-in-india/

◉ **FinTech, Insurance and Financial Services**

⌅ **Zeta**: Neo-banking services to be rendered by this startup by wrapping traditional banking institutions with digital solutions for credit, debit, billing, and pre-paid products.

⌅ **Digit Insurance**: It is a digital technology driven general insurance service provider with carefully crafted specific insurance policies befitting the need for customers' risks related to health, motor vehicles, travel, smartphones, commercial properties etc.

⌅ **CRED**: Created a faster digital solution for payment of credit cards. It is also exploring possibilities for introducing a digital solution and awarding customers of eCommece players with reward coins.

⌅ **Groww:** Developed a handheld device based digital solution for facilitating its customers' processes for investing financial securities.

⌅ **Chargebee**: Its financial service product helps integrating payment gateways for automating remittance and collection of money, raising invoices, and sending intimations through system-generated mails for improved CRM.

⌅ **BharatPe:** This startup has the credit of crafting India's first *"UPI interoperable QR code for merchants."* It is also trying to render several other financial services.

⌅ **Coin DCX:** This is the first cryptocurrency exchange of India with a resolve for spreading awareness about private cryptocurrency in India.

⌅ **CoinSwitch Kuber:** This is the second cryptocurrency exchange of India that has attained Unicorn status.

⌅ **MobiKwik:** Provides solution for faster remittance of money and payment of bills. Equity shares of this Unicorn are in the process of being listed.

⌅ **Slice:** Digitally crafted credit solution in collaboration with certain credit card companies and banks. It helps generating credit scores of customers and helps rewarding them.

⌅ **ACKO:** Insurance related services are provided by this startup in areas of mobility, electronic equipment. It also provides services to about a million of gig workers with the aim to help creating a gig-economy

◉ **HealthTech and Healthcare**

⌅ **Innovacer**: This is the first HealthTech Unicorn of India. It has created solution for analyses of patients' health and treatment data for generating insights and helping to initiate actions for medical treatment.

⌅ **PharmEasy**: Renders services for teleconsultation, medicine deliveries and gathering of samples for getting pathological tests done. It also provides Software as a Service (SaaS) for integrating medicine procurement and delivery.

⌅ **Curefit**: Provides online and off-line services for fitness related to mental healt, physical body, nutrition, primary care, etc.

⌅ **Pristyn Care**: Arranges for medical surgery services with the help of a network of about two hundred surgeons and is reported to have arranged for 20,0000 surgeries so far.

◉ **eCommerce and Supply Chain Management**

⌅ **InfraMarket**: This is a born profitable startup. It accumulates demands from small business entities and matches with supplies of materials at wholesale prices and reasonable terms for credit and/or financing arrangements.

⌅ **Moglix**: Has created a eCommerce market place for industrial tool, spares and consumables with the mission for creating a USD 1 trillion manufacturing economy.

⌅ **BlackBuck**: In surface transport sector this startup offers digitisation services for fleet with the aim to match vehicle demands for delivery of volume merchandise and ensures timely availability of vehicles from local transporters.

⌅ **Droom:** This venture is an eCommerce marketplace for automobile companies in four categories, viz, B2B, B2C, C2C and C2B. It offers customers to choose from options for thousands of vehicles

⌅ **OfBusiness:** This startup has created a B2B eCommerce marketplace for meeting requirements

of raw materials of MSME enterprises

- **ZetWerk:** Again, this is a B2B eCommerce marketplace for connecting vendors with buyers of customised products and industrial equipment, machine parts, etc.

- **Grofers:** This is a household name for online supplies of grocery products.

- **CarDekho:** Created a search engine and eCommerce platform for both old and new cars for motorists to buy from OEMs and sell used cars.

- **MyGlamm:** Like Nykaa this is also a direct to customer eCommerce platform for beauty, cosmetics, personal and skin care products.

- **Mensa Brands:** It is one of the fastest startups to enter the Unicorn club. It has created an eCommerce platform for women's wearing apparel, jewellery and ethnic wear items which are manufactured by reputed brands

- **Spinny:** It is an online platform for used cars and adding better technological facilities in cars so that motorists can derive improved driving experience.

- **GlobalBees:** Is engaged in acquiring seller businesses for large eCommerce players and acquiring direct to consumer (D2C) brands for reducing intermediation and cost reduction.

- **Meesho:** This startup is engaged in social commerce segment by providing individual entrepreneurs in micro and small business segment to explore business opportunities through social media for generating revenues.

- **Mamaearth:** It started as an eCommece platform for selling baby care products to mothers of new-borns and is gradually expanding to become a one stop shop for all personal care products.

