FUTURE OF THE LIBRARY: A COMPREHENSIVE ANALYSIS OF A SMART LIBRARY TECHNOLOGY

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Abstract The technology of the 21st century has made libraries valuable to deliver services, however remote access of some countries makes it irrelevant for others to enjoy the pleasure from libraries. More so, libraries playa major role in providing informal learning to people nationwide. It's a fundamental area which aims to bring digital literacy to everyone. Libraries are leading the world of new communication skills. It has helped build digital citizenship in most countries. It should be the first places for the most advanced technologies. The researchers then examined the smart technology that would be needed in the future for libraries to compete with other stakeholders. The researchers use the quantitative survey research technique in their analysis. The researchers selected 500 people from three countries i.e. Canada, China, and Ghana. The survey questionnaire was done online and the data collected was analyzed. The research reveals that a lot of people would be happier to read books, article, novels, fiction, and histories to gain more insight when smart technologies are been implemented. It also reveals that smart technology would help people in remote countries to enjoy reading books. It also reveals that the workloads of librarians would be reduced. Recommendations were also administered based on the findings

Keywords - Smart Library, Smart Technology, Academic Library, Online Resources

I. INTRODUCTION

The technology of the 21st century has made libraries valuable to deliver services, however remote access of some countries makes it irrelevant for others to enjoy the pleasure from libraries. Knowledge is of great essence in our generation today[1], therefore there is the need for libraries to play a key role in our life. With the advances in technology, people get the unrestricted flow of information to add to their knowledge bank.Libraries play a key role in building informal learning in our societies. It's a fundamental base which aims to bring coding and digital literacy to everybody in a fun and engaging way. Libraries now are leading the world of new communication skills. It should be the first places where most advanced technologies are implemented. It leads the way to digital citizenship[2]. When population increase therewould pressure on the libraries to provide knowledge for people. Therefore, the Libraryneeds to change its way of providing service. The changing natures of the library will not only reflect that of the web but will also feature new attributes based on the uniqueness of libraries[3]. The way contemporary library uses to supply information has been changed over time due to technology from Web 3.0 to web 4.0. The richness of Web 4.0 characteristics has created a dynamic way to user participation. Web 4.0 has an intelligent electronics agent, symbiotic, ubiquitous, and a machine which will be developed up to the level of the human brain with advanced nanotechnology and human interaction interfaces[4]. Due to Web 4.0 development[3] suggested that Library 4.0 would soon be in place. The researcher added that Library 4.0 includes not only software-based approaches but the technological environment. Due to the increase in technology this

smartness would be extended to libraries across the globe. With our limited resource and no space to build libraries to serve needed people, libraries need smart technology to help solve the needed demand. Smart appliances and voice-controlled assistants are examples of how technology is evolving to make people's lives comfortable[5]. Libraries must see challenges like underutilized space, limited budgets, and shrinking circulations as an opportunity to innovate and transform the definition of this critical community issues[6].

As technology changes, the way we manage our lives also changes and affect the way we manage our libraries. The smart library needs to embrace technology and avoid digital exclusion. Therefore, for the library to be considered smart in the future it needs to improve the technological literacy of local communities. A library fitted with smart library technology is able to be open to library users without being staffed[7]. The technology enables remote control of library buildings[8]. This includes lighting, self-service, automatic doors, and computers. This enables us to extend library hours and people can use it at any time.The major changes we expect in the future to happen in our academic libraries are the use of new innovating technology. This paper brings to light some innovating technology that is expected to happen in the future when one enters the libraries. The student and learning capacity can be strengthened and yield better product due to the smart evolution.

The libraries adapting to these new and existing applications of technology can help speed up the service for the library. This will help break the barriers among the remote areas that needed to read and do more research. This could help further collaboration across the globe. This means that libraries would provide improved access to scholarly material and resources. This innovation will help redefine and improve access for researchers in the across international borders and work towards common goals.The accessibility ofdigitalmaterials and resources will keep growing. This will undoubtedly affect the role of library services.

