



RESEARCH ARTICLE

IMPACT OF INFORMATION, COMMUNICATION AND SOCIAL BUSINESS TECHNOLOGY ON MICRO, SMALL AND MEDIUM-SIZED ENTREPRENEURSHIP IN CHHATTISGARH: A SHORT REVIEW

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ABSTRACT

This review paper discusses the potential role of the adoption of information, communication, and technology (ICT) and social business tools based digital technologies (DT) in micro, small and medium-sized enterprises (MSMEs). Chhattisgarh is one of the fastest growing states in India and is amongst the richest states in terms of natural and mineral resources. The State has an excellent educational ecosystem with Indian Institute of Management, Indian Institute of Technology, International Institute of Information Technology, National Institute of Technology, All India Institute of Medical Sciences, National Law University successfully operational. Micro, Small and Medium-sized Enterprises (MSMEs) form the backbone of the Indian economy making large contributions to important economic indicators as well as household incomes. A literature review pertaining to ICT and DT initiatives that can support MSMEs was conducted and is reported here briefly.

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INTRODUCTION

Micro, Small and Medium-sized Enterprises

Micro, Small and Medium-sized Enterprises (MSMEs) form the backbone of the Indian economy making large contributions to important economic indicators as well as household incomes. The 2015-16 Annual report published by the Ministry of Micro, Small and Medium Enterprises reports that India is home to 51 million MSMEs. The report also states that MSMEs contributed 37.5 per cent of India's GDP (MSME Annual Report, 2015-16) and 37 per cent of the manufacturing output (MSME Annual Report, 2015-16) underlining their strategic importance to the Indian economy. Equally important, MSMEs employed 117 million people that is 14 per cent of India's working age population (MSME Annual Report, 2015-16). The Indian economy has emerged as the fastest growing major economy in the world (India's economic growth is still the envy of the world, 2016). The Government's Twelfth Five Year Plan includes a vision to lift annual GDP growth to 8 per cent and to create additional 50 million job opportunities in the non-farm sector (Twelfth Five Year Plan (2012/2017)). The Plan repeatedly highlights the importance of Micro, Small and Medium-sized enterprises (MSMEs), skill development and

internet connectivity to achieve these objectives. Digital technologies have transformed the landscape in which MSMEs operate. This is led by consumers going online, especially on mobile. According to the study by TRAI and BCG-Google, India has mobile subscriptions to the tune of 1.03 billion and internet users to the tune of 350 million (Telecom Regulatory Authority of India (TRAI) May 2016 and Digital Payments 2020). These users increasingly discover, engage and transact with businesses online. Digital technologies assist businesses in innovation and achieving greater efficiencies with the help of enhanced communication tools and digital productivity gears; for example, Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) systems. Despite significant digital dividends, digital adoption by Indian MSMEs is extremely low. The report shows that a staggering 68 per cent of MSMEs in India are completely Offline and only 2 per cent of MSMEs are digitally engaged (Analysis of ITOPS<sup>TM</sup> Business 2016/ ITOPS<sup>TM</sup> Business 2015 and primary data collected by Kantar IMRB). It identifies low awareness of the benefits of digital technologies, lack of digital skills and knowledge, and limited internet infrastructure as the key reasons for such low uptake. Given the importance of MSMEs, the government has launched several initiatives to get more SMBs to digitize. All these initiatives make it easy to access Government services such as filing taxes and registering businesses online. Additionally, under the Digital India initiative the government aims to train 10 million students to

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raise digital skill levels in India (<http://www.cmai.asia/digitalindia/>). Government actions have been complemented by the private sector to raise digital awareness and skills levels among Indian SMBs (Intel India launches initiatives for digital literacy, 2016). Internet penetration in India is expected to rise to 50-60 per cent by 2020 (<http://www.tradingeconomics.com/india/population/forecast>). This trend, coupled with significant digital dividends for MSMEs, could help increase their contribution to India's GDP by approximately 10 percentage points to 46-48 per cent (KPMG in India research and analysis). This signifies the huge impact digital could have on MSMEs as well as on the India growth story. KPMG-India in association with Google performed an analytical study and reported the influence of digital technologies like internet connectivity, websites and e-commerce on Indian MSMEs. The study classified Indian MSMEs on the basis of their levels of digital commitment into four stages - Offline, Connected, Enabled and Engaged. As per the analysis of ITOPS™ and a telephonic survey done by Kantar IMRB during November 2016 for 504 Indian MSMEs, it was found that Indian MSMEs which adopt digital technologies are likely to:

- Grow profits up to two times faster than Offline MSMEs.
- Scale across city and country boundaries. The report finds that 51 per cent of digitally Enabled MSMEs sell beyond city boundaries as compared to 29 per cent of Offline MSMEs.
- Employ up to five times more people compared to Offline MSMEs.

