
‘INFORMATION TECHNOLOGY & DIGITAL INDIA’- A CONTRIBUTION TO DIGITAL INFRASTRUCTURE, DIGITAL SERVICES, DIGITAL LITERACY”

Dr.Pankaj S. Vishwakarma

Asstt. Prof. in Comm. & IQAC Co-Ordinator
Nehru Mahavidyalaya (Arts, Comm, Sci),
Nerparsopant, Dist. Yavatmal (M.S.)

Abstract :

Information technology in India is an industry consisting of two major components: IT services and business process outsourcing (BPO). The sector has increased its contribution to India's GDP from 1.2% in 1998 to 7.5% in 2012.

In this regard the contribution of India's present prime minister Narendra Modi is appreciable. He gives the name it to be 'Digital India'.

Digital India has three core components. These include:

- a) *To Create Digital Infrastructure*
- b) *To Provide Digital Services*
- c) *To Increase Digital Literacy*

The Digital India Project having following nine pillars:-

1. *Broadband Highways*
2. *Universal Access to Mobile Connectivity*
3. *Public Internet Access Programme*
4. *e-Governance – Reforming Government through Technology*
5. *eKranti - Electronic delivery of services*
6. *Information for All*
7. *Electronics Manufacturing*
8. *IT for Jobs*
9. *Early Harvest Programmes*

Information technology is playing an important role in India today and has transformed India's image from a slow moving bureaucratic economy to a land of innovative entrepreneurs.

Bangalore is considered to be the Silicon Valley of India. The New Telecommunications Policy, 1999" (NTP 1999) helped further liberalise India's telecommunications sector. The Information Technology Act 2000 created legal procedures for electronic transactions and e-commerce.

In ongoing market India is the largest exporter of IT. The biggest economic effect of the technologically inclined services sector in India—accounting for 40% of the country's GDP and 30% of export earnings as of 2006.

The industry continues to be a net employment generator — expected to add 230,000 jobs in fiscal year 2012.

Keyword : *IT, SME, AIS, IS, BPO, NASSCOM*

Introduction :

In order to improve their efficiency and performance, companies especially small and medium sized enterprises (SME) adopt new technologies, information systems (IS) and widely used accounting information systems (AIS).

Information technology in India is an industry consisting of two major components: IT services and business process outsourcing (BPO). The sector has increased its contribution to India's GDP from 1.2% in 1998 to 7.5% in 2012. According to NASSCOM, the sector aggregated revenues of US\$147 billion in 2015, where export revenue stood at US\$99 billion and domestic at US\$48 billion, growing by over 13%.

This study uses the extant work on the relationship between technology use, impact of digital India, their core factors and Small and Medium Enterprises (SMEs) performance to underline the determinants of this relationship.

In this regard the contribution of India's present prime minister Narendra Modi is appreciable. He gives the name it to be 'Digital India'.

Digital India is government services which made available to people of India both in rural and urban citizens in the electronic form. For this improving online infrastructure and by increasing Internet connectivity. This was launched by Prime Minister Narendra Modi on 1 July 2015. The initiative includes plans to connect rural areas with high-speed internet networks. Digital India has three core components. These include:

d) To Create Digital Infrastructure

- e) To Provide Digital Services
- f) To increase Digital Literacy

In this scheme both service providers and the consumers will be benefited. The scheme will be monitored and administrated by the Digital India Advisory group which will be chaired by the Ministry of Communications and IT. It will be an inter-Ministerial initiative where all ministries and departments will offer their own services to the public: Healthcare, Education, Judicial, etc. The Public–private partnership model will be adopted selectively. In addition, there are plans to restructure the National Informatics Centre.

The Digital India project have following things to do,

- 1) Broadband in 2 lakh villages,
- 2) universal phone connectivity,
- 3) Net Zero Imports by 2020,
- 4) 400,000 Public Internet Access Points,
- 5) Wi-fi in 2.5 lakh schools, all universities;
- 6) Public wi-fi hotspots for citizens,
- 7) Digital Inclusion: 1.7 Cr trained for IT, Telecom and Electronics Jobs creation: Direct 1.7 Cr. and Indirect at least 8.5 Cr.
- 8) e-Governance & eServices: Across government.
- 9) India to be leader in IT use in services – health, education, banking Digitally empowered citizens – public cloud, internet access. The Government of India entity Bharat Broadband Network Limited which executes the National Optical Fibre Network project will be the custodian of Digital India (DI) project. BBNL had ordered United Telecoms Limited to connect 250,000 villages through GPON to ensure FTTH based broadband. This will provide the first basic setup to achieve towards Digital India and is expected to be completed by 2017. Optical fibre cables have been laid out in more than 68000 village panchayats.

