

Want to Survive in Competitive Business World: India Needs Business Digitalization

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Abstract:

India enters the digital world long back in 2015 with a view to speed up its economic growth, yet its adaptability by the business sector is not a happy journey because of some hesitations till 2023. Compared to Russia and China, we are lagging behind in digital transformation of business. However, digitalization has been done in most of the personal activities such as music, dance, cinema, advertisement, news and movie presentation, communication, public administration and medical services.

With necessity of monitoring the business sector, the need of policy making has been discussed to speed up business digitalization in the country.

Overview: Business digitalization infers the digital transformation of every aspect of a business firm using the digital technologies. Digital transformation of business, thus involves creating a digital version of the products, services for improving the existing business efficiency and to create new product.

Keywords: Business digitalization, digital transformation, digital technologies

Jel classification: M2,M3,M4,M21

Business Digitalization Concept:

Use of cloud technologies in both of our personal lives and in Business organizations is now unavoidable. Be it a big Business company or a small Business firm, in the competitive world market **Business Digitalization** and use of **Cloud computing** system are the sine qua none. Because of the growing importance of digitalization many industries and business organizations have gone through digital transformation, and adopting Cloud technology. In doing so digitalized data / information are integrated to internet technology (IT) and Cloud technology is used for faster innovation, flexible resources, economies of scale, and server is used for data storage, data access, data recovery, networking, software, business analytics and artificial intelligence (AI) over the internet.

Research Methodology:

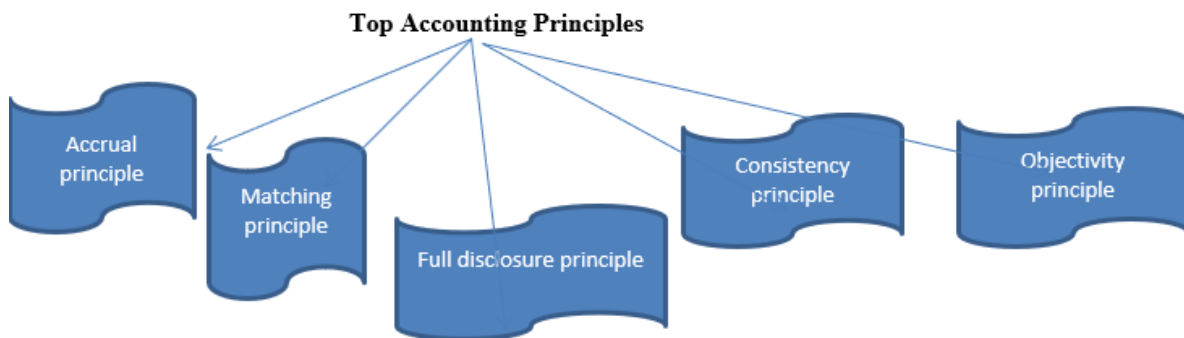
Based on secondary data objective analyses have been drawn. The period of study covers for India is from 2015 to 2023. Non availability of data leads to blind projection of digitalization trend in the cases of most of the analytics. This is a great limitation of planning for digitalization infrastructure development. Hypotheses have not formulated in order to render the paper understandable for general readers.

Conceptual conflict between Use of New Digital Technologies and Accounting Secrecy:

There are large many business organizations and big business firms who have not yet transitioned to Cloud system and many are not realizing the need and importance of it. Online payment and receipts do not reveal the business status to the finance department of the state, though this has been used by many customers.

Business firms using their on premises storage solutions may also avail Net App ONTAP system¹ and may also be able develop cloud native solutions that may allow better scalability and better performance in business operations.

However, most of the business firms prefer Tally² or Tally ERP-9 for working by the accounting team in business organizations. This software has made working the accounting system efficient and error free, at the same time it is worth for maintaining the sanctity of the accounting conventions and principles³. Let’s high light these main accounting principles.



