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Economic Development**

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Formation of Law**

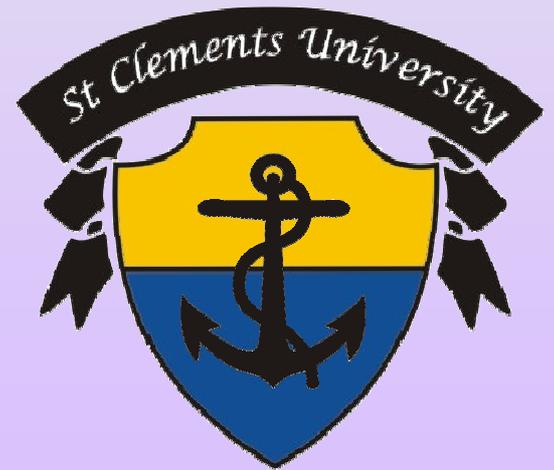
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**Veritas* is Latin for truth, reality.

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HOW AFRICA CAN LEVERAGE “POLICY” AS A TOOL FOR ECONOMIC DEVELOPMENT

Dr Gabriel Udendeh*

According to Webster’s Dictionary, “policy” is a *noun* that represents several concepts among which are: prudence or wisdom in the management of affairs; management or procedure based primarily on material interest; a definite course or method of action selected from among alternatives under given conditions, in aid of present and future decisions; high-level overall plan encompassing the general goals of the organization and acceptable procedures, especially of a governmental body.

Cole (1998) refers to “policy” as a statement by an organization indicating what it will or not do in pursuance of its overall purpose and objective. He notes that policies are neither objectives nor plans; rather, they are statements of conduct which reflect or contribute to organizational culture, and are largely influenced by owners of the organization.

Proceeding from this premise, one could suggest that a policy is a **guide** which provides managers with a basis on which to make decision in given contexts. A policy may be viewed as a general statement of understanding that guides managerial actions. Policies are therefore, part of strategy formulation and they aim at enhancing environment for effective realization of set objectives.

ORIGIN OF POLICY

The physiology of “policy” cannot be complete without reference to an institution’s contemporary history; existential theory of “policy” is as old as the institution. The Catholic Church, being one of the oldest institutions on earth, owed its stability to its own policies. Max Weber, Henri Fayol and Lyndall Urwick, all pontificated on policies as tools that mainstream organization’s sustainability in terms of bureaucratic principles. The historian, Rennie (2002) underscored this when she drew “policy” closer to “history” with the observation that not until the advent of 18-20th centuries, history had provided a model as to how society should be governed. She noted that societal experience was the basis of policies, notwithstanding the advancement in scientific knowledge, concepts and methodologies in the last millennium which tended to demean the relevance of history. She concluded that historical trends continued to dictate the pattern of policy essence, which is attainment of objective.

Arising from the foregoing, one could seek to establish a relationship between a policy and an objective, in order words, a policy exists to aid achievement of an objective, while objective remains a precondition for legitimacy of an institution. Consequently, the basis for establishing an institution may be misplaced where

such institution has no objective to aspire to. Objectivizing an institution has been a core principle of the private sector with a target deliverable on profitability, while measuring performance in terms of cost-benefit analysis, to the envy of public institutions.

POLICY CONTENT

The content of a policy largely reflects the perspective and profile of the organization. Policies are developed generally around the shareholders’ view or the stakeholders’ view. Irrespective of any view, generally, a policy contains certain elements that encompass a statement of purpose, desired effect or outcome; scope and applicability; effective date and those responsible for its implementation. A shareholders’ view perspective lays emphasis on personal benefit of policy to the detriment of the stakeholders’ view which is more encompassing. With respect to governance principles, the former is ideal for corporate entities, while the latter for State Policy.

INSTITUTIONAL POLICY

Institutional policy expresses an organization’s official attitude to various forms of behavior, whether it is government, corporate or private entity. In government, public policy aims at the welfare of citizens either through fiscal benefits, monetary incentives or both. An expressive policy may be written, unwritten or a combination of both and it is subject to flexibility to meet the dynamics of the society, while the latitude to flex it lies with top management. A policy can be used by an entrepreneur, company or a State.

POLICY USE BY ENTREPRENEURS

Robert Owen’s experience typified a classic instance of policy use by entrepreneurs towards business success. As a mill owner in Scotland, a socialist, a reformer, a philanthropist and a humanitarian (Cole, 1998) devised an ingenious approach to productivity (objective) that contrasted sharply from those used by the scientific managers, including Frederick Winslow Taylor, Lyndall Urwick, Henri Fayol and Frank and Lillian Gilbreths. Owen believed productivity was best driven from the employee welfare and sought to abolish poverty with other environmental hostilities among workers to achieve their welfare in exchange for productivity. To recall his effort, as an employer at his textile mill in Scotland, Owen enhanced employee environment with a reduction in the length of working hours, provided meals at workplace, improved working condition in the factory, organized model estates near the cotton mills. Others were:

- Encouraged employees to plant trees, shrubs, flowers and organized gardens around them.
- Installed shower baths and toilets with clean environment.

- Painted the factory, fixed windows to enhance ventilation.
- Established day schools for children and night ones for workers.
- Abolished child labour.

The level of productivity on each count was enormous, which informed his view that workers were **vital machines** in contrast to the classical managers' treatment of workers as inanimate machines. There is no gainsaying that Robert Owen's staff welfare strategy achieved productivity at the mill, while the policy of **expansive benefit** assured every member of the cotton mill yard benefit of the welfare incentives.

In efforts to emulate the private sector incentive driven productivity, a number of government (public) institutions in Africa have had to define own service delivery standards in the form of objectives, however loose. These conjectured service delivery objectives formed the bedrock for their search for policies that would best guide the process of realizing the objectives. Those with a clear mandate have not faced the severe challenge of formulating policies in this direction, as the clarity of mandate provides them with a compass. However, the institutions without mandates or with unclear ones have had to either leverage on the roadmap for the millennium development goals (MDGs) or face being exploited by both foreign and local consultants.

CORPORATE POLICY

At the corporate level, responsibility for policy formulation is vested in the Board of Directors under the company laws of most African countries; and the Board's job it to formulate policies for the good governance of the company. This presupposes that the Board will work with the management team to situate policies in the context of objectives set for the company. It also, implies that members of the Board would be people of sound character, knowledge, resources and with capability to work as a team devoid of vested interest. To ensure a seamless team spirit between the Board and the management team, chief executive officers are made automatic members of the Board, while serving at the same time as heads of the management team in such organizations. However, the experience of many countries suggests that most chief executive officers overlook this tenet once they get appointed to these positions; hence most of them resort to prosecuting extra-company agenda.

STATE POLICY

A state policy is the general principle that underlies governance of an entity. It allows for collective commitment to a common destiny under an environment of freedom to express opinion, equality of

participation, evenness of access to opportunities, equity in distribution of favours and supremacy of rule of law. Experience overtime suggests that states that have developed their economies went through this route. Below is a selection of nations whose developmental policies are worthy of emulation:

Malaysia

Malaysia initially bore several resemblances to Nigerian economy in the early 1960s up to the 1980s. Malaysia understood the importance of policy as a tool of economic transformation at its early stage of independence in 1957. The country's policy of **structural change and growth with equity**, aided the use of earnings from natural resources to diversify its economy and improve the welfare of its citizens, (Yusof and Bhattasali, 2008). To achieve this goal, the country embarked on strategic planning, code-named Outlook Perspective Plan (OPP), with an initial 20-year time span (1971-1990) and after realizing the rapidity in the pace of global changes, it adopted a 10-year range in subsequent plans (1991-2000 and 2001-2010). The OPP has first, second and third tiers, comprising the long term plan (10 years), medium term plan (5 years) and short term plan (annual budget). The strategic plan provides the long term view of the development agenda, while the medium and short terms operationalize it (Economic Planning Unit, 2004). The medium term sets out the macro-economic targets, and scheduling of public sector development programs. By so doing, the plan provides guidance as to government favoured sectors to enable the private sector key into the programs. The tight program, aside from keeping government purposeful and busy, it promotes efficiency in the allocation of resources.

The 1971-1990 Plan (OPP) christened New Economic Policy (NEP) fundamentally altered the conceptual economic profile of the country, as it among other things, developed an economic blue print for the country, provided a basis for national unity, established new growth centres, modernized rural life, promoted social schemes to raise living standards, expanded the scope of opportunities and eradicated poverty through income and employment policies (Yusof & Bhattasali, ante).

The second development plan (1991-2000), retained the 10 year time horizon but postulated into year 2020 under a clearly stated vision. The strategic millennium plan, as one would call it, firmed up the charter of harmony among the citizenry as well as cement partnership between the private sector and the government to achieve resilience and competitiveness. This developmental policy projected the nation as a corporate entity jointly owned by the public and the private sectors, where both were regarded as partners and government machinery was organized to support the enterprise. In the opinion of Yusof and Bhattasali, (ibid), government officials were and still continue to be service-oriented with a charter that promotes

transparency and accountability. The OPP further provided for evolution of a knowledge-based culture, modernization of agriculture and the manufacturing industry, promotion of effective service delivery and openness to drive domestic growth and investments in the economy. The 2000-2010 plan focused on, among others, the development of a domestic financial system not only to attract investment and funds mobilization but to make it internationally competitive. The efforts made Malaysia an envied member of the Asian Tigers.

