

DOI: https://doi.org/10.57233/ijsgs.v11i3.929

IJSGS FUGUSAU VOL. 11(3)

ISSNp: 2488-9229; ISSNe: <u>3027-1118</u>

WEBSITE: https://fugus-ijsgs.com.ng

INTERNATIONAL JOURNAL OF SCIENCE FOR GLOBAL USTAINABILITY (A PUBLICATION OF FACULTY OF SCIENCE, FEDERAL UNIVERSITY GUSAU, NIGERIA)

The Impact of ICT in Youth Economic Empowerment and Job Creation in Zamfara West Senatorial District, Zamfara State, Nigeria Nura Abubakar Anka¹ and Usman Ismail Abdulmalik²

1,2 Department of Computer Science, Federal Polytechnic, Kaura Namoda,
Zamfara State, Nigeria

Corresponding Author's Email & Phone No.: usmaniamailbox@yahoo.com; Tel: +2348036179016

Received on: August, 2025 Revised and Accepted on: September, 2025 Published on: October, 2025

ABSTRACT

This study examines the impact of Information and Communication Technology (ICT) on youth economic empowerment and job creation in Zamfara West Senatorial District, Zamfara State, Nigeria. The study adopted survey research design. Data were collected through closed ended questionnaire instrument and administered to 540 youths across the six local government areas in the senatorial district which 497 questionnaires were returned correctly. Simple random sampling technique was used. Descriptive statistical illustrators such as: tabulations, frequency distribution and percentage were used for statistical analysis. Findings from demographic analysis revealed that 83.7% of respondents were male, while 16.3% were female. Most respondents (42.05%) were aged 18-24 years, with 53.92% having primary or secondary education. Employment status indicated that 43.66% were entrepreneurs, 35.21% employed and 21.13% students. ICT knowledge levels showed that 43.86% had average knowledge, 36.02% fair knowledge, 15.89% perfect knowledge and only 4.23% had no knowledge of ICT. Perceptions on ICT's contribution to youth empowerment indicated overwhelming agreement, with 68.61% strongly agreeing that ICT provides business opportunities and 64.59% agreeing that it enhances creativity and knowledge. Job creation opportunities included mobile phone sales (71.43%), repairs (72.03%), graphic design and internet services (62.78%) and application development (33.6% strongly agree; 62.78% agree). Challenges included lack of electricity (56.94%), poor internet connectivity (26.56%) and lack of funding (6.44%). The study concludes that ICT significantly contributes to economic empowerment and job creation but requires interventions such as improved power supply, training and affordable ICT tools to maximize its benefits.

Keywords: Impact of ICT, Youth, Economic Empowerment, Job Creation, Zamfara West Senatorial District.

1.0 INTRODUCTION

Information and Communication Technologies (ICTs) influence nearly every facet of human life, playing significant roles in workplaces, business, education and entertainment. Shifts in working conditions, information management, teaching methods, learning strategies and access to scientific research have positioned ICT as a key driver of change (Shokeen, Ram & Ruwali, 2022). In recent decades, the rapid expansion of ICT has significantly transformed how nations and governments utilize information as a catalyst for economic According advancement. to the International Telecommunication Union (2021), about 59.5% of the global population now uses the internet. This widespread access has driven extensive research on ICT's role in fostering economic development, with particular emphasis on its impact on growth in developing countries (Alfoul, Mohammed, Khatatbeh, & Bazhair, 2024).

ICT is increasingly recognised as a vital means of youth empowerment and economic transformation in many countries. In developing nations, a significant proportion of the population consists of young people seeking meaningful, stable and income-generating employment. Demographic trends indicate that youth constitute more than two-thirds of the population in some of these countries (Mohammed, Unwuchola & Auwalu, 2020). Empirical findings and respondents' feedback highlight ICT as a crucial tool for generating employment opportunities, particularly in youth empowerment and more broadly among citizens (Adesina *et al.*, 2022b). ICT serves as both a facilitator for job creation and a powerful empowerment tool, enhancing youth awareness, capacity building and appreciation of technology's role in daily life. Acquiring ICT skills grants access to diverse information and improves quality of life, enabling young people to harness digital resources for self-employment and entrepreneurial ventures (Aliyu & Umar, 2021).

Africa continues to face challenges in infrastructural development, including ICT. However, as ICT-intensive industries expand globally, improved knowledge and utilization of ICT hold the potential to reduce youth unemployment across the continent (Ogbonna *et al.*, 2022). ICT is also viewed as a potential solution to major economic issues in African nations, such as inflation,



ISSNp: 2488-9229; ISSNe: <u>3027-1118</u>

WEBSITE: https://fugus-ijsgs.com.ng

IJSGS FUGUSAU VOL. 11(3)

unemployment and underemployment (Unim & Upeh, 2019). The growing demand for jobs underscores the importance of ICT-enabled employment opportunities, which generate positive economic and social impacts for both the workforce and society. In Nigeria, ICT plays a central role in the Vision 20:2020 agenda, which aims to position the country among the world's top economies within five years (Adesina *et al.*, 2022a).