Accounting Principles:

The top five generally accepted accounting principles (GAAP) are as follows:

1. Accrual principle states that accounting transactions should be recorded in the periods in which they occurred, rather than the periods in which the cash flows were earned. This creates accurate financial statement and rightful accounts for expenses and revenue earned.
2. Matching principle states that when the business organization recognizes and records revenue, it should document all associated cost and expenditures.
3. Full disclosure principle states that financial records and statements must disclose all relevant and important financial information without any concealment.
4. Consistency principle emphasizes that business firm must continue to use a particular method of accounting, until better method of data recording is available. Accounting consistency is always important for data analytics.
5. Objectivity principle refers that every single transaction should be backed by proper proof and claims.

In fact, all financial statements and data presented should be verifiable and free from personal biases. Pressurization to use a particular type of accounting software may trap a business firm in utter confusion, discouragement and business failure. As such, business firms should have a freedom of choosing a better type of software as to run its business digitally⁴.

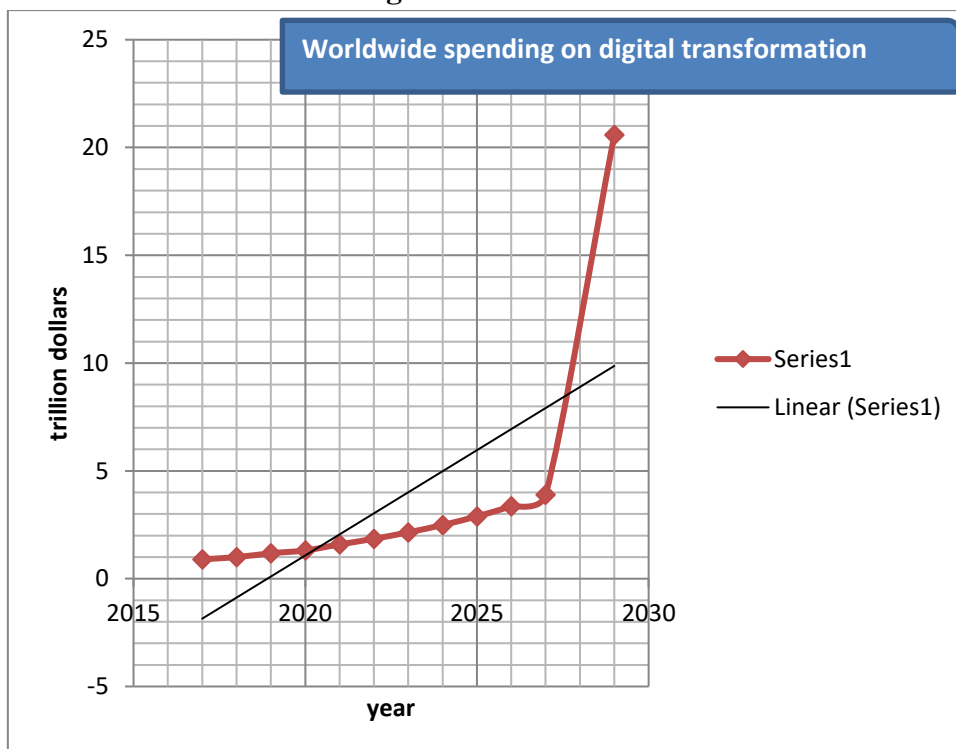
Adopting the Cloud technology, a business firm and/ or a producer company should not stay at comfort zone, because Cloud together with AI and other technologies are the game changers in the rapidly developing world. So, India’s business sector should not bear risk of falling behind.

Business secrecy could be maintained, particularly volume of profit, business strategy adopted, business turn out etc. in spite of using cloud system and business digitalization. More important is that business could be run within legal barriers, and not violating legal clauses with digital transformation.

Worldwide spending on digital transformation

It has been found that till 2027 spending on digital transformation may be a steady trend. As per projected data in Statista- 2024 the volume of worldwide spending may have a leopard jump up to 20.58 trillion dollars. This may be a possible phenomenon as because most countries of the world are going to have a tremendous shift in use of digitalization and digital technologies in war, business, production, innovation, administration and education. However, ground data reflecting the reality has not come up.

This trend has been drawn based on data given in table -1.



India has spent 31.9% of GDP has invested in ICT in 2023⁵. And for Infrastructure development of ICT for the period of 2021-2026 a sum of ₹ 14,903 crore has been assigned.