On 28 December 2015, the Panchkula district of Haryana was awarded for being the top performing district in the state under the Digital India campaign.

The Digital India Project having following nine pillars :-

10. Broadband Highways
11. Universal Access to Mobile Connectivity
12. Public Internet Access Programme
13. e-Governance – Reforming Government through Technology
14. eKranti - Electronic delivery of services
15. Information for All

16. Electronics Manufacturing
17. IT for Jobs
18. Early Harvest Programmes

The Digital India Project having following services need to serve:-

Some of the facilities which will be provided through this initiative are Digital Locker, e-education, e-health, e-sign and national scholarship portal. As the part of Digital India, Indian government planned to launch Botnet cleaning centers.

Some websites and facility launched by the government under Digital India Project :

Digital Locker facility :

This will help citizens to digitally store their important documents like PAN card, passport, mark sheets and degree certificates. Digital Locker will provide secure access to Government issued documents. It uses authenticity services provided by Aadhaar. It is aimed at eliminating the use of physical documents and enables sharing of verified electronic documents across government agencies.

Attendance.gov.in :

This is a website, launched by PM Narendra Modi on 1 July 2015 to keep a record of the attendance of Government employees on a real-time basis. This initiative started with implementation of a common Biometric Attendance System (BAS) in the central government offices located in Delhi.

MyGov.in :

This is a platform to share inputs and ideas on matters of policy and governance.

Different industrialist invest in Digital India Projects :

- 1) Top CEOs from India and abroad committed to invest 4.5 lakhcrore (US\$67 billion) towards this initiative. The CEOs said the investments would be utilized towards making smartphones and internet devices at an affordable price in India which would help generate jobs in India as well as reduce the cost of importing them from abroad.
- 2) Reliance Industries Chairman Mukesh Ambani said his company would invest 2.5 lakhcrore (US\$37 billion) across different Digital India heads, which have the potential to create employment for over five lakh people. He also announced setting up of the 'Jio Digital India Start Up Fund' to encourage young entrepreneurs who are setting up businesses focused around the Digital India initiative.
- 3) Bharti Group chief Sunil Mittal committed investments of more than 1 lakhcrore

(US\$15 billion) in the next five years to create deeper infrastructure in rural and urban India in the areas of e-health and e-education.

- 1) Silicon Valley :- Giants from Silicon Valley, San Jose, California expressed their support for Digital India during PM Narendra Modi's visit in September 2015. Facebook's CEO, changed his DP in support of Digital India and started a chain on Facebook and promised to work on WiFi Hotspots in rural India.
- 2) Google committed to provide broadband connectivity on 500 railway stations in India.
- 3) Microsoft agreed to provide broadband connectivity to five hundred thousand villages in India and make India its cloud hub through Indian data centres.
- 4) Qualcomm announced an investment of US\$150 million in Indian startups.
- 5) Oracle plans to invest in 20 states and will work on payments and Smart city initiatives.

Review of Literature :

The extant literature on technology use in SME context shows several performance factors such as strategy, owner commitment, and external technology expertise. Thong (1999) identified the characteristics that play a role in SME performance using data from Singapore based SMEs and affirmed that CEO characteristics (innovativeness and level of technology knowledge), innovation characteristics (relative advantage, compatibility), and organizational characteristics (business size and employee knowledge) are important in technology adoption and use. Hussin et al. (2002) in UK context supported this research and indicated that technology adoption depends more on the internal technology knowledge level of the firm and firms with a higher knowledge rely on their own team excluding outside experts that they see as a danger. Ismail and King (2006; 2007) emphasized the importance of accounting information systems and the information processing capability. The conformity between the required information quantity and the accounting information system that process this information to provide management with necessary reports contribute to the performance of SMEs in developing economies. Therefore, the strategic use of technology and IT add also to the firm value making them adopt new more information based business strategies. The conformity between the type of accounting information system and the general IT strategy of the firm that Boulianne (2007) formulates as defender, prospector and analyzer strategies have an effect on the overall performance of the company. In the same line of research, the relationship between technological capabilities and firm performance is also supported by Isobe et al. (2008) in a study of 302 SMEs. Moreover, the alignment of strategy and information technology is realized by shared vision, cooperation, empowerment, and innovation backed by technology making it connected, flexible and most importantly easy to report. Sharma and Bhagwat (2003) evaluated information systems performance according to operational efficiency of the information system, downtime and the responsiveness of the system. Accordingly, Levy et al. (2011) in their study showed that the alignment between International Journal of Academic Research in Business and Social Sciences 2016, Vol. 6, No. 12 ISSN:

