Improving Public Sector Service Delivery in Ghana:The Application of Innovation and ICT.

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Abstract
Public sector institutions are established by law to provide essential service to citizenry. However, research has shown that, service delivering form the public sector is not meeting the satisfaction of users. The competition posed by the private sector has collapsed many public corporations in developing countries. The emergence of the new public management was to improve the effectiveness of the public sector by adopting proactive phrases like reinventing government, re-engineering, revitalization of the public service, organizational transformation. Researchers have suggested that, the application of some private sector strategies into the public sector will improve service delivery. This study looked at how public sector will improve by adopting innovating strategies like, innovations, e-government and entrepreneurship. The study intent to provide literature on existing best practices of improving public sector effectiveness and efficiency. We argued that, public sectors in developing countries could improve by innovating existing practices, having an entrepreneurial mind and the application of e-government to facilitate full citizen inclusion in decision making process.
Keywords: public sector, innovation, service delivering, e-government

1. Introduction

The public sector is concern with providing services that are essential to citizens of a country. Government provide public services to the public through the various public institutions. Various research has shown that, service delivering from the public sector are not meeting the satisfaction of citizens or users and this is something common all over the world especially the developing countries. Because of that, in 1980, the new public management perspective of managing public organization came up. This perspective is associated. with proactive phrases like "reinventing *government, re-engineering, revitalization of the public service, organizational transformation, total quality management, paradigm shift, entrepreneurship, empowerment, results over process, downsizing, now rightsizing, lean and mean, contracting out, off-loading or outsourcing, steering rather than rowing, empowering rather than serving and earning rather than spending*" as stated by Frederickson and cited in (Joseph R 2005, P.12**)**

These suggested managerial thoughts were borrowed from the managerial perspective of the private sector which Frederickson believed will help the public sector improve. Developing countries especially those in Africa public service systems are directly adopted from that of their colonial masters. Many African countries in the late 1970s initiated various measures that will improve the ability of public institutions to function effectively and efficiently. These reforms were in three phases; the phase one was initiated through the structural adjusted programs of the 1980s. this was to provide training and technical assistance to the public service with the idea of Africanizing the civil service. This reform of the civil service was sponsored by the world bank. The phase two of the public service reform was done on the ideas of retrenchments and decompressing the sector; this was followed by "*restructuring of civil services, focusing on management systems, performance management and budget /financial management, and marketization of service delivery*" (joseph 2005, P.20). The last phase of reforming the civil service in Africa was focused on improving public service delivering to users through effective and efficient way.

African countries have continued to adopt various ways to make the public-sector service delivering more reliable and effective. One of the many ways was training and capacity development. Under this approach, various training and development policies were revised to make sure that, all level of civil servants is covered. According to joseph (2005, P.23), *"Some of the strategies of training and capacity development being adopted in Francophone countries like Senegal and Mali and Anglophone countries like Ghana, Nigeria, Tanzania, Egypt and Uganda are aimed at professionalization of the civil service"*. African countries also *"attempted"* the use of e -government infrastructure to improve service delivering. Despite the potentials of information technology to improve efficiency in service delivering, the system underperformed in Africa.

Ghana situation is no different from other African countries in terms of public sector service delivering. Many citizens are not satisfied with the services public institutions provide in Ghana. This problem persists from independence till now and various reforms and programs have been formulated and implemented with the intention to improve service delivering in the public service. One of these programs is the civil service performance improvement programme (CSPIP) which was introduced in 1996. The program required staffs (especially public managers) of public institutions to engage in self appraisal exercise where they must meet

users and solicit information on the quality of services they are providing. However, these programs have not improved the efficiency and effectiveness of service delivering.

This study intent to provide a value laden understanding of public sector and the recent approaches developed countries have adopted. This study will highlight some theories or perspectives of managing public sector organizations. Lessons from OECD countries report will be integrated into the study to provide a good literature for students of public management and administrations.

2. Purpose of The Study

This study is conducted to provide police makers in developing economies information how public sector can improve on service delivery. It will also provide current practices that are used in public service delivery. Last but not the least, students of public management and public administration will benefit from the literature.

3. Methodology

This paper used the qualitative method in the analyses. The researchers used reports from government, international organization, public institutions, library and academic reports that give clear understanding on the topic under study.

