## ENTREPRENEURIAL SERVICES IN A DIGITAL ERA: LIBRARIAN OVERVIEW.

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## Entrepreneurial Services in a Digital Era: Librarian Overview. Abstract

This imperative study is intended to give a crystal background of "entrepreneurial Services in this digital era: an overview". It is centered on the current entrepreneurial and technological tactics for implementing new phase/methods of harnessing and exploring/revolutionization of modern day businesses and organizations, traditional practice into hi-tech-and-advanced click-and mortar firm. In addition, this paper will serve as a pivotal gauge-and-scale to improving all offline (traditional operational businesses) into online (digital/click-and-mortar) firms or institutions because of the advent of technology. As we look into the core subject "entrepreneurship", it is also expedient to note that technology is a vital strategic tool and concept that is capable of transforming any trade, business, career, institution, government and all traditional revenue generating ventures because of the optimized services it offers. This study is carried out to showcase the multi-purpose nature of the application of "technology"; i.e. digital intelligent agents (I.A's) in this 21st century. It is also intended to support the need and education of adopting technology in all entrepreneurial ventures and institutions of higher learning due to the power of the (web 2.0).

**Keywords**: Entrepreneurship, Services and Digital Era.

#### **Introduction**:

The word entrepreneurship or entrepreneurial services whenever it is mentioned in the business world or cycle, it is mostly described as the creation of wealth and investment or it

is likened to be sole individuals, group of investors having similar targets and business ideology to form a corporate entity whether on a small, medium or large scale investments. Virtually whenever the term entrepreneurship is mentioned for discussions everyone including the lame man will view it as any business or service which creates or is about wealth creation. To other scholars, an entrepreneur is that visionary one or risk bearer who strategizes, negotiate, canvasses, and brings resources (finance), invest in human capital labour, materials and other supporting assets. But the norm and practice of entrepreneurship today have been revolutionized because of the adoption of (ICT) and online support interchange into businesses not minding the nature or field of business. Accordingly the combinations of technology into traditional business (Offline) into technologically enhance/powered business (Online):i.e. click-and-mortar business cannot be excluded from the present day business transactions and set up's.

According to Peters (2002)," entrepreneurship is the process or act of creating something new (new profit maximization services) with value by devoting the necessary time, skills and efforts with the assuming ability to create financial, econo-psychic, and social risks, it is also a venture and risk that makes investors to bear monetary unforeseen circumstances with the vision of receiving the resulting rewards of profits (earnings) and personal business satisfaction and trade independence".

An entrepreneur is the person engaged in entrepreneurship. Akanwa and Agu (2005) explained that the entrepreneur is a person, who sees a business opportunity, obtains the needed capital, knows how to put together an operation successfully, and has the willingness to take a personal risk of success or failure. He/she takes calculated risks by either creating a new business or investing in existing business opportunities and gets compensations from the risk by enjoying the high profit as the result of risk-taking (Anyawu, Amadi and Oparaku, 2010; Chuma, 2013). It is clear from the prospects of profit and independence - the challenges associated with it notwithstanding. The logic is that people who can create and manage their own business ventures will think less of paid employment.

To an e-Business manager or strategist online entrepreneurial services in a digital era is the adoption of investing in Information Communication Technology (ICT) and other electronic data interchange (EDI) support systems/software's with the aim of developing a digital/online program that is geared-and-designed for the transformation, reach, customization and expansion of any business or field of study with the aim of achieving more targeted customers and end-users through the power of a 24/7 online access; achieved through the combination of human efforts and computers for rapid business innovation.

More so, in other to enable entrepreneur students, teachers, practitioners and investors to engage themselves in visible entrepreneurship the following entrepreneurial skills must be identified because they are crucial for all sole investors and people who wish to venture into this practice and thrive extensively in the business world (Market Segment) and become successful (Torren, 2010). Torren (2005) identified (5) vital points these includes: (a) decision making, (b) people's skill, (c) planning, (d) sales, and (e) communication. Given these aforementioned entrepreneurship strategic planning steps, it is therefore advisable for all investors, individuals, group of business moguls, corporate organizations and even academic institution's to know-and-understand that the adoption of information communication technology (ICT) in this digital era is virally and rapidly remodeling, transforming, expanding, delivering and creating more value added services that are fast fulfilling most business organization vision-and-mission statement which is geared and targeted towards making profits in brick-and-mortar firms (traditional businesses operations methods), but back in the days when it was solely traditional trading style business operational model, it was harsh and enduring to make quick profits because their customers base is mostly on "calling" and "canvassing" for sales. In essence it is strategic to mention in this paper that the digital era have hugely transform the method of operations in both research, learning, business, arts, music and a host of other supply chain within the business ladder.