Volume of spending on iCT sector world-wide has increased to 115% in 2023 over the year of 2022. However, based on the year of 2017 spending on ICT sector world- wide has increased by 238 %, which has been projected to increase by 2286% in 2029 over the base year of 2017 (table-1).

Table-1: year	Spending amount on ICT world wide in trillion dollars(\$)	% change over the previous year	Index of growth, base year 2017
2029	20.58	527.6923077	2286
2027	3.90	116.0714286	
2026	3.36	116.2629758	
2025	2.89	116.064257	
2024	2.49	115.8139535	
2023	2.15	116.2162162	238
2022	1.85	116.3522013	
2021	1.59	121.3740458	
2020	1.31	111.0169492	
2019	1.18	118.000000	
2018	1.00	111.1111111	
2017	0.90	00.00	Base=100

Sources: i. Ahmed Sherif, Mrch 13, 2024
 ii. statista,2024

Long back in 2015 the digital India programme was launched to create a digitally empowered society and a knowledge based economy. This was planned to execute ensuring digital access to people and empowering them through the initiatives of Aadhaar, Digi Locker, Digital village, Aarogya Setu App, etc. The rise of the **Fin Tech sector** has accelerated financial inclusion in the country (India). Execution of digital payment system is an important pivot for controlling the financial sector, including the banking sector and in creating an equitable, prosperous, and financially inclusive India.

Pooja Ahluwalia observes that India has been globally recognized for its capacity to innovate in the digital space⁶. Already India has a leading campaign to support various countries around the world in the field of ICT and digital development.

Internet users in India & China: Comparative analytics:

Compared to India, the neighbouring country China has large number of internet users. In 2010 while India had 93.05 million internet users, China had 457 million ICT users in that year⁷, which is almost five times more than India. In that long past in 2010, USA with 308 million iCT users⁸ had a big stride in advanced technology. India, officially declared its internet launching program and policy by 2015.

However, by 2023 in India, the number of internet users has come to be 1240.69 million which is larger than (1092.25 numbers) iCT users in China. By 2024, China has 820 million active iCT users and remains to be dominant pioneer in digital technology. As per a Report by Chinese agency Xinhua, China has made explosive growth of online commerce and micro blogging⁹.

Table -2: Year	Internet users in India (n million)	Internet users in China (in million)
2010	93.05	457.00 ¹⁰
2013	205.00	617.58
2015	305.29	688.26
2019	627.00	854.49
2020	687.60	988.89
2021	624.00*	1031.95
2023	1240.69	1092.25
2025	1425.51+	NA
2030	1484.69+	NA
2035	1536.45+	NA
2050	1637.08+	NA

Source: Statista and others. + projected figures.

With more than one third of the Asian giants population China is far ahead of India in trade and commerce.

Table -3 :	Domain/ In 2023	Websites/ In 2023	Active Internet Users / In 2023
India	2.5 million	5.708 million	700 million**
China*	43 million	3.88 million	820 million

Source:* National Internet Exchange of India (NIXI); **Nielsen’s India Internet Report 2023

Comparative Analytics of Internet users of Three Asian Countries:

With 43 m million domains , 3.88 million websites and over 800 minion active internet users the Asian giant China has entered into big business of trade with the neighboring countries Bangladesh, Afghanistan, Pakistan, Bhutan and India.

But, Indian Businessmen hesitate to use Cloud Computing system which is integrated to internet least of divulging the secrets of business. Integrating with the internet system the business secrecy could be well maintained, and the gigantic benefits could be reaped out of it through navigating new market, new business, new product sources, product varieties, innovation, manage Augmented reality(AR), business administration, etc.

Digitalizing the economy Russia and China have marched ahead, which is implied by the growing percentage iCT users of these countries as revealed in automated graph below.