4. Literature Review

4.1 Ghana's Public Sector

The public sector/service as defined by the constitution of Ghana comprised of "(*a) the Civil Service, the Judicial Service, the Audit Service, the Education Service, the Prisons Service, the Parliamentary Service, the Health Service, the Statistical Service, the National Fire Service, the Customs, Excise and Preventive Service, the Internal Revenue Service, the Police Service, the Immigration Service, and the Legal Service*" (1992 constitution Ghana, p.116). the public service has over 800,000 employees working in various sectors of the economy. With Ghana education service having the largest employees over 400, 00. The public service was created to provide basic service to citizens however, research by Institute of Economic Affairs (IEA) indicated that, access to some basic service like good sanitation is a challenge to many Ghanaians which according to Matoso et al., 2016:3) is one cause of poor performance to achieve sustainable development goal. Access to basic service like health, water, sanitation, transport is very poor in Ghana and these challenges have persisted since independence. The provision of good healthcare, sanitation, water, education influences human growth and development in a country. Due to the unsatisfactory services provided by the public sector, the government has initiated new public-sector reforms that will help improve service delivery.

4.1.1 Ghana Public-Sector Reforms

In the past decades Ghana has made efforts to transform the public sector to enable it to improve on service delivery. However, these reforms have not improved the services of the public sector but have attained some level of achievement. In 2010, the government of Ghana came up with a new approach to public sector reforms. Government and policy makers blamed failure of various attempt of reforms on poor institutional capacity, inadequate support from central agencies, and poor coordination between sectors.

The new reforms focused on delivering of public service; "delivery model" this new approach is more of problem solving approach which tasked various units under the municipals and district assemblies to device performance improvement strategy that will improve service delivery**.**

Some recent major reforms in the public sector are **"***Ghana Decentralization Policy Review (GDPR) in 2004, Economic Management Capacity Building Project – Public Sector Reform Program from 2005-2011 and Ghana's New Approach to Public Sector Reform Focusing on Delivery in November 2010"* world bank/government of Ghana report cited in (**Ghana's New Approach to Public Sector Reform Focusing on Delivery, November 2010*)*

4.2 Public Sector Theory

4.2.1. Bonded Rationality Theory

The theory of bonded rationality assumes that members of organizations and decision-makers have limited knowledge or cognitive capacity and will act based on simplified models of the world (Tom etal 2007). This implies that, decision makers or public managers do not have enough time to think over societal problems because of the structure of the public organizations. The bounded rationality perspective believes that, the hierarchical structure of public organizations, makes decision making on problems difficult to public managers because, the actions of the public managers are procedural and bond to the bureaucratic chain of the institution. According to Tom (2007) the public organizations activities outside the organization are dominated by the directives or controls it get from the political leaders. Though public organizations might try to be independent of the political leaders but definition of policies for the public sectors are initiated by the pollical heads and most of the time, some key heads of the public sectors are appointed by the political head which is common in young

democracy like Ghana. One other problem of public organizations in developing countries is that their service capabilities are bounded to the limited resources. The limited resources of Public organizations affect their ability to respond to citizens demands, provide the basic service that they were established to provide. Tom (2007) posited that, public organizations must give more attention to how they influence the process of decision making and implementation. It is argued that, when public managers are allowed space to make decisions that will address the immediate concerns of their users, it make the service that they provide "customer-driven"

4.2.2 Public Organization as an Instrument Of Change.

Many public organizations or institution are established by law to carry out tasks to the benefit of the society. In many cases the establishment of these institutions are enshrined in the constitution of a country. These public organizations are a tools or instruments that the political system use to affect change in the society. For example, Ghana health service is established by law to formulate and implement policies that will improve the health of Ghanaian society. In this case, if cases like infant mortality, maternal mortality goes down in the society then one can say the health service was an instrument used by government to cause positive change in the society. The instrument perspective of the public sector is that, government must provide public services in the form of public goods in an efficient and economy way. In the advent of the new public management, the public sector is now adopting ways or reinventing the way they operate. This has led to the adoption of various tools that the private sectors use to ensure effectiveness and efficiency in their service delivery. Public managers now see the consumers of public service as customers and as a result adopt customer driven approach to bring changes in service delivery. Many researchers including Tom etal (2007), believed that, public organization need to have a clear goal that they want to achieve and in developing public goals there must be contingency plan. Although, the nature of the public organization is limited by the theory of bounded rationality. However, it is argued that public managers must be given a space to make decisions that will affect positive change in the society.

