INDIAN STREAMS RESEARCH JOURNAL
ISSN NO : 2230-7850
IMPACT FACTOR : 5.1651 (UIF)
VOLUME - 15 | ISSUE - 6 | JULY – 2025

GROWTH AND EMPLOYMENT GENERATION THROUGH DIGITAL LITERACY: ISSUES AND CHALLENGES

Maboobi Mulla[1] and Dr. Suresha K. P.[2]
[1]Research Scholar Department of Economics,
Karnataka State Akkamahadevi Women's University , Vijayaura.
[2]Assistant Professor, Department of Economics,
Karnataka State Akkamahadevi Women's University, Vijayaura.

ABSTRACT

Growth and employment generation through digital literacy play a crucial role in the contemporary global economy. Digital literacy refers to the ability to use digital technologies, communication tools, and networks to access, manage, integrate, analyse, and evaluate information. Digital literacy plays a pivotal role in driving growth and employment generation in today's technology-driven world. While digital literacy can contribute significantly to economic development, it also poses various issues and challenges that need to be addressed for maximizing its positive impact. Digital literacy is a catalyst for both individual and collective growth. It enhances employability, fuels innovation, and positions economies to thrive in the digital age. Policymakers, educators, and businesses play crucial roles in promoting and supporting digital literacy initiatives to harness these benefits. Digital literacy is crucial for individuals and communities to fully utilize the benefits of the digital era, as technology advances and growth opportunities arise. Digital literacy opens up diverse opportunities in the digital economy, attracting skilled workers in digital marketing, programming, and data analysis as industries digitize. Digital literacy enhances access to information, markets, and resources, enabling individuals to engage in education, entrepreneurship, and networking. It also increases the potential for job creation, as individuals with digital skills are more likely to find employment in various sectors, particularly those requiring technology proficiency. Digital literacy enhances economic growth by enabling online creation and service offerings, making a workforce with this skill set more innovative and entrepreneurial. Digital literacy refers to the ability to use digital technologies for meaningful life actions. Only 38% of Indian families have access to digital literacy, with urban areas having a higher rate (61%), compared to rural areas' 25%. This is defined by the Ministry of Electronics and Information Technology. Digital literacy is crucial for job demand, productivity, and inclusive growth. Technology enhances business management by monitoring employee health, tailoring requirements, and automating repetitive tasks. Digital literacy enhances global connectivity, facilitating remote work and international collaboration, thereby increasing job opportunities and skill exchange on a global scale. Digital literacy enhances workforce adaptability, fostering innovation and productivity, contributing to industry growth and job generation for businesses seeking modernization and competitiveness. It boosts growth and employment through e-commerce, digital marketing, and tech startups, creating new markets and opportunities, and driving a startup culture in innovative sectors. It fosters growth and employment by enabling remote work and collaboration, breaking geographical barriers, and utilizing global talent pools, thereby expanding job opportunities. Promoting digital literacy in underserved communities can

unlock potential, promote inclusive economic growth, and increase employment opportunities, reducing socio-economic disparities. Digital literacy is crucial for nations to thrive in the digital economy, as it facilitates accelerated growth and diverse job roles. It promotes lifelong learning, enabling individuals to adapt to technological advancements. Continuous up skilling in digital technologies helps maintain job relevance, reducing unemployment rates and fostering employment stability. This paper explores the impact of digital literacy on skill development and livelihoods, highlighting its role in shaping careers and enhancing employability. It explores the power of digital skills for self-improvement and success in an evolving job market.

KEYWORDS: *Digital Literacy, Digital Skill, Growth, Employment Generation.*

I. INTRODUCTION.

India's digital literacy is crucial for bridging the digital divide and equipping its citizens with the necessary information and skills for a digitally empowered society.India's demographic and technological transformation is accelerating, with the largest working-age population expected by 2025. Digital literacy refers to the ability to use digital technologies for meaningful life actions. Only 38% of Indian families have access to digital literacy, with urban areas having a higher rate (61%), compared to rural areas' 25%. This is defined by the Ministry of Electronics and Information Technology. Digital literacy is crucial for job demand, productivity, and inclusive growth. Technology enhances business management by monitoring employee health, tailoring requirements, and automating repetitive tasks. Senior management should engage with younger employees and understand their perspectives. Employment boosts consumer spending, stimulates demand, boosts production, and contributes to economic growth. Expanding industries necessitates a larger workforce to meet growing demands. However, persistent barriers like illiteracy, poverty, underdeveloped infrastructure, and poor technology awareness hinder its growth.