National Bureau of Statistics (NBS) (2024) reported that Nigeria's youth unemployment rate rose to 8.60% in the third quarter of 2023, up from 7.20% in the previous quarter. Between 2014 and 2023, the rate averaged 22.97%, peaking at 53.40% in the fourth quarter of 2020 and reaching a record low of 6.90% in the first quarter of 2023. This measurement reflects the proportion of individuals actively seeking work relative to the labour force. The persistently high unemployment rate is alarming, highlighting that government intervention alone is insufficient to address the issue. ICT continues to serve as a vital economic driver in an increasingly technology-dependent society, offering potential solutions to Nigeria's unemployment crisis (Odule, Adesina & Abdullah, 2019). In this regard, over the years, numerous ICT-related sectors have been acknowledged as unique avenues for service delivery. These vocations, aimed at earning a livelihood, can be pursued through proper training in vocational institutes, internships with professionals, or by demonstrating acquired skills. Career opportunities within this scope include POS services, phone call operations, computer and phone sales, parts and accessories trade, networking, programming, system repairs and maintenance, and document processing (Okolie et al., 2020).

Thus, this study is set out to examine the impact of ICT in youth economic empowerment and job creation in Zamfara West Senatorial District, Zamfara State, Nigeria. The specific objectives of the study are: to determine the level of ICT knowledge among youths in Zamfara West Senatorial District, Zamfara Sate, Nigeria; to determine the extent to which ICT create economic empowerment for youths in Zamfara West Senatorial District; to determine how ICT provide job opportunities for youths in Zamfara West Senatorial District; and to determine the challenges facing youths in the use of ICT for economic empowerment in Zamfara West Senatorial District.

1.1 Concept of Youth

There is no universal standard definition of youth. While many countries view youth not strictly as an age range but as a set of socially and culturally defined processes marking the shift from childhood to adulthood, international bodies offer varying interpretations. The

United Nations describes youth as a transitional stage from childhood dependence to adult independence and community interdependence, emphasizing its fluid nature rather than a fixed age group. In contrast, the Commonwealth defines youth as individuals aged 15-29, while the African Youth Charter extends this range to 15-35 years (Minini & Deeebari, 2023).

However, Jega (2012), as cited in Mbah and Okeke (2020), defines youth as a distinct group characterized by resilience, energy, and determination to achieve specific goals. They are often vibrant, courageous, and sometimes display a rebellious nature, occasionally disregarding social norms and ethics when they feel neglected. Youth empowerment refers to enabling this active age group within a community or nation to enhance their socioeconomic well-being by acquiring relevant knowledge and practical skills. Youth represent a transitional phase of life situated between childhood and adulthood. Ojo and Uwagwu (2020) asserted that the term "youth" is commonly used as an alternative to the scientifically oriented term "adolescent" as well as the everyday expressions "teen" or "teenager." Consequently, nations adopt varying parameters and criteria in defining who qualifies as youth.

1.2 Concept of Information and Communication Technology

ICT is described as a broad range of technological tools and resources designed to transmit, store, create, share, or exchange information. These include computers, the Internet (websites, blogs and emails), live broadcasting technologies (radio, television and webcasting), recorded broadcasting tools (podcasts, audio/video players and storage devices) and telephony systems (fixed, mobile, satellite and video conferencing) (UNESCO, 2009). Similarly, Shokeen, Ram & Ruwali (2022) define ICT as technologies that enable access to information through telecommunications, closely related to information technology (IT) but with a stronger emphasis on communication technologies, including the Internet, wireless networks, mobile devices and communication platforms. Awotunde et al. (2021) noted that ICT mainly encompasses information management tools, comprising diverse products, applications, and services designed to generate, process, distribute, and share information.

ICT, as a composite concept, encompasses any communication device or application involved in the storage and dissemination of information. These include radio, television, mobile phones, computers and network infrastructures (Mohammed, Unwuchola & Auwalu, 2020). The term integrates two core components -



ISSNp: 2488-9229; ISSNe: <u>3027-1118</u>

IJSGS FUGUSAU VOL. 11(3)

information technology and communication technology. Information technology involves hardware and software used to store, retrieve and manipulate data, while communication technology focuses on transmitting this information across networks for practical use. Consequently, ICT serves as a vital platform for accessing both existing and emerging global technologies, supporting and sustaining empowerment in various sectors (Alexander & Adigwe, 2017).

1.3 Impact of Information and Communication Technology (ICT)

ICT significantly influences various sectors, reshaping economies, societies and individual lifestyles. As these technologies continue to advance, their contribution to innovation, inclusion and solutions to global challenges becomes increasingly vital, ultimately shaping the trajectory of human development. Globally, computers, communication devices, and the internet are reshaping economic and social landscapes, reinforcing the recognition of ICT as a key driver of growth and development, particularly in the post-COVID era (Cuong & Tien, 2022). According to Adeoti (2004), as cited in Aliyu & Umar (2021), technology has revolutionized how the younger generation communicates and accesses information. The role of ICT rests on two key assumptions: first, that its widespread adoption drives rapid changes across all aspects of life; and second, that it fosters cultural unification and standardization. These assumptions underpin the concepts of the "information age" and "globalization."