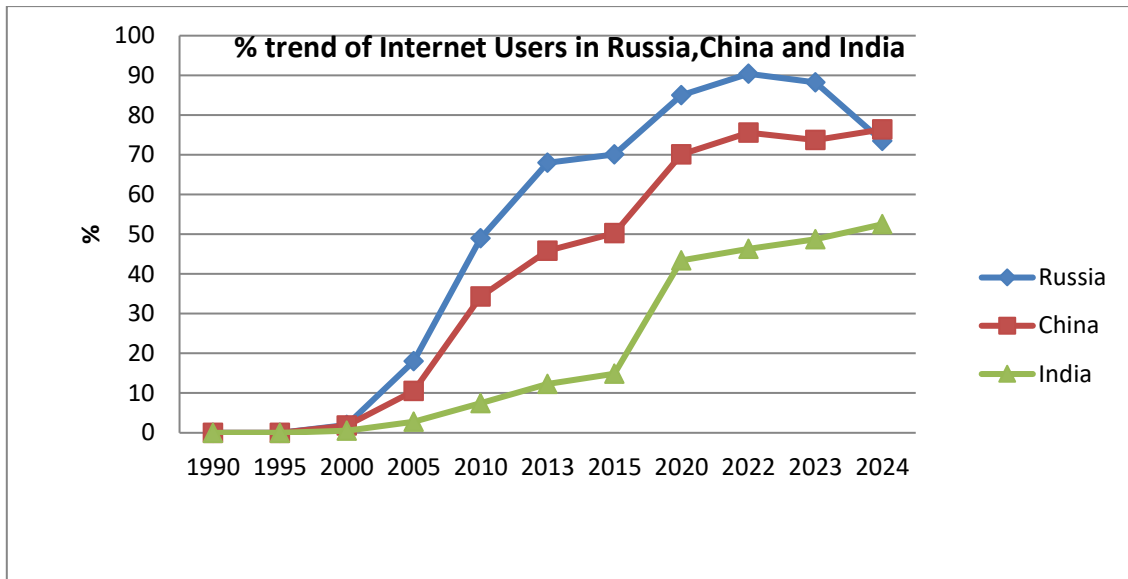


Table - 4: % trend of Internet Users in Russia, China and India

	Russia	China	India
1990	0	0	0
1995	0	0	0
2000	2	1.8	0.5
2005	18	10.5	2.8
2010	49	34.3	7.5
2013	68	45.8	12.3
2015	70.1	50.3	14.9
2020	85	70.1	43.4
2022	90.4	75.6	46.3
2023	88.2	73.7	48.7
2024	73.5	76.4	52.5

Sources: Various sources of statista till 2024.

Trend of Business Digitalization in India:

India is the third largest digitalised country in the world with chips score of 39, only behind the USA (score of 65) and China (score of 62)¹¹. This has been supported by the fact that with 888 million Broad Band Users, 5,9000 Common Service Centres (CsCs) India is a thriving economy.

It has been reported by the IDC (International Data Corporation) that 69% organisations in India have identified themselves as digital business indicating that they have used digital technologies throughout their business operations¹². This implies that 31% business organisations are yet not digitalising their business due to lethargy and other complications.

Another survey in 2023 reveals that digitalisation is fuelling the growth of Indian SMEs¹³. Survey report of IDC further points out that 88% of companies/ business farms have adopted digitalisation strategy.

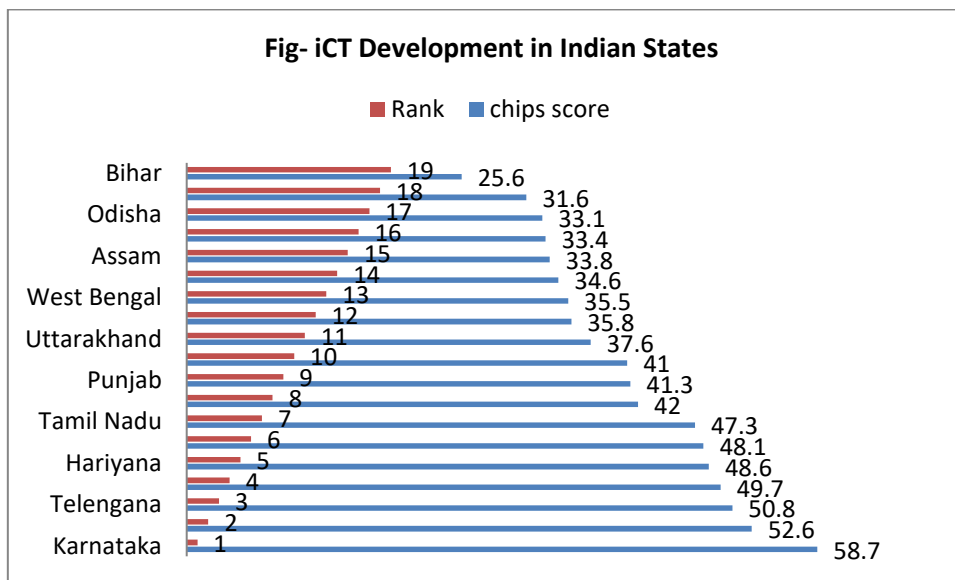
Unfortunately such digitalisations have been largely done within the company. 43% business companies are planning to digitalise their accounts, while 42% companies are trying to focus on marketing. More or less businesses and companies in the current scenario acknowledge that success can be achieved with a powerful digital strategy. The Indian Council for Research on International Economic Relations (ICRIER) in its India’s digital economy report, 2024 has stated that the state of digitalisation in India is better than some developed countries such as the U.K, Germany and Japan, compared by their aggregate level of digitalisation. However, at the level of individual users, India is ranked 12th in terms of digitalisation among the G20 countries.^{14***} The sub-national CHIPS Scores are implying that the iCT development is bewildering.

