

# Impact of stepping up digital literacy on increased representation of Tribals in Employment

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*Abstract:* - The Centre for Catalysing Change (2021) in Jharkhand observed that the main obstacles to digital access for young tribal living in remote areas were a lack of understanding and a fear of technology. They don't have a suitable setting for studying online, nor do they comprehend the notion. Nonetheless, not much research has been done on how the government, community, and culture contribute to the rural tribal population's ongoing digital divide. The current research analysed the challenges limiting digital literacy, ways and means to increase digital literacy and correlate the increase to increased employability of tribals. Cultural inhibition is found to be the top challenge for the current digital divide. Assistance and promotion by self-help groups are found to be the biggest game changes in increasing digital literacy. The research further analysed and found a direct correlation between digital literacy on increased employability in tribals.

*Key-Words :* - Indigenous, Digital Literacy, Tribals, Culture, Employment

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## 1. Introduction

There are roughly 635 tribal groups and subgroups in India, including the 73 so-called primitive tribes, which together make up roughly 8.2 percent of the country's total population [3]. Based on official estimates, they are found in large numbers in seven states in central and northeast India. Most tribal people still work primarily in agriculture and lead largely self-sufficient lives away from the mainstream in forests and other isolated places. There is a lower than 50% literacy rate. Poverty, illiteracy, low income, food insecurity, a lack of basic civic amenities and infrastructure, inadequate educational resources, a low standard of living, land loss, and unemployment are additional characteristics shared by our tribal community areas.

To raise their level of living, integrate them into society, and make sure they have access to all

the benefits and information they are entitled to, how can we digital literacy?

Digital literacy refers to the ability to use, understand, and navigate digital technologies effectively. It encompasses a range of skills and competencies that enable individuals to engage with digital devices, applications, and platforms in various aspects of life. Digital literacy is crucial in the modern world, as technology plays a pervasive role in daily activities, work, education, and communication.

Key components of digital literacy includes:

**Basic Computer Skills:** Understanding how to operate a computer, use a keyboard and mouse, manage files and folders, and perform basic troubleshooting.

**Internet Literacy:** Knowing how to access and navigate the internet, including using web browsers, conducting online searches, and

understanding concepts like URLs and hyperlinks.

**Information Literacy:** Evaluating and critically assessing information found online, including the ability to distinguish between credible and unreliable sources, understanding data privacy, and recognizing potential biases.

**Communication Skills:** Effectively using digital communication tools such as email, instant messaging, and social media. This includes understanding netiquette (internet etiquette) and appropriate online behavior.

**Media Literacy:** Understanding different forms of digital media, including images, videos, and audio. This involves the ability to interpret and create multimedia content.

**Cybersecurity Awareness:** Recognizing and understanding online threats, practicing safe online behavior, and protecting personal information from cyber threats.

**Problem-Solving and Critical Thinking:** Using digital tools to solve problems, think critically about information, and make informed decisions in various contexts.

**Digital Citizenship:** Understanding the ethical and responsible use of digital technologies, including respecting intellectual property, practicing online etiquette, and being aware of the impact of one's digital footprint.

**Adaptability to New Technologies:** Being open to and capable of learning and using new digital tools and technologies as they emerge.

Digital literacy is not a static concept; it evolves as technology advances. It is a foundational skill set that empowers individuals to participate actively in the digital age, whether in educational settings, the workplace, or society at large. Efforts to promote digital literacy often focus on education and training programs to ensure that individuals, regardless of age or background, can navigate and utilize digital tools effectively.

Stepping up digital literacy among tribal communities can have a significant impact on increasing their representation in the global IT sector.

- **Access to Opportunities:** Digital literacy opens opportunities for tribals to access online education and training programs.

With the right skills, they can participate in the global IT job market, contributing to increased representation.

- **Remote Work Opportunities:** The IT sector often allows for remote work, and digital literacy enables tribals to engage in such opportunities. This can be particularly beneficial for those living in remote or rural areas where traditional job opportunities may be limited.
- **Entrepreneurship:** Digital literacy empowers individuals to start their own ventures. Tribals can explore entrepreneurship in the IT sector, creating startups that can compete on a global scale. This can contribute to increased representation in terms of both employment and business ownership.
- **Cultural Representation in Tech Solutions:** Improved digital literacy allows tribals to represent their culture in technology solutions. They can develop applications, content, or platforms that showcase their unique perspectives, contributing to diversity and cultural representation in the IT sector.
- **Inclusive Innovation:** Tribals bring diverse perspectives and experiences. With digital literacy, they can actively participate in the innovation process, offering unique solutions to global challenges. This diversity can enhance creativity and problem-solving within the IT industry.
- **Bridge the Urban-Rural Divide:** Digital literacy helps bridge the urban-rural divide by bringing IT opportunities to rural areas. This can help prevent migration to urban centers in search of IT jobs, allowing tribals to contribute to the sector from their own communities.
- **Skill Development Programs:** Governments, NGOs, and private

organizations can implement targeted skill development programs to enhance digital literacy among tribal populations. This includes training in programming, data analysis, and other IT-related skills.