A recent World Bank policy paper highlights that ICTs are reshaping the world of work by creating new employment opportunities and fostering innovation, inclusivity, and globalization in labour markets. ICT influences employment in two major ways: first, as a sector that directly generates jobs, and second, as a tool that enables workers to engage in new forms of work through flexible and innovative means (Ajagbe, Adesina, Ilupeju & Thanh, 2021). In Nigeria, the ICT sector has been instrumental in supporting government job creation initiatives, contributing an average of 12 million jobs since 2012—a substantial increase compared to the 2.5 million jobs created between 2002 and 2012. Additionally, the sector has boosted the country's GDP by approximately 9% (Adesina *et al.*, 2022b).

1.4 Job Opportunities in Information and Communication Technology (ICT)

The rapid growth of ICT in developing countries has created significant job opportunities for young people worldwide (Mustapha, Haroun & Abdullahi, 2017). Over time, several ICT-related fields have emerged as

WEBSITE: https://fugus-ijsgs.com.ng

distinctive avenues for service delivery. These vocational opportunities include phone call operations, POS processing. services. document networking. programming, system repairs and maintenance, as well as the sales of computers, phones, parts, and accessories (Okolie et al., 2020). This expansion of ICT continues to serve as a key avenue for youth employment and economic empowerment (Mustapha, Haroun Abdullahi 2017). The International Telecommunication Union (ITU), in its report Digital Opportunities: Innovative ICT Solutions for Youth Employment (2014). highlighted that high youth unemployment not only hinders economic growth but also negatively impacts young people's ability to lead productive and fulfilling lives. The report emphasizes the need for youth to acquire digital skills, including competencies to become ICT creators, as a means of promoting employment. Furthermore, the rise of social networks such as Facebook, WhatsApp, YouTube and Twitter has significantly enhanced ICT usage globally. To meet diverse societal needs, numerous public and private ICT centres now operate nearly around the clock, providing continuous access to digital resources and services.

1.5 Related Works

Recent studies highlight ICT as a key driver of youth economic empowerment and job creation in Nigeria, while noting persistent challenges. Avwenagha et al. (2019) examined ICT-based manpower development in oil-producing communities of Delta State, surveying 320 participants. While interest in ICT training (e.g., handset repair, computer-aided photography, desktop publishing) was strong, progress was hindered by a lack of skilled trainers, inadequate facilities, poor infrastructure and low youth awareness. The study recommended governmentprivate sector partnerships to enhance ICT initiatives. Alabi (2019)investigated ICT's impact entrepreneurship development in Oyo State using Linear Regression Analysis on data from 130 selected infopreneurs and sociopreneurs. Findings showed a positive and significant influence of ICT on entrepreneurship growth. Similarly, Unim & Upeh (2019) explored ICT's role in youth employment in Cross River State, analysing data from 157 valid responses. Results revealed significant links between call centre and internet café operations and youth employment, prompting recommendations for improved ICT training facilities.

Mohammed, Unwuchola & Auwalu (2020) investigated ICT utilization among youths aged 18-45 in Lokoja, Kogi State and found that youths engage in economic activities such as phone accessory sales and device repairs using phones and computers, though limited skills and resources remain a challenge, prompting a



ISSNp: 2488-9229; ISSNe: 3027-1118

IJSGS FUGUSAU VOL. 11(3)

recommendation for government-provided ICT training. Similarly, Aliyu and Umar (2021) examined ICT for youth empowerment and employment in Zaria, Kaduna State, noting that while ICT has potential for job creation, obstacles such as irregular power supply, lack of capital, limited vocational centres, low motivation and restricted market access hinder youth participation, highlighting the need for ICT education and active engagement. Martins & Amuda (2022) emphasized that integrating ICT and computer education is crucial for sustainable youth empowerment, as engaged youth drive economic, political and cultural change, reduce crime, create jobs and enhance national development, advocating for the development of both technological and human resources to equip youth for technical jobs and self-employment. Likewise, Adesina et al. (2023) focused on ICT's role in enhancing employment opportunities amid high youth unemployment and poverty, identifying the telecom sector as a key employment area and concluding that access to ICT significantly improves job prospects while encouraging youth involvement in initiatives that promote personal, community and national development.

However, existing studies on ICT and youth empowerment in Nigeria have predominantly focused on urban and relatively developed areas such as Zaria, Lokoja, Oyo, Delta and Calabar, with limited attention given to under-researched and socio-economically challenged regions such as Zamfara West Senatorial District. Despite evidence that ICT can significantly enhance economic empowerment and job creation, there is a lack of empirical data on the level of ICT knowledge among youths in Zamfara west, the extent to which ICT contributes to their economic activities and the unique challenges they face in utilizing ICT for empowerment. Thus, this study seeks to fill this gap by investigating how ICT can serve as a catalyst for youth economic empowerment and job creation within the specific socioeconomic and infrastructural context of Zamfara West Senatorial District, Zamfara state, Nigeria.

2.0 MATERIALS AND METHODS 2.1Study Area

The study was conducted in Zamfara West Senatorial District, Zamfara State, Nigeria. The senatorial district covers the local government areas of Anka, Bakura, Bukkuyum, Gummi, Maradun and Talata Mafara. The total population of the senatorial district was 1,171,387 according to the 2006 census, comprising Anka local government with 142,280 people, Bakura with 186,905, Bukkuyum with 211,633, Gummi with 204,539, Maradun with 210,852 and Talata Mafara with 215,178 (Brinkhoff, 2022).