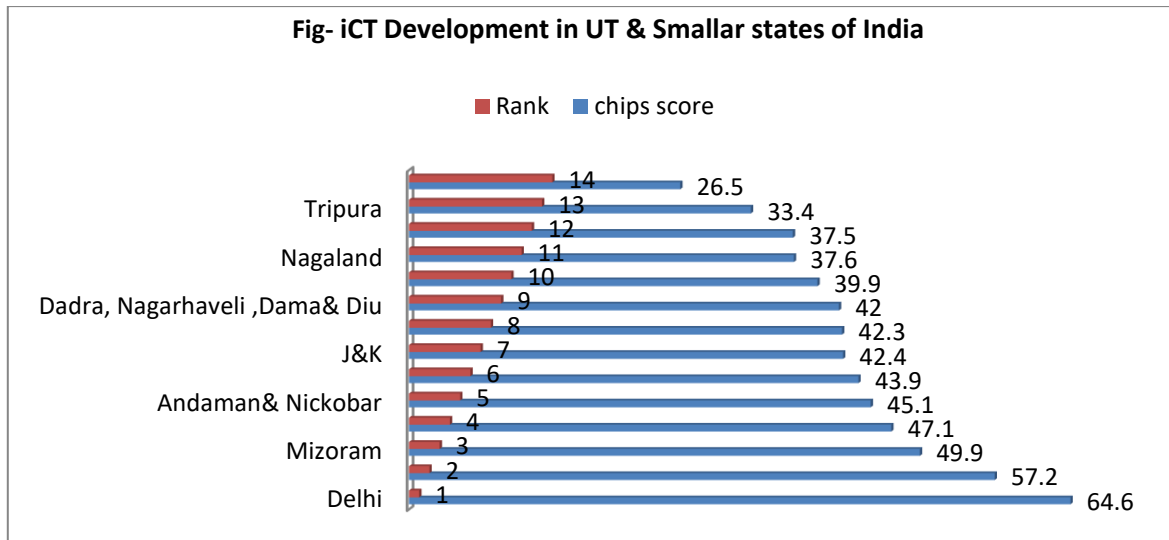
iCT Development in Indian states:

In various states of India iCT development is not equal. Some states are fairly poor in iCT development as revealed by the Chips scores. Development and use of iCT depends upon govt. spending on digitalisation. Poor CHIPS score earned by a state means little spending by a state for digital transformation.

Top five states having developed iCTs are Karnataka, Maharashtra, Terengganu, Gujarat and Haryana in order.

Amongst the Union territories and smaller states Delhi, Chandigarh, Mizoram, Sikkim and Andaman Nickobar tops in order. Maximum Chips score is found for Delhi (64.6), Lowest Chips scores are found in the cases of Arunachal Pradesh (26.5) and Bihar (25.6). In the cases of Assam state the Chips score has been estimated to be 33.8. This is the trend of digital investment by enterprises in India in 2020.