For libraries to offer equality of access to information for every citizen irrespective of the area, then there is the need forhigh tech digital use and implement the technologies. A lot of people think libraries serve as trusted spaces, free to enter and should be accessed for all to learn. People explore, share information, read current issues, hold meetings, acquire knowledge and meeting different people[9]. The use of innovative technology will even pave space for other things to be done within the library. Even though a lot of libraries are using Google Hangouts and other social network services for library meetings, or Piktochart to create library infographics, therefore this study goes beyond to bring to light some useful smart technology[2]a. It will help the resource of the library to use effectively, efficiently organized, flexible and sustainable and socially more economical.

II. STATEMENT OF THE PROBLEM

In some part of the countries selected by the researcher, it has been noticed that some people are not having access to libraries which prevent them from reading. Also, some language barriers have been other issues why the researcher in-depth in search for the new innovative way for people to have access to the information needed for them to make research livelier. With the use of smart technology future library challenges would be solved.The main problem for the study is to investigate the smart technology needed by the library for the future to make it convenient even for the rural areas to access the library service?

Fundamental Questions

To enable the researcher to achieve the aforementioned objectives, this study shall be guided by the following research questions, can the library technology[1].

- Break cross border accessibility.
- Create digital urban and enhance social connectedness.
- Make daily commutes faster and less frustrating
- Bring flexible community engagements space

Turn Over Rate

It's really important to know the Library's turnover rate. This implies that an average number of times an item circulates in a year. This will help the researcher to know if the library has too much collection or not. It will help the researcher to predict what the future library would be like if smart technology is not included. The turnover rate will help the researcher in his question to know that if the rate is 3.8, implies that each item in the library has been checked out 3.8 times. The library footage square that's the number of programs and services the library can offer without the smart technology been in place. This implies that the number of visits, hours of operation, programs organized can also affect the services of the library if the next generation increases.

Smart Library

Research done by Schöpfel, Joachim and other scholars pave way for the researcher analyze the impact of the smart library technology for next generation[10]-[11]. The authors presented the idea "how do smart libraries look like? The researcher presented an in-depth idea and stated a definition does not exist yet but there are many strategies related to the concept. He added that the use of technologies and innovative changes should be embodied in a comprehensive strategic concept that fits the local requirements of the staff and the users.[12] work on smart library models for a future generation. The researcher stated that libraries are now renamed as Resource Centers with an online facility to provide resource sharing services to its registered users. Advances in information communication technology disclosed a new opportunity for innovation in conventional library models. For library information system to utilizes collective intelligence and cloud computing, the knowledge convergence center capable of responding to various information demands, the development of next-generation information systems based on the latest information and communication technology is needed[13].The library automation systems must be considered[14]. The researcher added that radio frequency identification (RFID) which allows a library book to be tracked and communicated with by radio waves so that library user will get instant information. RFID can be used in library circulation operations and theft detection systems. A researcher [15] conducted a search on an RFID-based Library Management system using smart Cabinets using SAR simulations in the presence of human phantom models and concluded that unwanted identification of books residing at nearby shelves was checked. This will help increase the pleasure of reading and researching more since the right information can be retrieved. Since a smart library technology is able to be open to library users without being staffed[8] a proposed Smart RFID system which is a wireless non-contact system that uses radio frequency to transfer data from a tag attached to an object would be useful. The purpose of the smart RFID system is that it doesn't need the line of sight, it removes manual bookkeeping of records, improved utilization of resources like manpower, infrastructure,and less time consumption. It also helps to allow fast transaction flow for the library and will prove immediate and long term benefits to the library in traceability and security[16]. RFID technology in Smart Library has made patron's work easier and redefined various library-related services. Another system that will help the smart library to ease the burden on the librarian and to make the users of the library use it more effectively is smart Library Automation System[17]. The researcher added that the software is coded by using the web-based programming techniques and with the language definition it makes it so simple and easy for international cross borders to use the library.