In addition both readers and business owners should recognize that online (digital) education and adoption is the most recent business evolution that is capable of creating producers, earners, customers and real time entrepreneurs through the Internet/online, this is why Evans, Dave. (2011) described the web as the (IoT) meaning the "internet of things" therefore it is expedient to note that every 21<sup>st</sup> century business corporation that is setup to make profits and also create wealth in this digital era is suppose harness the use of online technologies in their business, this new trend supports business development, and its adoption will encourage increase in finances, customer database, reach and expansion because one characteristics of online businesses is the capacity of being everywhere and all over the globe (world) due to the power of search engine and web 2.0 (digital centered *i*tech).

#### **Literature Review:**

Several policies have been designed and implemented in the bid to arrest the tide of unemployment among graduates and other professionals in the country. Two of these policies which, in fact, are mutually-reinforcing, are worthy of mention: The first is the conscious push towards entrepreneurship by Library and Information professionals, while the second is the integration of entrepreneurship education into the university curriculum. Hisrich, Peters, and Shepherd (2008), defined entrepreneurship as the process of creating something new of value by devoting the necessary time and effort; assuming the

accompanying financial, psychic and social risks; and receiving the resulting rewards of the monetary and personal satisfaction and independence. Nwosu (2013) simplified this definition when she explained that entrepreneurship refers to 'the courageous utilization of resources such as finance, energy and time by an individual to create wealth by meeting identified human needs'. Bula (2012), referred to entrepreneurship from the economics, sociological and psychological background of human engagement and activities.

The record of historical development of the concept entrepreneurship, (Richard Cantillon, 1959), in his contributions to the subject was the first economist to acknowledge the "entrepreneur" as a vital economic factor because the entrepreneur is responsible for all business exchange and circulation in the economy. This account is recorded as a posthumous fact/publication in his book "Essai sur la nature du commerce en general" first published in 1755. Cantillon also described entrepreneurs as individuals or persons who equilibrate supply and at the same time placing demand in the economy and in this entrepreneurial ventures and functions take risks which are uncertain to the bearer. (Hebert and Link, 1988), described entrepreneurs as those who are opposed to wage workers and land owners, who sometimes receive a certain percentage or fixed income (rent) thereby earning an uncertain profits. Consequently, (Say, 2001) refer to the term entrepreneur as a task. He described the entrepreneur as a manager of a firm or institution; which is a vocal player and director of the production process in a business or firm. He also defined the entrepreneur as the core agent of production in the economy instead of emphasizing the entrepreneur as just a mere risk bearer that is transacting, caring or acting as an entrepreneur, he went further to state that one of the core principles of an entrepreneur is the capability to manage quality and good judgments in relation to business transactions and management.

### **Objectives/Aims of the study**

To complement this work the following objectives/aims of this study must be outline in other to give a clear assertion namely:

- I. This topic is designed to study the core concept of entrepreneurship
- II. To study the current trend of innovation in a digital era
- III. To actively study the role of the innovative in entrepreneurship development through the advancement of technology (ICT)
- IV. To examine the role of technology trend especially the use of the (web 2.0) as it is currently transforming, expanding businesses no matter the sector.

## (5) Cardinal Key findings/results gathered from the topic (Research)

- It was gathered that entrepreneurs are the driving force of economic growth and innovation.
- **II.** Every entrepreneur is a digital entrepreneur.

- **III.** Entrepreneurship activities create the platform for emerging markets.
- IV. Technological clusters within the entrepreneurial value chain, can assist in providing a pivotal ecosystem for entrepreneurial success especially amongst young or new entrepreneurs who are actively demanding support from the government in other to sustain their quest in technological innovation and lastly,
- **V.** Entrepreneurs are ready to shift attitude toward more collaboration with large companies.

## Statement of the Argument and Discussion: the need to adopt the use of online technology in entrepreneurial services in this digital era:

From inception, there have always been scholars of entrepreneurship and authorities who defined the term "entrepreneur" with diverse and different classifications and idea of who an entrepreneur is? But this paper is composed in other to contribute, support the decision of adopting the presence-and-usage of technology (web tech) in every field of business. Thus therefore, the above headings will help to examine, promote, educate and analyzed the importance of (ICT) in business, education, trade and commerce. In addition, the following observations must be viewed and cross-examined since this topic for discussion is just an overview, summary and an inspection that is proposed to look into entrepreneurial services, its practice and if there will be other means of transforming the concept and field of entrepreneurship through the use of internet (online) in this digital era. Another composite of the digital era is that it is capable of re-modeling entrepreneurial services into online based-industries/businesses with digital space, content delivery, wide reach and 24/7 access availability. Even when most offline entrepreneurs (real-time traditional entrepreneurs) have closed their shops, outlets, offices and services. But online support based entrepreneurs don't close on a 24/7 basis because of its reliability, availability and digital platform. As a generalist research paper, it will be cumbersome to discuss and deliberate on a wide range of professions, therefore this work will be limited to general entrepreneurship operations and the librarianship profession since they are (2) professions that have been operating as brick-and-mortar business/field, because since the inception of library services the traditional operation methods have been maintained which is the "active maintenance, care and shelving of books"; but today due to the advent of digital technology the library practice as a hub of research, learning, knowledge and training all across the globe have adopted the use of online application into their regular daily routine task, this is why today most academic institutions in the world can boast and talk of having "e-/virtual learning centers-and-libraries.

Moreover, the entrepreneurship profession too has been tremendously transformed from its old methods into online based entrepreneurial firms-with both offline presence and

intermediaries within the chain of their operations and services. The co-writers of this paper have carefully observed and also gathered research works from other scholars about entrepreneurship, librarianship and general online business operations. The following head points will serve as support guide in other to promote the adoption of online technology into work and business.

Furthermore, this paper will carefully focus on all rationale background information (data) that will encourage both offline practicing entrepreneurs and librarians to see this new paradigm of web business transformation as a platform that is readily accessible thus acting as a "motivator" and "backbone" for any field or business.

However, closer audit, autopsy and scrutiny should be carried out in other to examine the relationship between entrepreneurship and web (online) development. In order to stimulate the promotion and development of entrepreneurship discourse, it is thus necessary to first reconcile the role of digital technology back-ups as a key transformer of any business not excluding the entrepreneurship and librarianship development.

## Online Approach a Key Driver in Entrepreneurial Development

Following the advent of (ICT): information communications technology both librarianship and entrepreneurial services have started evolving in their operations. These common facts have helped the librarianship profession to expand its operations as a valid frontier in the referencing and storage of knowledge. Ordinarily, secondary research and observations revealed that library and information science as a field have been revolutionized due to the adoption of digital technology this is not limited to only operations in 3<sup>rd</sup> world or developing nations but also around other parts of the earth (the western world). Although, developing countries have not been able to fully harness and exploit the potentials/advantages of digital technologies, this is why online adoption into business operations is categorized/classified as a world-and-map for economic advancement and innovations.

Theories of entrepreneurship history and origin: from analytical evidence and observations there is no concept without practical evidence, experiments or findings and the issue and concept of entrepreneurship is not in isolation because authors and theorists have critically carried out on-the-profession survey and investigations in other to have a unified concept and definitions. The under listed scholars were able to propound and give some guiding evidence of this concept to back up the concept "entrepreneurship" they include: the Cantillon's theory (1755), Marshall's approach to entrepreneurship (Marshall, 1949), Schultz Approach (Schultz, 1975), Kirzner's "alert" entrepreneur (Kirzner, 1997), Schumpeter (1999):which otherwise known as the discovery and opportunity theory of entrepreneurship (equilibrium destruction theory), and Marz (1991), Knight's Approach

(Knight, 1971) theory with a host of other early theorists and authors of entrepreneurship. But amongst these array of theorist the writers of this work have decide to choose the theory of Marz (1991), who argued that "Schumpeter in (1999) hardly denied in his findings that the process of accumulation (business) is the ladder to social power and social prestige; he went further to propose that the very mainspring of the exercise/duty of the entrepreneur's function is the will and power to assert economic leadership. This concept also states that the joy of carrying out innovations is the elementary motive, the acquisition of social power which of course is a subsidiary to it (i.e the investor and the act of maximizing profits). In essence, entrepreneurs are not obviously the only ones (investors or individuals) who invents new combinations but the ones who strategically identifies how these new combinations (clues, strategies and visions) can be applied into the production or service line of any investment.

Analytically both secondary researches and findings including other literatures has it that this line of reasoning implies that a business whether a large scale, small or medium (SMEs) owner is considered an entrepreneur only if he/she is carrying out new combinations." The entrepreneur from all indications moves the economic system out of the static equilibrium by creating new products or production methods thereby rendering others obsolete. This is the process of "creative destruction" (the act of creating uncertainty), which Schumpeter in his theory saw as the driving force behind economic development according to (Schumpeter, 1949).

In comparison and contrast the concept "entrepreneurship or entrepreneurial services" is broad and complex but also people centered economic transactional experience. It is beyond theories and trials it is about earnings and long-term business/e-commerce survival within the demand and supply chain of goods and services as observed /gathered by the co-writers of this research according to (Wennekers and Thurik, 1999). As a result of these numerous findings the next phase of this research will lead us to the concept of digital entrepreneurship.

#### What then is digital entrepreneurship?

In summation of all findings and observations in relation to the above topic an in-depth studies from the (European Commission Digital Entrepreneurship Scoreboard, 2015), rightly described the term "digital entrepreneurship as the assembling or putting digital technologies at the center (heart) of business and harnessing their power in other to generate value and growth, innovate and create jobs. From this definition it is pertinent and crystal clear to mention or even state that "entrepreneurial service in a digital era: an overview" is indeed a vital area for implementation and discussion if researchers and academicians will continually investigate and proffer digital solutions to professions, careers and services that need to be transformed from their traditional methods of

operation (services) through the aid and adoption of the power of digital intelligent agents(I.A's) and the web(2.0) otherwise referred to in modern times as the internet of things (IoT) since there are multi-dimensional and opportunities in technology adoption into businesses in this digital era every profession, business, craft, institutions and trade drastically need the support of the web (online power and application) to boast, customize and re-model their business for global reach-and-expansion with a 24/7 access and availability.

#### **Dimensions of Entrepreneurial Services in a Digital Era**

Although definitions and other propounded theories by various schools of thoughts have demonstrated their own view and analysis of who an entrepreneur is, what they do and what they are established to achieve. Entrepreneur from a plain view can be described as one who creates a product on his own account; it is also an industrial enterprise in which workmen are employed. Thus therefore, regardless of Africa's (i.e. -Nigeria and the rest developing nations under the surface of the earth) approach to Information and Communication technology (ICT) in this present digital or information age(era). Therefore entrepreneurs must understand that there are fundamental framework and dimensions if this sector of business must think of adopting (ICT) into it for creative advantage, advancement, re-development and innovation. Following the above comments about "digital entrepreneurship" the under listed frame work will help to acquaint both entrepreneurial practioners and researchers before investing any trade, commerce or business because they are the core factors and enabling pillars of digital/online entrepreneurship. These pillars/dimensions/framework are subdivided into (5) namely;

- The digital knowledge base and ICT market, these are core applications and factors supporting digital innovation and commercialization as well as indicators of country competitiveness in the production of ICT related products also shown by the ability of investing abroad in ICT related activities;
- **Digital business environment**, this aspect of the pillar or frame work focuses on describing the degree of development and use of infrastructures enabling the use of digital tools as well as determinants for an improved business environment;
- **Taxation & financial environment**, including all indicators that capture the ease of finding the necessary financial resources for entrepreneurial investments;
- **Digital skills and e-leadership**, describing the efforts of companies in hiring and training professionals in the domain of digital skills as well as the possibility of acquiring such skills through formalized educational institutions the like librarianship profession is a true example of digital skills and services despite

entrepreneurship being the anchor discussion and test for adoption and lastly,

**Entrepreneurial mindset**, encompassing all aspects related to the entrepreneurial impetus of society.

Going by the tenants' and practice of electronic business and commerce information and communication technologies (ICT/IoT) it is vital and clear to state that digital/online adoption and application forms an essential and integral part of modern business organizations. Hence the rapid development into businesses of diverse nature has come through ICT, and digital technology is still making a serious profound impact on organizations, institutions, government and society therefore need for adoption into entrepreneurial services should not be over emphasized.

From oral and secondary reports it is fair and visible to dispose increasingly that, businesses of all sizes have to rely on ICT, in other to deliver their products and services, and more critically, to survive and grow. Information systems are now acknowledged as the important driver for innovation and an essential ingredient for success and growth as suggested by (**Digital Entrepreneurship Scoreboard** December, 2015, pg.54 of 157).

## Traditional Entrepreneurship Practice into a Big Data Establishment

The deployment of advanced ICT in business organizations is constantly creating new opportunities, as well as challenges. Therefore, to maximize the potential benefits that ICT can deliver, it is imperative for ICT practitioners to understand and address the critical issues associated with ICT applications and one major concept in the digital and technological world today is the "concept of Big Data".

According to (Baskerville and Myers 2004), the concept of "Big Data" emerged to describe the volume, variety, and velocity of the data generated with Information and Communication Technologies (ICT's). Business, institutions and society likewise need to act swiftly in chase for innovation and competitive advantages. Business Intelligence otherwise known as (B.I) is a concept and technology that has significant potential in transforming data from distributed and heterogeneous sources into an integrated enterprise view for supporting organizational decision-making, management and strategic planning.

**Big data and Business Intelligence:** Big Data is making big headlines today in modern day ICT practice; especially in the commercial sector thus it is significant to state that the quest for entrepreneurial service revolution is not exemption. However, Big Data is not a

phenomenon just affecting large commercial firms/companies. More so, with the increasing amount of data being collected and distributed from internal and external sources. Organizations of all types are now able to have access to ICT the new paradigm of packages and application known as "Big Data". There are many definitions of Big Data, but key concepts of Big Data can be categorized as the three "V"s:

- Volume data has increased from terabytes to petabytes and is encroaching on Exabyte.
- Velocity refers to not only how fast we accumulate data, but also how fast some of the data that we already have is changing.
- Variety—data is continually evolving; it is both structured and unstructured. Despite these (3) keys there are additional important (2) V's to the above three (3) V's in relation to the concept and use of the Big Data they are:
- Verification this simply refers to data verification and security
- Value—Most importantly, has the big data being utilized to generate value of the insights, benefits, and business processes, etc. within an organization. Business and society are constantly seeking new technical and managerial approaches making the best use of Big Data generated with advanced (ICT's). Big

Data therefore can be used to achieve the followings results and functions namely;

- Improved Customer relationship management
- New products
- New business models e.g. real time customization
- Better decision making and planning
- Enhanced management "managerial revolution"
- Reduced costs and improved efficiency

The concept of Business Intelligence (B.I) was coined and introduced as a result of the need to aggregate, synthesize and report the data into an enterprise view which is developed for supporting decision-making and strategic planning as suggested by (Simons H.A, 1965). Theoretically, Simons (1965) decision-making process model provides good understanding on the intelligence concept. From the intelligence-design-choice? phases of decision-making, the intelligence phase" is of particular importance as it precedes the other twophases.

Simultaneously, the concept of Business Intelligence (B.I) is frequently heating up the ICT polity and environment especially in education and academic services that is why the "librarianship" profession was used as a complementary field to support the use of

technology into entrepreneurial services in a digital era as suggested by (Durso,2009) and the Joint Information Systems Committee (JISC,2011a). Dekker G.W, *et al.* (2009) and Kotsiantis *et al.* (2003) in their works were able to use data mining tools to predict student's dropout as it relates to learning and performance, thus therefore business intelligence can be incorporated likewise into entrepreneurship practice since it's practice focuses on investment, profits, customer data base and innovation.

However, Chaudhuri S., and Dayal, U., et. al. (2011), states that today it is difficult to find a successful enterprise that has not leveraged (B.I) for its business. In spite of these grounded facts, by digital technologist and educationist potential and practicing entrepreneurs over the years have failed to adopt technology into this field that is presumed to be risk bearers-and-takers. This topic is a dual and multi-dimensional concept as it focuses on (2) dynamic and lucrative discipline that are both capable of generating income or profit for anyone (practitioners) who strongly believes in the adoption of ICT into the field of entrepreneurship. In contrast entrepreneurs must endeavor to build and learn how to develop their own virtual network platforms as a combination or part of their business ecosystem in other to have unristricted access, new innovations, technologies, virtual space, resources and expansion which will make their firm experience rapid and uncanvassed popularity on a global scale in this age of digital era.

Literary, in today's world it is not entrepreneurial services that will change information communications technology (ICT), but it is the power, application and adoption of digital components into this field (entrepreneurship) that will help to transform, re-model, promote and generate more income for entrepreneurs. Thus, if you want to become a prosperous or successful entrepreneur, investors must crave to think more on "evolution & innovation", because when their offline shops (physical locations) are closed for business; customers and end-users with the web link or login address of the entrepreneurs site can easily surf and search for business packages, visit their product page, check out their delivery conditions and if they are satisfied with the services of the entrepreneur's online platform they can swiftly "pay" for their choice goods and services since the word entrepreneurship is not limited to firms, individuals or investor's alone that are selling luxury goods, consumables, groceries, machineries and so on but investors who have decided to take, bear risk, create and make enticing profits through any sales (services) and transactions they make whether online or offline.

### Methodology

Action Research design was used due to the sensitivity and compound structure of this work, Using secondary reports, surveys and empirical data collection. It is iterative because the chosen fields of study have been researched by scholars and practitioners to

find solutions as it regards a particular cycle of activities, which includes problem diagnosis, action intervention and reflective learning according to (Avison, Lau, Myers, and Nielsen, 1999).

It is also a reflective analysis because it is devoted to issues concerning people, technology and the economy. Furthermore, it is a research that is content base focusing on change, transformation, reflection and innovation. To support this paper even if it is just an overview study, researchers and entrepreneur practitioners should endeavor to actively participate in the quest for organizational change whilst carrying out or conducting research that are poised to making viable contributions to theory, learning and knowledge as stated by (Baskerville and Meyers 2004).

To give all readers of this work a crystal clear value and benefits; the issue of "action research" should be given a high and standard attention because action research aims or is targeted to solve current practical problems with the view to expanding scientific knowledge unlike other research methods, where the researcher(s) interest is to study organizational phenomena but not to change or transform them. Lastly, the (AR) is centered on creating and establishing organizational change and simultaneously to studying the process according to (Baburoglu et.al 1992).

# Entrepreneurial Skills Development an Anchor for Digital Technology Implementation:

Digital era is not limited to business (entrepreneurship) alone but it is also used for learning, knowledge and research that was why the concept of "action research" was raised in this paper, other arguments and findings propped/propelled this work to carry out a distinctive research that can be used for the purpose of transforming the entrepreneurial sectors. Wherefore, it is once again noteworthy to examine the term "entrepreneurial skills", which can be defined as the intended output of both education and training efforts using applications. In view of this study the applications which authors and theorist have propounded is capable of increasing job related productivity, effectiveness and performance within the organizations context (Larry and Best, 2011). Corresponding evidence also revealed that entrepreneurial skills development is one of the determinants of (ICT) entrepreneurship development because it activates or provides diagnostic insights into small business (SME's) innovation.

Fundamentally, entrepreneurial skills development has direct effects on small business innovation in terms of number of innovation transferred, total funds, invested in innovation projects and improved time to market for new innovations. The development of

entrepreneurial skills paves way for small business innovation, so this aspect of the paper is a genuine evidence for other researchers to carry out additional facts and investigations in other to make this topic a background requirement for any small business that wants to explore the advantage of using or adopting of digital technology.

To explore other research materials used for this study, (Ballam K.S and Festus T.C, 2007) strategically embarked upon a similar work in explaining the construct (constituents) of entrepreneurial skills development into employee's specific sphere of influence which helps in promoting and improving the production or bottom line revenues of the firm, thus creating more visible insights into the general conceptions of understanding entrepreneurial skills and development.

### **Enhancing the developmental impact of Entrepreneurship**

Given the "grand ideas" in development economics the main policy considerations for enhancing the developmental impact of entrepreneurship are to improve the quality and allocation of entrepreneurial ability; and reduce the need for necessity entrepreneurship. Both considerations require better quality and quantity of research and data-generation. Wherefore, improving the quality of entrepreneurial ability means not only improving the skills and education of entrepreneurs, their 'human capital' base, but rather focusing on the innovative abilities of entrepreneurs.

Particularly, findings from other surveys and literature also have it that it is indeed innovative for entrepreneurs that are most desirable for growth. Innovation policy ought therefore to be a central focus of entrepreneurship promotion in developing countries as it is in advanced economies of the world. Entrepreneurs in developing countries have a much greater propensity for innovation than it is often recognized in literatures or by policy-makers.

A diligent inquiry by Yi A.B et al (2006) further elaborated on entrepreneurial skills development by adopting the use of internet (web 2.0) technology in the developmental process and thus he proposed that virtual/internet (online) technology is positively related and linked to development in entrepreneurial skills. Due to the background of this work; it will be imperative for researchers to support the work of Yi A.B, Audrey S.Y, and Santos, F.I (2006) in their quest to expand this concept.

In fact, there is a synergy between the background information quoted by (Evans, Dave 2011) when he described the web as "Internet of Things (IoT)". Thus referring to this practice as the next evolution in businesses because the internet is capable of changing everything", since the internet is customized to house and deliver digital programmed information and services to any end-user or institution that would want to transform its

service and operation.

Therefore, the following propositions were formulated by Yi, A.B et al below to support this discussion:

- P¹: Entrepreneurial skills development will have significant positive effects on number of innovations transferred.
- P<sup>2</sup>: Development of entrepreneurial skills will have significant positive impacts on improved time to market new innovations.
- P<sup>3</sup>: Entrepreneurial skills development will have significant positive effects on average prototyping speed and budget spent on research and development within the various participating firms as a percentage of turnover.

To examine the role played by ICT and entrepreneurs, the foregoing observation and practice shows that the idea and theory of entrepreneurship is not fresh likewise in the field of librarianship. To justify these facts, emphasis have been laid on the adoption of entrepreneurial skills which is geared or directed at coping with specific and verified change that will fast track improvement and innovation in the offline operations otherwise known as (traditional library practice).

(Ogunsola L.A, 2011) opined that traditionally, libraries were designed to carter for the collection of books, journals, manuscript, storage of newspapers (daily's) and a host of other sources of recorded information. The library thus processes or carry out such functions like acquisition services, processing, storage of academic materials of all sort, retrieval and dissemination of information resources these general duties of the librarian is mostly facilitated through shelving of books, book keeping, cataloguing and card (sorter) system. The general overview of this paper shows that the stimulation of innovation has not been paramount in most development agencies or donor's private-sector development programs, nor in national entrepreneurship support programmes. The only innovation relevant aspects of such support programs have been their concern to improve the general business environment, a pre-requisite for innovation and to argue for patent protection. Here, such policies tend to be more concerned with improving static and allocative efficiency, and not dynamic efficiency, which is more important for job creation and growth (Evenett2005).

### **Entrepreneurship as a virtual Office and Business**

Apart from the physical efforts, know-how, skills and better work performance we render to the job we are employed to do, technology has made it even more easier to work and function in offices these days without solely relying on active human presence as their last resort to get work done. Given, the above commendation it is therefore difficult to see the leadership of organizations carrying out administrative task without the use of office automation machines, technologies and software's. Due to this reason rather than having a work system and space hogging suite of applications such as word processor, spreadsheet creators and a host of presentation methods or even publishing platforms sitting on computers, they could as well choose to work online instead as a result of the accessibility-and-reach the web (online) can offer to them in-

this digital era. Examples of such digital business intelligence suite includes: Google's online suite, Ajax 13, Think Free and Microsoft's Office Live because it is an enabling business intelligence (B.I) package that helps firms or institutions to work with ease, the reasoning being that if someone needs to interact or meet with their customers (end-users), through a reliable and efficient platform that can likewise give them access to meet with the request or needs of their customers.

### Online targeting as an emerging business force:

According to (Teo, 2001), from the early days of the advent of the internet, end-users were usually considered as being naive to the capabilities and practice of the web. Today almost the entire citizens of the world are dependent on the power of the web, as a multi-faceted aid or device for business transformation, reach-and-content validity. In essence, more digital channels upon successful adoption are bound to change the traditional operation method of any business whether voluntary or profit making ventures.

However, both oral interviews and secondary researches indicate that targeting tension is perceived to be the least important challenges for marketers who as well can be referred to entrepreneurs. As a result of these findings it is presumed to say from our observations that most businesses (firms or institutions) have come to know/understand that online presence (medium) is currently adopted by a significant majority of businesses and investors (entrepreneurs). More so, educated and enlighten consumers will feel very comfortable to dealing with firms with online presence than dealing with entrepreneurs that does not have any online presence which is what the digital era supports and is creating for businesses. Although, throughout the discussion of this work no nation of the world has been mentioned, but it is evident to state that in Nigeria today, consumers (end-users) are now exhibiting the habit of doing businesses online especially amongst the young population and a few populations of adults who are computer literate. Nevertheless, there is an important bias in targeting older customers. Recently, on AIT News Bar of 29<sup>th</sup> July, 2017 at exactly 19:00 Hrs (07:00 am) "an official statement made by Google ranked Nigeria 8th in Global Internet Growth", according to (www.google.com) this is a documented proof and thus means that digital adoption is gradually taking over the business world no matter the area or field.

To ascertain this fact, (Porter C.E, and Donthu,2006) also added that older end-users (customers viz a viz entrepreneurs) but also less educated individuals (people) have lower perceived ease of using online channels for transactions, while others within the older end-users (customers) populations believed that there are more access barriers associated with the use of the web 2.0 (internet). To complement these fact, it is evident to state that digital adoption is indeed the most in terms of recent method of doing business no matter the field or profession therefore whether an entrepreneur, a librarian or any other profession (business) the need to adopt technology in this digital era should be encouraged and given the lean way to transform all businesses without considering the complexity and cost of adopting it because technology is cheap and reliable.