4.3 Innovation Theory

4.3.1 Theory of Innovative Enterprise

organizations either in the private or public sector seeks to transform resources into goods and service that can meet the demands of their clients which will results in revenue generation. According to (William Lazonick 2013) business organizations focus on three activities which are strategy; which involve how resources are allocated to developing human and physical capabilities in the organization,: "*organization; this is about transforming technologies and accesses market and thereby develops and utilizes the value creating capabilities of these resources to generate product that buyers want at prices that they are willing to pay: finance; sustain the process of developing technologies and accessing markets from time at which investments in productive resources are made to the time at which financial returns are generated through the sale of products"(p,4)* Williams also identified three social conditions of innovative enterprise which are related to strategy, organization and finance that helps business organization to generate highly quality products at lesser unit cost. These social conditions are uncertainty, collective, and cumulative characteristics of the innovative process (see William Lazonick 2013, p,4)

Innovation in business enterprise demands strategic allocation of resource to developing and applying productive resources. Strategy control in business enterprise can translate strategy into innovation. This explore decision makers in business enterprise to possess some degree of authority to allocate resources to innovative investments strategy. This theory also posits that, business organizations need organizational integration to innovate. Organizational integration is a condition that creates incentive to people within organizational structure with responsibility and function ability to use their skills and abilities to the strategic objectives of the enterprise. This explore organizations to develop a very good compensation system that will motivate employees to develop job satisfaction. Good workmen compensation in the form of work satisfaction, promotion, remuneration induce workers to work hard and it also attract and retain employees. It is argued that, public organization managers should break the barrier of decision making restriction to enable them to have some degree of authority to allocate resources. When public organization adopts innovative enterprise strategy often use by the private sector, private sector, it will help the public sector to transform available resources efficiently and effectively to meet the demands of the citizens/users.

4.3.2 Diffusion Theory of Innovation

Rogers diffusion of innovation theory is the most appropriate of investigating the adoption of technology in the public-sector environment. Rogers explained innovation in the following way "*An innovation is an idea, practice, or project that is perceived as new by an individual or other unit of adoption*" (Rogers, 2003, p. 12). (Rogers 2003) often used the term technology and innovation synonymously. According to rogers, "technology is a design for instrumental action that reduces the uncertainty in the cause effect relationship involved in achieving a desire outcome. According to rogers, there are four elements influencing diffusion of new ideas; culture, communication channel, time, and social systems (see roger 2003)

4.3.3 Innovation Decision Making Process by Roger

Decision making process explained by rogers (2003) Individuals make effort to seek information concerning the innovation for clear understanding. according to roger innovation diffusion theory, decisions in innovation involves the following steps; knowledge, persuasion, decision, implementation and confirmation and it follows each order in time-order manner.

figure. 1. Innovation decision making process by roger
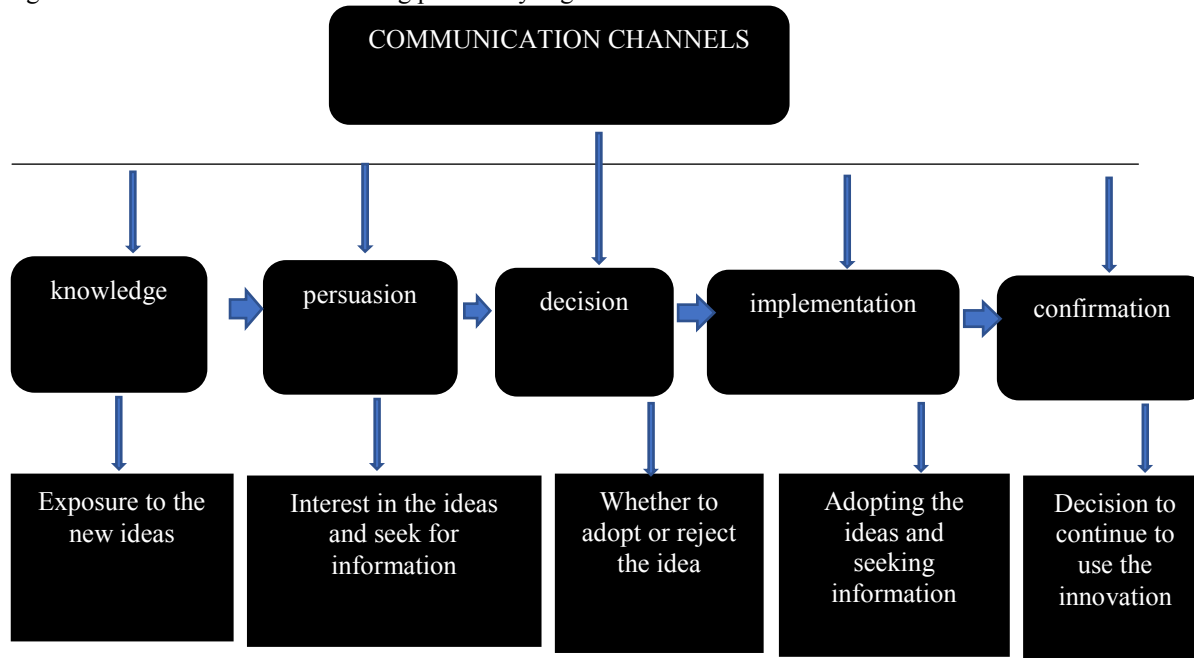
Source: based on Rogers (2003)

