

## **Scenario Planning As a Strategic Tool for Higher Education Planning In Ghana: Modelling After Universities UK Scenarios Project**

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**Abstract:** Education is an action that involves the transfer of knowledge in the form of experiences, ideas, skills, customs, and values from one person to another or from one generation to another generation. The generational transfer of this knowledge, has increasingly become challenging in the face of uncertainties. Academic scholars and policy makers have attempted several scientific approaches to predict the demand and the future of education, however few have succeeded in this attempt and have gained competitive advantage in the area of provision of quality education globally.

This paper seeks to explore the concept of scenario planning as a strategic tool for planning higher education in Ghana and chooses a qualitative approach by studying the case of the University UK scenario project. The Universities UK scenario project is a model that Ghanaian stakeholders can adapt and apply to developing the Higher Education sector to become more pragmatic and responsive to the anticipated change among the actors and factors that influence the sector.

The research revealed the structure and membership of the Universities UK, as an institution is more organized, well represented, and poised to take decisions that can stand the course of time compared with Ghana's two main institutions, CIU and NCTE, which oversee tertiary education.

**Keywords:** Scenario Planning, Strategy, Education, Ghana

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### **I. Introduction**

According to Adu-Gyamfi, et al. (2016), education is an action that involves the transfer of knowledge in the form of experiences, ideas, skills, customs, and values from one person to another or from one generation to another generation. Scenario planning is a strategic decision-making tool that allows stakeholders to tell stories about the possible futures that may unfold, thus allowing senior management and all stakeholders to develop alternative routes to reach the agreed vision (De Ruijter, 2014; Peterson, et al., 2003). This study explores the subject of scenario planning a more relevant and all-inclusive tool for policymakers to explore and adopt in the long term strategic planning of the higher education sector in Ghana. The paper also studies the Universities UK Scenario Project and suggests a framework that various stakeholders in Ghana Higher Educational Sector can adopt this model to develop similar projects in Ghana.

The education sector in Ghana has also seen a lot of changes over the years since the democratic rule took off in 1992, but most of these government-led structural changes have been mainly focused on the basic and secondary levels of education (MoE, 2003). Prior to the commencement of the constitutional era, however, the educational system in Ghana before the 1980s had gained great respect as being one of the most effective and highly developed systems in West Africa. However this view entirely altered in the 1980s as the educational system was in near collapse and viewed as dysfunctional in relation to the goals and aspirations of the country (Kadingdi, 2004). George & Stein (1976) also identified the inconsistencies within the structure of the Ghanaian education system as the result of "over politicization".

The few changes that have occurred in the tertiary or higher education level have been more reactive (to the pressure of stakeholders) than proactive. The country's Education Strategic Plans have struggled to live up to expectation as different political parties come into power with their plans and agenda (NCTE, 2014).

Africa has been described as a dawning success (Berman, 2013) especially because of the annual growth rate of 5.7% in the last decade from 2002 to 2012. Hopes are high about the future of the continent of 54 countries. However, countries cannot achieve this success independently in today's global village where every nation's activities influences and is influenced by another country. Due to this high level of complexity and interdependence, many unforeseeable events can hinder the success of well-intended policies. The ability of any leadership to see beyond the forecasts and projections from statistical data and prepare for unexpected events in the future will position that nation as a leader in development.

One of the major flaws by governments, and in this case decision makers in the education sector in Ghana, in decision making is that only one possible future is assumed amidst all uncertainties. In Shell Corporation’s New Lens Scenarios, the Head of Scenarios mentioned that the future is neither entirely predictable nor completely random and thus any meaningful exploration of possible future landscapes will inevitably highlight alternative features and patterns. The research will focus on Scenario Planning as an effective tool for decision-making in Higher Education. It will review literature on the case of Universities UK’s scenario project as well as Shell’s methodology of scenario and explore how Ghana can adopt the methodology for planning and effective decision-making.

This paper is divided into three themes; the first theme covers the relevant discussions from the literature on strategy and scenario planning as a tool for long term decision making. The second theme focuses on the Ghana Higher Education Sector, its stakeholders. The third theme also covers the case of how the Universities United Kingdom (UK) scenario project was carried.

Though the research is focused mainly on higher education, it may also, by extension, be useful to strategic decision-making at all levels within the Ghanaian context. It will also form the basis for developing scenario-based strategies in other sectors of the economy with some adjustments made to suit that particular industry.

The research developed from theory and move into data by gathering qualitative information through the case study approach and extensive desk research. All the information gathered through the review of literature sought to answer the research question:

*“Why is scenario planning a more effective tool for long term strategic planning for the higher education sector in Ghana”*

In order to understand the subject, the researcher undertook a two-day Masterclass in the Netherlands with an institution called De Ruijter in 2014. This masterclass was in the format of a workshop, allowing participants to try their hands on simulated scenario exercises. It also allowed the researcher to understand into much details the process design, methodology and potential challenges to be faced when executing a scenario planning exercise and executing it.

According to Yin (1994) data analysis consists of categorizing, examining, or otherwise recombining the data collected to address the research questions. Most of the information gathered from the literature reviews and also from documents for the case study were mostly categorized already, leaving much of the work left in the areas of recombining and examining.

No special software or tools were required for the analytical process other than the analytical ability of the researcher. While this may seem simplistic and somewhat subject, it challenges the researcher to look beyond the given information and think deeper. Analyzing qualitative information requires a deep understanding of the subject and that was what the analysis pulled out of the researcher.

The research will also be a good source of reference to researchers who wish to explore this phenomenon and develop further or criticize its contents, all with the aim of improving upon the framework proposed.

## **II. Strategy: A term with many meanings**

Though a word in long-lasting use, researchers have been unable to generate a single definition of what strategy means. Some of these definitions that have been given much attention in recent times will be explored.

Before proceeding to define what strategy, it is important to note what it is not. De Ruijter (2014) posits that it is not a single plan for achieving the goal of the organization. Static strategy formulation focuses heavily on goal setting, budgeting, and bonuses (De Ruijter, 2014, p. 7). Fig. 1 shows the difference between a static, conventional approach to strategy in most firms compared to what modern strategy means.