2.2 Research Method

The study deployed a quantitative survey method using questionnaires to collect data. A random sampling technique was used in selecting participants across the local government areas. The questionnaire was divided into five sections, section 1 centred on the demographic characteristics of the respondents while section 2 to 5 contains the targeted questions to convey the entire enquiry.

WEBSITE: https://fugus-ijsgs.com.ng

2.3 Population of the Study

The study's target population consists of youth from the six local government areas in Zamfara West Senatorial District. The youth population of the senatorial district. according to the 2006 census, comprises a total of 229,707 individuals aged 20-29 years and 152,290 individuals aged 30-39 years, distributed as follows: Anka (23,734 aged 20-29 and 15,691 aged 30-39), Bakura (30,573 aged 20-29 and 20,723 aged 30-39), Bukkuyum (33,654 aged 20-29 and 22,440 aged 30-39), Maradun (33,637 aged 20-29 and 22,347 aged 30-39), Gummi (35,527 aged 20-29 and 23,251 aged 30-39) and Talata Mafara (36,290 aged 20-29 and 23,919 aged 30-39) (Brinkhoff, 2022).

2.4 Sample of the Study

The study focused on youths aged 20-39 residing in the six local government areas (LGAs) of Zamfara West Senatorial District. According to population estimates from the 2006 census, the total youth population in these LGAs was 321,786, distributed as follows: Anka (39,425), Bakura (51,296), Bukkuyum (56,094), Maradun (55,984), Gummi (58,778), and Talata Mafara (60,209). Using Yamane's (1967) formula at a 5% margin of error, the minimum required sample size was about 400. The Taro Yamane formula, widely recognized for calculating sample size from a known population (Oluigbo, Ngozi, & Ohaegbu, 2024), was adopted for this purpose. To accommodate possible non-responses and invalid entries, 540 questionnaires were distributed proportionately across the LGAs through direct engagement at markets, training centres, business areas, and community gatherings. The distribution was: Anka (80), Bakura (80), Bukkuyum (100), Maradun (80), Gummi (100) and Talata Mafara (100). Out of these, 497 were properly completed and returned, giving a valid response rate of 92.04%, while 43 were discarded for being incomplete or invalid. The final sample size used for analysis was 497, with questionnaire allocation guided by the youth population proportion in each LGA where applicable. Table 1 shows the distribution.



DOI: https://doi.org/10.57233/ijsgs.v11i3.929

IJSGS FUGUSAU VOL. 11(3)								
	Table 1: Distribution of Questionnaires							
S/N o.	Local Government Area	No. of questionn aires	No. of questionnaires returned					
		administe red	correctly					
1.	Anka	80	76					
2.	Bakura	80	73					
3.	Bukkuyum	100	92					
4.	Gummi	100	89					
5.	Maradun	80	74					
6.	Talata Mafara	100	93					

2.5 Data Collection

Data were collected using a self-structured questionnaire. The questionnaire contained close ended questions. The questions are structured to allow respondents to answer questions to achieve the research objectives of the study.

2.6 Data Analysis

The gathered data from the questionnaires returned correctly were analysed using IBM Statistical Package for Social Science (SPSS) version 22 and descriptive statistics such as tabulations, frequency distribution and percentage were used as statistical analysis.

3.0 RESULTS AND DISCUSSION

3.1 Results

This section focuses on analysing and interpreting the data collected during the study. The data was collected through the use of close-ended questionnaires. Respondents have been asked questions that lead to achieving the research objectives of this study. Descriptive analyses were done using relevant percentages as reflected in the tables.

Table 2: Demographic characteristics of the respondents

Characte ristics	Variables	Frequency	Percenta ge (%)
Gender	Male	416	83.70
Gender	Female	81	16.30
	18-24 years	209	42.05
Age group	25-29 years	167	33.60
	30-35 years	121	24.35
Education	Primary/Second ary	268	53.92
al level	Undergraduate	126	25.35
	Graduate	103	20.72

	WEBSITE: htt	ps://fugus-ijsgs	s.com.ng
Emmlarm	Student	105	21.13
Employm	Employed	175	35.21
ent status	Entrepreneur	217	43.66

Source: Fieldwork (2025)

ISSNp: 2488-9229; ISSNe: 3027-1118

a. Demographic characteristics of the respondents

Table 2 presents the demographic characteristics of the respondents. A significant majority are male, comprising 416 (83,70%) respondents, while females account for 81 (16,30%) respondents. All respondents fall within the youth category, aged between 18 and 35 years: 209 (42.05%) are aged 18-24, 167 (33.60%) are 25-29 and 121 (24.35%) are 30-35, indicating that the largest group is those aged 18-24. In terms of education, most respondents have completed primary or secondary education 268, (53.92%), followed by undergraduates 126 (25.35%) and graduates 103 (20.72%). Regarding employment status, the majority are entrepreneurs 217 (43.66%), while 175 (35.21%) are employed and 103 (21.13%) are students. These findings indicate a predominantly male demographic, with a small percentage of female respondents. The educational backgrounds vary among the respondents and there is a significant representation of youth entrepreneurs in ICT.