#### Role of (ICT) and online integration for business transformation in this Digital Era:

A couple of enquiries used to compile this paper to an extent have proved that all sectors in the society today are beginning to be transformed by technological innovations based on the adoption of information communications technology (ICT). Again, the writers of this work decided to use the "librarianship profession" as a complementary support to back up the adoption of businesses especially as it center's around the entrepreneurship sector. Oral and secondary reports and findings also show that universities have been carrying out internal deliberations about digital technology if it is the idle method to support and aid learning, teaching and researches (online education). But today it is evident that online technology (digital era) is becoming the new breakthrough for businesses and learning because it is a business intelligent agent with diversity of solutions even if it is principally backed up by artificial technological aid.

The holistic background of this research/paper indicates that online or e-learning will increasingly affect all educational institutions because of its promising and efficient potentials it is capable of rendering to any adopter of digital aid. In fact, the accessibility and flexibility, brought by the adoption/use of (ICT), will rapidly create new educational opportunities in the areas of learning-and-research, which are entirely internet-based, in this digital era. This means that with the acceptability of online technology in learning and knowledge (education) institutions will begin to enjoy quality learning-and-borderless education just as most businesses are enjoying the support of digital aid.

Strategically, digital era cannot be over emphasized since it is capable of contributing to strategic connectivity, partnership and knowledge combination (alliance) to foster curriculum collaborations and access virtually. Basically, virtual education (e-learning) and other work based transactions (businesses) is a boost to support and enhance entrepreneurship activities because virtual or online digital support incubation is increasingly gaining strategic importance through equipping learners (students) and workers with skills necessary for changing jobs routine task as well as entrepreneurship,

again this adminicle towards promoting entrepreneurship and enterprise creation and support for knowledge exchange as cited by (CBV

As the writers of this work round off this paper, it should be viewed or considered as a compensate for further research therefore both readers and scholars of entrepreneurship management should understand that beyond information brokering, consultancy and bargains (profits), online technology is a viable digital communication support aid that is built by ICT specialist and programmers to effect change in businesses in this digital era hence it should be made readily available for all sectors of business. This is why (Bynog,2003:137), declared that when considering entrepreneurship in businesses whether librarianship or entrepreneurial skills the field of information/data brokerage, simply means that the future of every business could be summed up as a competitive field, hence the quest for adoption of the web (2.0) should not be viewed as a financial burden to any business that needs transformation and expansion that is designed to make or maximize profits and business breakthrough because the globe which we operate in today is becoming more complex and electronical.

#### **Conclusion:**

There is no doubt, that the world has become a global village, therefore organizations, institutions, government and libraries must understand the role of online (digital) aid as business transformation intermediary designed to generate huge market shares for and can therefore be considered as the need or adoption of priorities for any field or business that wants to be online. Using the search engine (online), as a vital business tool is a means that help's to connect buyers and entrepreneurial services providers. This means a balance between the needs and demands of consumers, on the other hand, and reality for advancement, therefore the equilibrium of online adoption should not be ignored. Strategically, the advent of the World Wide Web (www) into modern day business transactions has transformed end-users lifestyle and purchasing attitude because of reachand-customization, speed, value proposition, content and interactivity. Thus, an establishment with a (website) online service operation and virtual purchasing capabilities for its potential customers is liable to gain huge market shares or vital competitive merits. In summary, it is clearly observed from literatures and surveys that there are actually choices for these entrepreneurs or business organizations, whether they would want to embrace the adoption of online entrepreneurial services or not. Lastly, due to the advent of the internet libraries (e-learning center's) educational institutions are beginning to transform and convert into digital cyberspace learning and knowledge hubs. To sum up this research, entrepreneurship is not only an important driver of economic growth, productivity, innovation, expansion and employment but a value chain that support financial dealings and transactions exchanged for goods and services. Although, from the

definitions of entrepreneurship, it is clear that entrepreneurs often fight an uphill battles to get their new customers and make more profits but many investors (entrepreneurs) don't succeed sometimes, thus if they begin to sort for the adoption of online (digital), it will lead to the success and transformation of their businesses as entrepreneurs because the advent of digital era in all sectors of business is a gold mine of opportunities. Every entrepreneur should queue up to ensure that they adopt digital services.

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