Smart innovative technology

As the population keeps growing there is an absolute pressure on demand for books to broaden their knowledge. Since the land remains constants there is the need to find a smart way to provides services to those that are in need of the requested item without affecting future generation.

i) Light fidelity

The researchwas done on Light Fidelity(LIFI) based

on smart library system technology[18]-[19]. It indicates that services can be done using light transmitters which will reduce the pressure on Wi-Fi

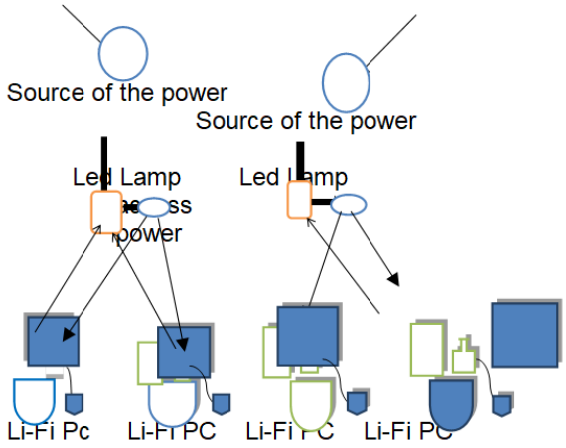


Fig 1. Working Principle of Li-Fi System

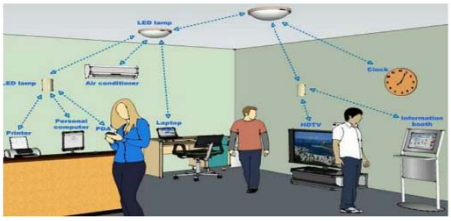


Fig 2. Library Office using Li-Fi as a source of power

Fig 2, shows the working principle of Li-Fi system, for data transmission; it can be done by a single LED or multi-LED. On the receiver side, there is a photodetector, which converts this light into electric signals, and it will give the electric signals to the device connected to it. Voltage regulator and level shifter circuits are used on both sides to convert or maintain a voltage level between transmitter and receiver[20]

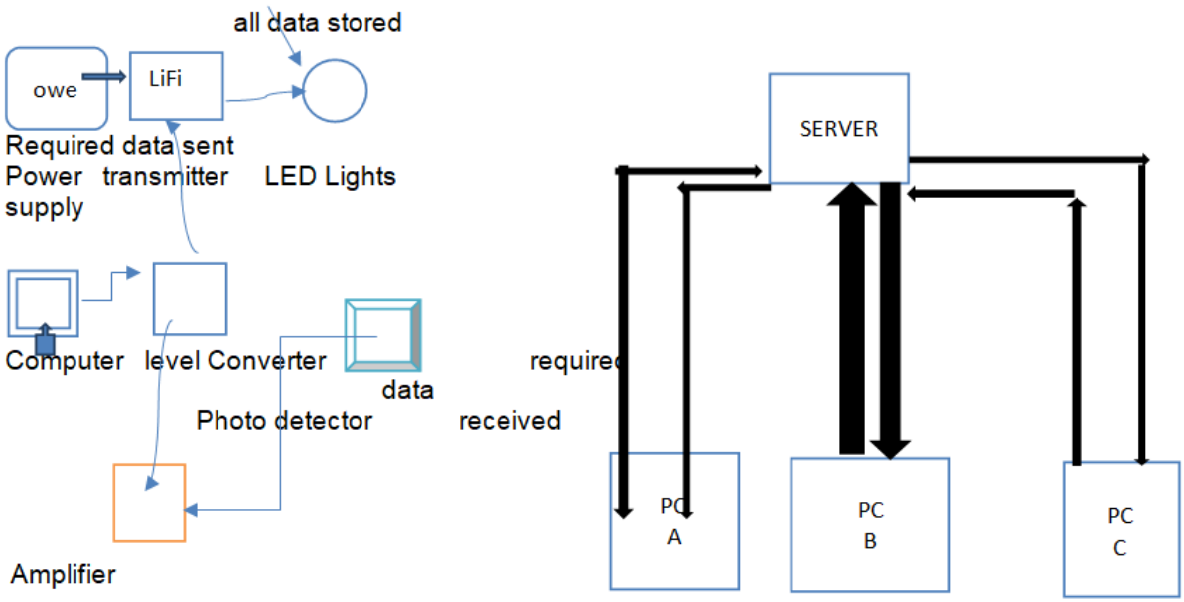


Fig 4. Receiver Unit of the Li-Fi

Fig 4, the information sent by the user is received by the server by means of photodiode and level converter. The server reads the data required by the user, then transmits it by means of LIFI transmitter to the user by using LED lights. With the technology, the user sends the required data through the LIFI transmitter by means of a level converter. The data is received by means of the photodiode and sent to the source where data is to be fetched through the converter. The data is received is again transmitted from the source to the receiver through the LIFI transmitter by means of a level converter. The data transmission and receiving process is done by simulation by means of proteus simulation software. This help reduces the cost of internet in data transfer.