- Corporate Diversity Initiatives: Increased digital literacy can feed into corporate diversity initiatives. Companies may actively seek talent from diverse backgrounds, and with improved digital skills, tribals can become attractive candidates for IT positions.

Government policies that support digital literacy initiatives in tribal areas can play a crucial role. This might involve providing infrastructure, resources, and incentives for IT education and training in these communities. Beyond the IT sector, digital literacy contributes to overall social and economic empowerment. Tribals can use digital skills for various purposes, including financial management, healthcare access, and civic engagement.

## 2. Literature Review

A literature review on the impact of improving digital literacy on the increased representation of Tribals in the global IT sector involved exploring existing research, studies, and publications related to digital literacy, tribal communities, and their participation in the IT industry.

“What is literally digital about literacy today is how much what is read and written has been conveyed electronically” [1]. So Digital literacy refers to the ability to use, understand, and engage with digital technologies effectively. It includes skills such as using computers, navigating the internet, critically evaluating online information, communicating through digital platforms, and understanding concepts like

cybersecurity. Digital literacy is essential in the modern world, enabling individuals to participate actively in a society where technology plays a pervasive role in daily life, work, and education.

The digital gap has frequently caused indigenous peoples to be divided in this era of information technology dominance. This low adoption of technology can be attributed to several factors, including the high cost of new technologies, [2] the remote location of many villages, limited computer proficiency, and a lack of knowledge about how technologies could support the aspirations and interests of indigenous people. Other cultural concerns include those around language barriers, cultural appropriateness, and the maintenance of indigenous knowledge. Interest also plays an important role in being more receptive to technological evolution.

The tribal community's acceptance of digital or e-learning methods is influenced by both social and cultural capital. Convincing the local community to invest appropriately in digital devices that may support a digital learning environment could be greatly aided by a shared awareness of the importance and overall effectiveness of digital modes of learning [5]. It is found that lack of confidence/knowledge & skill and no interest are also fundamental reasons for not having access to the internet [4]. The cost of adoption of technological devices is also a hindrance. Having the money to purchase the right devices to take advantage of a more extensive digital infrastructure is a concern on an individual basis. For this reason, in addition to availability, the devices' cost is essential for enabling peaceful participation in the digital ecosystem [5].

Research also found that in the section of tribals under the influence of modernization, digitalization and globalization, there have

been changes in lifestyle [6] of the community. New generations are emerging who are more than open to access to digital literacy and be part of global growth.

Researchers looked at digital literacy as a stepping stone for participation in 21<sup>st</sup> century workplace. The authors [7] assessed three hundred young people in all answered

### 3. Methodology

This quantitative study aimed to examine the impact of digital literacy on increased representation of tribals in employment. The study design targeted employees across different levels across different sectors but are either based in Jharkhand or connected to the state in some form.

The participants completed an online survey through google forms to assess increased employability due to digital literacy.

In this study population related data has been gathered from employees from different sectors. Therefore, it can be assumed that population size may vary. However, in this survey more than half of the population can impact information security for maximum variability so  $p=0.5$ . The author(s) set the confidence level to 95% and an acceptable margin of error is

So, a random sample of 385 employees in our target population was enough to give us the confidence levels we needed.

The survey was responded to by 580 employees. The authors primarily analyzed the impact of digital literacy on increased Survey Questionnaire

SQ1 – What are the top challenges limiting digital literacy in Tribals?

the self-administered surveys. The study's conclusions demonstrated how a learning system, visual learning style, collaborative learning style, critical skills, and operational skills all improve digital literacy. Additional research indicates that digital literacy enhances academic achievement and increases global employability.

5%. And the author(s) calculated the sample size using Cochran's Formula.