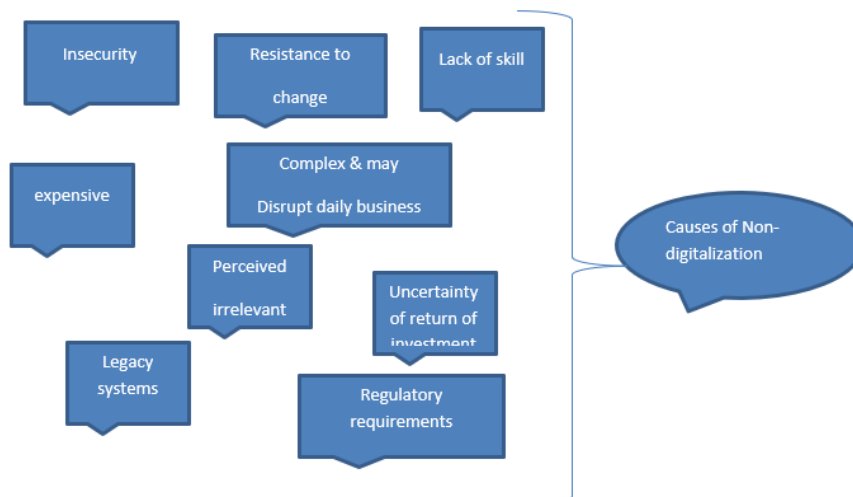
Lower the Chips score means Poor iCT development and internet use. It does not mean poor infrastructure of iCT, rather the crux lies in the pricing structure of goods sold by most of the business firms. The on-going pattern of price structure for goods sold by the business firms have observed to be as follows:

$$\text{Selling price} = \text{Company's marketed product price} + \text{profit margin} + \text{GST} + \text{CGST}$$

Where, 100% of GST+CGST are born by the customers alone.

Most of the business firms are therefore reluctant to link their accounts to internet least their actual functioning do come to surveillance of the tax and revenue department. However, compared to their un-established fears, the benefit accrual and profit to the business firms would be too much higher. The chips score of the USA and China are very high 65.1% and 62.3% ,respectively in 2023 and contribution digitalised business in GDP is very high because of internet linking of their business. For non-digitalisation of business India's digital contribution to GDP is low and Chips Score is very poor as 39.1. Digital transformation and use of AI in business firms in India would surely lead country to bypass most of the developed countries in the world in the case of GDP, social change and economic development with justice for all. In spite of utmost need and great benefits business digitalisation, most of the business firms in India are not choosing to digital transformation of their countless affairs of business.

AI answers to a query to for non-digitalisation of trade and business by their owners may be summed up as follows:



To sum up the main reasons of non- digitalisation on the part of businessmen-

1. Digital transformation may be expensive,
2. Lack of skill to run digitalised business,
3. Security concern, digitalisation can expose business to other cyber threats and data breaches.
4. Traditional business sectors perceive digitalisation irrelevant,
5. uncertain return on investment(ROI).
6. Resistance to change: employees and management do not choose to shift for digitalisation.
7. Existing legacy systems can be difficult and costly to integrate with new digital solutions.

The positive of digitalising the business could be well understood from business digitalisation waves in China, Russia and the USA.

Need of policy Preparation:

With slow pace of digitalization the nation is lagging much behind in economic progress and other fields. Without progression with digitalization of business, the largest sector of the Indian economy, it would cost production industries and the businesses of the country. By not reaping the benefits of business digitalization and not advancing on the ladder of civilization, the nation would be greatly humbled to forward nations. As such for digitalization of the India's biggest economic sector, the business sector inclusive of MSMEs, some policies are needed to be prepared and implemented.

1. Big business firms, medium and small are needed to be digitally registered under ministries of finance, state wise and centrally. It should be legally mandatory.
2. the GPS (global positioning system) which is a satellite navigation system should be used to identify the ground position of each business farm.
3. Cloud computing¹⁵ services needs to be encouraged to be used by each business firm for improving efficiency in business, data analytics, product improvement, in providing customer services, for payment of GST, CGST and other services as required by the business firms. For, this would help business firms for faster innovation, scale up the marketing, lower the costs and maximize the profits.
4. Products dealt in, Volume of stock and category wise price of products of the business firms should be made available digitalizing in enterprise resource planning (ERP) system. The ERP system of the business company and business firms may be connected to IT, through third party provider's servers. 'Public Cloud Computing'¹⁶ system where the third party provides the server services through internet may be allowed for pretty business class and other internet browsers.