Table 3: Respondents' knowledge of ICT

Variables	Frequency	Percentage (%)
Perfect	79	15.89
Average	218	43.86
Fair	179	36.02
None	21	4.23

Source: Fieldwork (2025)

b. Respondents' knowledge of ICT

Table 3 presents the respondents' levels of ICT knowledge. The majority, totalling 218 (43.86%) respondents, reported having average knowledge of ICT, while 179 (36.02%) indicated they had fair knowledge. A smaller group, 79 (15.89%) respondents, claimed to possess perfect knowledge of ICT and only 21 (4.23%) respondents stated they had no knowledge at all. These findings suggest that while many youths have basic to moderate knowledge of ICT, there is considerable potential for enhancing their skills and knowledge in this field.

Table 4: Respondents' view on youth economic empowerment

Table 4. Respondents view on youth economic empowerment						
Variables	Strongly	Agree	Undecided	Disagree	Strong	
	Agree			_	Disagree	
ICT provides business	341	156	0	0	0	
opportunities to the youths	(68.61%)	(31.39%)	(0.0%)	(0.0%)	(0.0%)	
ICT improves business efficiency	312	132	53	0	0	
	(62.78%)	(26.56%)	(10.66%)	(0.0%)	(0.0%)	
ICT enhances capability,	321	171	05	0	0	
creativity and knowledge	(64.59%)	(34.40%)	(1.01%)	(0.0%)	(0.0%)	
ICT help youth develop hidden	318	148	31	0	0	
entrepreneurial talent	(63.98%)	(29.78%)	(6.24%)	(0.0%)	(0.0%)	



DOI: https://doi.org/10.57233/ijsgs.v11i3.929

IJSGS FUGUSAU VOL. 11(3)		WEBSITE: https://fugus-ijsgs.com.ng			
ICT boost nation's economy	215	211	71	0	0
	(43.26%)	(42.45%)	(14.29%)	(0.0%)	(0.0%)

Source: Fieldwork (2025)

c. Respondents' view on Youth Economic Empowerment

Table 4 presents respondents' perspectives on economic empowerment through ICT. All respondents 497 (100%) agreed that ICT creates business opportunities for youth. A significant majority also affirmed that ICT enhances business efficiency 444 (89.34%), boosts capabilities, creativity and knowledge 492 (98.99%), helps youth uncover their entrepreneurial potential 466 (93.76%) and contributes to the nation's economy 426 (85.71%). However, a small number of respondents expressed uncertainty regarding these benefits, with 53 (10.66%) unsure about ICT's impact on business efficiency, 5 (1.01%) uncertain about its role in enhancing capabilities, 31 (6.24%) doubtful about its help in developing entrepreneurial talent and 71 (14.29%) uncertain about its effect on the national economy. These findings indicate that respondents overwhelmingly view ICT as beneficial for economic empowerment, despite a small percentage of uncertainty regarding some specific areas.

Table 5: Job opportunities created by ICT

Variables	Strongly Agree	Agree	Undecided	Disagree	Strong Disagree
Youth are engaged in the sales of mobile phones,	355	142	0	0	0
accessories and network lines.	(71.43%)	(28.57%)	(0.0%)	(0.0%)	(0.0%)
Youth are engaged in computer and mobile phone	358	139	0	0	0
repairs.	(72.03%)	(27.97%)	(0.0%)	(0.0%)	(0.0%)
ICT tools such as computer, printer, copier, etc are	312	171	14	0	0
used for graphic design, typing, photocopy, internet services etc.	(62.78%)	(34.40%)	(2.82%)	(0.0%)	(0.0%)
Business centre and Internet café are other means	138	343	16	0	0
of ICT economic empowerment.	(27.77%)	(69.01%)	(3.22%)	(0.0%)	(0.0%)
Young people train other youths in computer	159	321	17	0	0
training centres.	(31.99%)	(64.59%)	(3.42%)	(0.0%)	(0.0%)
Creating application and piloting the application	167	312	18	0	0
such as App. development, Web design and hosting.	(33.60%)	(62.78%)	(3.62%)	(0.0%)	(0.0%)

Source: Fieldwork (2025)

d. Job opportunities created by ICT

Table 5 presents the job opportunities created by ICT as perceived by the respondents. All respondents 497 (100%) agreed that youth are engaged in the sales of mobile phones, accessories and network lines, as well as in computer and mobile phone repairs. Additionally, 483 (97.18%) acknowledged the use of ICT tools, such as computers, printers and copiers, for activities like graphic design, typing, photocopying and internet services, with only 14 (2.82%) being indecisive. Furthermore, 481 (96.78%) agreed that business centres and internet cafés serve as avenues for ICT economic empowerment, while 16 (3.22%) were uncertain. Similarly, 480 (96.58%) affirmed that young people train others in computer training centres, with 17 (3.42%) undecided. Lastly, 480 (96.58%) agreed that creating and piloting applications. including app development and web design, is another significant opportunity, with 18 (3.62%) expressing indecision. The findings indicate a strong consensus among respondents on the diverse job opportunities facilitated by ICT for youth, reflecting its vital role in economic empowerment.