Since  $p = 0.5$  so  $q = 0.5$  (since  $q = 1-p$ ). With 95% confidence, and at 5 %—plus or minus—precision,

So,  $e = 0.05$ . A 95 % confidence level gives us Z value of 1.96.

$$n_0 = \frac{z^2 pq}{e^2}$$

(1)

$$((1.96)^2 (0.5) (0.5)) / (0.05)^2 = 385.$$

(2)

employability. And secondary analysis for challenges and means to increase digital literacy among tribals.

SQ2 – How can we increase digital literacy among Tribals?

SQ3 – How does digital literacy increase the employability of young Tribals?

Tribals?

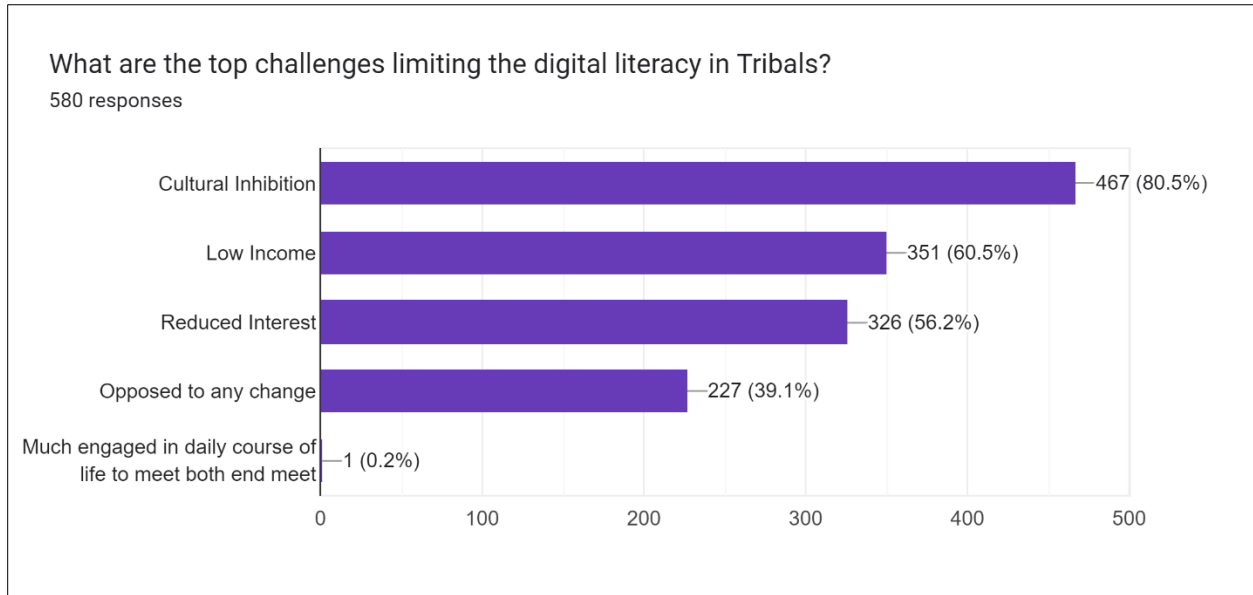


Figure 1 Response to Survey question SQ1

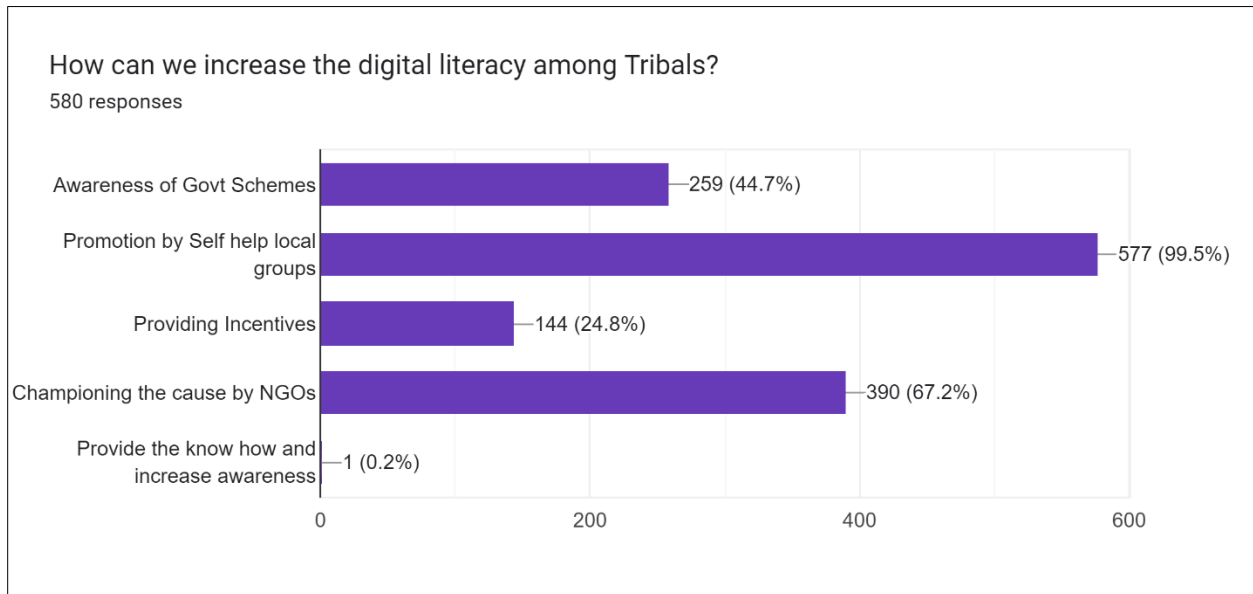


Figure 2 Response to Survey question SQ2

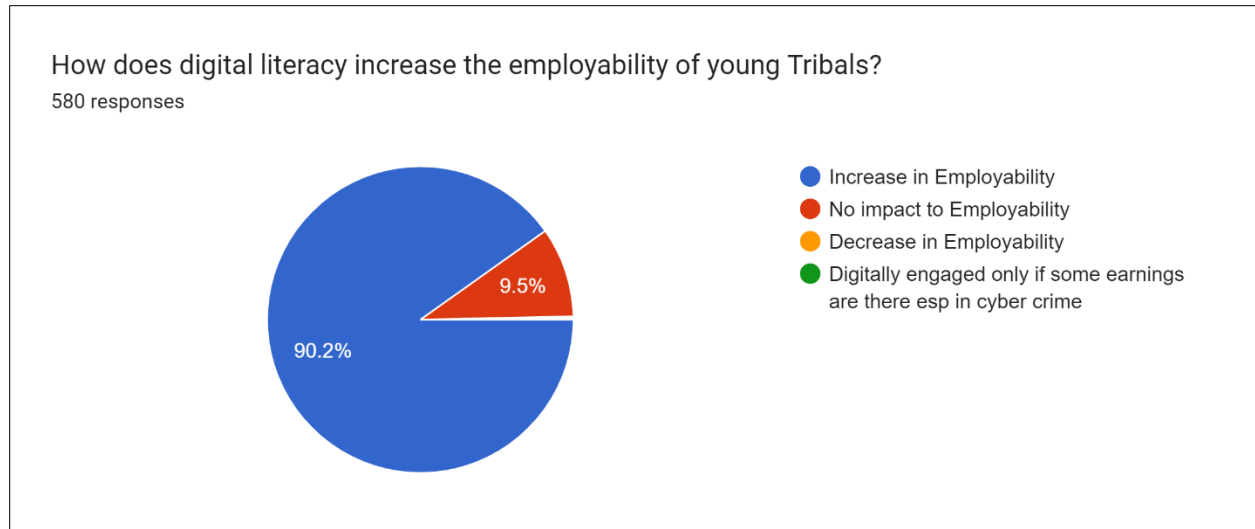


Figure 3 Response to Survey question SQ3

#### 4. Result Analysis

The authors analyzed 580 responses to the questionnaire with below findings.

“Cultural Inhibition” with 80.5% respondents citing it as the topmost challenge for digital literacy among tribals. Followed by “Low Income” with 60.5%, “Reduced Interest” with 56.2% and “Opposed to any change” with 39.1% respondents citing as challenges.

99.5% of respondents believe that “Promotion by self-help local groups” can help in increasing the digital literacy among tribals.

A whopping 9.2% respondents believe that digital literacy will increase employability of tribals thereby increasing their representation in employment.

#### 5. Conclusion

Studies have shown that targeted digital literacy initiatives in tribal and rural areas can significantly enhance the skills of community members. These initiatives often include introducing Govt. training programs, workshops by local help groups, and the provision of digital infrastructure. Emphasizing the importance of culturally sensitive approaches in designing

digital literacy programs for tribal communities to ensure relevance, effectiveness, and better adoption. Stepping up digital literacy among tribals can have a transformative impact on their representation in the employment sector. It not only provides employment opportunities but also allows them to contribute their unique perspectives and innovations to the industry, fostering diversity and inclusion.

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