Budget	Strategy
Single Plan	Several outcomes
Procedure	Social Processes
Financially oriented	Involves all departments
Linear	Dynamic
Forecast: • One future • Implicit uncertainty	Scenarios: • Several futures • Explicit uncertainty

**Fig. 1 . Budget is not a strategy**

**Source: Ruijter, 2014**

Thinking of strategy as static presumes that the situation of the organization and the environment is static, which is not a very valid assumption considering the fact that the only constant thing in this strategy, within corporations, has become less concerned with detailed plans and more about guidelines for success (Grant, 2010).

According to Mintzberg, et al., (2014) the word ‘strategy’ can be defined in multiple dimensions in order to maneuver the confusion that has lingered over its real definition for several years. Accordingly, they proposed that strategy has five main definitions based on the purpose of it. These include strategy as a plan, ploy, pattern, position, and as a perspective.

Grant (2010 pp. 17) also shares the same multiple-dimension approach to defining strategy. As decision support, he defines strategy as a support or theme that gives coherence to the decisions of an individual or an organization. By this, he meant that strategy helps to improve decision making by constraining the range of decision alternatives, thus acting as a rule of thumb making the search for an acceptable solution to a problem easier. Another way the strategy is a useful decision support is that it permits the knowledge of different individuals to be pulled together and integrated. It also facilitates the use of analytical tools.

Grant (2010), within his multiple dimension approach, sees strategy as a communication device to promote coordination, as well as being forward-looking. It is the forward-looking dimension of strategy that we shall be exploring within this research.

Having established that a strategy is neither a static nor single-dimension process/concept (Grant, 2010; Ruijter, 2014; Mintzberg, et al., 2014), but rather multi-faceted, we will look into the one of the most popular tools to deal with uncertainty and changing situations in the process of strategy formulation; scenario planning, which is only one of the eight topics that make the entire strategy formulation a dynamic one.

According to De Ruijter (2014) to make strategy formulation process a dynamic one, the eight topics that need to be involved are: mission, trends, scenarios, options, vision, roadmap, monitoring, and action. Figure 2.2 gives the impression of the relationships between these topics.

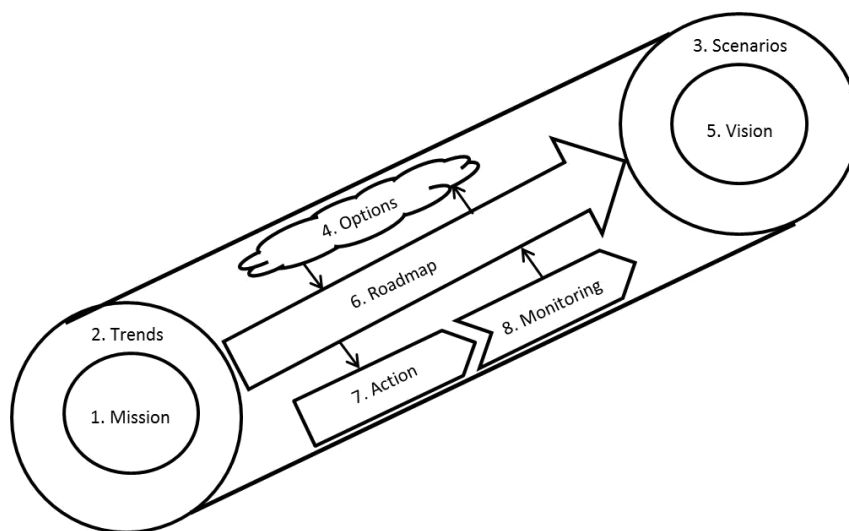


Fig. 2.2 Strategy in the broad sense

Source: Ruijter, 2014

## 2.1. Scenarios

Porter (1985) defines a *scenario* as an internally consistent view of what the future might turn out to be. Like other authors that will be reviewed, he agrees that it is not a forecast. Schwartz (1991) also defined scenarios as tools for helping us to take a long view in a world of great uncertainty. One of the definitions of a ‘tool’ in the Oxford dictionary is that it is “a thing used to help perform a job”.

There is also the element of ‘ordering one’s perceptions’ which connotes the fact that prior to the application of scenarios there is some element of disorder or confusion probably emanating from the challenge of dealing with uncertainty. Uncertainties can create a disturbing and distorting perception for managers and leaders. ‘Alternative future environment’ debunks the possibility that could occur either within a business or macro environment. It therefore goes to imply that the environments within which businesses and organizations operate in are continually changing.

It can, therefore, be deduced from Schwartz’s (1991) definition that scenarios are ideal for decision-making in uncertain times, and that they avoid possible disappointments that a business may encounter due to lack of proper planning.

Scenarios are neither predictions nor forecasts. Predictions mean different things to different professions and disciplines. Science and non-science based subjects have different interpretations for what they are. According to Sarewitz, et al.(2000) and MacCracken(2001) scientists perceive predictions as conditional probabilistic declarations while non-scientists see them as things that will happen no matter the circumstances.

Forecasts are, however, the best estimates derived from an approach, model or person (Peterson, et al., 2003). There is a common understanding among the public and decision makers that forecasts may or may not come to pass or turn out to be true (McCracken, 2001). This implies that in terms of uncertainties, forecasts are more uncertain than predictions, especially to non-science practitioners.

It is also important to clarify that scenarios are not the final products of outside futurists, but rather the results of management insights and perceptions (Ralston & Wilson, 2006). This school of thought is very important, especially to new practitioners of the tool. The organization seeking to use the tool is a very important part of the whole process. They must not leave the entire work of creating the scenarios to the outside consultant. This suggests the integrated nature of scenario formulation.

Scenario planning is not strategic planning (Sayers, 2010). Nicola Sayers' report on a guide to scenario planning for higher education is a very relevant document that cannot be overlooked considering the focus of this paper. Her research is a joint work by the Leadership Foundation for Higher Education and the Association of Commonwealth Universities. According to Sayers (2010), the ultimate goal of scenario planning is to better inform strategic planning by challenging the boundaries within which strategy normally takes place. Conventionally, strategic plans adopt one, official, future and plan accordingly. Scenarios, by contrast, are 'hypotheses of different futures specifically designed to highlight the risks and opportunities involved in specific strategic issues' (Ogilvy & Schwartz, 1998).