Use of different type of digital technology for outsourcing of products, Outputs and sales management, for improvement of products, marketing, stock management, keeping of e-vouchers, use of Artificial intelligence (AI), and machine learning (ML) may be left at the option of the business firms

Conclusion:

Digital transformation of Data/ information of the traders, business companies and big business firms is utmost necessity in order to survive in competitive business world, out compete the foreign production and the business companies with true national spirit for development of India, for employment of skillful and elite labourforce and to march with rapid change of time and work culture.

Appendix:

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Table- 5: States with Chips Score and rank in 2023

State	chips score	Rank
Karnataka	58.7	1
Maharastra	52.6	2
Telengana	50.8	3
Gujrat	49.7	4
Hariyana	48.6	5
Kerala	48.1	6
Tamil Nadu	47.3	7
AndhraPradesh	42	8
Punjab	41.3	9
Rajasthan	41	10
Uttarakhand	37.6	11
Uttar Pradesh	35.8	12
West Bengal	35.5	13
Chattishgarh	34.6	14
Assam	33.8	15
Madhya Pradesh	33.4	16
Odisha	33.1	17
Jharkhand	31.6	18
Bihar	25.6	19
Having Pop>1 crore		

Table-6: UT & Smaller States with Chips Score and rank in 2023

UT & smaller states	chips score	Rank
Delhi	64.6	1
Chandigarh	57.2	2
Mizoram	49.9	3
Sikkim	47.1	4
Andaman& Nickobar	45.1	5
Goa	43.9	6
J&K	42.4	7
Meghalaya	42.3	8
Dadra, Nagarhaveli ,Dama& Diu	42	9

Himachal Pradesh	39.9	10
Nagaland	37.6	11
Manipur	37.5	12
Tripura	33.4	13
Arunachal Pradesh	26.5	14
Having Pop<1 crore		

Notes & References:

1. Net App ONTAP is a company of computer technology industry. Data ONTAP based software-only platform for private cloud. It is advanced **data management software** for better hybrid Cloud experience. It solves the problems of IT challenges, such as data security, operational efficiency and future growth.
2. Tally=Transactions Allowed in a Linear Yard
3. Refers to fundamental guidelines and rules that dictate how financial transactions are recorded and reported in accounting. These conventions serve as a framework for maintaining consistency and reliability in financial reporting.
4. Any top cloud providers, such as Net App, Blue XP, AWS, Azure, Google have the extensive knowledge of cloud adoption challenges, knows well how to make smoother changes in cloud data management solution , data storage and data analytics.
5. P.Hazarika (article, 2023), “Digitalisation of Business: A need for India’s faster Economic Development” .
6. Pooja Ahluwalia is Assistant Secretary General ASSOCHAM Journal March 2023. This is her editorial note.
7. China Internet Network Information Centre.
8. U.S. Census Bureau
9. Social channels, such as Instagram, Facebook, pinterest offer popular platforms for micro blogging . With micro blog one shares short messages with other online audience to improve engagement with others.
10. U.S. Census Bureau
11. Deepak Mishra, Mansi Kedia, Aarti Reddy, Krithika Ramnath & Mayank Manish: State of India’s Digital Economy (SIDE) Report, 2024 ; published by IPCIDE; Figure -5, p.18; CHIPS= connect, harness, innovate protect and sustain are the five pillars of digitalization.
12. Report of Digital transformation Adoption –Industry Priorities and Focus Areas, india; june 01, 2023
13. SMEs survey, August 2, 2023
14. Indian Council for Research on International Economic Relations (ICRIER): State of India's Digital Economy Report, 2024.***The study is based on ‘CHIPS’ framework wherein five pillars - connect, harness, innovate, protect and sustain standards are considered.
15. Cloud Computing refers to delivery of computing services such as servers, storage of data, networking , new software, data analytics and Artificial Intelligence over the internet .
16. Public Cloud is a type of computing services offered by the third party provider over the public internet. This is made available to anyone on demand who wants to use it, but must pay for its uses. It is like that of Computer Café.