4.3.4 The Knowledge Stage.

This stage is the starting point where individual/s get to know the existence of the innovation and start searching for details information on it. This in practice in the public sector maybe explained as public managers having knowledge about existing innovation that can improve service delivering and them make attempt to find out more about the innovation. According to rogers, 2003 p21) "What?" "how?" and "why?" are the critical questions in the knowledge phase. During this phase, the individual attempts to determine "what the innovation is and how and why it works". (see rogers 2003 for further details)

4.3.5 The Persuasion Stage.

This stage follows the knowledge stage in the innovation decision making process. It occurs when individuals develop an attitude toward the innovation. The application of this stage in the public-sector institutions is that, after acknowledging the existence of a new innovation, public managers need to persuade policy makers to adopt or accept the innovation. According to roger, "the formation of a favorable or unfavorable attitude toward an innovation does not always lead directly or indirectly to an adoption or rejection" individuals after acknowledging the existence of innovation will develop or shape their attitudes by involving themselves. Roger has described the knowing as a "cognitive centered" and the persuasion as "effective centered".

4.3.6 The Decision Stage.

This stage of the decision-making process is where individuals make choice on whether to adopt or reject the innovation. "adoption means complete use of an innovation as the best action available and rejection means not to adopt and innovation" (rogers 2003). Rejection of innovation is anticipated in innovation decision making process. There is situation where after trial of the innovation, individual decides not to adopt it this is described as active rejection by roger. On the other hand, he further expressed that, in passive rejection, individual never thought of adopting the innovation at all. Public managers at this stage need to be very critical in their thinking. The importance of innovation in the public sector cannot be over emphasized, however, its adoption must be done in a way that will not bring losses to the country

4.3.7 Implementation stage.

This stage according to roger is where the innovation is put to practice. He further stated that uncertainty about the outcome of the innovation can be a challenge to implementers. He suggested that, implementers will need technical assistance from change agents and other expertise to lower the uncertainty and the consequences. Furthermore, at the implementation stage, roger stated that, reinvention will be needed because it is an important part of implementation stage. he defined reinvention as "the degree to which an innovation is changed or

modified by a user in the process of its adoption and implementation" (Rogers, 2003). To prevent confusion between the understanding of innovation and invention, he stated that, the main difference is "invention is the process by which a new idea is discovered or created," the adoption of an innovation is the process of using an existing idea". One challenge to pubic managers is implementation; there have been instances good policies did not go well in the implementation stage. Constance monitoring of the innovation can ensure successful implementation.