### Digital India Program

Under the flagship program of Government of India, Digital India is a program to prepare India for a knowledge based future. The focus is on being transformative – to realize. The motto of the program is: IT (Information Technology) + IT (Indian Talent) = IT (India Tomorrow). It is coordinated by DeitY and implemented by the entire government. The weaving together of central and state governments makes this mission transformative in totality. The Digital India project will see investments to the tune of Rs 4.5 lakh crore as promised by top industrial houses and create 1.8 million jobs. The project will help make technology central to enable change. It is an Umbrella Program – that spans across many departments. It stitches a large number of ideas and thoughts into a single, comprehensive vision to ensure that each of them is a part of a larger goal. The project will ensure that services and governance are there on the net in every government department and ministry, so that the facilities can be availed by citizens without having to queue up at various offices (<http://www.chips.gov.in/files/Digital%20Chhattisgarh%204.pdf>).

### Initiatives by Chhattisgarh State for Adoption of ICT and DT

Chhattisgarh is arguably the first state in India with a comprehensive IT strategy. Chhattisgarh is probably the first state in India to build up a widespread Geographical Information System (GIS) by means of 38 thematic layers plan. In Chhattisgarh the internet connectivity till every block headquarters is achieved. In Chhattisgarh, 3000 Common Service Centers are deployed to deliver government services. In Chhattisgarh, 4500 highly computer literates, IT savvy

senior bureaucrats are working as government employees and top political executives (<http://www.chips.gov.in/files/Digital%20Chhattisgarh%204.pdf>).

In addition to the above, Chhattisgarh state has launched several schemes to promote the use of ICT and DT (<http://www.chips.gov.in/files/Digital%20Chhattisgarh%204.pdf>); these are:

- Inauguration of Chief Minister Dashboard Portal
- Wifi hotspot inaugurated
- Pension Services Inaugurated
- iOS Based App for District e- Services
- Dashboard for district e-services inaugurated
- Inauguration of the mobile app for integrated digital Chhattisgarh
- Chhattisgarh Campus Connect Portal
- PC Tablets with Digital Chhattisgarh App Distributed
- Websites of Universities and Colleges Inaugurated
- Launch of app for Public Health Engineering Department
- Application Software for Midday Meal Launched
- Launch of Online Electricity Connection Application
- Website for MLA Model Village
- PC Tablets distributed among College students
- Portal for online land allotment

The Chhattisgarh InfoTech & Biotech Promotion Society (CHiPS) has been at the forefront of turning the vision into a reality. It has worked to bring government to citizen services online, increase government to government e-communication and train government and citizens to avail the benefits of IT enabled services and create information driven society. *Government to Citizen Interface*: A government service called CHOiCE is developed to encourage the concept of “anytime-anywhere” government. CHOiCE stands for Chhattisgarh Online Information and Citizen Empowerment. It provides nearly all Government to citizen (G2C) services such as Birth/Death, Caste, Income Certificates etc. It is a widespread open source e-Governance project in India. Today, Chhattisgarh state has second largest operation of fixed ‘WiMAX’ in the country that provides 3000 locations with the state. Private Citizens employed as ‘CHOiCE Agents’ have been notified as Public Servants under IT Act in the year 2003 thereby facilitating them to process government documents. The Common Service Centre (CSC) is one of the flagship program of the National e-Governance Plan (NeGP).

It has been implemented by CHiPS with full dynamism and passion. The CSCs offer decent quality and lucrative voice and data content and facilities in the areas of e-governance, education, health, telemedicine and entertainment principally in rural areas. The services involve diverse certificates, application forms, and utility payments such as telephone, water and electricity bills. CHiPS has already accomplished the NeGP objective of establishing 3385 IT kiosks in the Chhattisgarh State. The e-kiosks have been rewarded in four divisions of Chhattisgarh namely Raipur, Durg, Korba, and Raigad. CHiPS have also employed an e-Procurement solution for the Chhattisgarh's government. As a result, the entire purchase procedures including works, goods and services of Chhattisgarh's government have been automated from the very beginning till the very end (<http://www.chips.gov.in/files/Digital%20Chhattisgarh%204.pdf>).

## Conclusion

Chhattisgarh state's ICT infrastructure needs to be even better developed. At least 90 percent of the micro, small and medium-sized enterprises (MSMEs) in the state must have an internet connection so that they can use Internet for information, social media and other collaborative solutions for their business operations. However, implementation of ICT equipment and usage of management software packages fluctuate significantly depending on the company size and the business type. Companies with employee strength of 100 to 499 show a greater use of the ICT and a better web presence than the smaller companies. However, women owned enterprises tend to have fewer than 100 employees. The number of women owned businesses in Chhattisgarh has been steadily increasing. They tend to be concentrated in the service- orientated sectors such as food processing, health care, information and cultural industries, arts, entertainment, recreation and retail. Scores of women entrepreneurs find it difficult to access and use the technology, networks, and knowledge that they require to establish and nurture their businesses. Some suggested steps that can be taken forward by the Chhattisgarh State Government to revolutionize ICT and DT for the improvement of MSMEs can be:

- Broadband Highways
- Universal Access to Phones
- Public Internet Access Program
- E-Governance –Governance through Technology
- Electronic delivery of services
- Online Hosting of Information & documents
- Electronics Manufacturing
- IT for Jobs

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