Singapore

Singapore's development agenda was basically set by its pioneer Prime Minister, Lee Kuan Yew with policies designed to bring out the best of Singaporeans at contributing to the society. The country used strong family ties, discipline and equality of opportunities among citizens to promote governance. As a city-state with virtually no natural resources, Singapore became a developed country due to its strength in **developing human resources and continuous investments in human capital**. Through its meritocracy policy, citizens were propelled to pursue personal achievements as the road map to the development of the City-nation. Lee Kuan Yew, the country's pioneer Prime Minister (1959-1990), set the stage for the country's development. As a British trained lawyer (along with his wife), he engineered policies that targeted citizens ownership of the country. For instance, he facilitated the passage of fundamental laws like the Religious Harmony Act, Presidential Council for Minority Rights Act, Employment Act and Industrial Relations Act.

In his speech at the national day rally in 2007, the Prime Minister affirmed that "Singapore's strength lay in its people; its dedicated workforce; capable leaders; cohesive society; and a strong Singapore team". To further cement the fundamental objective of state policy, Singaporean leaders are required to "possess a clear vision about the goals of the nation and how to achieve them; they regularly and effectively communicate such to the citizens; they provide efforts towards implementing the publicized plans; leaders listen to citizens' feedback and demonstrate empathy; leaders demonstrate fairness, honesty and readiness in acknowledging circumstances that warrant policy switches; leaders lead through exemplary behavior by demonstrating cleanliness, fairness and effectiveness" (Yong, 2010). The government of Singapore underscores the importance of citizens feedback by establishing a REACH portal to enable citizens discuss national issues.

Hong Kong

The sustained **enterprise** policy that drove Hong Kong's growth miracle has been well documented with its anchor on: even-handedness of the rule of law, ebullient education, the deliberate friendly business environment and a state of the art infrastructure. The

freedom of the Hong Kong people as guaranteed by the country's basic laws promotes ownership of private property, facilitates engagement in businesses to create wealth and restricts all forms of official interference. Businessmen in Hong Kong enjoy official recognition and high social status. The duration to register and commence a business in Hong Kong is a matter of a few days, which makes it the first out of 144 countries reviewed in the "2012 Annual Report of the Economic Freedom of the World".

Hong Kong policies deliberately encourage individuals to start and own businesses by providing financial support for business start-ups, encouraging partnerships and engaging the young ones in business mentoring programs. The tax laws are supportive with enablers like low rates, a low administrative burden and diminishing payments. The country has a 12 year compulsory education which offers the young equal opportunity to acquire basic education. This policy contributed to its attainment of literacy rate of 94 per cent as at 2012. The wage policy is friendly as its laws stipulate a minimum wage rate of \$28 per hour, implying \$4,368/month for 8 work \$Hong Kong at end 2012 was (1:7.8). The government does not owe any domestic debts, while its external debts accounted for 2.3 per cent of the external reserves, put at \$474,690 million at end December 2012 (Wong, 2013). Hong Kong government owns a few companies, including Water Supplies Department and Hong Kong Housing Department. These departments are not for profit but rather to provide essential services. These facilitative policies rendered Hong Kong a self-fulfilled City-State.

United Arab Emirates

The seven federating emirates of United Arab Emirates (UAE), namely: Dubai, Abu Dhabi, Sharjah, Ajman, Umm Al-Quwain, Ras Al Khaimah and Fujairan formally established on December 2, 1971, as one country to achieve the common goal of economic prosperity, in spite of their differing individual characteristics,. Between 1973 and 1982 the country used the policy of **resource-based-industrialization (RBI)** to kick-start development of its economic infrastructure. Prior to oil discovery and exportation, the component states, with a staccato of narrow economies, depended largely on subsistence agriculture (Shilab, 1999). The merger created synergy that facilitated diversification in earnings, especially from industrialization, tourism and property industries. To further leverage on this, the country designs its education policy to target mandatory free and compulsory education at the primary level for all UAE citizens. Higher education is also liberalized and made competitive within the country, with generous scholarships for students both in local and foreign universities.

Botswana

The first National Development Plan of the government of Botswana (1968-1973) directed its development efforts towards **raising the standard of living of its citizens**. The policy strategy was predicated on the need to eradicate poverty, provide social justice, develop basic infrastructure and engender social system. The policy also, aimed at economic diversification with emphasis on the development of infrastructure, tourism, agriculture and education. The Town and Country Planning Act, 1977, Urban Development Standards Act of 1992 and Development Control Code of 1995, all facilitated orderly planning of settlements in Botswana. The country has continued to grant investors financial incentives to establish employment generating activities with inbuilt mechanism to spur the participation of women.

LESSONS FROM GLOBAL EXPERIENCE

A review of country experience reveals that their development policies unequivocally target **citizens' welfare**. Variables to anchor this fundamental objective include: cohesiveness, planning, governance, the rule of law, education, economic diversification and infrastructure development. Each of the variables is grossly lacking in most climes, especially in Africa where ethnicity has taken centre stage, breeding unbridled corruption, mis-governance and destruction of meritocracy that the likes of Singapore used to lay a solid foundation for economic growth and development. National cohesion in most parts of Africa has remained a mirage and where resemblances of it exist, it is only to the extent of illicit sharing of the national wealth. Cohesion cannot be achieved where merit is sacrificed on the altar of self-aggrandizement. National planning has not fared any better, as most of these countries are plagued with protracted wars which hamper growth, governance, diversification and infrastructure development. Malaysia's planning skills produced a framework for governance, enhanced utilization of resources and eliminated idle funds that create temptation for corruption.

Virtually, all the jurisdictions reviewed prioritized Education which provided them with the bedrock for effective exploration of emerging opportunities in the economies. The level of attention paid to education by many African leaders has remained inconsistent and suspect, implying that despite not measuring up with global standards, the continent is mortgaging the future of its future generation and by extension, further ostracizing them from the comity of nations. For the continent to move out of this quagmire, it needs to urgently review its policies in the following areas:

Economic Planning

Ministries of economic planning across the continent should come up with a well-articulated discussed and

crafted blue print for economic progression based on resource-based-comparative advantage, with a five-ten year outlook, while subsequent budgets and investment drive should be predicated on the plan. The Malaysian model will be of assistance in this direction.

Education Development

Free and compulsory education for primary school and facilitative policies at the secondary level, including annual grants for basic infrastructure development should be implemented to upgrade our education system. In addition, tertiary education should enjoy structured grants, scholarships and research incentives to compel them to aspire to merit. This will certainly make education relevant to the society.

Business Policy

There should be a clear policy on business operation akin to what obtains in Singapore. The private sector must enjoy high social status, incentives from government and treated by government officials with the desired decorum to make them belong, creative and productive. Hong Kong and Malaysia have done it with bountiful reward.

Citizens Involvement

Our leaders often alienate themselves from the citizenry once they ascend the throne. The leadership must listen to the citizens as governance is about people and when our leaders put us off over policy issues that have direct bearing to our welfare, they weaken our collective desire, diminish our efforts and create a distance between us and them, which smacks of fascism.

CONCLUSION

From the discussion above, it is obvious that "policy" can be used to transform the society. Policy facilitates the attainment of objectives. Indeed, with policy, managers are guided on decision making that leads to the desired impact on the organization. Policies enable leaders to carry out the collective will of the people and not just the individual agenda of a few and by so doing, they promote public good, value system and distributed ownership of democracy; not just its dividends, to elicit voluntary positive contribution from members of the society.

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THE HISTORY OF THE FORMATION OF LAW

Dr George Reiff*

TRADITIONAL AND MODERN LAW

The difference between custom and law is nowadays common knowledge. No authority, in Western countries at least, can issue regulations regarding clothes and no court can enforce rules of politeness. Most people now understand that laws are outlined in written documents based on decrees developed by the state that are used by its authorities and courts.

Early Forms

In order to understand the meaning of these facts for society, some remarks regarding the historical development of the formation of human society are necessary. Early forms of society did not yet know the difference between custom and law. The social norms that gave order to clans and tribes were valid due to long lived traditions; what share one would receive from hunting game or from a harvest, how heritage and work were regulated; which positions man and woman had in society – all these and other rules of life were followed because they had rendered themselves useful for the survival of the community.

Primal societies were small and usually did not know institutionally established authority. Traditional paradigms of behavior constituted the social reality and they ordered the thinking and acting of the members of the community.

Habitual convictions shared by all determined the order of community life and became rules of behavior, which were perceived as ‘legally’ binding. In the beginning a violation of rule was usually acted upon by self-help, like for example vendettas. Slowly however, processes developed in order to deal with the negative effects of violations against valid norms of the community that were introduced for the unity of the same.

The history of law knows overwhelmingly many forms in which human societies tried in an orderly way to react on violations of rules in order to implement once again the binding validity of the violated rule. Take for example the decisions through influential medicine men, clan chiefs or respected old people or by people’s assemblies like the “Thing” assemblies of the Germanic age. Such and similar institutions are the roots of modern courts. Their formation is an historically important event and it gives us a key to understanding the formation of law in itself. Already in the history of languages we can see the close connection between justice and judge. The old German word “reht” (English: right) is related to the Latin word (rectus) and it means as much as straight, honest or right. Just were therefore the legal rules that were

indispensable for societal life and whose obeisance was not subject to the individual’s will and that had to be put up “erect” once again if violated.

History of Law

The Babylonian King Hammurabi created a large legal code (circa 1700 B.C), inscribed it on a 2.5 meter stele and displayed in public (see Annex 1 below). As hard as the laws were, most subjects gave way and followed them. The poor and the weak enjoyed protection through the law and were not subject to wanton attack by the powerful anymore. Considering these laws with today’s eyes, we can say: it was a beginning.

The Jewish Law and Rulebook, the Torah (the old part of the Christian Bible) was started by Moses around 1225 B.C. and signifies another important step forward in the development of law.

Solon, already during his lifetime around 600 B.C. called ‘The Just’ gave the Athenians upon their own request laws that replaced feuding and a smaller and very hard law codex from his predecessor Draco. Draco prescribed very hard punishments; he is still remembered as being “draconic”. Solon’s legal thought, however, would not get lost in the following times.