ii) Digital augmented reality and Virtual reality

Smart technology would make interaction in the library and educationist simple. This is because, with

the use of the augmented reality or virtual reality that's been developed, librarians will find it so simple to communicate to the user with the physical interaction. Virtual reality makes it possible to bring outside user into the library to interact with the librarians and seek assistance needed. An application like Unimersive can transport the librarian from China to meet the librarian in Canada. Also, Cospaces allows the user to share their virtual creation to the other users across the board. Relying on power-Point, books, iClickers, and occasional hands-on could greatly benefit from additional technology[21]. Conference users can benefit greatly from VR/AR technology to make their meeting a success. This will help meet a larger library user which will help improves learning. This will help create space to be redesigned for another thing. Augmented reality enhances natural environments which enriched experiences. A study conducted in Jiangsu university 58% indicated that users can recollect a lot of things read with the use of VR.

iii) Drone

Another factor is the use of drones. It's an unmanned aerial vehicle. They are manually commanded through remote control, traveling under real-time human control, or programmed by using integrated systems of digital control, such as sensors, radars, and GPS[22]. This should be made specially that the sensor can locate everywhere the person is in order to locate. The first UAV in 1935 was piloted by "servo-operated controls" being regularly used as a target. Currently, the UAVs have been substituting manned aircraft[23]. The drones arethe hexacopter with six rotorsto help in taken the books to whatever destination needed to be given. In Australia, a start-up company has teamed up with a book rental service Zookal to deliver books to customers. With you of an app, the drones can easily look at your location. Drones canis a good option for creating content for the library, collecting data or for delivery service for the library users.



Fig 5. Pictorial map of drones

Using the unmanned aerial vehicle (UAV)books were flown in a grid formation to separate destination. Animage displays the actual route taken by the UAV. Assuming a professor is located in the Kinabatangan Wildlife Sanctuary located in Ghana and needed a book to complete the research, with the use of the UAV it makes the work easier.

The drones are expected to replace another book delivery services to reduce fewer casualties even though some ethical and deontological problems arise.

iv) Robots and Driverless car

Robotic is seemly amazing in helping people in the smartest way. Is been able to function autonomously or as part of a complete robot. When the future library is expected to introduce this in their field of work it easy pressure on librarians. The Robotic Arm is a programmable manipulator, composed of the rotational or linear segment that controls the precision of their movement[24]. There is usually a tool which is able to move, position and manipulate objects, this could potentially be a mailing and also deposit books and other materials to the librarian or the user. This prevents stress in searching for a particular book or the user go to the librarian for particular documents. On

the other hand, the driverless car is an automobile that has an autopilot system allowing itto safely move from one place to another without help from the human driver[25]. Ideally, this can travel a far distance to deliver books to the customer at a high speed.

v) Movable Library

Librariesare ubiquitous and are really important for everyone to have access to it irrespective of their location. Due to an increase in population without a change in the land,32 years to come that's 2050, will there be land for people to build? No. That's where the movable library should be taken a keen matter to assist the next generation. In some remote areas in Ghana specifically Northern and Volta region, it's really difficult for people to have access to the library. This academically affects them and the nation as a whole. It's rather very appropriate for the government to engage in the movable library to enable a lot to read without limited their career.This technology needs small space to operate. A lot of people can have access to it. This can help reach out to even refugees who are willing to read.

InChina, Beijin gone can have access to this kind of library. A newly train build has such a library to assist those who want to read. Subway trains in Beijing have been transformed into libraries so that even blind people can listen. The library is actually home to audio books[26]. The carriage prominently features pictures of various Chinese novels, with the titles clearly listed on the cover of the books. It's on selected trains that run on Line 4 and Line 10 of Beijing's subways feature the audiobooks.