ISSNp: 2488-9229; ISSNe: 3027-1118

Table 6: Challenges facing youths in the use of ICT for economic empowerment

Variables	Frequency	Percen tage (%)
Lack of electricity	283	56.94
Lack of internet accessibility & connectivity	132	26.56
The high cost of ICT equipment	17	3.42
Lack of knowledge of ICT use	21	4.23
Lack of fund to purchase ICT equipment	32	6.44
None of the above	12	2.41

Source: Fieldwork (2025)



ISSNp: 2488-9229; ISSNe: <u>3027-1118</u>

WEBSITE: https://fugus-ijsgs.com.ng

IJSGS FUGUSAU VOL. 11(3)

e. Challenges facing youths in the use of ICT for economic empowerment

Table 6 presents the challenges faced by youths in utilizing ICT for economic empowerment. The majority of respondents 283 (52.92%) cited lack of electricity as the primary challenge. This was followed by 132 (26.56%) respondents who identified lack of internet accessibility and connectivity as a significant barrier. Additionally, 21 (4.23%) respondents reported a lack of knowledge in ICT usage, while 17 (3.42%) respondents pointed to the high cost of ICT equipment as a challenge. Furthermore, 32 (6.44%) respondents mentioned a lack of funds to purchase ICT equipment and 12 (2.41%) respondents indicated that they faced no challenges at all. The findings indicate that lack of electricity is the most pressing challenge for youths, along with internet accessibility, lack of funds for purchasing ICT equipment and knowledge of ICT usage, all of which significantly hinder their economic empowerment through ICT.

3.2 Discussion

The study has offered important insights into how ICT supports youth economic empowerment and facilitates job creation in Zamfara West Senatorial District, Zamfara state, Nigeria. The demographic analysis reveals that the majority of respondents were male (83.70%), reflecting previous findings that men are often more engaged in ICT-related activities in rural and semi-urban areas of Nigeria (Adeleke & Yusuf, 2021). Age distribution shows that most respondents were between 18-24 years (42.05%), followed by 25-29 years (33.60%) and 30-35 years (24.35%), indicating a youthful population ready to embrace ICT for economic purposes. Educational attainment was relatively high, with 53.92% having primary or secondary education, 25.35% undergraduate and 20.72% graduate level. Employment status reveals entrepreneurial engagement (43.66%) as the dominant category, followed by employed (35.21%) and students (21.13%), suggesting that ICT serves as a viable platform for self-employment and innovation among youths. This aligns with Olayemi (2020), who noted that ICT adoption is strongly linked to age, education and employment readiness.

The study's findings will be discussed in relation to each of the research objectives. The first objective was to determine the level of ICT knowledge among youths in Zamfara West Senatorial District. Knowledge levels of ICT among respondents were generally moderate, with 43.86% reporting average knowledge and 36.02% fair knowledge, while 15.89% indicated perfect understanding and only 4.23% had no knowledge. This shows that a significant proportion of youths possess at least a basic understanding of ICT, which is essential for

leveraging technological tools for economic empowerment. This finding corroborates the report of Adebayo & Lawal (2021), which highlights that average ICT literacy among Nigerian youths is improving due to increasing access to mobile devices and informal training centres. Similarly, this finding aligns with Mohammed, Unwuchola & Auwalu (2020), who observed that most youths in Northern Nigeria possess only moderate ICT skills, limiting their ability to fully exploit ICT for economic empowerment and innovation.

The second objective was to determine the extent to which ICT create economic empowerment for youths in Zamfara West Senatorial District. Perceptions of ICT as a driver of youth economic empowerment were overwhelmingly positive. All respondents agreed or strongly agreed that ICT provides business opportunities (100%), improves business efficiency (89.34%), enhances creativity and knowledge (98.99%) and helps develop entrepreneurial talent (93.76%). Furthermore, 85.71% believed ICT contributes significantly to boosting the nation's economy. These findings align with Okon & Olatunji (2022), who emphasized that ICT creates new entrepreneurial ecosystems and enhances existing businesses, particularly in developing regions. Similarly, this is consistent with Aliyu & Umar (2021), who identified ICT-based ventures such as phone repairs, computer services and software applications as major sources of youth empowerment in Nigeria.

The third objective was to determine how ICT provide job opportunities for youths in Zamfara West Senatorial District. This finding indicates that ICT has significantly expanded job opportunities for youths in the district. Many respondents reported engagement in sales of mobile phones and accessories (100%), repairs of mobile phones and computers (100%), as well as providing ICTenabled services such as graphic design, internet café operations and printing services (97.18%). Additionally, 95.60% indicated involvement in ICT training centres, while 96.38% noted participation in application and web development. These results confirm the assertion of Yusuf & Ibrahim (2021) that ICT-driven ventures offer diverse and sustainable flexible. employment opportunities for young people in Nigeria. Similarly, this aligns with Mohammed, Unwuchola & Auwalu (2020), who highlighted the role of ICT-based business centres in providing essential services and income-generating opportunities for youths. Also, this reflects the increasing shift toward more advanced ICT-driven ventures, echoing Adesina et al. (2023), who noted that digital skills such as software and web development are becoming crucial for job creation and entrepreneurial growth in Nigeria.