The Chinese Philosopher Confucius (Master Kong) created around 500 B.C. rules for life and legal regulations, which deeply affected Chinese life, thinking and culture.

And what would Rome be without Roman law – unthinkable! As much as the Romans conquered their empire by the sword and as much as conquest brings injustice, the Romans brought with them their strict and well thought legal codex into the newly conquered lands. And so they could proudly say in many cases that conquest also leads to pacification. With the invading legions came law and order.

The Christian Church took over Roman law and carried it into the Germanic context, where till then a form of law prevailed that was deeply rooted in the people and which emphasized the thought of freedom. During Medieval times the Roman law interconnected itself with Germanic heritage. The Empire of Charlemagne was the first which was founded on this combination. From then on to the **Age of Absolutism**, when the princes had absolute power, this form of law combined of Roman and Germanic elements remained valid.

In the 15th and 16th Century the princes prevailed over the cities and knights; from then on the will of the absolute ruler was the supreme law. As the orders of the prince were the law, it goes without saying that the law was often neither particularly good nor intelligent. But soon reflection would start: great thinkers in France, Germany and England led the people towards unalienable laws that were independent from mere

force. Instead of the absolute monarch who would rule in his splendor like a central sun as source of all power and all law, there came the enlightened monarch who, as first servant of the state, was willing to put the rule of law even above himself. Even though this was often subverted, the truth was there, it could be expressed and shown to be effective.

Freedom and Justice – with this aim the American colonists fought for independence in the war against their English motherland between 1776 and 1783. They had taken over the thought of liberty from England and were upset when England tried to curb the freedoms that were seen as sacrosanct in the colonies.

With the motto Liberty, Equality and Fraternity the French Revolution of 1789 prevailed. All violence could not delete what had been proclaimed. Emperor Napoleon I who was a conqueror and dictator gave his empire the vast uniform law book ‘Code Napoleon’ and with this a generally valid Civil and Criminal Code.

Within the German renovation movement after 1806, when the Germans tried after the Napoleonic wars to implement a free common state, the thought of having equal rights played an important role as a requirement of liberty for all. The constitution of 1848 tried to implement this thought. Bismarck, the German Chancellor of the late 19th century, knew about the importance of the law when he founded the Second German Empire, although he was in many ways still absolutistic. After long attempts the completed work of new law codes (Civil Code BGB, Penal Code StGB) in 1900 meant a decisive step forward on the way towards modern German law.

Written Law

With the development of larger communities, expanded and more structured societies and the formation of superior political structures of governance, there came the need for fixation of legal rules in order to ensure their compulsory application everywhere. The literacy of the law expanded not evenly during its history. The extent depended on the prevailing social, political and cultural conditions. Generally, however, the development of written law was an important requirement in order to discriminate between law and custom. We find this discrimination in the area of the Germanic people, within the ancient high cultures of Asia, in ancient Greece and Rome and during the European Medieval period. The oldest traditional collection of legal regulations is the law code of Hammurabi from the 17th Century BC. This early evidence of legal history contains already a fundamental characteristic of legal rules: they do not only define how one has to act or not to act (as this do also the social norms of the customs), but they *command*, i.e. bring into force the penalty if somebody did or did not do something.

Thus, we can see that some of what is now legal procedure was already present at that early stage of legal development. However, there is an important incision within the historical development, which makes it clear that we should talk on one hand about traditional law and on the other hand about modern law. This difference refers to the question of how causes have been defined and for what reason it has been defined, i.e. which social norms should become law in a society. Traditional law indicates that the reason for validity of the law lies in tradition. Legal rules made compulsory what was valid already and what was supposed to be valid in future as well, hence the phrase ‘common law’.

The writing of laws developed over time in the collecting and writing down of those rules that were valid in the past or where one at least believed that they were valid in the past. The rationale of the law was that it was old. The author of the ‘Mirror of the Saxons’ or ‘Saxon’s Mirror’, which is a law collection from the 13th Century, wrote: “These Laws I have not invented myself; our good forefathers have handed it over from olden Times to us”.

The Mirror of the Saxons was authored by Eike von Repkow between 1220 and 1235, and is the most important law code of the German Medieval Time. It demonstrates the unwritten traditional common law of the Saxon tribe and became soon recognized as a law book which served as a template for later law books like ‘The Mirror of the Swabians’ and the ‘Mirror of the Germans’. Annex 2 shows one page out of the Script of Wolfenbuettel from the first quarter of the 1400s.

FROM COMMON LAW TO POSITIVE LAW

The idea of continuous validity of old laws was typical for societies in which conditions of human community were static over a long period of time. Certainly there was always change in society and even in the older legal order there was change from time to time triggered by the need for new rules for community life. It is important, however, that such changes only occurred over long periods of time and then only very reluctantly and the new norms measured against the old. A **divine world order** was always seen as the source of law that was always present and just needed to be discovered anew.

Modern law is fundamentally different in regards to this old idea of law. It is no longer about customary law but about **positive law**. The word positive (deducted from the Latin word “positum” from the verb “ponere” ‘to set, to put, to lay down’) means that here we have a form of law which is “set” through decision of the holder of political authority to rule. We must not imagine, however, that the change from traditional to modern law was a sudden incision in legal history. Over long time spans the old customary laws remained valid alongside the new governmentally

determined laws. Nonetheless the change to positive law was decisive; the reason for the validity of law changed:

“Was it valid before because it belonged to the divine plan for the world or at least because it was congruent with it or because it came from permanent use within the population, so the reason for validity of law now went over to the will of the ruler” Quoted from Dieter Grimm (Verfassung. Zur Geschichte des Begriffs von der Antike bis zur Gegenwart. Zwei Studien, 2. Auflage, Berlin 2002).

In our present jurisprudence, customary law plays as good as no role at all; it has been superseded by positive law. It makes the understanding of positive law easier if we shed some light on the historical causes of its diffusion.

The Diffusion of Positive Law

We call societal order static if the problems that it should solve stay unsolved over long time spans. In such societies the individual has no or little opportunity to order his life. Such a state we do not only encounter in primitive societies, it was also evident in socially structured medieval society. The opportunities of the individual were limited by the caste into which he was born. Such order lacked the necessity to change the traditionally valid law.

Societal Change

Once societal change gained momentum the demand for new legal regulations increased in order to direct the change of living conditions in an orderly way. Totally different reasons have caused the diffusion of positive law since the end of the medieval times. The modern state formed in which the central government established itself within its sphere of influence. Since the 18th century the idea of human rights aimed to establish freedom of the individual within the political and societal order. New technical inventions changed agricultural production. There had never been a similar economic and societal change before. Within a few decades the societal structure changed totally. Factories were established in which goods with new technical methods were manufactured. The factories needed workers who came from the villages into the rapidly growing cities. Instead of the traditional caste order in which everybody had his allocated place, there came a society where the life's fate was not determined by birth. The bourgeoisie and the workers became the most important social groups. The fast development of the industrial economy caused a deep and ever faster change of societal life conditions. New problems of the economic traffic and the social order occurred. They could not be solved anymore by calling on tradition but they had to be solved by new, governmentally set legal regulations.

The Demand for New Legal Regulation

A good example of the need for governmental laws is the introduction of social security insurance for workers at the end of the 19th Century in Germany. Within rural communities it was tradition that many generations lived under one roof and the individual taken care of in case of age or illness. From this type of traditional rural society the factory worker was taken away and was without any means in case of inability to work. Reference to the old traditions could not solve the new societal problems. New legal regulations for the social security of the individual in case of illness or invalidity were necessary.

With industrial development came rapid technical progress and an increased development in natural science. This enabled an unbelievable mastery and exploitation of nature through mankind. It provided for the individual new possibilities of life and led at the same time to problems within society which had to be solved legally. As long as there were only horse drawn cars on the streets, no High Way Code was necessary. Motorization of traffic, however, brought dangers that had to be avoided by new governmental regulations.



The Roland at the Hanseatic City of Bremen in Germany. Columns depicting the Roland can be found at many market squares of North German cities. The Roland monument is understood as the insignia of the courts of the cities.

Fast Change of Living Conditions

In modern societies more and more areas of life are influenced by human decision. The poor action alternatives, which signified traditional societies, have been replaced by a wealth of opportunities to choose from. From this variety of choices one has to be chosen because not all are socially compatible. The binding decision about this is executed by the law.

Let us consider an easy example: For long time agriculture could not do much against insect attack that affected the harvest negatively. Modern science developed efficient insecticides. But the uncontrolled use of such materials may have harmful collateral effects. For that reason there have to be binding regulations that avoid such collateral effects or keep them at least under control.

It is a permanent task of law to guarantee the ordering of social community as a whole. Nothing stands still. Permanent changes, like the use of nuclear power, air pollution through traffic or the design of contracts for holidays, all require ever changing new laws by which existing norms are replaced, enhanced or changed.

Implementing Law in a Democratic State – Legislation

As we have seen, positive law that law decreed by the state as the result of political decision making. This brings us to two questions: (1) **who** is empowered to decree law and by **what kind of process** does this happen?; and (2) **what areas** of human community life are structured through law and in **what way** does this happen? The first question refers to the formal side of the law and the second to the substance of it. The following explanations deal with the first question: they are limited to some aspects of the implementation of laws in the democratic state.

Popular Sovereignty

In a modern contemporary democratic state one foundation of positive law based is based on the idea of popular sovereignty (this is not the only foundation as we shall see). Law prevails because it is based upon the will of the people. Different political decision making procedures developed on the basis of popular sovereignty. We know the **direct democracy** where implementation of the law is voted upon by people's assembly (this happens indeed sometimes in Switzerland) and **indirect democracy** where the people has given the decision making process into the hands of elected representatives. We call this indirect form of democracy **representative democracy**. The governmental systems of the United States of America, the UK, France, Spain and the Federal Republic of Germany are based on this form of democracy.