II. REVIEW OF LITERATURE

1. **Andelka et al. (2023):** The study examines the relationship between digital literacy and the employment rate of the older population using data from the Eurostat database. It found that digital literacy significantly influences the employment rate in the age group 55-64, but not in the age groups 35-44 and 45-54. Digitization processes can negatively affect older people's working performance and employability.
2. **Giridhari et al. (2017):** The Digital India drive, launched by Prime Minister NarendraModi in 2015, aims to transform India into a digitally empowered society and a knowledgeable economy. It envisions universal digital literacy, accessible resources in regional languages, and digital scaffolding for participatory governance. This paper explores the impact and challenges of digital India on governance and citizen quality of life, focusing on employment prospects for the youth.
3. **Amit Singh. (2016):**India's rapid demographic and technological transformation, technology enhances business management by monitoring employee health, tailoring requirements, and automating repetitive tasks. Senior management should engage with younger employees and understand their perspectives.
4. **Kshema (2016):** The essay explores the ecology of resources model in blended classrooms for enhancing English language and technology literacy, promoting content literacy, active social participation, lifelong learning, and learner autonomy.
5. **Radovan (2016):** Digital literacy is crucial for the global labour market, as it adapts to new job demands and redefines existing jobs. It directly impacts an individual's employability, which is determined by factors and processes. Universities adapt their programs to meet labour market needs, and this paper examines digital literacy in Zagreb's student population.

III. RESEARCH METHODOLOGY

The present research paper is descriptive research approach, which is purely based on secondary data which has been collected by government reports, national and international journal articles, magazines, newspapers and websites.

IV. OBJECTIVES.

1. To know the concept of digital literacy.
2. To understand employment rate.
3. To enumerate growth and employment generation through digital literacy.
4. To explain issues and challenges of digital literacy in growth and employment generation.

V. DIGITAL LITERACY AND EMPLOYMENT GENERATION.

Digital literacy refers to the ability to use digital technologies for meaningful life actions. Only 38% of Indian families have access to digital literacy, with urban areas having a higher rate (61%), compared to rural areas' 25%. This is defined by the Ministry of Electronics and Information Technology. Digital literacy is crucial for the current and future workforce as the global labour market is transformed by digital technology. It directly impacts an individual's employability, which includes factors and processes enabling employment and stay in the workplace. Universities adapt their programs to meet labour market needs, such as the study at the Faculty of Humanities and Social Sciences in Zagreb, Croatia. The study examines the relationship between digital literacy and employment rates in the older population, using Eurostat data. It found that digital literacy significantly influences the employment rate in the age group 55-64, but not in the age groups 35-44 and 45-54. Digitization processes can negatively affect older people's working performance and employability.

VI. LABOUR FORCE PARTICIPATION RATE.

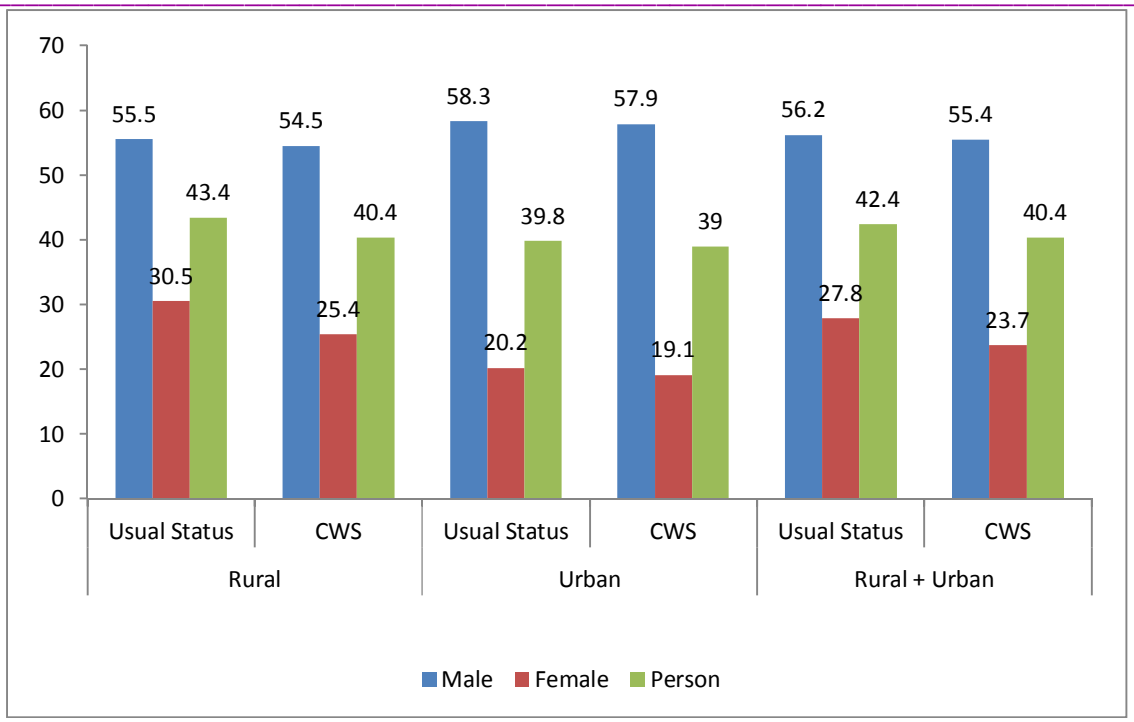
Table 1. Labour Force Participation Rate