4.3.8 The Confirmation Stage.

According to Rogers (2003), this decision can be reversed if the individual is "*exposed to conflicting messages about the innovation*". "*However, the individual tends to stay away from these messages and seeks supportive messages that confirm his or her decision. Thus, attitudes become more crucial at the confirmation stage. Depending on the support for adoption of the innovation and the attitude of the individual, later adoption or discontinuance happens during this stage* "cited in (Ismail 2006 p.17).
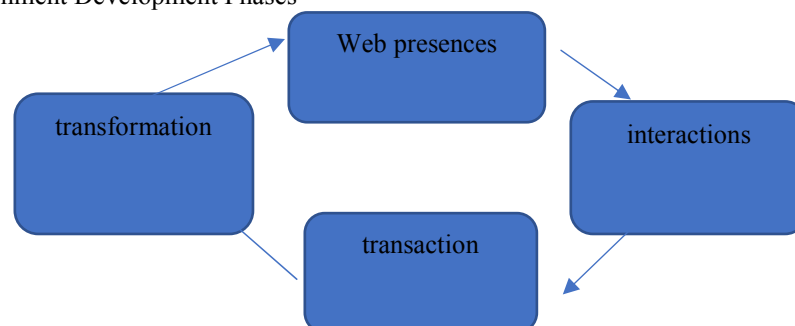
4.4 E-Government.

InfoDev/World Bank, (2009, p.2) "*E-Government" refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government*". According to the infoDev/World Bank, the e-government system help business to transact with other business (B2B), business to customers (B2C), government interact with its citizens (G2C), government to business (G2B), Government to employees (G2E) and government to government agencies (G2G). According to infoDev (2002, p.5) "*E-government is about transforming the way government interacts with the governed. The process is neither quick nor simple. It requires a coherent strategy, beginning with an examination of the nation's political will, resources, regulatory environment, and ability of the population to make use of planned technologies"*. This further suggest that, for a successful e-government implementation, government must adopt citizen centered models that will involve stakeholders outside the government machinery.

4.4.1 E-Government Phases in The Public Sector**.**

This paper will adopt 4 stages model by Gartner in discussing the e-government phases which some literatures describe as evolutionary process.

Figure 2. E-Government Development Phases

Source: based on Gartner (2000) cited in infoDev/World Bank, 2009

4.4.2 First Stage of E-Government in the Public Sector

This stage is where government agency/ies develop a website. The website platform is used to provide general information to its users about the organization. Some literatures suggest that web presence may include a push system that send information to users via e-mail and other means. Government agencies usually publish government information on the websites starting with rules and regulations, documents and forms. This platform reduces the bureaucratic nature of the public service where citizens must travel far distance to access government information. The quality of the websites is based on how often it is updated and its user friendly. Websites that are design to make its accessibility easier to find information is called user-centered design. (Gartner (2000) cited in infoDev/World Bank, 2009)

4.4.3 The Second Stage of the E-Government Evolution In The Public Sector

The second stage is interaction stage which broaden citizen participation in governance. This stage involves two-way communication. The sites provide basic communications functions like email contact of government officials, a platform form users comments which will provide feedback to officials. The interaction tools often used at this stage are web-based form, chat rooms, bulletin boards question and answers and among others. (Gartner (2000) cited in infoDev/World Bank, 2009)

4.4.4 The Third Stage of the E-Government Evolution in The Public Sector

At the transactional stage, government agencies can modify or upgrade their websites in a way that will allow users to transact online with officials. In developing countries, the private sector is far advance in this stage than

the public sector. The e-banking system adopted by many banks which allow customer to transfer funds directly from their accounts to a third-party account without going to the bank. The transactional stage reduces long queues at various bureaus; it also reduces corruption because of less direct contact between users and officials. (Gartner (2000) cited in infoDev/World Bank, 2009)

4.4.5**.** The Fourth Stage of E-Government Evolution

This stage is called integration and transformation; user centered experience, multiple agency connections. This according to (infoDev/World Bank, 2009, p.19) **"***The integration of information, processes, and channels across multiple government, non-government, and private sector organizations enable a user to start and complete an entire task easily, confidently, and securely"*. This underpins the concept of integrated and transformational service. Users can access any service or information in a complete "end-to-end" package where the existing boundary between departments/ministry or organizations do not interfere with or interrupt the service outcome, and where the services are clustered along common "customer" needs. The integration demands are substantial" (Gartner (2000) cited in infoDev/World Bank, 2009)

4.5 User-Driven E-Government

The user-driven approach of e-government as explained by Bernd W. Wirtz & Peter Daiser (2015, p.117) "*creating common interface for public stakeholders that possess distinctive information and service needs as well as different educational and technical backgrounds inevitably leads to demanding issues*". In recent years, public sector policy makers are tailoring e-government to meet the needs of citizens. This approach suggests to e-government policy makers to involve users in the designing of a e-government platform; this will enable the government to know what is expected of them by the users.