The most important legislative outcomes are laws. Laws may be defined as valid legal regulations that

aim to normatively structure the reality of life. In the democratic state there are different powers participating in the law making process that comes before laws are implemented. The legal norm itself is the result of majority rule.



DIRECT DEMOCRACY: In the city of Glarus in Switzerland every first Sunday of May the citizens assemble in order to discuss political problems and to vote for resolutions. Each citizen of Glarus has the right to bring in motions or to express critic or accord with other citizens' motions. All citizens are allowed to vote stand on the scaffold to state their opinions.

At the beginning of the legislative process is the written expression of a problem for which a legal solution would be reasonable or necessary. Is it for example reasonable to exacerbate the penal code in order to avoid riots during demonstrations? Should the asylum laws be changed in order to curb immigration through asylum seekers? Does environmental pollution warrant se of motorways? Is it reasonable to reduce car taxation for new models that produce fewer pollutants?

Such questions result from societal problems. Addressing them through binding governmental decisions is usually based on prior public political discussion. A variety of societal lobby organizations, the mass media and, of course, the political parties are involved. Parties are supposed to be links between the population and the authority of the state within a parliamentary democratic system. They participate in elections and are empowered and legitimized through the votes of the citizens as bearers of the people's will within parliament. Problems are normally highlighted by political parties in order to start a legislative process – it does not matter whether the original initiative process – it does not matter whether the original initiative came from the parties themselves or whether they were pressured by public opinion or interest groups.

The Legislative Process

The exact course of parliamentary legislation needs only to be dealt with superficially as it would be the basis of a different commentary. In the case of the Federal Republic of Germany FRG, there is usually interplay between the Federation and the States. The

rules of due process order the plenary debate in three sessions. The discussion of bills in specialized committees of the Federal Parliament (Bundestag) aims at transparency and public control of the legislation process. These days, 70-80% of laws can be traced back to bills of the government. In modern industrial society legislation deals increasingly with complicated problems in detail whose solution needs a high degree of expert knowledge. According to contemporary political practice such specialized knowledge is allegedly easier to be found within the government than among the individual members of parliament. A grave example of this ruling doctrine is the process in which bail out packages in the USA and Europe were approved by the respective parliaments whereby the individual MPs freely admitted that they had not read the thousands of pages as there was not time for it. The Patriot Act within the USA came into being in much the same way.

Not all legislative motions find the same public attention. Many legal rules touch questions that are only of marginal public interest. Little attention will be paid to a legal regulation that is concerned with the traffic of goods between the FRG and other countries. In such cases, the discussion usually stays within the bounds of affected interest groups. The more important a societal problem is for the public, the more disputed the possible solution is, the most probable is that the preparation of the discussion of this bill will be accompanied by a broad public discussion. This is especially the case if the living conditions of significant parts of the population are affected (e.g. taxation laws) or if it is about fundamental political decisions about values like abortion or marriage of homosexual citizens.

Not every problem will actually lead to a new legal regulation. Differences of opinion are often so large within society that a legal regulation does not take place. For instance, in Germany a speed limit of 100 km/h was suggested 20 years ago but the idea was finally dropped. It has been proven since that an average speed of 90 km/h is optimum in consideration of traveling time, use of fuel and exhaust fumes but the economic interests of the auto industry and public demand has impeded such a regulation so far.

Decree and Statute

In a modern society there is such a demand for legal regulation that time and parliamentary legislative processes make it impossible to consider them all. For that reason, parallel to laws there exist regulation instrument called **decrees**. Decrees are issued by the government and they are to be explicitly enabled by a law. Many laws enable the government to issue more specific regulations for the execution of a law or to implement special regulations. For example: the Street Traffic Decree in the FRG contains commandments and bans for the behavior of traffic.

A third form of legal regulation is the **statute**. These are regulations which are issued by public corporations in the FRG that have the right to do so within the framework of the law that gives them limited self-administration. This is important especially the towns/cities; they often have the right to issue statutes on the basis of communal self-administration, e.g. the setting of a levy for public waste disposal.

The end of the legislative process is reached by **public proclamation** of a legal norm. Laws are after decided upon in parliament sent to the Federal President for formal issue and published in the Federal Gazette as legal decrees of the government. Statutes are publicly proclaimed as only by being public can they obtain compulsoriness.

To this point we have concentrated on describing the formal aspects of law. In the following part we will more strongly tend to the aspect of content. However, as form and content are strongly interconnected, we will talk about formal aspects once again.

NATURAL LAW

Natural law is understood as something that is eternally valid for all times and among all people. It is a law that is seen to not derive its establishment from governmental legislative but it exists "coming out of nature". The idea of Natural Law is of Greek origin; it has been developed out of Plato's Idea Philosophy and out of Aristotelian Entelechy teachings. Thomas Aquinas developed the natural law from antiquity based mainly on Aristotle and Christianized it. According to Aquinas's scholastics God placed values in his creation, which are recognizable by all mankind due to their very nature. By following these values humans are fulfilling their reason for existence. During the modern age the law of reason still adheres to the timeless and universal validity of natural law though it separates it from the will of a creation god and emancipates it so from moral theology. In this version it found entry in the great codifications of law during the 17th and 18th Century (for instance Prussian General Country Law of 1794). Since High Medieval times, however, there is a counter current that threatens the validity of natural law. The Nominalism of the schools of Duns Scotus and William Occam (see Baird, Forrest E.; Walter Kaufmann (2008): From Plato to Derrida. Upper Saddle River, New Jersey: Pearson Prentice Hall) argues that the good and just is deducible from general definitions but only out of dedication to God's will. With this the individual obtains precedence before the general; the personal consciousness of law replaces the objective Order of Being and Value. Martin Luther connects his teachings also to this nominalist voluntarism and he sees the justification of the fallen human in need for salvation only in the mercy of the hidden reason of god who can only be experienced by believe. Thus, it is understandable that protestant theology unlike catholic has many reservations against natural law.

A state doctrine outgoing from rational non-deductibility of ethical norms that in order to surmount the inexplicable war of all against all – which Hobbes saw in all those religious and civil wars of his time – the state authority must set a real effective Order of Law and Peace. Hobbes is considered the founder of this notion of legal positivism. The followers of natural law are certainly determining legal norms like respect for human rights, justice, the ban of murder, of assault, false imprisonment, theft are definitely pre-statist - meaning they are in existence before states came into being. Natural law faces always the objection that it is not possible to determine substance with regard to the specific historic situation as legally binding norms beyond a timeline. But this does not change anything regarding the fact that natural law is always then a mobilizing and revolutionary power if positive law does not match anymore the perception of justice within a given era of time. Given the attention of effects of legal positivism as they came into being under national socialist systems of injustice to light, it gained new momentum. The Basic Law of the FRG declares the dignity of mankind as unalienable (Article I) and thereby professes human rights (in Article II) and with this it expresses a system of values within the constitution that is built upon traditions of the natural law (see Hechel, 2012).

We should, perhaps, the Basic Law for the Federal Republic of Germany as a constitution-like law code that got its standing by long time common practice. By its intention and certain insertions, it was, however, originally a legal fig leaf of an occupying power (USA as overlord over West Germany from 1945 – 1991). The internal administrative purpose, of the Basic Law for the FRG was certainly oriented on European values of liberty and human rights (Kant, see <http://www.dgphil2008.de/programm/sektionen/abstract/rothhaar.html>). But it was influenced also by US American provisions that point to US constitutional history such as the ‘natural law of unalienable rights inborn to mankind that cannot be altered by positive laws from kings etc’.

The belief in natural law as an eternal law that is the standard for the state and laws for the individual and what is due to society, seems to be inborn to mankind. Where our sense of justice is violated we involuntarily measure the specific law against an ideal of justice. The question of justice never became silent, although it did come about that it was asked in a quieter way but still unmistakable way.

When comparing the two positions we see that natural law sublimates into something indefinable. Where do we find proven eternal legal substance? Even if we do not present the legal sense of head hunters and cannibals against the currently recognized sanctity of life, there are enough phenomena within our occidental culture that prove – apart from war – that the right for life was not always obvious and that it is even now not completely uncontested. Personal freedom is a

relatively very late acquisition against slavery and dependence, which were evident well into modern times. The right of self-determination of a people has been contested anew in our times through mass expulsions like the ethnic cleansings during the Yugoslav wars in the 1990s, the Kurds in Saddam’s Iraq or the Germans in Czech Republic (Benes decrees) and so forth.

Monogamy is not the norm in all cultures and there are merely economic reasons that have brought it about. Property seems to be one of the most stabile fundamentals of humanity; he who declares private property as theft from society, denies the eternal legality of private property. Historical laws are according to the respective understanding of virtue and justice and they correspond with the respective state and historical position of the culture. Substantive Natural laws as even and permanently valid demands of consciousness are not evident. Apparently the conscious is a major attribute of cultural man but the content of that consciousness appears to change over time according to changed understanding. This means that the legal sense, which lets one know the “real” law, is not constant but also subject to change. For that reason, one has spoken about Natural law with changeable content in order to show the paradox that the perception of an eternal law everywhere is alive; and that it is proven impossible to define compulsorily the substance of natural law and therefore to define the substance of justice as well; that “to each his own” changes with time and culture.