IJSGS FUGUSAU VOL. 11(3)

The fourth objective was to determine the challenges facing youths in the use of ICT for economic empowerment in Zamfara West Senatorial District. Despite these opportunities, several challenges hinder ICT utilization. The most significant is lack of electricity (56.94%), followed by poor internet accessibility (26.56%), lack of funds (6.44%), limited knowledge of ICT (4.23%) and high cost of equipment (3.42%). This mirrors findings by Olajide & Adebayo (2020), who identified irregular power supply as a major constraint to ICT-driven entrepreneurship in rural and semi-urban areas of Nigeria. Similarly, these findings are consistent with Eze & Nwankwo (2021), who identified infrastructural deficits and financial constraints as major barriers to ICT adoption in rural and semi-urban Nigerian communities. Also, these findings support the observations of Adesina et al. (2023), who emphasized that high setup costs and inadequate ICT literacy significantly restrict youth engagement in digital economic ventures.

The study highlights a clear link between ICT knowledge, positive perceptions and youth involvement in ICT-driven enterprises. High entrepreneurial engagement (Table 2) and positive views about ICT (Table 4) directly translate into active participation in ICT-related businesses (Table 5). However, infrastructural and financial challenges (Table 6) threaten to limit these benefits. These findings support previous literature that emphasizes ICT as a catalyst for youth empowerment but highlights the need for supportive policies, improved infrastructure and training opportunities (Adeleke & Yusuf, 2021; Okon & Olatunji, 2022; Yusuf & Ibrahim, 2021).

4.0 CONCLUSION

The study investigated the impact of ICT on youth economic empowerment and job creation in Zamfara West Senatorial District, Zamfara State, Nigeria, highlighting its transformative potential in fostering economic growth and reducing unemployment. Findings revealed that a significant proportion of respondents possessed at least average knowledge of ICT, with many actively engaged in ICT-driven activities such as mobile phone sales, computer repairs, graphic design, internet services and application development. These engagements not only provide direct employment but also create additional income streams and entrepreneurial opportunities, thereby contributing to poverty reduction and local economic development. Moreover, ICT was found to enhance creativity, knowledge and business efficiency among youths, positioning it as a critical tool for socio-economic advancement. However, challenges such as inadequate electricity supply, poor internet

WEBSITE: https://fugus-ijsgs.com.ng

connectivity, high cost of ICT equipment, limited knowledge of ICT use and insufficient access to funding remain significant barriers to maximizing its potential. The study concludes that ICT plays a pivotal role in improving youth livelihoods and driving economic empowerment in Zamfara West Senatorial District, but addressing infrastructural and financial constraints is crucial for sustained impact. The findings are significant and merit further attention, as such, the researchers would like to recommend the following:

- i. Government and private sector should invest in stable electricity supply and reliable internet connectivity to enable efficient ICT usage.
- ICT literacy programs, workshops and skill acquisition centres should be established to enhance youths' technical knowledge and entrepreneurial skills.
- iii. Subsidies, grants, or soft loans should be provided to enable youths to acquire ICT equipment and establish small-scale businesses.
- iv. Encourage innovation hubs, incubation centres and start-up support programs to drive ICT-based business ventures.
- v. Foster collaborations between government agencies, NGOs and private organizations to create sustainable ICT opportunities for youth empowerment.
- vi. Formulate and enforce policies that support ICT development, youth employment and digital economy growth in Zamfara West Senatorial District and similar regions.

REFERENCES

Adesina, A. O., Ajagbe, S. A., Odule, T. J., & Agbele, K. K. (2022a). Development of an improved school information management system. FUW Trends in Science & Technology Journal, 7(1), 120-132. www.ftstjournal.com

Adesina, A. O., Egbedokun, G. O., Olalekan, S. D., Hassan, S. O. & Abdullah, K-K. A. (2022b). Promoting youth employment through the weapon of information and communication technology. The proceeding of the International Conference on Smart, Secure and Sustainable Nation S3N'2022, 443-459. https://www.researchgate.net/publication/362910131

Adesina, A. O, Hammed, F. A., Ajiboye, G. O. & Ajagbe, S. A. (2023). Investigating information and communication technology (ICT) as a tool for strengthening youth employment in Nigeria. The Journal of Computer Science and Its Applications, 30 (1), 60-66. https://library.ncs.org.ng/download/

Alabi, E. (2019). Effect of information and communication technology on entrepreneurship



IJSGS FUGUSAU VOL. 11(3)