Sayers (2010) argues that whereas practitioners tend to predominantly limit the scope of strategy to the immediate future – often the next quarter or year, or at most five or ten year plan – scenario planning tends to have a longer scope, typically 20 or 30 years. It is very important to also note that the main objective of scenario planning is not a scenario plan. It is commonplace to misconstrue that since in strategic planning the main objective and outcome is a strategic plan, then in scenario planning the, the outcome will be a scenario plan.

## **2.2. Developing Scenarios**

Most organizations, once they have very good information to develop trends, stick to that stage and develop strategies along the trends analyzed. However De Ruijter (2014) argues that because they are based on the past trends alone cannot reveal as much as is required about the future in order to make decisions. The whole idea of scenarios is to present the plausible outcomes or futures that an organization or institution may end up. It is, therefore, necessary to conduct the exercise in a way manner that combines developments in a meaningful way, with the aid of modelling and scenario thinking.

De Ruijter (2014) has clearly explained what needs to be considered at this stage of the process. Issues like time horizon, determining the key uncertainties, elaborating scenarios through the use of the 'trilemma' framework, the logic behind elaborating scenarios, quantification of scenarios and modelling of trends within the scenario were identified as crucial to the development of scenarios. Another important element in the development process of scenarios is visualization or how the scenarios are presented to move people to action (De Ruijter, 2014).

### **2.2.1. Horizons**

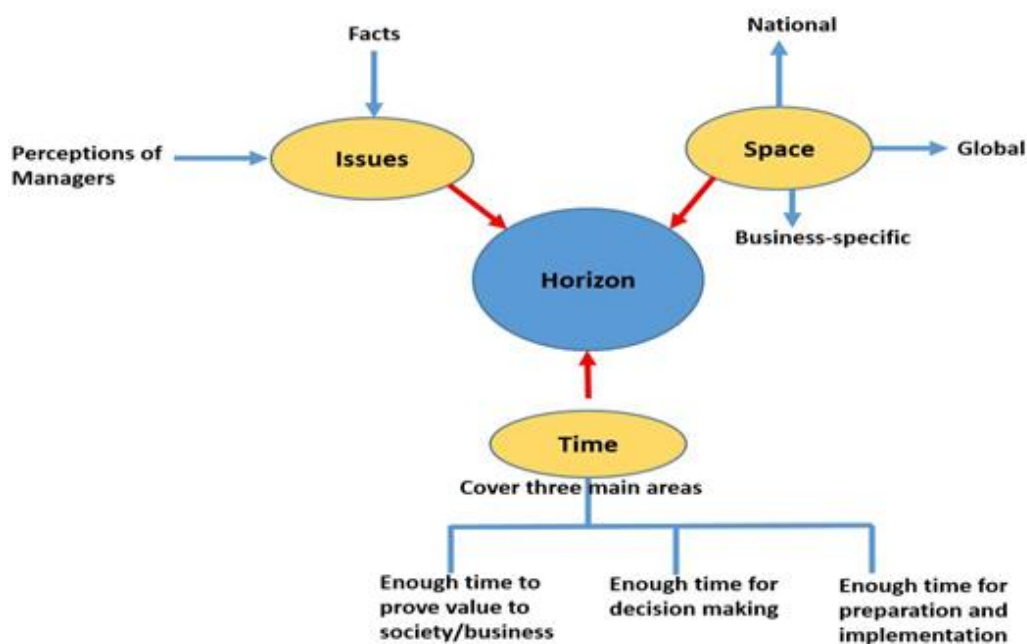
According to De Ruijter (2014) scenarios have a certain horizon in terms of space, time and issues covered. The space which the scenarios cover and how they are filled in, according to the author, very much depends on the organization, the people on whom the scenarios are made and the environment within which the organization operates. The space may refer to national, global or be business-specific.

As a rule of thumb, the time horizon must cover enough time to prove value of to the society at large or the business stakeholders or shareholders/owners. It must also cover enough time for decision making. Some cultures or businesses may be faster than others in this regard. The last area the time horizon must cover is enough time for preparation and implementation (De Ruijter, 2014).

There are implications to the uncertainty scenarios carry when the time horizons are either too long or too short. The shorter the horizon, the less the uncertainty, stimulus and surprise that the scenario will carry while a horizon too long will lack relevance and commitment from the appropriate stakeholders (De Ruijter, 2014).

The issues that arise within the scenarios should that which are a bridge between the worries of the managers and people within the organization and the worries of the outside world (De Ruijter, 2014). The fig. 2.3 below summarizes the concept of horizon in scenario planning.

**Fig. Pictorial Representation of the Framework for Determining Horizon in Scenario Planning exercise**



Source: By Author Based on description in De Ruijter (2014)

### 2.2.2. Determining key uncertainties

Key uncertainties are defined as the trend or influence clusters that are most likely to have the biggest impact on future developments and events if they do really occur, but at the same time are the most uncertain (De Ruijter, 2014). There is an infinite number of events that could impact a given event, but because the number infinite is an unworkable number to deal with, he proposes a framework made of two axes with mutually independent key uncertainties.

According to the framework proposed, to be able to determine the key uncertainties it is important for the participants to let go of false uncertainties and rather spend ample time to define the uncertainties that are of importance to the organization (De Ruijter, 2014 pp. 63).