An answer is provided by belief. If I see the 10 Commandments as divine inspired law then I have eternal substance of just law. But this answer is not valid outside the Judaeo-Christian world. And already Protestant Christians accept the 10 Commandments as norms for virtue but not as legal norms. The Enlightenment found Natural law in the reasonable nature of man; her many different systems of deviating content render it impossible to determine compulsory legal substance in this way. We find a diametrical form of binding law onto an absolute standard within the Ideology of Law of the Soviet Union. If it is the task of law to implement the uncontested over-lordship of society over the individual in order to preserve the accomplishments of revolutionary society insofar as all individual rights have to give way to the rights of society, then this means that the identification of interests of society and justice can only be rendered by those who absolutely believe in it. The motto: “just is what is useful for the people” arises from a similar opinion.

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ANNEX 1:

EXTRACT FROM HAMMURABI'S CODE OF LAWS

[Source: Binder/Steinbügl: Our Time, a Textbook for Political Education, Wilhelm Hagemann Publishers, Duesseldorf 1966, p. 15; Translation George Reiff 201]



The Stele is kept nowadays in the Louvre in Paris and contains the whole Codex Hammurabi in cuneiform. In the upper part we can see Sun God Shamash commanding Hammurabi to create laws.

Examples from Hammurabi's Code:

1. If anyone ensnare another, putting a ban upon him, but he cannot prove it, then he that ensnared him shall be put to death.
3. If anyone bring an accusation of any crime before the elders, and does not prove what he has charged, he shall, if it be a capital offense charged, be put to death.
13. (There is no 13th Law because, then as now, the number 13 was considered to be unlucky).
14. If anyone steal the minor son of another, he shall be put to death.
22. If anyone is committing a robbery and is caught, then he shall be put to death.
53. If anyone be too lazy to keep his dam in proper condition, and does not so keep it, if then the dam break and all the fields be flooded, then shall he in whose dam the break occurred be sold for money, and the money shall replace the corn which he has caused to be ruined.
54. If he be not able to replace the corn, then he and his possessions shall be divided among the farmers whose corn he has flooded.
127. If anyone "point the finger" (slander) at a sister of a god or the wife of any one, and cannot prove it, this man shall be taken before the judges and his brow shall be marked (i.e. probably by cutting to leave a scar).
195. If a son strikes his father, his hands shall be hewn off.

196. If a man puts out the eye of another man, his eye shall be put out.
197. If he breaks a man's bone, his bone shall be broken.
200. If a man knocks out the teeth of his equal, his teeth shall be knocked out.
221. If a physician heals the broken bone or diseased soft part of a man, the patient shall pay the physician five shekels in money.
229. If a builder builds a house for someone, and does not construct it properly, and the house which he built fall in and kill its owner, then that builder shall be put to death.

ANNEX 2:

A PAGE FROM THE SCRIPT OF WOLFENBUETTEL



From top to bottom:

1. Conviction and condemnation.
2. Scene at court: juror, prosecutor, judge
3. Hanged thief, executioner with scissors as master over hide and hair; perpetrator goes free by paying money.
4. A fraudster who duped people with wrong weights gets his hair shorn.
5. Theft of the plow, murder, theft from mills and churches are punished by breaking on the wheel.



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GUIDED INQUIRY TEACHING VERSUS CONVENTIONAL TEACHING

Bakke M. Matthew* & Dr Kenneth O. Igharo*

Teaching in education is the act of importing instruction to the learner. It covers all the activities teachers engage in or actually do with the aim of bringing about particular changes in the learner.

Offorma (1994) sees teaching as a systematic activity deliberately engaged in, by the teachers to facilitate the learning of the intended knowledge, skill, and values by the learner and getting necessary feedback. She further listed the activities involved in teaching process as: curriculum planning, instruction, measurement and evaluation.

Okeke (1995) considered teaching method as a systematic procedure employed by teachers in their attempt to help learning take place. This usually includes the implementation of given learning theories and description of how the teacher organizes and presents teaching materials to learners.

Whichever teaching method a teacher decides to use, there are certain important features which are always present in the process. Obodo (1997) saw these features including the amount of practices the learners are exposed to in individual and group participation, motivation, transfer of learning and retention of learned materials. Research has shown that though these features are common in most teaching situations, there are teaching methods that make use of them more often and more effectively than others. Hence the need for the comparative analysis of the effectiveness of guided inquiry teaching method and conventional teaching method in the teaching of mathematics.

THE CONCEPTS OF GUIDED INQUIRY TEACHING METHOD

Guided inquiry teaching method is a student- centered actually oriented teaching method in which learners are closely guided by the teacher to discover answers to their instructional problems through investigation. Anih (1997) found the guided inquiry teaching method trained learners to work cooperatively with other people holding different opinions, accept different sexes and learn to be patient enough with other people.

Joanne (1998) and Harbor Peter (2001) affirmed that teachers in an inquiry based lessons must act as facilitators, resources person, and as procedural technicians. They are to create the enabling environment which is safe for the investigation to take place; they impart conceptual knowledge, mathematical and technical tools, general guidelines at moments; teacher select learning experiences, adopt

and design curricula to meet the interest, knowledge, abilities and background of their learners.

Bello (1980), Abdullahi (1982) and Gbamanja (1991) classified the guided inquiry teaching method into two procedures for learners use. These include

1. **Inductive procedure:** In this procedure the teacher provides the solution of the instructional problem and learners are required to find out (discover) the general principle in which the solution is based.
2. **Deductive procedure:** In deductive procedure, the teacher gives the general principle and the learners are required to use the principle in order to discover the solution to a specific problem.

For any of the two guided inquiry teaching procedures, the teacher gives enough guidance to ensure that learners do not get tired and frustrated in the course of finding solution to the instructional problem. His assistance should be in the form of questioning and giving directions to help learners think about possible investigative procedures themselves.

Strength and Weakness of the Guided Inquiry Teaching Method

According to Gbamanja (1991), the strength of the guided inquiry teaching method includes:

- Learners are actively involved in the lesson (i.e. the instruction is student centred) and makes learners to use their mind to think. Thereby building self-concept in the learners.
- It creates opportunity for learners to discover things for themselves using techniques of discoveries.
- It aids in better memory, facilitate retention and transfer knowledge to new but similar situation.
- It gives the learners satisfying intrinsic motivation rather than extrinsic motivation.
- It contributes to the development of reflective thinking, creative expression, critical and analysis and logical reasoning.
- It avoids learning at the verbal levels only and permits learners the time to mentally assimilate and accommodate information.

On the hand, the weaknesses of the guided inquiry teaching method are:

- The method is time consuming. As such, teachers do not cover the expected syllabus due to lack of time.

- The method is expensive, because it requires constant use of instructional materials.
- There is acute shortage of competent teachers to develop inquiry based lessons and inquiry abilities in the learners.
- The large class size and too much work load render the effective teacher supervision of learners very difficult.
- It is not possible to use the guided inquiry teaching method in all situations.

CONVENTIONAL TEACHING

Conventional teaching, otherwise known as the traditional teaching method, includes all teaching methods that are subject-centred or teacher-centred. Examples of such teaching method are lectures and expository methods. Gbamanja (1991) refer to the conventional teaching method as “talk “and “chalk” or the textbook method. It is the oldest form of teaching method and tends to lead to rote learning.

The focus of this teaching method is on what is being taught rather than who is being taught. In the conventional lesson, the teacher talks while the learners listen and jot down points. He teaches the whole class as a unit. The learners therefore get the impression that they can learn only when their teacher is present and teaching. In other words, the conventional teaching method is more of spoon feeding learners with principles, facts and their application to series of similar problems.

Strengths and Weakness of Conventional Teaching Methods

There are instances where the conventional teaching method could be of importance. Some of its advantages are:

- It could be used in tertiary institution or at the senior secondary school levels.
- Many students could be taught at the same time with conventional teaching method.
- It is economical in time, teaching materials and students labour.
- It is important for easier coverage of wide area or syllabus within a short period.
- It is good for introducing or beginning a new topic or lesson.

The conventional teaching method has its limitation too. These include:

- The students (learners) are passive in the class. Thus it encourages rote memorization of facts without necessary aiding understanding.
- The learners easily get bored, frustrated and easily lose interest in the subject, since they are not actively involved in the learning process.
- It does not take care of individual differences of the learners in terms of learning abilities.

Despite the weakness of conventional teaching methods the teachers tend to use it due to a lack of instructional materials, in-adequate mathematics teachers, large class size, and the urgent need to cover syllabus so that students can face their examination and so on. But the use of conventional methods may lead to less than satisfactory results. Obodo, 1990 and Adebayo, 2001 observed that students’ poor performance in tests and examination might be attributed to the teaching methods adopted by teachers in presenting instructions. As such, there is need for careful assessment of teaching method in order to avoid the adoption of in-effective ones.

RESEARCH

The comparative study of guided inquiry teaching method and the conventional teaching methods (above) suggests that conventional or traditional teaching method may be unsuitable for teaching mathematics in that they do not lead to student achievement in mathematics. This calls for a search for new teaching models that can enhance the teaching/learning of mathematics.

Nwagbo (1997) investigated the effects of guided inquiry and expository teaching methods on achievement and attitude in biology, of students of different levels of scientific literacy. A quasi-experimental design was used for the study. The student population researched were 147 senior secondary from schools in the Nsukka urban area of Enugu State Nigeria. Students were randomly assigned as experimental and control groups. Mean and standard deviation were used to answer the research questions, while analysis of covariance (ANCOVA) was used to test the hypothesis. The result of the study showed that the experimental group taught with guided inquiry teaching method, performed significantly better than the control group who were taught with the conventional (expository) teaching method. The results showed that there was a significant difference between the guided inquiry teaching method and the lecture method in improving students’ performance in biology tests. It was also noticeable that the guided inquiry teaching method also improved the low achievers performance in the test. Nwagbo concluded that the guided inquiry teaching method is better in enhancing cognitive achievement in biology at all levels of scientific literacy.