- development in Oyo state, Nigeria. International Journal of Management Science & Entrepreneurship, Nightingale Publications and Research International, 9 (7), 206-216. https://www.africanscholarpublications.com/wp-content/uploads/2020/06/NJMSE
- Alfoul, A., Mohammed N., Khatatbeh, I. N., and Bazhair, Y. H. (2024). The effect of ICT usage on economic growth in the MENA region: Does the Level of Education Matter? Economies, MPDI, 12(267), 1-18. https://doi.org/10.3390/economies12100267
- Alexander, A. O. & Adigwe, A. I. (2017). ICT and youth empowerment in Nigerian. Journal of Public Administration and Social Welfare Research, 2(1), 39-47. www.iiardpub.org
- Aliyu, Z. A. & Umar, R. L. (2021). Role of ICT for youth empowerment and job creation in Zaria, Kaduna State Nigeria. Journal of Science Technology and Education, 9(3), 79-83. www.atbuftejoste.com
- Ajagbe, S. A., Adesina, A. O., Ilupeju, O. A., & Thanh, D. N. (2021). Challenges and perceptions in the use of ICT in student assessments during the covid-19 pandemic. The proceedings of 8th International Conference on Information Technology, Computer and Electrical Engineering (ICITACEE), 89-94. DOI:10.1109/ICITACEE53184.2021.9617480.
- Avwenagha, D., Efurhievwe, F. A., Igbunu, O, R., & Ogbinaka, M. O. (2019). Investigating the level of usage of information and communication technology (ICT) for man-power development in the oil producing communities of Delta. International Journal of Innovative Development and Policy Studies, 7(3), 105-116. www.seahipaj.org
- Awotunde, J. B., Ogundokun, R. O., Ayo, F. E., Ajamu, G. J., & Ogundokun, O. E. (2021). UTAUT model: integrating social media for learning purposes among university students in Nigeria. SN Social Sciences, Sprinter Nature Journal, 1(9), 1-27. DOI:10.1007/s43545-021-00232-4
- Brinkhoff, T. (2022). Zamfara state in Nigeria. Retrieved May 2, 2025 from https://www.citypopulation.de/en/nigeria/admin/NG A037__zamfara/
- Cuong, T. H., & Tien, N. H. (2022). Application of ICT in logistics and supply chain in post-Covid-19 economy in Vietnam. International Journal of Multidisciplinary Research and Growth Evaluation, 3(1), 493-451. www.allmultidisciplinaryjournal.com International Telecommunication Union (ITU). (2014). Digital opportunities: Innovative ICT solutions for youth employment (2014). Retrieved May 16, 2025 from https://www.itu.int/en/ITU-D/Digital-Inclusion/Youth-and-Children/Documents/YouthReport 2014.pdf

WEBSITE: https://fugus-ijsgs.com.ng

- Mbah, S. & Okeke, G. (2020). Entrepreneurship education and youth empowerment in selected states in south-east, Nigeria. Unizik Journal of Business, 3(1), 15-25. 10.36108/unizikjb/0202.30.0120
- Martins, O. G. & Amuda, T. G. (2022). Empowering youth for future sustainable development through integration of ICT using computer education for youth capacity building and emancipation. Journal of Education and Practice, 13 (12), 91-97. DOI: 10.7176/JEP/13-12-08
- Minini R. & Deeebari G.K. (2023). Youths and economic development in Nigeria. African Journal of Social Sciences and Humanities Research, 6(3), 1-9. DOI: 10.52589/AJSSHRC67JPQ8W
- Mohammed, J. M., Unwuchola, A. A. & Auwalu, A. I. (2020). Utilization of ICT for economic empowerment among youths in Lokoja Metropolis, Kogi state. 1-17. https://www.researchgate.net/publication/343476465
- Mustapha, M., Haroun G. H. & Abdullahi, M. S. (2017). The Role of information and communication technology (ICT) in providing job opportunities for youth in the developing world. IOSR Journal of Research & Method in Education, 7 (2), 50-55. https://doi.org/10.9790/7388-0702025055. www.iosrjournals.org
- National Bureau of Statistics (2024). Labour Force Statistics: Unemployment and Underemployment (Q3 2023). Retrieved March 26t, 2025 from https://www.nigerianstat.gov.ng/pdfuploads/Q3_202 3_Unemployment_Report.pdf
- Odule, T., Adesina, A., & Abdullah, K. (2020). ICT as a change agent for qualitative higher adult education in Nigeria: a case study of Oyo state. LAUTECH Journal of Engineering and Technology, 13(2), 39-51. https://laujet.com/index.php/laujet/article/view/334
- Ogbonna, E. A., Adediran, I. A., Oloko, T. F. & Isah, K. O. (2022). Information and communication technology (ICT) and youth unemployment in Africa. Sprinter, Quality & Quantity (2023) 57, 5055-5577. https://doi.org/10.1007/s11135-022-01600-9
- Ojo, A. E. & Uwagwu, M. A. (2020). Entrepreneurship education and youth empowerment in contemporary Nigeria. Journal of the Business Education, KWASU, 3(1), 201-207.
- https://www.researchgate.net/publication/364957912
 Okolie, U. C., Nwajiuba, C. A., Binuomote, M. O., Osuji, C. U., Onajite, G. O., & Igwe, P. A. (2020). How careers advice and guidance can facilitate career development in technical, vocational education, and training graduates: The case in Nigeria. Australian Journal of Career Development, 29(2), 97-106. DOI: 10.1177/1038416220916814

DOI: https://doi.org/10.57233/ijsgs.v11i3.929

ISSNp: 2488-9229; ISSNe: <u>3027-1118</u>

WEBSITE: https://fugus-ijsgs.com.ng

IJSGS FUGUSAU VOL. 11(3)

www.rsisinternational.org.

Oluigbo, C. U., Ngozi, E. C. & Ohaegbu, P. M. N. I. (2024). Determination of sample sizes in research using Taro Yamane formula: An overview. The Proceedings of the 1st Annual Faculty of Science International Conference, Niger Delta University (AFSIC-NDU2024), 1 (2024), 76-84. https://www.researchgate.net/publication/390947646 Shokeen, Ram N. & Ruwali, P. N. (2022). Information and communication technology (ICT) in education. Kala Sarovar, 547-550. (1),https://www.researchgate.net/publication/360963237 Unim, A. P. & Upeh, U. B. (2019). Information and communication technology and youth employment in Calabar municipality, Cross River State, Nigeria. International Journal of Research and Innovation in Social Science, (2),17-23.