4.5.1 Functional E-Government Demand Factors

Moving from provider oriented to user oriented, e-government policy makers are to foster good communication between public sector institutions and stakeholders. Government needs to solicit for information from the users to understands their specific demands before formulating and implementing e-government systems. According to Bernd W. Wirtz & Peter Daiser **(2015)** the "functional e-demand factors can be organized in three quality package Use quality, System quality, and Service quality (USS)" (*see Bernd W. Wirtz & Peter Daiser (2015) for details***)**

figure.4. functional e-government demand factor
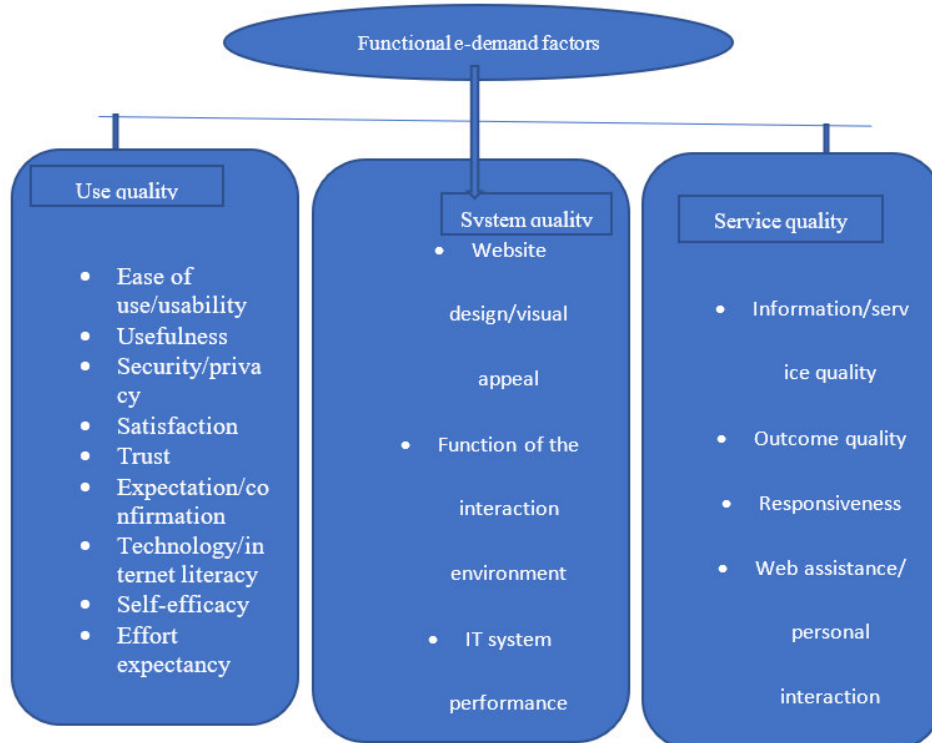
Source: Bernd W. Wirtz & Peter Daiser (2015)

5.Discussions/Conclusion
5.1 Implication of Reengineering the Public Sector
Discussing the way forward for the public sector, one must understand the public sector in whole. The sector

could be comprising of public corporations and the general government. Public corporation could be non-profit making and profit making depending on the law that established them. Usually corporation is a legal entity established to produce goods and services for the market. Many corporation are to provide essential service at a moderate market price that ordinary citizen can afford. For effective provision of these services by public corporation we suggest to the policy makers and public managers to adopt some of the tools the private sector use to improve on their services. Public corporations can be effective and the same time efficient by putting in place use-friendliness services. Application of strategic management in the management of corporation will enhance their service. Hanse and Ferlie (2014) indicated that, the application of strategic thinking in public organization cannot be over emphasized. We also argue in line of Herman (2005) that, strategy management and resource-based view help public organizations to build and sustain competitive advantage. Private sector in this direction are drawing strategies that are difficult to imitate by other competitors. Though one can argue that the private sector does this to increase their bottom line which is not the main reason for public organizations like corporation but for corporation to attract the attention of the public and to continue providing service to the public, they need to be competitive as the private businesses.

The public sector can also adopt the entrepreneurship perspective in its functions. According Zanpetakis and Moustakis (2007) cited in Hamisi K. et al (2014 p.64) "*a public entrepreneur is a person working in the public sector setting, who possesses an ability to create an energetic working environment in the working place and through a strategic vision for the organization and a change orientation, performs a set of activities and practices, aimed at providing quality services for the citizen*" this suggests that public sector can incorporate the ideologies of entrepreneurship into its planning and execution of services.