Category of Persons	Rural		Urban		Rural + Urban	
	Usual Status	CWS	Usual Status	CWS	Usual Status	CWS
Male	55.5	54.5	58.3	57.9	56.2	55.4
Female	30.5	25.4	20.2	19.1	27.8	23.7
Person	43.4	40.4	39.8	39.0	42.4	40.4

Source: Periodical Labour Force Survey July 2022 - June 2023

* CWS –Current Weekly Status.

The table shows the Labour Force Participation Rate (LFPR), a measure of the percentage of the working-age population (15-64 years) employed or actively seeking employment across different settings.Male participation in the labour force is higher in rural and urban areas, with 55.5% in rural areas and 58.3% in urban areas, while female participation is lower, with 30.5% in rural areas and 20.2% in urban areas.Urban areas have a wider gender gap in LFPR, with males more likely to participate, while urban participation is higher for both genders, as shown in the "Rural + Urban" column.



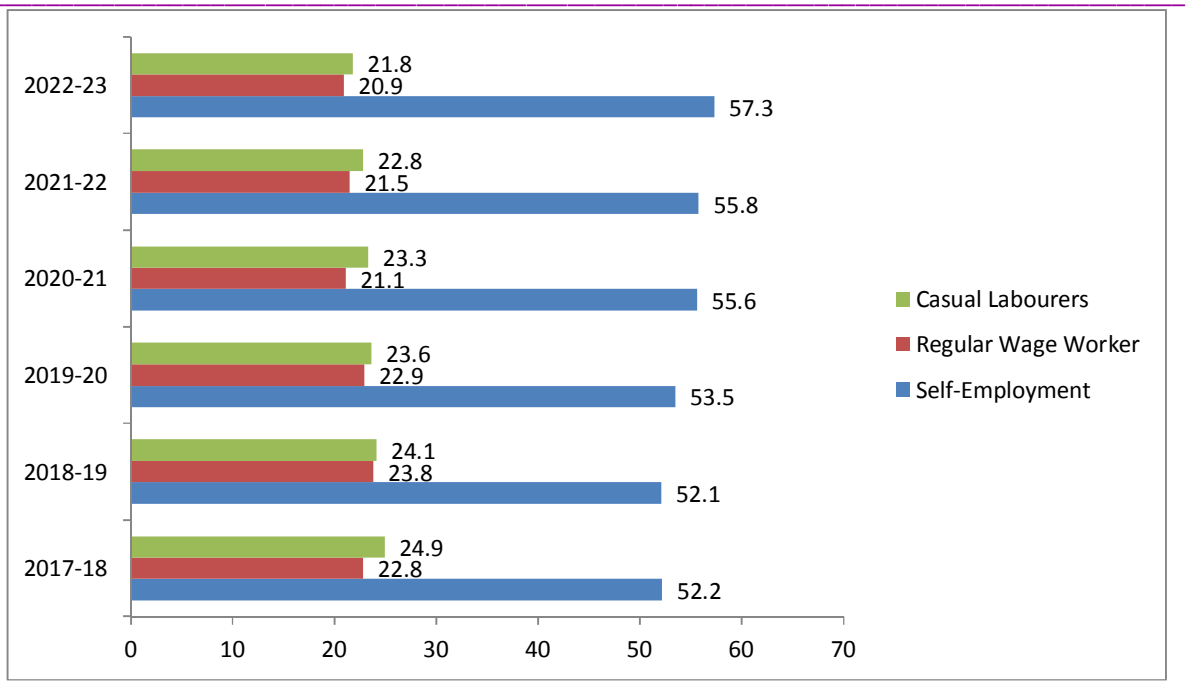
The study reveals that males have a slightly higher LFPR when considering Current Weekly Status (CWS) than usual status, suggesting more weekly labour force participation. Females also show a noticeable difference between their usual status and CWS, suggesting variations in weekly labour force participation. Overall, overall labour force participation is influenced by both rural and urban dynamics.