- **NoBroker:** Thousands of migrating people looking for accommodation and house properties in new locations are being helped by this startup. They have created an online platform for the property owners and seekers to meet and strike deals.

⊙ Education Technology

- **UpGrad:** It is an online learning and knowledge management service provider in higher education space in coordination and collaboration with universities.

- **Eruditus:** This is also engaged in similar line of business like upGrad for providing online education in collaboration with several universities and business schools of international eminence.

- **Vedantu:** Renders online tutoring services to students by arranging live classes. Students have options to choose from various subjects according their need and interests.

⊙ Software as a Service (SaaS)

- **BrowserStack:** Startupians of this entity have created a platform for App developers who can test their newly created smart phone based Apps.

- **MindTickle:** Provides unique SaaS for creating online training and learning management facility aimed at enhancing knowledge and skills of employees engaged in customer relationship management.

⊙ Social Communication and Job Portal

- **ShareChat:** It has created a versatile communication and social media platform and content sharing tool for digital contents in serval vernaculars. Some users consider it as a substitute for TikTok.

- **Gupshup:** Provides communication services through a platform for messaging and conversation particularly connecting customers of banking, consumer products, hospitality, etc. companies.

- **Apna:** People with vocational skills like that of a carpenter, painter, plumber electrician, etc. can seek online help for getting information for employment opportunities. This platform also provides to employers facilities for conducting interviews.

⊙ Local Services

- **Urban Company:** It is gradually becoming a popular household name in major cities by providing various types of manpower based services in local areas for repairs and maintenance, personal care, grooming, etc.

⊙ Food Products

- **Licious:** A fast growing household name in Indian urban centres, this startup supplies gourmet meat, fish, eggs in raw and semi-processed conditions. The author uses their online platform for buying such

products and the experience is worth to be recommended for.

⚘ **Rebel Foods**: It is an online cooked food supplier from various reputed cookeries, gourmet shops and hotels.

⊙ **Mobile Premier League**

⚘ **Mobile Premier League**: This is an online gaming platform.

Conclusion

Writing this article is one of the most amazing experiences of the author. His conviction is that readers would also enjoy it. It is a matter of great pride for every citizen that Indian startups, soonicorns and unicorns are rendering overwhelming services for not only digital transformation of India but also contributing to GDP. It is said that a rupee saved is a rupee earned. These startups are immensely contributing towards value generation not only by creating value but also by minimisation of value destruction. They are helping to ensure inclusive growth with inclusive smile and shared values for all people across the societal strata of India.

There seems to be no scope for any counter argument to the statement that these startups would spread their wings more widely right across the world and help improving lives of millions of citizens of other countries. The author takes this opportunity to convey best wishes to all startupians, their team members and upcoming first-generation entrepreneurs who are striving every nerve for actualising their dreams. **MA**

Bibliography and Webliography

All these websites have been accessed during January 2022.

1. *https://www.linkedin.com/pulse/thoughts-startups-transformation-successful-business-entities-basu/*

2. *https://www.linkedin.com/pulse/thoughts-startups-transformation-sustainable-business-basu/*

3. *https://www.startupindia.gov.in/content/sih/en/registration.html*

4. *https://www.republicworld.com/business-news/union-budget-india/delhi-replaces-bengaluru-as-nations-start-up-capital-with-record-surge-of-5000-in-2-yrs-articleshow.html*

5. *https://www.business-standard.com/article/companies/edtech-giant-byju-s-is-raising-300-mn-valuation-may-touch-18-bn-121100400847_1.html#:~:text=In%20June%2C%20Byju's%20became%20India's,company%20Paytm's%20%2416%20billion%20valuation.*

6. *https://economictimes.indiatimes.com/tech/startups/startup-inc-begins-2022-with-a-bang-snags-3-5-billion-in-jan/articleshow/89207698.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst*

7. *http://www.innoventionians.com/wp-content/uploads/2020/11/15th-Monthly-Article-on-Digital-Transformation-November-2020.pdf*

8. *https://techilive.in/can-india-take-on-global%E2%80%8A-tech%E2%80%8A-giants-with-its-own-os/*

9. *https://economictimes.indiatimes.com/tech/startups/india-can-capture-a-larger-share-of-global-space-tech-pie-economic-survey/articleshow/89251049.cms*

10. *https://sweden-science-innovation.blog/new-delhi/how-india-is-leading-in-digital-transformation/*

11. *https://economictimes.indiatimes.com/news/india/indias-growing-data-usage-smartphone-adoption-to-boost-digital-india-initiatives-top bureaucrat/articleshow/87275402.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst*