

Information Communication Technologies and Integrated Community Development in the 21st Century

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ABSTRACT: This paper discusses Information and communication technologies (ICTs) and Integrated community development (ICD) in the 21st century. The discourse emphasized the need for the application of ICTs apparatus into the practice of ICD in the 21st century of the Jet technological age and her fast tracking effects on human activities which will also result to spontaneous progress in the use of computer and other communication gadgets in recent times, by adding values to information dissemination process and adoption globally. Secondly, to promote and actualize the ingredients of ICD via; sustainable livelihood, citizen's participation, integration, productivity, capacity building, income generation, and empowerment, that will strengthen the spirit of skill acquisition, self-dignity for values, norms and put smiles on the faces of the citizenries especially rural dwellers who are faced with the challenges of poverty, deprivation, poor communication network, insecurity, environmental degradation, community militancy amongst others. This also will in turn be achieved through the use of the internet to operate digital apparatus like the POS (for cash and business transactions), mobile phones, satellites cables, digital library, online-learning and improvement on the community mobilization strategies that will open doors for self-confidence, self-motivation, social networking, human transformation, through active citizen's participation in planning, execution and evaluation of projects and programmes of community felt needs. That will bring about sustainable livelihood and sustainable integrated community development practice. This discourse again centred on the concept of ICTs, need for its application, features, challenges. Also, the concept of ICD, elements, objectives and relationships of ICTs with the ICD to the society in the 21st century and conclusion.

KEYWORD: Information Communication Technologies, Integrated Community Development.

Introduction

Information and communication technologies (ICTs) is a new brand in the household of the 21st century globally. It covers and engages both the children, young, adults and the elderly in the society, with its products that has to do with storage, retrieval, manipulation, transmission or receiving of information electronically in a digital form through the use of mobile phones, personal computers, digital television, email, Gmail, WhatsApp, Facebook, Twitter, Instagram, zoom, video conferencing etc.

Based on the above facts the discussion on this subject matter is anchored on two dimensions of; universal acceptance of the practice and utilization of ICTs products in all aspects of human life and as a driving force to the growth and development of the society, especially in the area of e-banking, e-learning, e-commerce, e-

travelling and tourism (through virtual conferencing, video calls, video watch. The second part is on the preservation of archival materials used in the instructions of building the rural communities, in terms of historical existence, genealogy, leadership pattern, selection and implementation of felt needs projects and programmes. The infusion of ICTs into the concept of integrated community development (ICD) towards enhancement of her quality, in the 21st century is very necessary, because ICTs offers the opportunities that requires citizens to engage, adopt and deploy to other strata of the society.

Information Communication Technologies

Emenanjo in Okwudishu (2014), mentioned that ICTs is not one, but many different, but complementary technologies, which are all digital and include fibre-optics, laser disc, packet-switching, direct broadcast satellite (DBS), digital satellite system (DBS), multimedia technology. He also sees it as a 'new industry', which is referred as "consciousness industry" or "knowledge-based industry" propelled, propagated and driven by ICT based tools: electronics, computers, telecommunications, television and her software components. He further explained that the hub, dynamo and catalyst of this industry is the internet (vast network of networks which connects countless computers all over the world through 'telephone lines'.

ICTs are also referred to as a broad range of activities and equipment including all the tools, applications and information that are available and accessible via computers, information technology in its fully convergent form encompasses various forms of information delivery system, such as television, radios, newspapers, magazines, books, internet amongst others. in one integrated environment. According to Mandah (2016), ICT is, a process that permits the use of materials, tools, gadgets to collect, store, retrieve and manipulate data in order to enable information procession and dissemination for better global understanding. Victor-Ishikaku and Mba (2022), perceived ICT as innovative technology which has brought tremendous changes that have revolutionized the manner in which every human activity is carried out.

Victor-Ishikaku (2017), also mentioned that ICT has been a tool with great potential to create awareness, advocacy and learning to transform lives. That if this technology is well utilized it could bring about re-orientating the value system in the society, because ICT is a tool for educating people. Secondly, it is a generic term for all technology devices, applications and management systems used for information management and communication. This is based on the fact that the reason for introducing ICT into the human society is to bring about transformation and development in the society, especially as it concerns value acquisition and re-orientation at all levels of the society. Thirdly, ICTs services such as the social media have been found to be very useful in building relationships and communities of individuals who help and support each other to achieve common goals, like what happens in our rural communities where ideas that has to do with the communities are discussed and solutions are proffered collectively. Ebo (2015), stated by adding that technology has become an indispensable part of the life of our new generation as the digital natures, it should no longer be seen just as an instructional material, but as part of their everyday life and activities and as such, should be used as a tool for learning core values and morals for meaningful living in the society.

Oji (2016), supporting these views agree that ICTs has turned the world into a functional global village with the use of ICT gadgets and technological information apparatus, such gadgets are the internet, computers and other softwares. These gadgets have also assisted in the dissemination of information, solving societal problems and other related issues that have bedevilled man in the past. The era of ICTs has also resulted in building literacy capacity in respect to the development of higher order skills of knowing what it means to live in a digitalized and networking society in our everyday life. The new era has over ridden the traditional philosophies and processes applied by the traditional institutions. This is on realization of the fact that man and society today, depend almost totally our technological apparatus for their normal day-to-day existence, life and work, which has demonstrated a significant positive effect on the growth and development of the nations. Meaning that efforts that will link the rural communities to the global village must come through

ICT literacy (information age). Therefore, it became very pertinent to say that the level of integration of ICTs to the ICD process, needs a shift from literate centered to non-literate centered learning environment in our rural communities. Since it requires greater awareness and humanistic approach to capture the mind of the audience that are made up of rural dwellers.

Need for the application of ICTs in ICD Process

Every human existence or settlements in the universe are under serious pressure to the use of the new technology in all spheres, especially in poverty alleviation, ignorance, disease control, environmental sustainability, skill (empowerment) and knowledge development that will transform the rural communities and society through better access to ICTs apparatus. Also, in terms of social, economic, political, cultural and community development which will serve as an engine room to sustainable livelihood, it is not left out of the expected gains of ICTs.

The application and utilization of ICTs is inevitable in the 21st century ICD, because it is needed to fast track development in the rural areas as an activity of modern society and potential values of such technologies in the following areas of integrated community development;

- Lifelong learning, it is a learning process that occurs throughout one's life time. It is about acquiring knowledge and skills that will influence or add values to one's life so long as he has the mental ability. It is voluntary in nature, self-motivated because of an individual's love for knowledge, skills, and self-development towards one's satisfaction in life. Victor-Ishikaku (2019), add that the Emergence of technology into the education sector has given great impetus to lifelong learning. This is because it has enhanced the way information are shared, sourced and communicated. With the help of assistive technology and web 2.0 technology, learning modes are taken new dimension, hence, the need for mobile learning (fuse of GSM, Email, Gmail, WhatsApp) for lifelong learning became necessary.
- Promoting the use of library within the community. This activity is referred to as community reference services. Enyinnah & Aghadiuno in Obi (2021), explained that community reference services is a product of ICTs centered on informing the members of the community about where they could locate their information needs and requirements within and outside the community. Libraries as we know are constantly evolving to adapt to the needs and desires of information seekers and users anywhere including the rural communities. This also attracts the presence of librarians who leaving their workplace to interact with community members to answer queries or questions concerning development which include education, creativity, skills acquisition, and preservation of records for sustainability some of the ICTs products for the service are through phone calls, chat in WhatsApp, Instagram, twitter, Facebook, etc. Access to e-library leads to empowerment and development of a community in all spheres.
- E-learning or distance and open learning education. ICTs products are used wherever it is difficult for the facilitators of adult education centres especially where they cannot meet face to face with their learners or clientele, just like what happened during the period of Covid-19 pandemic, where teachers and students at the formal setting find it difficult to meet on one-on-one basis. This situation enhanced teacher-learner inter relationship through steady communication.
- It defines learning objectives and delivery plans.
- Creates motivation to new ideas and values.
- Reporting of environmental degradation or disasters Mobile phones, radio jingles, are used to observe and report weather conditions, forecast floods, erosions, wildfire and other emergencies in our rural communities through the activities of emergency service providers who confront disasters.

- Capacity Building include efforts to increase public awareness on environmental, issues, economic, cultural, political, social through development of professionals and integrating environmental content into formal education and non-formal sectors.
- Capacity building involves knowledge development that strengthens motivation and self-confidence of community members, their ability to network with actors inside and outside the community nurturing their ability to gain legitimacy for the decisions through processes or dialogue and consensus. It is a critical link efficient development of the society.
- Health care systems, ICTs have revolutionized this system by doing away with old-fashioned approaches to treating maladies, illnesses, and diseases. It contains the elements necessary to prevent medical errors. a circumstance where rural residents can monitor their blood pressure, blood sugar, weight, prostate, etc. while remaining in their comfort zone. Know what it takes to create a balanced diet as well, unlike in the past when all food was actually food.
- ICTs helped in increasing assistance in the quality of the patient, which will strengthen the health and safety nature of the society through direct access to the medical case history. Some treatments are checked online, likewise, other services of determining sex character/DNA of unborn babies.
- Access to online banking transactions through the use of POS, Opay, ATM machines, money transfer through mobile phones is made simple by means of transferring cash through SMS. This reduce transportation cost and dangers significantly.
- Positive impact on empowerment and employment of the youths in small scale medium enterprises to make a living in the rural/urban communities. This has resulted to strengthen the society, on family financial issues, build self-confidence, self-reliant and self-sufficiency and encourage community involvement in all strata.
- Improved participation in decision making about community development efforts through online contacts, especially amongst the elites in democratic communities.
- Provides versality of learning opportunities at a very high speed through proper dissemination of information and communication.
- Creation of local community platform or social media has enabled rural dwellers listen to reporting on latest social news, for instance birthdays, deaths (burial ceremonies) events, forum on discussing community needs, adverts, photo/event galleries. This also helps to usher in new business opportunities into the communities i.e., attraction of new investors or investments in the area of purchase of digital accessories, (selling of phones calls, recharge cards to people in the community and at the end earn income.
- Raising ideas of online marketing by knowing online marketing companies where you can buy at your comfort zones, like Jumia, Jiji, Alibaba, Konga that conduct shopping online.

Features of ICTs in ICD

Features of ICTs in ICD process are;

- Been flexible.
- Complete freedom to choose what a person wishes to study.
- Allows for self-spaced learning or individualization.
- It is focused on the learner.

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- Use facilitators, mentor or coach.
- Learning takes place outside the formal classworks.
- Adopts humanistic approach of teaching.
- Use of diagnostic approach in solving problems of felt needs in all spheres.
- Methods of instruction are online in nature.
- There is room for active participation of all educators and educates.
- Promotes technical/cognitive skills acquisition.
- Leads to collaboration and good social habit.
- Learning is viewed as fun and leisure. (Amadi, 2021).

Envisaged challenges of ICTs to ICD practices include,

- Seeing technology products as a craft.
- Fear of failure and embarrassment.
- Excess uncertainty about where the change will lead to and future effects.
- Loss of control of being in charge in the past for decision making, implementation etc.
- As a Burden or additional burden to the people.
- Timing because of procedural activities, involves acquiring the skills of technology.
- No reason for follow up.
- Cultural ethos of being replaced of traditional philosophies and practices.
- Anger if not meeting the target or specific objectives of the programmes.
- Fear of technology replacing key activities of man in the rural communities /urban centres. (Amadi, 2021).

Generally, ICTs is a process of extending learning or delivering instructional materials to remote sites through ICTs products that bring education closer to the people in the village council, churches, mosques, etc in the 21^o century. This is based on the fact that “a productive mind is a useful citizen to the society”.

Integrated Community Development (ICD)

The idea of ICD in this discussion is very important, especially in the 21st century grapped with the jet age, filled with people walking on the fast track of attaining a better life endeavor. This is based on the fact that realization of development in all quarters depended on the approaches employed in planning and implementation of the programmes, that leads to self-sufficiency and reliance, especially in the rural communities. The approach of ICD is a modern trend that replaced other approaches in the past such as matching grant, directive, non-directive and sectorial methods which did not achieve her stated objectives to the commoners in our society, for instance when they cannot classify such programmes as being regarded as community development programmes or projects. Most importantly, ICD makes provisions for people and society to experience positive change in the socio-economic, cultural and political spheres of human livelihood. It has the capacity of involving the entire community members in the programmes that will lead to process of development. It connects the design, delivery and evaluation of programmes across discipline and strata to produce an array of lasting impact on the people’s lives. Supporting this view Oyebamiji and

Adekola (2008), agreed that this approach emphasizes effective coordination of resources available in a community for its overall development.

This assist in the achievement of desired changes in the performance of key interactive variables in the sector of community development towards the welfare and benefit of the poor living in rural and urban areas of the country.

Ihejirika (2007), also maintained that this approach in essence calls for the effective co-ordination and management of all the materials and human resources available in the various communities to achieve total development. It allows that all the decisions of a project to be carried must be based on the “principle of community participation, in the spirit of sharing knowledge and developing strategies to Support community development”. The vision of ICD is based on self-managed local communities with equitable and sustainable wellbeing. While the mission is to promote a holistic and dynamic process through which rural people continuous to improve their productivity and quality of life through efficient and sustainable utilization of resources within and outside the community.

Elements of ICD include;

- i. Integration
- ii. Sustainable development
- iii. Productivity enhancement
- iv. People’s participation
- v. Capacity development.

Objectives of ICD, some objectives of ICD are;

- i. To promote building of a civil society organizations to develop pool of technical human resources at all levels for collective and self-sustaining initiatives.
- ii. Contribute in sustainable community-based gender sensitivity development by empowering communities especially the women folk in the society.
- iii. Enable people living in poverty and under privileged to play their vital roles in improving the socio-economic conditions in their areas of interventions.

Relationships between ICTs and ICD in the 21st Century

ICTs in the new era is a practical oriented component to the USUW delivery system in ICD. What it means is that it is a reflection of the needed strategies to improve upon in the methodology of the community development practice.

The relationships that exist between the ICTs and ICD cannot be over emphasized in the 21st century, as most communities in our nation are settlers of the rural centres, faced with poverty, deprivation, inadequate modern infrastructure, poor waste management and environmental degradation, poor communication network, insecurity, and other indicators of the rural poor.

This has made life very unbearable in such settings. Therefore, the idea of this discourse is on how to connect or build a communication link devoid of too much barriers between the rural/urban communities, through the use of digital apparatus, that will boost their productivity and capacity building process towards empowerment for sustainable growth of their livelihood. Such digital apparatus is the use of GSM, mobile phone, POS machine, digital library or e-library, satellite cables, television, microphone/megaphone, projectors, video machines, etc. These apparatuses assist the adults and younger ones during learning and

instruction in the remote sites via the internet (online learning network technologies), especially in this post Covid-19 era and high cost of living in the urban centres. Linkage to the online businesses and trading, cash transactions through 'POS' to build their economy and breaking barrier in terms of age and educational qualifications is another important aspect. Accepting online reference materials that can assist in building members in the community and acquiring education at self-paced conducive environment which fits into the busy lives at work and other responsibilities is also a kudos. Digital apparatus encourages active citizen participation in decision-making of how to plan, implement and evaluate projects and programmes in the rural communities through telephone calls, video conferencing etc. This is the centre of community mobilization strategies for actions that leads to self-confidence, self-motivation, social networking and latent capacity to improve productivity and income. It has helped to accelerate the pace of all human transformation in the rural community and beyond.

However, there is no doubt saying that relationships between ICTs and ICD is very obvious, as these will generally strengthen the spirit of skill acquisition, self-dignity for values and norms, integration and popular participation that will put to service in the countries and finally result to sustainable community development built on integrated approach hoped upon in the 21st century in Nigeria.

Conclusion

Discussing this subject matter is timely, because of the impacts of the 21st century ICTs era, with her technological age and speed tracking effects on human activities. ICTs in the present era is continuously taking leaps, booming, swimming as a result of spontaneous progress in the use of computers and other communication gadgets in recent time. ICTs has not only added value to communication, but in building of human capacities around the globe in terms of data analysis, utilization of information and dissemination, migration from analogue to digital ways of doing things right especially in our rural communities. This paper is calling for a better synergy that will promote the indicators ICD via; sustainable livelihood, people's participation, integration, productivity, capacity building income generation, empowerment through the application of information and communication technologies ICTs. However, it will be out of place to say that ICTs have not ruled the world. "ICTs have ruled the world in all human facets". The paper also discussed the concept of ICTs, need for the application of ICTs in the ICD process, features of ICTs in the ICD process, envisaged challenges of ICTs to ICD practices, concept of ICD, elements of ICD, objectives of ICD and relationships of ICTs with ICD to the society in the 21st century in Nigeria.

Recommendations

In view of the numerous impacts of ICTs in the 21st century. The following recommendations were suggested;

- i. There is the need for the government at all levels to adopt the application of ICTs in all their activities, especially in the rural areas to fast track development.
- ii. Establish ICTs infrastructures and training centres for enhance ICT library.
- iii. Mobile phones, ATM and 'POS' machine should be given to trainee at the rural areas as insensitive to take off entrepreneurial life.
- iv. Request for adult educators and NYSC graduates with computer literacy to serve in the various communities very necessary.
- v. Modern infrastructures (Electricity, good roads, health facilities) should be provided to power the ICTs gadgets it could also be alternative light supply.
- vi. Need to support allowance in terms of stipend will encourage trainer trainee relationship.

- vii. Internet service providers should be encouraged to build communicative equipment in the rural areas for better connectivity.
- viii. ICTs infrastructures should be used by Adult educators in community mobilization for social actions e.g projectors in discussing and demonstrating an action that will lead to elimination of social vices and other challenges of the society.

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