For a person to listen, a QR code needs to be scanned. Once scanned, you will have the opportunity to listen to them toaudiobooks for free.

vi) Library App and Library ATM

Now in our 21stcentury, information should not be limited to people. Each and everyonehas access to a smartphone. Library planners can work with engineers to redefine library app, can be commonly accessed on smartphone app stores which can be interlinked with major libraries across the border for easy borrowing of books. Just like going to the bank ATM to withdraw money, in the future Library, ATM would be in place with just a token one can take a book and read with no hassle without going to the library to borrow books. In Shanghai, one of the medical schools is gradually updating itself to this system. Hillsboro Public Library in Oregon has also introduced the Book-O-Mat, a self-service kiosk which is monitored from the main library to track usage and identify usage trends and make recommendations.



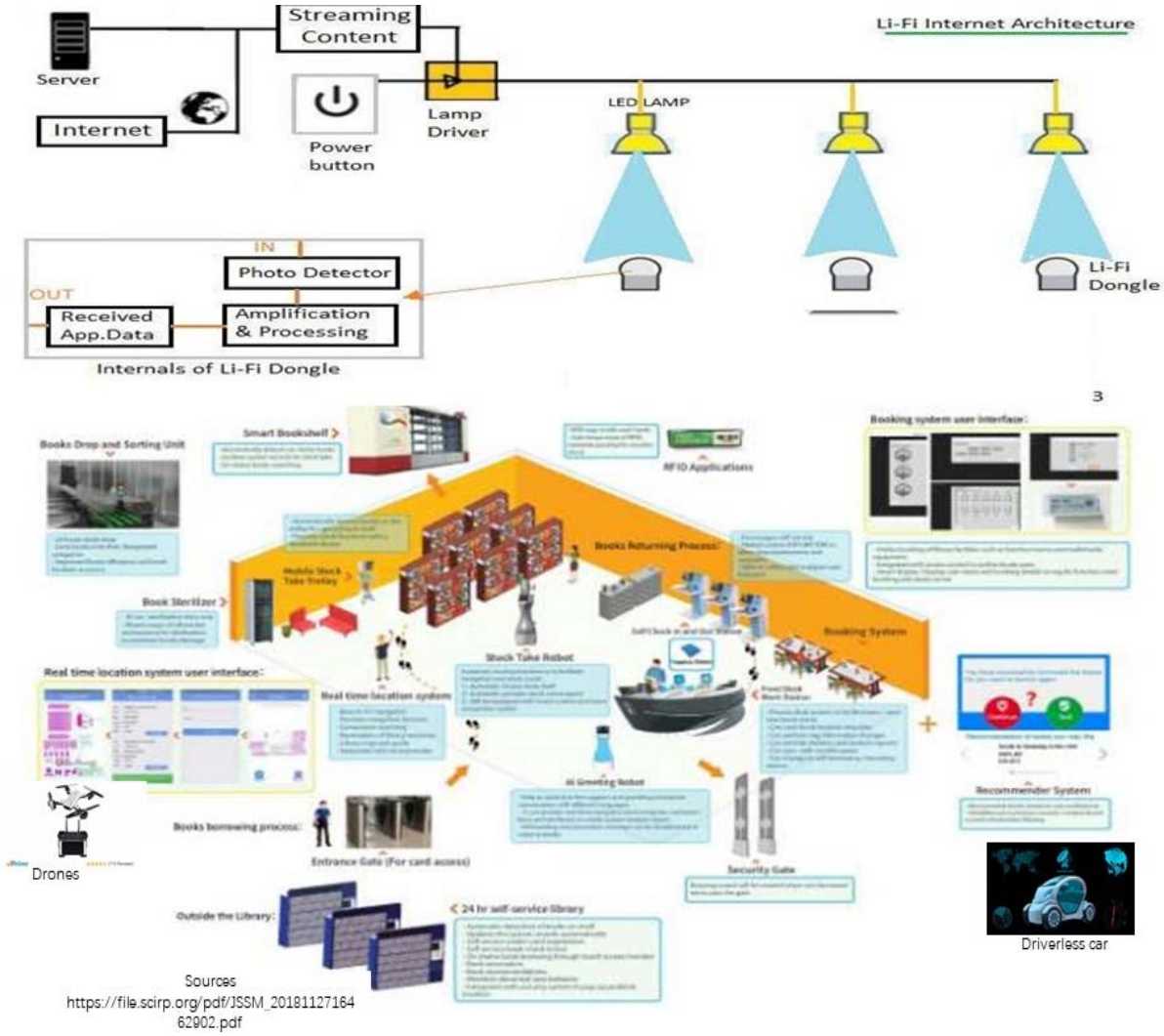
Figure 6

With Fig 6, it looks like ordinally bank ATM, all you need is card and money on it. You can check out for books of your favorite. Library planners need to collaborate with such a company to make it accessible for people to enjoy reading without limitation.