Dagoli (1999) investigated the effects of guided inquiry teaching method and conventional teaching method on students' achievement in Geometry. A quasi-experimental design of the non-equivalent control group was used for the study. A sample of 168 junior secondary school students was randomly selected from a population of 2790 for the study. The data for the study was collected using the geometry achievement test (GAT). The data from the study were analyzed using mean and standard deviation for answering research questions and analysis of covariance (ANCOVA) for testing of hypothesis. The results revealed that students who were taught geometry using the guided inquiry teaching method performed significantly better than their counterpart in the control group who were taught geometry using the conventional teaching method. Dagoli concluded that the guided inquiry teaching method is significantly better than conventional teaching in enhancing students' achievement in geometry.

In another related study Kurumeh (1999) investigated the relative effectiveness of the guided inquiry teaching method on senior secondary school students' achievement in algebra. The researcher used the quasi-experimental design. Stratified random sampling techniques was used in selecting a sample size of 120 senior secondary school students from four (two male and two female) schools out of 32 secondary school in educational Zone of Anambra State, Nigeria. The data were analyzed using mean, standard deviation, chi-squared and analysis of variance (ANOVA). The results of the study indicated that there is a significant difference in the achievement of students in the experimental and control groups. This implies that the guided inquiry teaching method is significantly better in improving learners' achievement than the conventional (expository) method.

Bakke (2005) investigated the effects of guided inquiry teaching method on students achievement in logic. A quasi-experimental using a non-equivalent control group was used for the study. A group of 197 senior secondary school students were randomly sampled from 4 secondary schools (two schools randomly assigned to both experimental and control groups) in Jalingo Education Zone of Taraba State, Nigeria. Mean and standard deviation were used to answer the research questions, while analysis of covariance (ANCOVA) was used to test the hypothesis. The result of the study indicated that the experimental group who were taught using the guided inquiry teaching method performed significantly better than their counterpart in the control group who were taught logic using the conventional teaching method. Bakke concluded that the guided inquiry teaching method is better in enhancing cognitive achievement in logic.

From the studies reviewed, it can be deduced that the guided inquiry teaching method promotes learner's cognitive achievement, enhances learning and develops in the learners positive attitude towards science,

mathematics and further mathematics, unlike the expository or lecture (conventional) method.

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Africa has a long history that goes well beyond the cold war, the colonial period as well as the Atlantic experience. Each of these periods, though separate in nature, has interplayed with the other or others and vastly contributes to the overall understanding of the different stages the continent has come through. This understanding, however, takes a new turn when the lens is turned to the continent from its postcolonial perspective when nationalism gave birth not only to pride and a new look of the continent, but criticism as well. This puts postcolonial elites on the spot for their failure to move the masses from poverty to prosperity. As a result, a myriad of reasons have been raised as the active contributors to the volatile political and economic situation of the continent where confronting narrative and counter-narratives on the social development debates have been exchanged in the Africanist as well as globalist scholarship.

During the last few decades, different nations in Africa have faced challenging times of wars and economic under-performance. Yet, some have demonstrated remarkable advancement in economic performance, others moved well towards Western style democracy through the adoption of multi-party governance system, while others are taking time to recuperate from devastating war. The latter case has led, in certain situations, to regional and international levels of intervention. The volatility has also brought in a new trend of global security issues which placed Africa at the heart of global security and the associated debates on international terrorism.

From another interesting perspective, Africa has recently again attracted attention in the global trade and economic power struggle. The cold war being over, and terrorism taking a major Western focus, China has emerged with a new strategy that aims at dominating the African foreign investment regime, a matter which demanded a Western rethinking towards improving their treatment of Africa as well as forging a mechanism to off-balance the aggressive intervention of the Chinese where African countries seem to encounter less conditions and/or internal interference compared to the Western partnerships.

This course approaches the study of Africa from the aforementioned interdisciplinary platform. It guides the student to trace the reality about the situations expressed and the various academic opinions that shape and inform the debate surrounding the continent's affairs. It involves readings of a broad spectrum of relevant topics and subjects, combining disciplines in politics, social development, ethnic studies, history as well as a critical look that fosters the current debate in and on the continent.

If you are interested in this program and require further information please contact somalia@stclements.edu

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BIOMASS AND ECONOMIC DEVELOPMENT OF THE GAMBIA

Nya Joe Jacob*

Biomass is the oldest fuel used by mankind. Wood has been used as a fuel for cooking and heating since time began but has suffered a decline in the last century as the use of fossil fuels increased. However, the environmentally harmful effects of burning fossil fuels coupled with the need to secure indigenous renewable sources of energy has resulted in a return to using natural and clean sources of energy such as biomass.

The use of renewable energy sources is becoming increasingly necessary, if we are to achieve the changes required to address the impacts of global warming. Biomass is the most common form of renewable energy, widely used in the third world but until recently, less so in the West. Lately much attention has been focused on identifying suitable biomass species, which can provide high-energy outputs, to replace conventional fossil fuel energy sources. The type of biomass required is largely determined by the energy conversion process and the form in which the energy is required. In this paper the background to biomass resources and production is examined. In the second part, energy conversion technologies are reviewed. The potential of a restored landfill site to act as a biomass source, providing fuel to supplement landfill gas-fuelled power stations, is examined, together with a comparison of the economics of power production from purpose-grown biomass versus waste-biomass and the barriers to the development of biomass energy technologies in the Gambia were discussed.

THE RELEVANCE OF BIOMASS TECHNOLOGY IN THE GAMBIA

The term biomass encompasses a variety of fuels and technologies used to produce renewable energy. Biomass refers to land and water-based vegetation, organic wastes and photosynthetic organisms. These are non-fossil, renewable carbon resources from which energy can be produced and used as fossil fuel substitutes. Examples of biomass include: wood, grasses, crops, and agricultural and municipal wastes. Biomass can be burned to produce heat that is used to create steam to turn turbines to produce electricity. Therefore, energy from biomass can produce electricity and/or heat. Liquid biofuels can also be derived from biomass crops such as oilseed rape.

Energy from biomass and waste is often referred to as bioenergy. When plant material is burned for energy purposes carbon dioxide is released. However, because plants absorb carbon dioxide during their life cycle, the net emissions of carbon dioxide are zero. In this way, wood is said to be carbon neutral.

There are many environmental, economic and social benefits associated with the development of biomass as an energy source:

Firstly, biomass is an indigenous resource which can reduce the Gambia's current state of overdependence on fuel imports. Gambia currently imports 100% of its fuels, making it the most import dependent country in Africa.

Secondly, biomass offers hope of a secure energy supply; as an indigenous and self-sufficient source of energy, there is no risk of cut off in supply.

Thirdly, biomass developments provide a valuable source of employment, especially in remote rural areas. The main employment categories are created in the following areas:

- Fuel supply through the cultivation of energy crops, recovery and transportation of wood wastes, forest residues, agricultural wastes etc.
- Engineering consultants - feasibility studies, design and engineering/construction management
- Environmental services - environmental impact assessments
- Construction - roads, buildings, electrical infrastructure etc.
- Legal/Financing - planning, contractual and financing
- Manufacturing - while there are some manufacturing companies in the Gambia e.g. pellet and briquettes processing equipment, there is significant potential for establishment of manufacturers of the various components of biofuel systems
- Maintenance, servicing and administration

Fourthly, biomass provided environmental gains in that biomass is sustainable and does not deplete future resources. Energy forestry crops have a much greater diversity of wildlife and flora than arable or pasture land and careful design of energy crops will enhance local landscapes and provide recreational facilities.

Fifthly, biomass offers an opportunity to use waste products to advantage. Bioenergy can be recovered from wood wastes (e.g. from sawmills), forest residues (e.g. wood chips, bark), household and agricultural residues (e.g. slurry and poultry waste) to generate heat and electricity, while at the same time dealing with the problem of waste disposal.

BIOMASS FEEDSTOCKS - SOURCES OF BIOMASS

Biomass sources can be divided into two main streams: energy crops and organic residues.

Energy Crops are those grown specifically for energy purposes:

Short Rotation Forestry (SRF)

SRF is the production of wood fuel through the cultivation of high-yielding trees at close spacing on short time rotations. Species such as Willow and Poplar are ideal for SRF, as they are easy to establish, fast growing, suitable for a variety of sites and resistant to pests and disease.

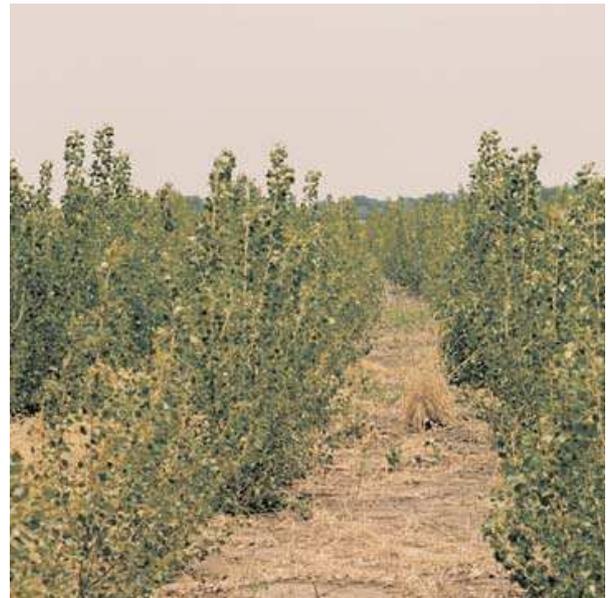
Land for short rotation forestry is likely to come from two sources, namely: non-rotational arable set aside land and land outside the existing arable pool – presently in beef or sheep production.

Other energy crops such as Hemp and Miscanthus (Elephant grass) have been investigated for their suitability as a source of biomass fuel. Cultivation of Hemp has the advantage in that being an annual plant, farmer's experience of dealing with annual tillage crops could easily be applied to it and existing farming machinery used for harvesting etc.