Table 2. Worker by Employment Status(Rural+Urban) in %.

Period	Self-Employment	Regular Wage Worker	Casual Labourers
2017-18	52.2	22.8	24.9
2018-19	52.1	23.8	24.1
2019-20	53.5	22.9	23.6
2020-21	55.6	21.1	23.3
2021-22	55.8	21.5	22.8
2022-23	57.3	20.9	21.8

Source: Periodical Labour Force Survey July 2022 - June 2023.

The table provides information on the distribution of workers by employment status, distinguishing between self-employment, regular wage workers, and casual labourers across different periods.The percentage of self-employed workers has increased from 52.2% in 2017-18 to 57.3% in 2022-23, indicating a growing trend in entrepreneurial activities. The proportion of regular wage workers has slightly decreased, suggesting a shift away from traditional employment.The increasing number of self-employed individuals is a significant trend, possibly due to entrepreneurship, freelancing, or small business ownership. This shift is influenced by economic, technological, and gig economy changes. Regular wage work remains stable, while casual labourers percentage decrease suggests a reduction in reliance on temporary or seasonal labour, possibly due to industry changes or policy measures.



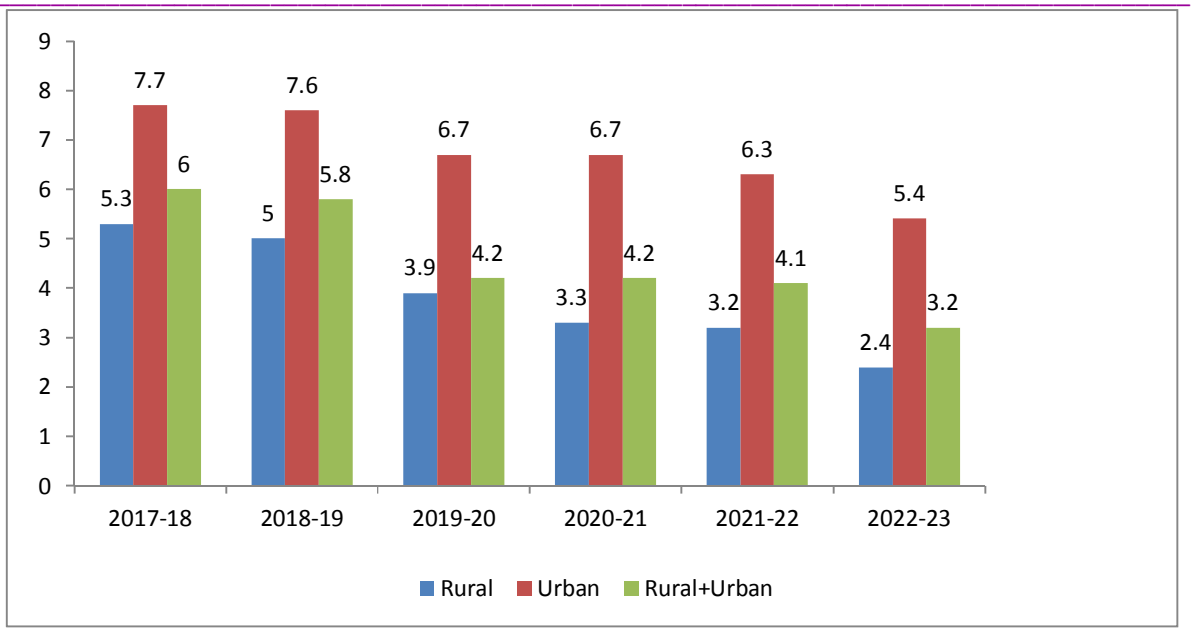
The chart indicates a shift in the composition of the workforce over the years, with a notable increase in self-employment and a decline in casual labourers. This information can be valuable for policymakers and analysts to understand the evolving nature of employment in the given region or sector.

Table 3. Employment Rate in %.