Smart Library design

The main objectives of the libraries are knowledge resource, library information system should have to use cutting-edge information technology[27]. Smart library technology system like big data, mobile computing, cloud computing, and Li-Fi helps in the innovation

The smart library after the technology and other systems has been in place might look like the above. This is the architectural design that will help service for the future generation to be smooth and comfortable. It will also help remote areas to enjoy the library. Within the library, it will provide enough space and fewer people can work with multiple tasks.



III. RESEARCH METHODOLOGY

The methodological approach for this study surveyed, the researcher uses the quantitative survey research technique in their analysis. The researchers selected 500 people from three countries i.e. Canada, China, and Ghana. The survey questionnaire was done online using both closed and open-ended type of questions and the data collected was analyzed. Random sampling techniques were used in order to get accurateinformationaboutdata collection[1]. The questionnairewas used as the instrument of the data collection. The study was started in mid-June 2017 and ended in summer 2018. This study is set to presume the next32-year generation that's 2050.

Test for Reliability and Validity

In mid-June, the pre-test questionnaire was randomly used to test the reliability of the selected respondents from one of the selected countries that's China. The result generated from the test was used to ascertain the reliability of the measuring instrument.

Questionnaires of about five hundred were distributed which were done online to the targeted respondent and about four hundred and fifty were returned.

Data analysis

The tool used for this study includes Excel and R program. Gender specification was done to know how many answered the questionnaire.

Table 1: Gender wise Response

Gender	Number	Percentage (%)
Male	320	71.1
Female	130	28.9
Total	450	100

From Table 1. It can be seen that out 450 respondents 320 were male representing 71.1% and 130 were female representing 28.9%.

In terms of demographics, below is how the respondents were categorized because our main aim is to determine the future smart library using smart technology. With the next32years, that's 2050 which group of people would be affected most if the smart technology is not in place.

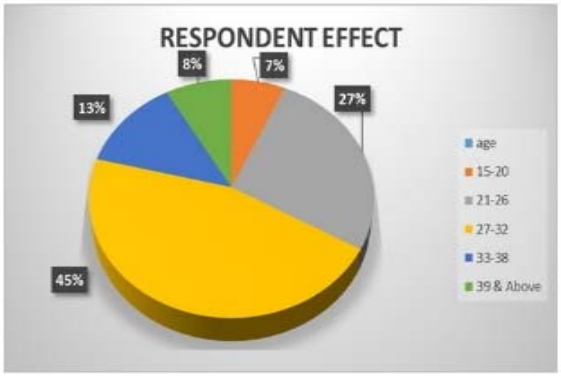


Figure 10

From fig.7 above, affected age group would be between 21-26 and 27-26. Those are the labor force group. They need more research to keep the economy going and if in the next 50 years all available lands are used how would they survive in their research work because they won't be any available place to construct the library.

Technology inequality

With the above technology mentioned, not all countries have an equal right to enjoy the existing ones. This is really a big issue librarian should solve in the future. The research compares the population of the three countries. An increase in Technology, in particular, create changes but not all people have access to it. Technology inequality is reflected in the three countries. Per the study, the country Ghana technology inequality rate is high due to the fact that a lot of people do not have access to the technology due to the high rate of the internet. In view of this, not all people can have access to technology in the future. Since the principal aim of the library is to ensure that people have access to the right information there is the need of the Library Association in Ghana to restructure to ensure that people have access to information.

Also, in China, it was revealed that the rate for technology inequality still hit some significant figure even though people have access to technology but not all. Some rural areas don't have access to technology. China is well known about the speed of technology movement but some still don't have access to it.

Lastly Canada, the study reveals that there is still some rate of technology inequality.

The cause of this technology inequality is the income disparity in the country[28]. It was revealed that an increase in Gross domestic product (GDP) has a positive impact on the technology which in the future affect the generation as a whole but only a minimum threshold density is reached. To counter the disparity of future technology inequality between lower and higher income groups, library planners should focus on implementing the smart technology irrespective of the income the person earn so that the children or himself can still enjoy reading.