According to the framework,

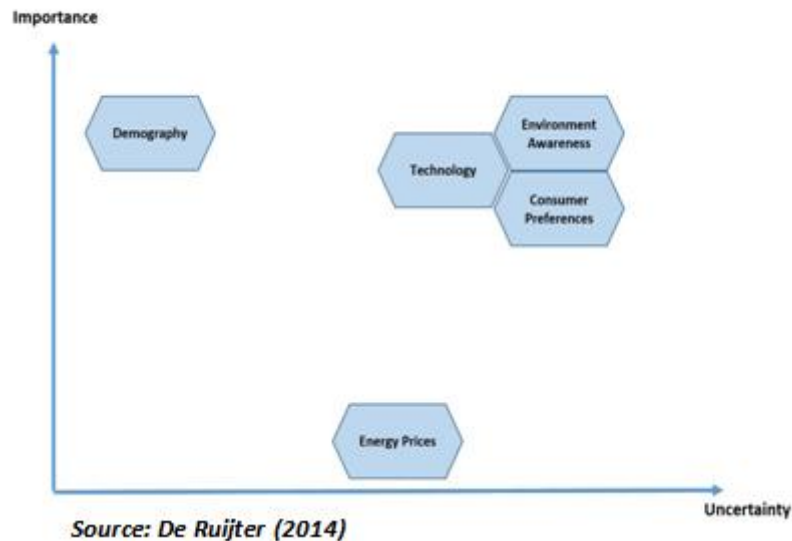
**Step 1:** Ensuring that all participants let go of (false) certainties and rather spendtime developing or defining what key uncertainties affect the organization the most. In making this decision, it is important to embrace the cultural factors that bind decision-making within a country or organization. While some may be very open and democratic, others may be closed and autocratic. A good understanding of models such as Hofstede's Dimension of culture is required for smooth running such a crucial exercise.

**Step 2:** Map out all trends clusters on two axes. One axis represents the degree ofuncertainty of the clusters and the other represent the importance of the clusters. Clusters which end up in the upper right corner are the key uncertainties.

To get the commitment desired to move the completed scenarios, it is important to select these key uncertainties in a group. Three approaches are recommended:Firstly by scoring the various clusters for their importance or uncertainties, secondly by voting, and lastly by discussing until a consensus is reached.

According to De Ruijter (2014), a good indicator of what a key driving force is when certain clusters demonstrate several relations with many other clusters, and could therefore drive many other clusters. Fig. 2.4 below, shows the importance-uncertainty matrix.

Fig. Importance-Uncertainty Matrix

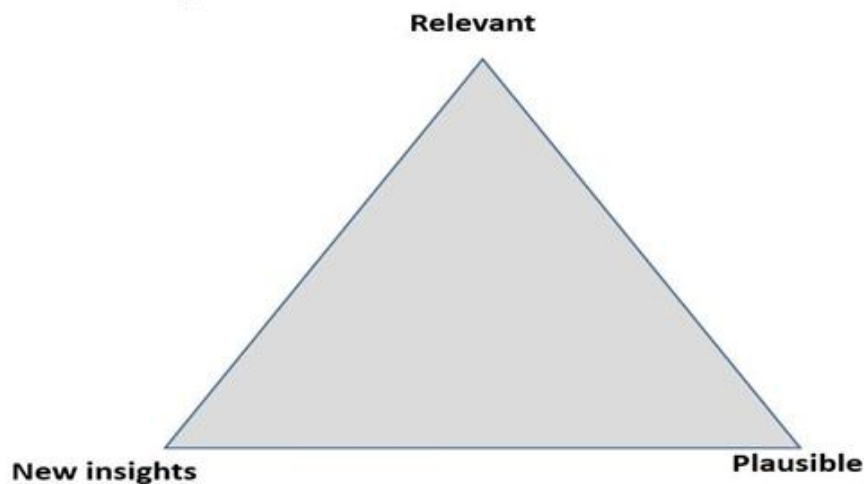


### 2.2.3. Elaborating the Scenarios

To strengthen and improve the scenarios which have been created within the framework, there is the need to ensure that they follow a set of three criteria laid out by De Ruijter (2014). These are relevance, plausibility, and new insights.

According to De Ruijter (2014), the criterion of plausibility concerns the credibility of the scenarios while relevance talks about how the scenarios must be useful to the project and the organization since they are not a goal in themselves. According to De Ruijter (2014), good scenarios trigger people action and help them let go of false certainties. To do this they must provide new insights that invite action, and must also be surprising in nature.

Fig 2.5. Three Criteria for good scenarios



Source: De Ruijter (2014)

Fig. 2.5. Shows a trilemma model; the three criteria for good scenarios

### 2.2.4. Visualizing Scenarios

When all the scenarios have been properly elaborated, there is the need to package them in a way and manner that will attract the interest of stakeholders as well the push people into actions (De Ruijter, 2014).

### 2.3. Ghana Higher Education Sector

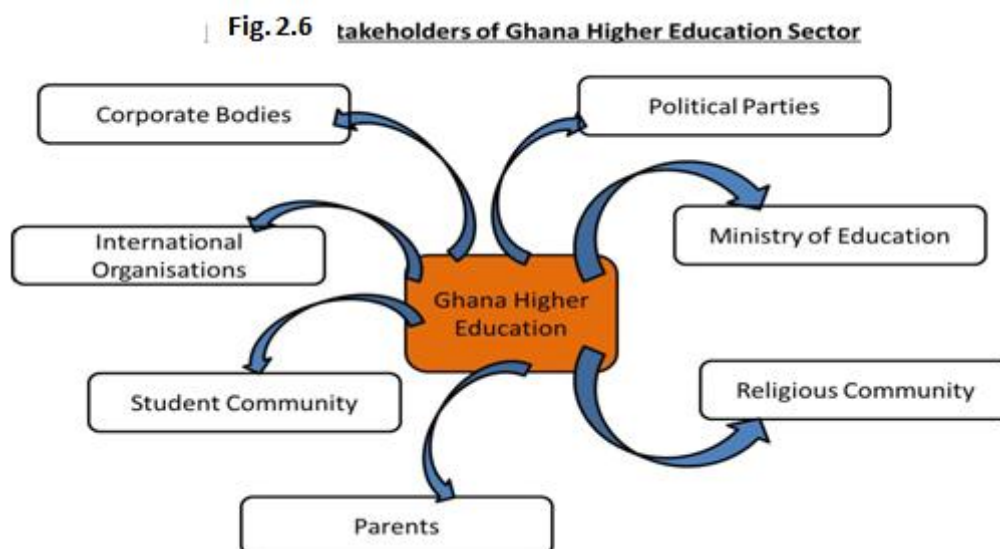
Higher education in Ghana, also known as tertiary education, has been beset by some interesting developments in the past years, and those incidences have given the researcher reason to believe that the scenario planning exercise will be useful and relevant to decision. Tertiary education is education that is offered after thesecondary level. It includes universities, polytechnics, Colleges of Education, specialized institutions and other institutions offering training leading to awards of diplomas and degrees (Adu-Agyem& Osei-Poku, 2012). While other sub-sectors of the education sector like junior high, senior high schools, primary and kindergarten have undergone drastic structural changes over the years (GoG, 2014) the higher education sector has seen little changes structurally. This lack of structural change in terms of content and relevance to industry in the face of fast paced changing external environment as resulted in what has been described as a skills gap or quality mismatch (Sattinger, 2012). As Sattinger (2012) sees it, qualitative mismatches arise when the qualifications or skills of workers, individually are different from the qualifications or skills required for their jobs which eventually leads to both employee and employer dissatisfaction. Employability or graduate unemployment, not only in Ghana but neighboring West African countries, also becomes a great issue to tackle with Nigeria having the highest rate of 23% graduate unemployment rate (McCowan, 2014).