Period	Rural	Urban	Rural+Urban
2017-18	5.3	7.7	6.0
2018-19	5.0	7.6	5.8
2019-20	3.9	6.7	4.2
2020-21	3.3	6.7	4.2
2021-22	3.2	6.3	4.1
2022-23	2.4	5.4	3.2

Source: NSO

The percentage of self-employed workers has increased from 52.2% in 2017-18 to 57.3% in 2022-23, driven by factors like entrepreneurship and small business ownership. Regular wage workers have slightly decreased from 22.8% to 20.9%, while casual labourers have declined from 24.9% to 21.8%. This suggests a shift in workforce composition, with an increasing number of self-employed individuals and a potential shift towards more stable employment.

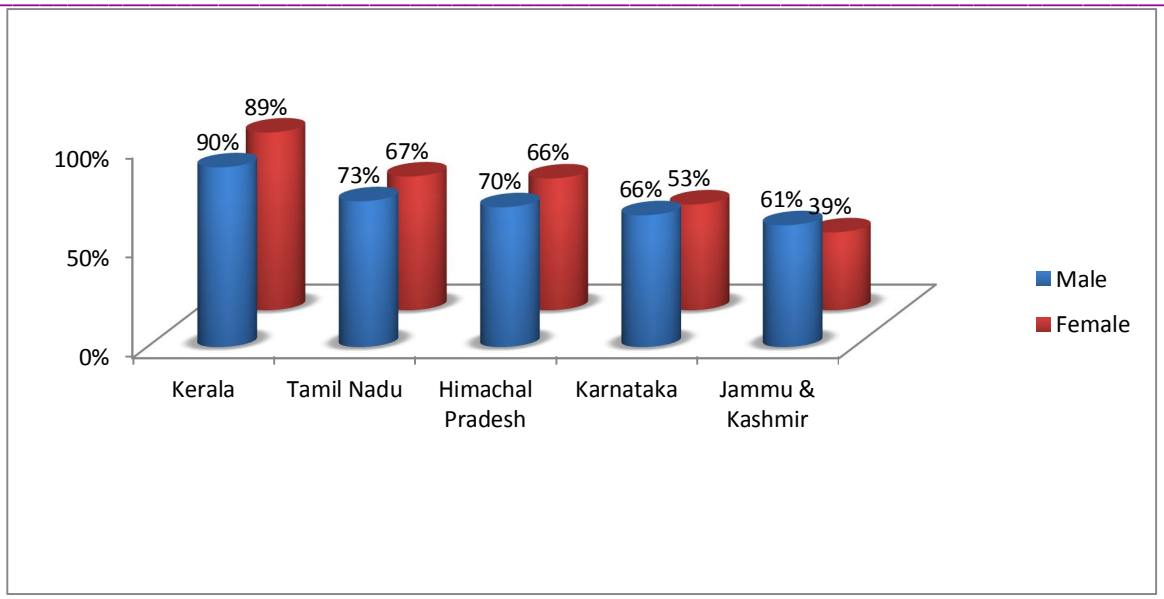


The chart indicates a changing landscape in employment patterns, with a rise in self-employment and a decline in casual labour. These shifts have implications for labour market policies, economic planning, and social welfare measures, necessitating a nuanced understanding of the underlying factors driving these changes.

Table 5. Digital Literacy Rate of Top 5 State.

State	Male	Female
Kerala	90%	89%
Tamil Nadu	73%	67%
Himachal Pradesh	70%	66%
Karnataka	66%	53%
Jammu & Kashmir	61%	39%

The table provides information on the digital literacy rates of the top 5 states in India, distinguishing between males and females. Digital literacy refers to the ability of individuals to use digital devices and technology to access, understand, and utilize information. Kerala has high digital literacy rates for both males and females, with 90% for males and 89% for females. Tamil Nadu has a significant rate of 73% for males and 67% for females, but there is a noticeable gender gap. Himachal Pradesh has a slightly higher rate of 70% for males and 66% for females. Karnataka has a lower rate of 66% for males and 53% for females. Jammu& Kashmir has the lowest digital literacy rates among the top 5 states, with 61% for males and 39% for females.The gender gap in digital literacy is quite significant, with a substantial difference between male and female rates.



This data emphasizes the need for targeted efforts to improve digital literacy, especially among females, in states with lower rates. Addressing gender disparities in digital literacy is crucial for ensuring equal access to opportunities in the digital age. Policymakers and educators can use this information to tailor interventions and programs to bridge the digital divide, focusing on regions and demographics with lower digital literacy rates.