2222-6990 680 www.hrmas.com information system and strategy, the user-friendliness and the functionality of the system play an important role in the SME's performance. However, the investment in information is limited to supporting operations and transactions. The performance increase supported by information systems is supported by Estebanez et al. (2010) especially in the service sector using information systems intensively. The study also showed that new accounting standard implementation and information systems usage are the key factors for SMEs that align strategies with organizational culture towards continuous improvement and competitiveness in the market. These studies show a significant positive relation with SMEs performance and the information system but the information systems sophistication level and the company's requirements must be fit (Ismail and King, 2006) and in order to measure this fit level several studies suggested factors such as the systems and organizational characteristic (Thong, 1999), type of industry (Sousa et al., 2006) and type of strategy (Bouliane, 2007) moreover the extant literature shows that business strategy (Tuanmat and Smith, 2011), owner commitment (Amidu et al., 2011), IT expertise (Amidu et al., 2011) are also other factors affecting AIS implementation success and the company's performance.

Conclusions :

- 1) **Information technology in India** is an industry consisting of two major components: IT services and business process outsourcing (BPO).
- 2) In this regard the contribution of India's present prime minister Narendra Modi is appreciable. He gives the name it to be 'Digital India'.
- 3) Digital India has three core components. These include:
 - a) To Create Digital Infrastructure
 - b) To Provide Digital Services
 - c) To increase Digital Literacy
- 4) The Digital India Project having following nine pillars.
- 5) Different industrialist invest in Digital India Projects like Ambani group, Bharati group, Google, Microsoft, etc.
- 6) The studies show the effect of AIS implementation on SMEs performance. The relationship between AIS implementation and performance can be analyzed using a variety methods and variables.
- 7) *Digital India has three core components played the crucial role in this sectors, which includes; to Create Digital Infrastructure, to Provide Digital Services, to Increase Digital Literacy.*

References :

- www.google.com
- www.wikipedia.com
- www.uow.edu.au
- www.transworldeducation.com
- https://en.wikipedia.org/wiki/Information_technology_in_India#cite_note-kamdar-2
- https://en.wikipedia.org/wiki/Supercomputing_in_India#cite_note-22
- https://en.wikipedia.org/wiki/Supercomputing_in_India#cite_note-dnai8f-12
- Attendance.gov.in
- Abernethy, MA. & Lillis, AM. (1995). The impact of manufacturing flexibility on management control system design.
- Accounting, Organizations & Society, 20(4): 241-258. Amidu, M. Effah, J. & Abor, J. (2011). E-Accounting practices among small & medium enterprises in Ghana. Journal of Management Policy & Practice, 12 (4):146-155. Al-Eqab. & Ismail, NA. (2011).
- Contingency factors and accounting information system design in Jordanian companies. IBIMA business Review, 166128, 1-13. Bledsoe, N. L. & Ingram R. W. (1997).
- Customer satisfaction through performance evaluation. Journal of Cost Management, Winter, 43-50. Boulianne, E. (2007). Revisiting fit between AIS design and performance with the analyser strategic type.
- International Journal of Accounting Information Systems, 8, 1-6. Bouwens, J., & Abernethy, M. A. (2000). The consequences of customization on management accounting system design. Accounting, Organizations and Society, 25(3), 221-241.
- Burca, S., Fynes, B. & Brannick, T. (2006). The moderating effects of information technology sophistication on services practice and performance. International Journal of Operations & Production Management, 26(11): 1240-1254.
- Chenhall, R.H. (2003). Management control system design within its organizational context. Findings from contingency based research and direction for the future. Accounting organization and society ,28(2-3),127-168