Access to knowledge is a critical factor in supporting economic development and boosting the indigo economies of the future. The human capital distribution and income lie at the center of technology. This will help shape the country's economy and institutional structure. The Smart library should be taken keen note so that the economy of the various countries can be developed because as more and more are having access to technology the country economy keeps boosting. The Library is the brain behind every succes economy in their productivity.

The new library breaks cross border accessibility

Somewhat paradoxically, by drawing millions of more people into serious reading and learning, the digital revolution has in fact created the need for more spaces of physical interaction" Bookless Library. Technology is really important in humankind's growth because at each stage of its development technology has made life more comfortable and opened several doors of opportunities for us that were unthinkable before.

The library is a place to do research, foster critical

thinking and for educating book lovers. As new generations develop, new technological devices continue to develop as well. Some with a thought believe that technology has had a good impact and others also believe that it has a negative impact on our lives. one of the Respondent strongly agrees that yes, the smart library will help closes the gap since a lot of people will now have access to the library. This is because for instance Library ATM and Library App even with the increase in a population where there is no any other land to build a library the person can still have access to the books using the card in the different country. With the help of the drone, a respondent strongly agrees that even in a remote area, for instance, one can still have access to books. A Ph.D. student studying atthe University of Toronto can still get the required book preferred with the help of the drones. A per studying at the University of Ghana can still get some document at the fastest rate with the help of the driverless car or robot.

New Library Creates Digital Urban and Enhance Social Connectedness.

From this research survey question, 50% respondent strongly agree that it will enhance social connectedness and a new type of digital urban. For instance, with the use of Li-Fi people will not worry about the internet since almost every household has LED bulbs. One respondent wrote, “It makes it simple to connect to the internet to request for whatever is needed on the library”. Our analysis suggests that using these types of smart technology double the share of residents who feel connected to the community. Also, the respondent strongly agrees that with the driverless car it can even go to some areas to help deliver books to other people. The respondent agrees with the research that the multi-LED light after providing light for the community can also help provide Li-Fi which can be usable by the citizen in the country. Another respondent wrote “The smart Library Technology will help sanitized the country because the library is now paperless and everything is done digitally. With the help of movable library, people find not difficult in reading. This will enable them to have enough time to connect with the rest of the duties as much less document will be with them. In addition, a respondent agrees that with serene environment people will feel happy to enjoy their reading as when you request is given. A Ghanaian respondent added that much work is needed to be done in order to accept the smart library. He added though a lot of remote areas or even cities lack some library there is still not requisite equipment to get there. He also added that with an increase in population, the available library would be under serious pressure to provide an available resource to the users.

New Library makes daily commutes faster and less frustrating for the user

Every day on campus, I notice a long queue in front of the school library when is time to open. Even though the technology in China is highly efficient but a lot of libraries have not graduated to be smart yet. This make is so frustrating and prevents people from going to the library to read or do research. By 2050, the research is expecting a lot of smart library technology in China that will make reading enjoyable. When library admitsinstituting smart technology, it will gradually affect the country as a whole, therefore. Smart technology is believing to reduced commuting times by large margin. People will favorably enjoy going to the library to enjoy reading and research.

Per the survey, about 72% respondent strongly agree to the claim. Some stated that in our 21st century our technology has really approved our life and if it in cooperates in our library our future generation won’t have any difficulty in life. A Chinese respondent Mary (玛丽) added that smart technology has really their economy. A Ghanaian respondent (Osei Yaw) added that much of the work is needed to be done in Ghana to improve their smart technology. When done will help improves the living. Therefore, increase reading to help increase the academic curriculum. A respondent in Canada Franklin strongly agrees that as the smart technology like the driverless car is well used can increase transit system in the library for the users and can fasten commutes movement with the library. He added that using driverless cars and drones can deliver

books to the user who needs them helps remote areas user to also enjoy reading. Installation of robotic arms with the help of IoT sensors in the library can help fix problems that librarians are going through. This will help provide adequate service to the user. Another respondent agrees that intelligent furniture may facilitate a collaborative working process and innovative possibilities to make library stock or digital cultural objects visible. Digital desks will strongly help during the presentation in a multimedia room.