Liquid biofuel energy crops – these crops are grown for the production of liquid transport fuels. Different conversion techniques are used to produce (a) biodiesel, (b) bioethanol and (c) biomethanol. Biodiesel is derived from oil crops such as oilseed rape and camelina (an oil-seed crop with an oil yield similar to that of oilseed rape). Bioethanol is produced from crops such as wheat, sugarbeet, sweet sorghum and woody crops. Research on the production of biomethanol from various biomass sources such as



Willow



Poplar



Hemp



Oilseed Rape

grasses, short rotation forestry, crop residues and municipal solid waste is ongoing. Liquid biofuels can be incorporated as blends with petrol/diesel fuels or used on their own as a replacement fuel.

Organic Residues

Forest residues, such as tree tops and branches remaining after timber is harvested provide useful sources of biomass. Some forest residues need to be left on the forest floor to decompose and return nutrients to the soil and also to act as brush mats, which allow machinery to travel across soft ground. However, a lot of this material could be harvested with suitable machinery and used as a renewable fuel for energy production.

Wood wastes or by-products from wood processing industries e.g. chips, bark and sawdust. These are used within sawmills and board mills to provide heat for drying or space heating and to raise steam for the manufacturing process.

Agricultural residues e.g. animal slurry and manure, chicken litter, spent mushroom compost and straw. Disposal of some of these residues poses an environmental problem. It is estimated that the total amount of agricultural waste in the Gambia in 2008 was approximately 60 million tonnes. Wet wastes such as cattle and pig manure are suitable for anaerobic digestion, while wastes with a lower moisture content e.g. chicken litter and spent mushroom compost can be combusted.

Municipal solid waste (MSW), food processing waste, and sewage sludge – all of these wastes can be converted to energy, in the form of biogas, through the process of anaerobic digestion. The organic fraction of MSW is collected separately from households and commercial premises. It is estimated that over two million tonnes of MSW were produced in the Gambia in 2008. Sewage sludge is a by-product of wastewater treatment. With EU regulations influencing the treatment of waste, increased amounts of wastes are available as a source of affordable biomass fuel.

Waste vegetable oil from the catering industry: a portion of this goes into animal feed production but the rest is dumped. Waste oil can be processed to produce biodiesel and the successful use of this as a transport biofuel has been demonstrated in light vehicles in the western world.

Tallow – animal fat of variable quality. Previously, much of this would have been used for animal feed production, but with restrictions regarding the use of bovine offals due to BSE, increased quantities are available for alternative use. While further research is required, indications are that tallow can be used in small quantities in blends with waste vegetable oil and camelina.



Forest Residues as Wood Fuel in the Gambia

CONVERSION OF BIOMASS INTO ENERGY

Biomass can be converted to different forms of energy including heat, power, combined heat and power (CHP) or liquid biofuels. There are a number of processes that can be used to recover energy from biomass fuels:

- Direct combustion of biomass material; some processing may be carried out prior to combustion e.g. sorting, chipping, pelleting or drying.
- Thermochemical processes - where solid biomass is upgraded to a liquid or a gas by pyrolysis and gasification.
- Decomposition of solid biomass to liquid or gaseous fuels by processes such as anaerobic digestion and fermentation.

Combustion

Fuel + oxygen = carbon dioxide + water + *energy*. This is the simplest way to produce heat energy from biomass. The heat, often in the form of steam, can be converted to electricity and/or it can be used for heating houses and buildings. Technology used for combustion varies depending on the scale of the plant. On a domestic scale wood stoves burn wood waste efficiently. For larger industrial scale facilities such as wood processing industries or apartment complexes, the use of a wood-fired boiler would be more appropriate to meet higher heat demands. Of course, using combined heat and power (CHP) for such large-scale facilities would be the most efficient method of producing energy; CHP facilities have efficiencies of over 85%.

Burning Wood in a Real Fireplace

In the Gambia we currently rely too much on harmful, expensive fossil fuels, such as coal kerosene LPG and oil, for the majority of our heating. These fossil fuels took millions of years to form and are burnt at an ever increasing rate, releasing millions of tonnes of harmful greenhouse gases and polluting the air around us.

Wood is an eco-friendly fuel, which comes from local woodlands and forests, taking just a few years to grow. Wood is still one of the most inexpensive fuels in the Gambia and is readily available from farmers and local suppliers. Compared to oil or electric heating, the wood stove or fireplace can give you a nice saving on your heating bill.

Wood Stoves

Most Gambian houses have a fireplace, which can easily accommodate a highly efficient traditional woodstove or a compact modern wood fireplace 'insert'. A modern stove can convert over 80 percent of the energy content of the wood into heat, compared to a standard Gambian fireplace which is only 20 percent efficient. A fireplace insert can give all the benefits of the traditional fireplace as well as all the advantages of a highly efficient wood stove. High efficiency means fewer trips to the wood shed and lower fuel bills. Homes using wood heating alongside oil or gas save around 15% in their heating bills.



Woodchips, Sawdust, Bark and Pellets.



Modern Wood Cook-stoves.

Gasification

This is an advanced conversion process that offers a method of power generation with higher efficiencies than combustion-based steam cycles. It is a process in which biomass is converted to higher grade fuels prior to combustion. Basically biomass is partially oxidised at high temperatures to produce biogas. This biogas contains a mixture of carbon monoxide, hydrogen and methane. The advantage of this process is that

undesirable particulate matter and pollutants are removed. A variety of gasification systems are available e.g. fixed bed, fluidised bed gasifiers and pressurised gasifiers.

Although not yet demonstrated in the Gambia, large-scale gasification of wood with subsequent use of a gas turbine and combined cycle generating plants to produce electricity has been demonstrated with success in America and Europe.

Pyrolysis

This is a means of converting solid organic material into a liquid biofuel by heating at high temperatures in the absence of oxygen. The resulting pyrolytic or 'bio-oil' can be refined to products in a manner similar to refining crude oil and can be used for electricity production in diesel engines. Pyrolysis oils are easy to transport and store. However, some improvements in the properties of pyrolysis oils, followed by standardization of the quality of oils, are needed for successful introduction to the commercial market.

Anaerobic Digestion

Biomass may be converted to biogas by Anaerobic Digestion (AD). This is the breakdown of organic waste by bacteria in an oxygen-free environment. AD can take place in specially designed AD plants or naturally at landfill sites. Farm, municipal or industrial-based AD plants process waste material into biogas (containing methane and carbon dioxide). The waste/feedstock is placed in an airtight container (digester) along with bacteria.

Depending on the waste and system design biogas typically contains 55-75% pure methane. This biogas can be upgraded to fossil ("natural") gas, which typically contains 70-96% methane. The liquid fraction of the remaining digested feedstock can be returned to the land as a fertiliser and solid fibre used as a soil conditioner.

Landfill Gas

At landfill sites, AD of the organic component of waste occurs naturally, and more slowly than in anaerobic digestion, releasing landfill gas (which contains methane and carbon dioxide) into the atmosphere. Methane in landfill gas has 21 times the global warming potential of carbon dioxide! To avoid the environmentally harmful effects of this, landfill gas can be collected and used as an energy source for heat and/or power. Wells are inserted into the waste to collect the gas through a series of perforated pipes. A suction pump collects the gas, which is then cleaned and ready to be used a source of energy.

Conversion to Liquid Biofuels - Conversion of Biomass to Alcohols

Biomass is converted to alcohol by the process of fermentation in which bacteria convert carbohydrates in plant material from crops such as sugar beet and sugar cane into bioethanol. Grain crops such as wheat and maize can also be used for bioethanol production, but their carbohydrates are in the form of starch and so must be converted to sugars prior to fermentation. The production of bioethanol from the cellulosic element of other crops such as miscanthus, reed canary grass, hemp and switchgrass is undergoing research.

Biomethanol is produced from a synthesis gas (a mixture of carbon monoxide and hydrogen) that is derived from biomass sources such as crop residues, grasses, short rotation forestry and municipal forest waste through the process of gasification. Further research on aspects of synthesis gas production will help to make biomethanol production more cost effective.

Conversion of Vegetable Oils to Biodiesel

Biodiesel can be produced from different types of vegetable oils e.g. oilseed rape, sunflower oil, palm oil, soybean oil and waste vegetable oil. The oil is first pressed from plant material and then converted to biodiesel by a transesterification process. This process involves combining the oil with an alcohol in the presence of a catalyst. Costs of feedstock production can be high in some cases, but the use of waste vegetable oil offers a low cost alternative.



Production of Energy at AD Plant in the Gambia.

BARRIERS TO BIOMASS RENEWABLE ENERGY IN THE GAMBIA

Lack of experience and familiarity with biomass technologies amongst key players such as policy makers, local authorities and resource owners inhibits development of biomass systems in the Gambia. Misconceptions can hinder development of biomass as a renewable energy source. Demonstration of successful or best practice examples of biomass facilities will help to build confidence.

The attitude of the electricity, heat and fuel supply industries to biomass technologies is poor. These industries prefer to avoid risk, use familiar energy technologies and maintain the status quo.

Initial capital costs of solid biofuel systems and the interest associated with these costs are much higher than for liquid or gas fuelled systems. This can act as a significant barrier to the development of energy production from biomass.

Uncertainty as to the availability of biomass resources e.g. farmers doubt the stability of the biofuel market, resulting in a reluctance to change over to the production of energy crops.

There is a need for an integrated biomass policy to incorporate the agricultural, environmental, rural and transport sectors. Energy crops should be given the same stability as conventional forestry and food crops and not used as part of set-aside to counter surpluses in food production.

The low prices of fossil fuels make biomass fuels appear non-competitive. If biomass technologies were to receive the same level of subsidies as fossil fuels this would increase their cost competitiveness considerably.