VII. ISSUES

1. Disparities in access to digital devices and internet connectivity hinder individuals from acquiring digital skills, especially in rural or economically disadvantaged areas.
2. Many individuals lack the necessary digital skills for the rapidly evolving technological landscape, limiting their employability.
3. Traditional educational systems may not be adequately preparing students with the digital skills required in the modern workforce.
4. As digital literacy increases, so does the potential for cyber threats and attacks.
5. Automation and digitization of certain tasks may lead to job displacement for individuals lacking digital skills.
6. Certain demographic groups, such as women and minorities, may face barriers to digital inclusion and representation in technology-related fields.
7. The fast pace of technological advancements requires continuous learning and adaptability.
8. With increased digital access, there is a risk of misinformation and a lack of critical thinking skills in evaluating online content.

VIII. CHALLENGES

1. Bridging the digital divide requires infrastructure development, affordable internet access, and initiatives to provide devices to underserved communities.
2. Developing comprehensive digital literacy programs that cover a range of skills, from basic computer proficiency to advanced coding and data analysis.
3. Integrating digital literacy into formal education curricula and providing continuous training for teachers to stay updated on technological advancements.
4. Incorporating cyber security education into digital literacy programs to ensure individuals are aware of online risks and can protect themselves and their organizations.

5. Implementing policies and programs that facilitate the reskilling and up skilling of the workforce to adapt to the changing job market.
6. Promoting diversity in the tech industry and addressing systemic barriers to ensure that digital literacy initiatives benefit all segments of society.
7. Establishing flexible and dynamic digital literacy frameworks that can evolve alongside technological changes, and promoting a culture of lifelong learning.
8. Incorporating media literacy and critical thinking components into digital literacy programs to help individuals navigate and assess online information.

IX. SUGGESTIONS

1) Policy makers may need to consider the growing trend of self-employment and its implications for social security, labour rights, and economic stability.
2) Implement comprehensive digital literacy programs in schools and communities to equip individuals with essential digital skills.
3) The changes in employment status may reflect broader economic and social shifts, such as technological advancements, changing industry structures, or shifts in worker preferences.
4) Offer specialised training in emerging technologies to enhance employability in sectors like IT, data analytics and digital marketing.
5) Foster collaboration between government, private sector and NGOs to pool resources and expertise in addressing digital literacy challenges.
6) Efforts to understand and address the reasons behind the decline in casual labourers can help tailor policies to provide stability in the labour market.
7) Invert in reliable internet infrastructure to ensure widespread access to digital resources especially in rural areas.
8) Tailor digital literacy programs to cater to diverse demographics, considering age, gender and socioeconomic factors.
9) Provide resources and mentorship to encourage the creation of digital start-ups, fostering innovation and job opportunities.
10) Establish platforms for ongoing skill development, as the digital landscape evolves rapidly.

X. CONCLUSION

Digital literacy is crucial for individuals and communities to fully utilize the benefits of the digital era, as technology advances and growth opportunities arise. Digital literacy opens up diverse opportunities in the digital economy, attracting skilled workers in digital marketing, programming, and data analysis as industries digitize. Digital literacy enhances economic growth by enabling online creation and service offerings, making a workforce with this skill set more innovative and entrepreneurial. Digital literacy enhances global connectivity, facilitating remote work and international collaboration, thereby increasing job opportunities and skill exchange on a global scale.

XI. REFERENCES

1. Andelka, S., Isidora, M., &Sanela, A. (2023). The Influence Of Digital Literacy On The Employment Rate Of The Older Population. *International May Conference on Strategic Management*, XIX(1), 291–300. https://www.researchgate.net/publication/371125896.
2. Giridhari, M., SathyaSwaroop, D., &Sudipta Kishore, N. (2017). A Study on Growth and Prospect of Digital India Campaign. Saudi Journal of Business and Management Studies, 2, 727–731. https://doi.org/10.21276/sjbms.
3. Amit Singh, K. (2016). Digital Literacy: How Prepared Is India to Embrace It? *International Journal of Digital Literacy and Digital Competence*, 7(3),12. https://doi.org/10.4018/IJDLDC.2016070101.
4. Kshema, J. (2016). Digital Literacy Matters: Increasing Workforce Productivity Through Blended English Language Programs. *Higher Learning Research Communication*, 6(4), 1–17.

5. Radovan, V. (2016). Digital Literacy as a Boost Factor in Employability of Students. *Communications in Computer and Information Science*, 1–11. https://www.researchgate.net/publication/313031140
6. Annual Report Periodical Labour Force Survey(PLFS) July 2022-June 2023

Web links

https://www.ideasforindia.in
https://sambhavfoundation.org
https://www.linkedin.com