Flexible engagement community space.

The new library would be the most effective assets to serve the society very well if well implement. The change would create a flexible space and innovative way of doing things and would increase community engagement. The technology would help create multi-purpose spaces to accommodate other activities[6]. The users would be attracted to dynamic and smartness environment. The new libraries would prove tremendously in creating mechanisms for gathering community inputs[29]. The flexibility created by the new library can help library achieve space-planning goals. The new library technology space created supposed to be transferrable and has to fit the actual use

DISCUSSIONS OF THE FINDING

This study was based on empirical findings. Libraries were considered discrete in the contemporary era. People have to walk for miles before having access to the library, but in our 21st-century things havechanged to make information access every day. Many libraries are networked organizations containing substantial volumes of sharable digital resources that people can access remotely without the need to travel to particular geographical locations to access them[30]. The researcher added a whole range of different types of electronic technology can now be used to access the digital resources held in modern-day libraries.

The study is to investigate the smart technology needed by the library for the future to make it convenient even for the rural areas to access the library service. Per the above findings it was discovered that with the use of the smart technology like Li-Fi, drones, robotic, Library Apps and Library ATM, movable library, driverless car, and other smart library systems will really improve the life for the next 32-year generation that 2050. Even though the increase in population causes a lot of problems with this smart technology and system in place it will reduce the workload of librarians. Per the study, it was also revealed that it will bridge the cross-border gap to enable a lot of people to enjoy reading. Some people in remote areas, for instance, Ghana can also enjoy reading and this will help increase education productivity. With the movable library, few librarians can manage to enable others to concentrate on other duties. Per the above finding, it also indicates that the use of smart library technology in the near future will have a positive impact on society. For instance, it will help reduce commutes movement and also prevent queuing in some libraries. Libraries can now compete with other stakeholders for the near future and the workload would be reduced. A lot of future generation would be creative enough to do to the smart library technology. We have the power to influence future generation. It’s not realistic to get rid of technology[31].

Creativity is the skills of the previous era-left-brain capabilities that powered the Information Age- are necessary but no longer sufficient[32]. The skills valuable today includes creativity which helps in creating smart cities thereby making life comfortable. this may help sharpen the skills of the people and increase online studies[33] as people may feel comfortable and secure learning and do other duties.

CONCLUSION

The future of librarians as information providers is not in a dazzling building, but in the world of cyberspace that resides in the hand-held devices of most library customers, and as an indispensable partner in the local and world communities[34]. Libraries are seen as a house of books. With technology spreading its arms into every area of human life, libraries have not been

left out and it has become beneficial to them. The information provided indicates that Next Generation libraries and Librarianship would be different from current libraries and librarianship. The librarians must understand and adapt to the existing services to be able to create new ones to meet their community needs. This will help change the perception people have about the library. The technology willimprove the service of smart libraries.It will also bridge the gap of the across international borders. Upon the findings, it attested that smart Technology will improve the life of the next generation and an increase in population won't affect the work of the library service. It also indicates that with the use of library card like ATM can help bridge the learning gap across the internal border in borrowing book since information is fed on the card. With the common apps borrowing a book is no more a problem.

RECOMMENDATION

Smart library technology has become the pillar in creating a smart city in the 21st century. If care is not taking our future generation will be out of control because getting information won't be difficult as at now. The research gave some recommendation that will enable library planners, government, and nation telecommunicate to have absolute control of it.

- There should be a smart Library Technology Management Strategy Team to help improve Library of Future. This team should be made aware clearly about the duties so that it won't conflict with duties whatsoever.
- The library planners should have strict regulation that would be made laws so that it can guide the future smart library. Training programs conjunction with some expert in the field of smart technology to train librarian. Library Technology Management Team should collaborate with the country Law enforcement agency to enact a law about smart technology to ensure strictness.
- Library Technology Management Team should liaise with the national communication commission to set rules and regulation to regulate the use of drones. This will protect the privacy of the user of the smart library.
- Encouragement in sponsoring more research related area to enable enlighten librarians about the new technology. This implies that more scholarship should be given to researchers and scholars to do an in-depth analysis of the related area.
- Increase new smart technology awareness among the librarians.

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