5.2 Implications of Innovation in The Public Sector

All literatures and scholars believe and understand the difference between the private sector and the public sector. The role of a CEO is different from the one of the public manager and the services and the end users of these service differ from one another. However, one cannot underscore the dynamism in the demands of consumers in our world today. The private sectors are innovating their services and products to meet the demand specification of their customers in order to stay competitive. The quest for the private sectors in developing countries to innovate is to create value proposition for their organizations which will give them competitive advantage over other competitors. The new pubic management call for adoption of some practices in the private sector into the public sector to make the public sector both efficient and effective.

We suggest in this research that, the governance systems and the laws that established public organization organizations should be amended to create room for public mangers to develop strategies contingent on the changing environment. Firstly, one thing that will make public organization more attractive to citizens is to improve on accessibility. Countries that practice decentralization has a very long structure in the public service which at times makes it difficult for citizens to access some basic services. We are not arguing against decentralization of various public sector, but we want to recommend to policy makers to provide one stop point of access that will connect all public organizations that citizens can access without going through the whole structure. One real case is the Ghana education service; its structure run from the district level to the national headquarters in Accra and in most cases a teacher with a salary problem must travel to the regional office and from there to the national headquarters. With the one-point access, a teacher can register his concerns through the system and get feedback without leaving his post. this platform will increase productivity because the teacher does not need to leave the classroom to address a concern.

Another suggestion this paper want to put forth is user engagement; in the private sector, business invest in research and development to better their service. They do this in the form of collecting data from their customers and then integrate them into the production. This help them meet the specific demands of their customers. The public sector can adopt this participatory model for the production and provision of public service by directly involving the users or citizens, stakeholders and communities. Lack of this in the public sector creates dissatisfaction and rejection of public service. One example is the. Ghana electricity company. When the company introduced new energy consumption meters, many household consumers agitated that, the new meters were a strategy adopted by service providers to cheat them because the new meters has increased their monthly bills. All these agitations happened because the consumers were not involved in the design and introduction of the meters, so they do not understand how it works.

5.3 Implication Of E-Government Service in The Public Sector.

Developing countries in quest to achieve the 2030 agenda for sustainable development must promote citizens in decision making process at all level. The 2016 e-government ranking saw many developing countries scoring lower than the average score. This means developing countries need to do more to improve on the e-government infrastructure. One can argued that, the e-government infrastructure of a country depends on its economic development because, form the 2016 survey, "*A majority of countries in the very-high-EGDI group are from*

Europe, which comprises 19 out of 29 countries (66 per cent) in 2016, as compared to 16 out of 25 countries (64 per cent) in 2014; while at the other extreme, the low-EGDI group mainly consists of African countries" (see UN e-gov survey report 2016, p.112) however, there were some developing nations from Africa that performed better than some European countries among them were Mauritius and morocco.

Building the e-government infrastructure in the public service will enhance e-participation which help developing countries achieve the Sustainable Development Goals (SDGs). The use of social media on many government websites allow users or citizens to contribute to public policy. According to Enrico Ferro et al (2013, p.360) *"Government agencies are increasingly adopting social media in their policy making processes, as they offer interesting opportunities for increasing citizens' participation and engagement, by providing to more groups a voice in discussions of policy development and implementation"*

It is also recommended that the e-government system should be adopted in the public procurement system to promote transparency and accountability. The open government data approach of e-government will make available government institution information online for every citizen to access. One area of concern to many developing countries of which Ghana is not exception is the public procurement process. Many procurements are done in the darkest side of citizens. With e-government in place citizen can monitor every level of the process. The SDGs agenda require public institutions to be accountable and transparent to spear head the sustainable development goals and implement innovative policies. "*In building effective, accountable and inclusive institutions at all levels, Target 16.5 of the SDGs calls for countries to substantially reduce corruption and bribery in all their forms. Historical data shows that there is a strong positive correlation between e-government development and the Corruption Perception Index (CPI). Countries with high corruption rates in the public sector will generally score poorly on their ability to deliver public services via ICTs, including the provision of open government data*" (UN survey 2016, p.126)

5.4 Further Research Directions
This study further suggests to researchers and students specializing in public administration to further research on how to improve public service delivering through the application of e-service and e-participation especially in developing countries.

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