#### 2.3.1. Stakeholders in the Ghana Higher Education Sector

Stakeholder theory suggests that if we adopt as a unit of analysis the relationships between a business and the groups and individuals who can affect or are affected by it, then we have a better chance to deal effectively with the three problems associated with it (Freeman, et al., 2010). According the Freeman, et al. (2010) these three problems are the problems of the value creation and trade, ethics of capitalism, and managerial mindset.

The debate about the issues of quality within the Ghana Higher Education (HE) sector has not received as much attention as the lower levels of education by political parties who vie for office. When education is talked about within those circles of politics it is mainly referring to secondary level or lower. It is, however, noteworthy that traditional and emerging stakeholders, especially in the private sector, have developed great interest in the development of H.E. in Ghana, therefore contributing to the increase in numbers attending tertiary institutions in Ghana (McCowan, 2014).

Based on the stakeholder theory and events that have occurred in the past regarding higher education in Ghana, the following have been identified as some of the most the important stakeholders within the H.E. sector, as seen in Fig. 2.6 below.





The Ministry of Education of Ghana (MoE) has as part of its mission to carry out the Government's vision of using quality education delivery to accelerate the nation's socio economic development (GoG, 2014). Education sector policy, planning and monitoring are the overall responsibilities of the MoE. According to the Education Strategic Plan (ESP) (MoE, 2003) various agencies have been set up under the MoE to ensure the delivery and implementation of education. This responsibility is intended to decentralize the entire system of management of the education sector. This breakdown has been done into institutions, Districts and Regions in the country.

According to the ESP, of these institutions, the Ghana Education Service (GES) is the agency that implements the Basic and Senior Secondary education components, including Technical and Vocational institutes. GES is therefore responsible for schools and, by virtue of the size of these sub-sectors, about four-fifths of the annual expenditure on education.

The other agencies cover the rest of the education sector. Of these the National Council for Tertiary Education (NCTE) and the Non-Formal Education Division (NFED) have important sub-sectoral areas of responsibility regarding education delivery. Appendix A contains an outline organogram of the MoE and its agencies. It also highlights those agencies that are relevant to higher education in Ghana.

NCTE was established by Act 454 of 1993. Operating with the Vision of "Leading tertiary education to greater heights" (NCTE, 2014). According to the NCTE (2014) there are sixty-four (64) public tertiary institutions under the NCTE – Universities (9), Polytechnics (10), Colleges of Education (38), Specialized Institutions (2), Regulatory Bodies (3), and other sub-vented organizations (3). In addition, there are about (94) accredited private tertiary institutions (as at December 2013). The membership of the NCTE Council also gives a clear idea as to who they consider to be their stakeholders. The other stakeholders include Ministry of Employment & Labor Relations, National Accreditation Board, Ghana Academy of Arts and Sciences, National Development Planning Commission, Ministry of Finance, Conference of Rectors of Polytechnics (CORP), and Centre for Scientific and Industrial Research (NCTE, 2014).

With the growing number of private tertiary institutions in Ghana, the Council for Independent Universities (CIU) has also emerged. The Council of Independent Universities (CIU), formerly the Conference of Heads of Private Universities, Ghana (CHPUG) was formed at a meeting held on November 25, 2004 at the Central University College, Mataheko Campus, Accra, Ghana where the secretariat is currently located. The membership of the council currently stands at 30 out of the 94 Private HE institutions reported by the NCTE. CIU's core mandate is to embark on advocacy for quality tertiary education, fashion-out policies, and handle regulatory issues that affect member institutions (Daily Graphic, 2014).

The CIU has expressed in public what they perceive to be unfair treatment from public institutions to whom they are mentees. The structure of the tertiary educational system in Ghana, which is the 'affiliation system', is such that private university colleges understudy a public university until the private university college becomes mature and receives a presidential charter to run its own graduate programs (BFT, 2014). The CIU believes the system is exploitative, thus there isn't that cohesion between two main institutions that over higher education in Ghana.

Political parties are also major stakeholders in the Higher education sector in Ghana. Major reforms that have taken place in the country's educational system occurred when different political parties took office (GoG, 2014). The implementation of Ghana's most recent education reform, which began in 1987, brought to the fore many problems in the objectives, content, administration and the management of education.

Since democratic rule in 1992, major political parties such as the National Democratic Council (NDC) and the New Patriotic party (NPP) have alternated leadership in governance and have implemented various educational policies, especially at the pre-tertiary levels, that have drastically impacted on the nation (GoG, 2014; MoE, 2003). This goes to show, based on the stakeholder theory, how relevant political parties to the education sector, and the level of impact they could make on the higher education sector in Ghana

The Ghanaian religious community has been a great influencer in the provision of higher education since 1995 when the Valley View University, an institution owned by the Seventh Day Adventist Church (SDA), then called the Adventist Missionary College, started offering four-year bachelor degree courses (Valley View University, 2014). Before then, In Ghana, there was a state monopoly on tertiary education immediately after independence (Utuka, 2008). The period of monopoly was considered by Balderson (1979) as 'golden period in higher education' for the state.

Since Valley View University's establishment, the number of private universities, owned by religious bodies, offering four-year bachelor degree programs has grown considerably with the Anglicans (Anglican University, 2014), Methodists (Methodist University, 2014), Catholics (Catholic University, 2014), Islam Society, and Presbyterian church contributing to the increase in enrolments in Tertiary institutions (Effah, 2006). In this regard, and in line with the stakeholder theory, the religious community plays a key stakeholder.

Another group of people who are directly affected by the higher education sector is the business community. The business community is the first beneficiary of the higher education sector, and significantly



determines the employability rate of graduates (Sattinger, 2012; McCowan, 2014). High employability among graduates by, especially, the private sector indicates a positive relationship between of what educational institutions are teaching and what the business environment considers to be relevant (Sattinger, 2012).

International organizations, mainly not-for-profit, such as the British Council of Ghana (BC) have gradually evolved over the last seventy years in their operations in Ghana. The organization which boasts as the place to start when considering to connect with educational institutions in the United Kingdom (UK), has developed programs in partnership with some other stakeholders like the private business sector to organize events that have changed the face of education and employability in the Ghana (British Council Ghana, 2014). Other institutions whose actions affect, indirectly the HE in Ghana are Association of African Universities (AAU), United Nations Educational, Scientific and Cultural Organizations (UNESCO), and Association for the Development of Education in Africa (ADEA) (UNESCO, 2006). Their influence is mainly through offering platforms for collaborations with other institutions and also research.

Students are one of the major stakeholders of the HE sector. Issues regarding their employability, competitiveness in the global market, and standard on living are dependent on the level and quality of education that their macro environment affords them (McCowan, 2014).

## **2.4. Conceptual Framework**

Analytical scenario approaches use formal models or simulations to develop both broad alternative scenarios and their details (Ralston & Wilson, 2006).

Intuitive scenario approaches, however, focus more on visions that are qualitative in nature of the future. These visions reflect the mental maps of the people developing and making use of the scenarios. While they may also have considerable analytical details, intuition plays a greater part of the development process (Ralston & Wilson, 2006)

After the publication by Ralston & Wilson (2006), Janseen et al (2007), in a document published in Dutch but cited in De Ruijter (2014) talks about how there exists basic two schools of thought with respect to approach to scenario planning. The first centers more on content while the other on the process.

Practitioners who have focused on the content aspect of scenarios emphasize on the presence of multiple, and equally possible futures put together in scenarios which assist organizations to avoid surprises in the future. This school of thought is said to be the area of field experts, mathematicians who employ mathematical models, and scientists who produce reports to make the contents as plausible as possible. De Ruijter (2014) posits that it is the best approach to use if the organization applying the scenario planning methodology puts high importance on plausibility. It is important to also note that this approach does not engage stakeholders as it should. A lot depends on the experts.

The other approach, which is the process-oriented, focuses on engaging stakeholders in a dialogue to open them for nouvelle ideas and to make them think beyond boundaries (De Ruijter, 2014). This approach challenges stakeholders to think of the unthinkable before it become probable

Having looked at both approaches critically, it can be mentioned that both approaches can work hand-in-hand, and must therefore not be seen or used in complete isolation. Interaction with the stakeholders is as important as ensuring the content is as plausible as possible, however, each project will demand whether more of one approach should be used over the other

Having reviewed the several methodologies that have existed and been used, the most recent approach of the Shell/GBN methodology which was also highly used in educational institutions globally will be used as a foundation theory. This process follows the process-oriented school of thought as mentioned in De Ruijter (2014). This approach is selected because of the level of importance placed on engaging stakeholders in higher education rather than on expert knowledge.

The process-oriented leaders of an organization, in an attempt to develop a dynamic strategy via scenario planning, must consider having the following eight points on their agenda, as proposed by De Ruijter (2014). Working within this framework will keep the entire process very structured, initiating any missing dialogues, keeping track of mutual relationships and their connections with the implementation process. The framework is based on fig. 2.1.

## **III. The Case Study: Universities United Kingdom (UUK) Scenario Project**

Having explored the process-oriented approach in the literature review, and justifying why the case study approach is the most appropriate to use, the research will look at the case of the Universities UKs (UUK) scenario project which started in 2010. This project explores in details the whole concept of process-oriented approach to scenario planning and is also very relevant to the research question.

In October 2010, the UUK facilitated what they called a ‘futures exercise’ to look forward to what higher education might resemble by 2040 with the objective of to help individual universities and higher

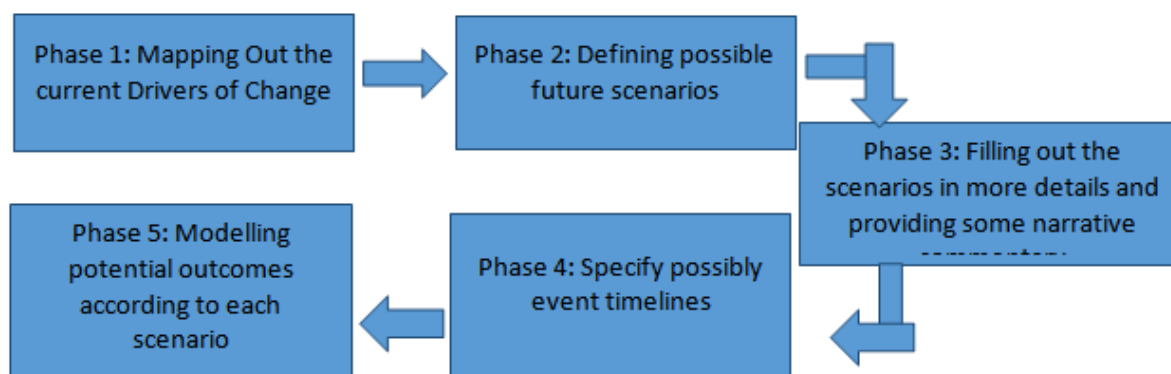
educational institutions develop their own thinking about the factors facing the sector and how they will respond to these factors (UUK, 2014).

Based on information provided, including materials from the project available on the website, the case is summarized as seen below:

Project Sponsors	Universities UK
Name of Project	Futures Exercise
Commencement – End Time	October 2010 – June 2011
Aims of the Project	1. Take stock of longer term drivers and shape of the sector 2. Help start a conversation on the long term future of the sector
Stakeholders Involved	1. UUK Policy team 2. Vice Chancellors in the Longer Term Strategy Network 3. Several other stakeholder groups from other universities

**The Process:** The approach taken allowed the following to be covered: reach a collective discussion of the sort of future towards which members of UUK would like to see the sector move; aim to set the agenda, rather than merely respond to external events; and better reflect the urgency with which the current issues need to be dealt with. This approach led to an outcome which represented the future as a series of possible paths, identifying the most important assumptions along the way.

The main phases through which the scenario exercise proceeded was as follows:



Source: flow chart compiled by author based on report from UUK (2014)

According to the report, the themes and analysis set out were generated through an interactive process of development, testing and reflection carried out over a period of months. The principal steps followed according to the report were:

Step 1	Initial scoping of the main issues facing UK higher education
Step 2	A series of development workshops with staff and stakeholders looking at the trends shaping the system
Step 3	Testing assumptions through a series of workshops held in a range of universities
Step 4	A 24-hour round table discussion with the Longer Term Strategy Network, reflecting on the wider themes and implications from the exercise
Step 5	Individual conversations with academics, university administrators, and other stakeholders to develop and refine the analyses

**Tools for Achieving Results:** The report identified 5 main tools for achieving their results, these included:

- i. Long Term Strategic Network (LTSN) 24 hours round table in June

- ii. Three LTSN Meetings
- iii. Three University Workshops
- iv. Three UUK Staff workshops
- v. Online Survey
- vi. Planner Forum Workshop

Out of these workshops, the following challenges were identified as the ongoing challenges of the 21st century facing higher education in UK.



Source: flow chart compiled by author based on report from UUK (2014)

Image adapted from Professor Paul O'Prey's presentation at the UUK Members Conference (2011)

### Main Challenges Faced:

The main challenge was striking the right balance between encouraging the group to move beyond immediate concerns whilst also maintaining a degree of focus without being too prescriptive. This was particularly challenging they were engaging with senior groups, including the network of vice chancellors themselves who only meet infrequently. The solution was getting the right amount of inputs – which they did by running a series of workshops with different groups and combining the findings during the main session. They also chose to present the outcomes as a tool rather than an answer so that we could avoid the problem of presenting visions of the future which are inevitably wrong and could be politically sensitive.

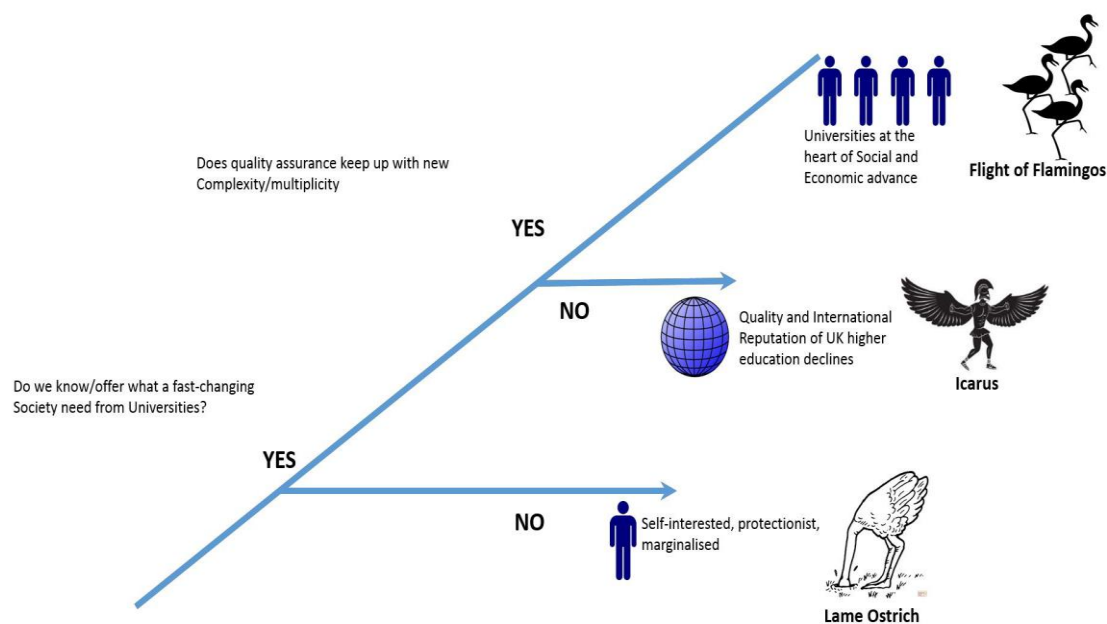
### Scenarios Developed:

The UUK project generated a number of scenarios through to 2040. The design of these was based on the structure of the influential Mont Fleur scenarios (developed as part of the democratization process in South Africa in the early 1990s). The three example scenarios for the future of higher education are:

- Flight of the Flamingos 'vision' scenario: 'Networks of universities at the heart of social and economic advance'
- Icarus: 'Rapid expansion at the expense of a global reputation for excellence'
- Lame Ostrich: 'Internecine struggles and marginalization'

Fig.4.2 shows the thought process that went into developing each of the scenarios. The format takes the same design as the influential Mont Fleur scenarios

Fig. 4.2. Scenarios Developed by UUK in the 'Futures Exercise' Project



Source: UUK Report: Futures for higher education: analysing trends

According to the conclusions from the exercise, in order to achieve the goal of the 'flight of the flamingos', all stakeholders including the institutions, the educational sector as a whole, and government will need to work together to:

- maintain a global reputation for quality by preserving the highest standards across a more diverse system
- invest and develop good practice standards in delivery to keep the sector at the forefront of innovation
- deliver on agendas of wide public importance – such as social mobility, and research and innovation – which require cooperation between institutions to ensure effective outcomes
- maintain the autonomy and freedom of institutions to set their own agendas and strategies

#### IV. Findings and Analysis

The findings from the research are based on the literature reviewed on the both UUKs scenario project as well Ghana's ESP, structure of the governing bodies of the higher education sector, as well as reviewed literature on the Shell/GBN Methodology.

It is noteworthy that the structure and membership of the Universities UK, as an institution is more organized, well represented, and poised to take decisions that can stand the course of time compared with Ghana's two main institutions, CIU and NCTE, which oversee tertiary education. Universities UK members are the executive heads (vice-chancellors/principals) of UK university institutions which have met the criteria for membership agreed by the board of UUK. The total number of member institutions represented in UUKs council is 133. The mission of the UUK is to be the definitive voice for universities in the UK and to provide high quality leadership and support to our members, to promote a successful and diverse higher education sector. It boasts of being an autonomous body.

On the other hand, Ghana's Council of Independent Universities (CIU) is targeted at non-government institutions only and also has a weak membership of 30 out of 94 institutions as stated by the NCTE. The National Council for Tertiary Education (NCTE) also has representatives from almost all sectors except private Universities or tertiary institutions, and is also not autonomous as the UUK.

This is one point of major concern in the Ghanaian case. Any attempts to emulate positive efforts from the Universities UKs (which is one large body of Universities well represented) scenario project will be undermined mainly due to the 'structure problem' of both NCTE and CIU. NCTE, looking at its functions as provided in Section 2(1) of Act 454, is more politically biased and will have its membership probably changing every time a new government comes into power. Thirteen out of the eighteen members of the council are government or agencies related to the government and therefore appointed by the government. This will pose a huge threat to objectivity and continuity of policies. In this light, it can be assumed that the government will always have its own way, even in a democratically approved decision.

Scenario planning cannot be effective if it is either initiated or done by NCTE or CIU since its membership is not complete. A scenario project undertaken by NCTE will be seen as a politically motivated and will therefore not be appealing to political opponents, likewise any scenario project undertaken by CIU, with its current membership.

This is the first major issue that needs to be addressed through structural adjustment.

- Throughout all the documents reviewed in the Ghanaian case, there seems not to be a unified or common vision for higher education in Ghana. There is a major question of ‘what is the shared vision for higher education in Ghana’ which needs to be answered by all stakeholders in one voice and language. NCTE has been operating since 1993 with the same vision “Leading tertiary education to greater heights”. It has not, however, been recorded or documented whether this vision has been reviewed or not. It is expected that an institution which oversees all tertiary institutions in Ghana will have a mission that is inspiring and will drive or motivate member institutions to action. The stated vision does not contain any elements that allow it to be measured or assessed. The CIU, through its Chairman, has stated that it also has as its vision to articulate and promote issues relating to private tertiary education in Ghana, in order to foster world-class standards and meet the country’s development needs or demands.
- These two visions from the two institutions seem to be a contributing factor to the many challenges plaguing the HE sector in Ghana. Because of the lack of uniform vision, each stakeholder seems to be seeking his own interest, and CIU is unclear when its member institutions will receive their autonomy, thus leading to an intense rivalry between both sub-sectors instead of there being complementary to each other.
- The challenge of getting decision makers to look beyond current problems and rather focus on the future without being predictive is a real one. Every institution or organization has its own problems and this has the tendency to cloud the long term mindset of leaders. The role of the facilitator is therefore very crucial to helping participants look beyond their immediate problems.
- Ghana’s Education Strategic Plan (ESP) is usually an inside and expert process which does not really get the public domain involved in major discussions or in the media about possible steps or plans towards a new strategic plan. A document as important as a Strategic Plan for a sensitive sector like education should, ideally, be in the news for discussion by the public. Think Tanks and policy research institutes are yet to give special, exclusive and dedicated attention to the subject of higher education planning. Considering the duration it took for the UUK scenario project to be completed, it would have been ideal for any strategic process towards Policy formulation in the higher education sector to be given at least twelve months prior to the expiration of the most modern policy or strategy.
- While the framework proposed by De Ruijter (2014) seems very comprehensive and methodical, in practice – based on the case from UUK scenario project – it does not indicate how organizational learning and performance will be measured. Each stage of the process should allow for measurement of the learning that takes place among participants and how they plan to impart that knowledge into non-attendees who are also employees of the organization.
- As a decision making tool, the scenario planning process is quite flexible regarding when it can be adopted by a company. Based on the mind map created by the Universities UK, an organization can adopt the process even after they have used another tool for their strategic planning. This flexibility of use of the process makes it a highly desirable tool for potential adopters to test their already existing strategic plans with alternative futures.

## **V. Limitations of the research and future considerations for further research**

The paper sought to answer the question why scenario planning is a useful tool for undertaking long term strategic planning exercises in Ghana. It, therefore, does not explore the how and the process into details. The goal of the paper was to lay the foundation on the subject matter of scenario planning in the Ghanaian context since not much research has been done in this area, and especially in the area of higher education.

The research is also qualitative in nature, therefore no mathematical models or regressions were explored. This, however, does not eliminate the adoption of scientific process to the research. The research adopted a research question approach and also identified a framework, which is the Shell/GBN Methodology, a process-oriented approach, to back the approach employed by the UUK Project. The same methodology is used to explain why the current approach used for decision-making through Education Strategic Plan (ESP) may not suffice in executing the whole process scenario planning.

Based on the outcomes of this paper, the researchers aim to explore the following areas in order to provide deeper understanding of the concept of scenario planning or long term strategic for both academic and policy-making purposes: to explore the behaviors of stakeholders identified in this paper and the payoffs achieved so far by using the game theory, and also recommend possible strategies that stakeholders can adopt to achieve Nash equilibrium. The researchers will also explore how the current process-oriented method of

scenario planning could further be enhanced by the application of agent-based model or computer experimentation (CE) models.

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