Taxes on renewable energy systems: Value Added Taxes on renewable energy systems and their components reduce the competitiveness of biomass technologies in relation to fossil fuel technologies. In Europe, domestic consumers of 'green' energy pay a lower VAT rate, which enables renewable energy technologies to compete well with fossil fuel technologies. The introduction of tax incentives such as this, as well as the exemption of biomass-derived fuels from energy taxes in the Gambia, will attract investors.

Lack of subsidies for research, development and demonstration: Certain biomass technologies e.g. anaerobic digestion are well established and require support for demonstration, while others are at an earlier stage of development and require support for research e.g. growth of Miscanthus as an energy crop.

The provision of information, education and training is fundamental to overcoming all of the above barriers.

CONCLUSION

The use of biomass, as an energy source in the Gambia can play a pivotal role in helping the developed world reduce the environmental impact of burning fossil fuels to produce energy.

- Biomass is an accepted form of renewable energy and is seen as a means of helping to reduce global warming, by displacing the use of fossil fuels: up to 10% of the Gambia's electricity needs is targeted to be generated from renewable forms of energy by 2015.
- Of the four main types of biomass, woody plants and herbaceous plants and grasses are the main types of interest for producing energy, with attention focused on the C4 plant species.

- The stored chemical energy in plants is contained in the cellulose, hemicellulose and lignin components of the plant, the proportions varying with the type of plant.

In practice the actual amount of energy obtained and the form of that energy, will vary from one conversion process technology to another. Two examples may help to illustrate the above point:

- Gasifying wood gives the same potential release of energy as burning wood in a combustor but the form of the energy released by gasification may be of more use than that derived from combustion e.g. a useable, low CV gas, that could be used to fuel a gas engine, rather than hot air, which can only provide heat/steam, or power a steam turbine to generate electricity.
- Fermenting wheat to produce ethanol provides a fuel suitable for vehicles, which is not possible via combustion or gasification processes.

Apart from energy being available in a more suitable or convenient form, the overall conversion efficiency from biomass source to alternative energy product, for each type of conversion process, is of interest. For example, while combustion releases all of the 'available' chemical energy stored in the biomass source, converting the hot gases (via a boiler) to produce steam (at an efficiency of 88%) and subsequent conversion to electricity (via a turbo-generator), gives an overall thermal efficiency of about 40% for large plant and as low as 10–15% for simple, steam plant. The importance of these thermodynamic considerations will depend on the particular economic factors associated with specific projects.

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ENTREPRENEURS – DEALING WITH THE DARK SIDE

Dr Bruce Duncan*

Picking up mercury (Hg) with the fingers is impossible' - its viscosity defies containment. Stubbornly retaining its uniqueness it is nevertheless important in numerous household and medical products. So it is with entrepreneurs whose distinctive contributions will always play exceptionally important roles in societies; but their mercurial temperament makes handling them difficult.

This article conceptualises entrepreneurs as individuals who identify opportunities, allocate resources and create value [for themselves and others]. This creation of value is often through the 'identification of unmet needs or through the identification of opportunities for change' (Watson, 2010). The thrust of this article's polemic hypothesis is a deliberate focus on the disturbingly destructive side of business entrepreneurs. The unveiling of the dark side behaviour of entrepreneurial genius is accompanied by the parallel plea for them to add lustre to their creativity by converting to modern management practices.

A SAMPLE

Entrepreneurs, past and present, are represented in the following selection: Bill Gates (Microsoft), Andrea L Taylor (Microsoft Computer Software), Steve Jobs (Apple), Richard Branson (The Virgin Group), Harry Oppenheimer (De Beers), Oprah Winfrey (Entertainment), Anita Roddick (Body Shop), Coco Chanel (Cosmetics), Adenike Ogunlesi (Clothing), Aliko Dangote (Commodities and Building materials), Adriane M Brown (Venture Capital & Private Equity), Mary Baker Eddy (Religion), Oral Roberts (Evangelist and Educationalist), Billy Graham (Evangelism Inc.), Cecil Rhodes (Colonialist), Genghis Khan (Nation builder), Lee Byung-chull (Samsung), Lakshmi Mittal (Steel), Saddam Hussein (Political opportunist and Dictator and Sadist), Kim Sung Il (North Korean Tyrant), Adolf Hitler (Nationalist turned war criminal), the Mafia, Triads, drug cartels, the local shopkeeper (Convenience and retail stores et al) and home and family businesses enterprises including the amazing mother and housewife. A complete list is as long and distinctive as recorded history and entrepreneurial initiatives, creativity and ingenuity continue to feed humankind's expanding archives of distinctively famous, successful, eccentric, sociopathic and notorious women and men who have embedded their blameless, positive or bloody footprints across the continents of the globe.

THE MANY-SIDED DIAMOND

Polished or uncut, native crystalline carbon has value. Similarly, an entrepreneur's multifaceted genius,

character and personality have importance. However, an uncut diamond (raw entrepreneur) is not as valuable as the polished production (the reforming pioneer embracing modern management practices).

'Writers and practitioners from Drucker to Christensen note that the essence of entrepreneurship is "creative disruption' – tearing up the old to make way for the new' (Science of Personality, 2011). This has been evidenced, for example, in the genius that replaced the vinyl record with the CD and then the MP3 and ... what next?

It is the entrepreneur who makes or breaks an established organisation especially when challenging a corrosive organisational culture that needs changing¹. However, the organisational baby does not need to be thrown out with the dirty bath water, and challenging the 'as it was in the beginning is now and ever shall be'² Luddite attitude is essential. It is then that the severing of the growth-inhibiting umbilical cord feeding and encouraging the decrepit state of organisational culture can be changed.

However, any reforms must be based on an appreciation and understanding of the entrepreneurial dervishes performing their arthritic choreography on the same mat (Boyson, 1995, p.130).

Before addressing the entrepreneurial dark side, let us affirm the humanity of these dynamic movers and shakers.

HUMANITY RULES

Excluding the psychopaths, sociopaths and misfits, in common with general humanity the majority of entrepreneurs are not saintly figures whose track record of personal integrity and public purity would necessarily guarantee them sainthood.

Behaviour and genius are different sides of the coin, and to discredit an entrepreneur because of their cupboard of skeletons would be like missing the wood because of the foliage. Steve Jobs, for example, gave the world his genius but did so in the wake of reportedly water under the bridge but not-so-private indiscretions. His personality was to introduce the phrase, 'the Apple Paradox ... Steve Jobs is a very difficult person with minimal leadership skills' (Science of Personality, 2011) but was able to change the processes of communication, even though his interpersonal communication reportedly caused much unhappiness and *angst* amongst colleagues and subordinates. Does the wisdom of the Bard offer food for debate: 'The evil that men do lives after them; the good is oft interred with their bones' (Mark Anthony in Julius Caesar 3:2)?

¹ cf The Product Life Cycle

² Christian Doxology

Let us now turn to ten blotches (syndromes) that are blemishes illustrating the dark side of entrepreneurial brilliance. Thereafter we shall consider a better way forward and “what next”.

THE NEPOTISM SYNDROME

Research is coming to grips with the entrepreneurial psyche/the traits (Gartner, 1988) and significant studies confirm the culture of nepotism in families and/or among a group of friends during the early development of an enterprise (Chulguen Yang et al, 2011). However, the overall western and eastern employment paradigms differ where, for example, the acceptance of nepotism within western individualistic societies sits alongside that of collectivist Asian cult³. Favouritism, in Western commercial ventures, is an official employment taboo. Such practices militate against western ideals of equal opportunities, fairness and non-discrimination in the workplace.

Furthermore, entrepreneurs entangled with nepotism tie an emotional albatross around their neck and thus contaminate their business ethos (Singell, 1997). For example, to keep relationships whilst having to make unbiased decisions that differ from sentimentality, often encounters objectivity, fairness, transparency and non-discrimination. Unnecessary tension and the arbitrary abrogation of policies feed the conflict that follows in the wake of trying to reconcile personal emotional ties with dispassionate employment law and its responsibilities. Pragmatic business decisions can easily fall prey to the avariciously devouring demands of sentimentality (Barton, 2012). Of relevance is the fact that progressive, rational and proven management models do not support such an outdated “Monarchical Style”.

To summarise, creative ventures will not survive when based on self-serving sentimentality (c.f. the growth of Apple, Samsung and Yahoo). Blood is thicker than water and thus it often congeals and then clogs the arteries of progress.

THE SELFISHNESS SYNDROME

Motivation remains the subject of scholarly research; and thinkers such as Frederick Herzberg, Douglas McGregor, J Stacey Adams, David McClelland, Erik Erikson, Howard Gardner and other intellectual giants have pulped many trees to explore motivation. It is thus naïve to accept that all entrepreneurs are motivated by pristine, philanthropic ideals.

Within globalisation, inherent, self-serving greed is also enshrined in the avaricious land-grabbing initiatives of powerful tycoons and influential conglomerates (with well-filled wallets, invasive influence and personal goals). They continue to elbow

out the smaller fry; many of these and other activities indicate that some entrepreneurs could be classed as shysters and charlatans⁴. Research into globalisation indicates practices that have resulted from the power imbalance of capitalism’s displacing of the “corner shop and small holding” initiatives of mini-entrepreneurs (Duncan, 2011).

In support of the above, and in citing their sources, the World Institute for Development Economic Research states:

‘... entrepreneurial activity is not universally “good”, because entrepreneurs act in creative ways simply to increase their wealth, power, and prestige—and without active consideration of externalities or societal effects’ (Baumol, 1990). Entrepreneurial talent is allocated to activities which provide maximum private returns, and this may not generate the highest social returns (Murphy et al, 1991). If activities are chosen based on perceived profit, it is not implicit that they will have positive effects and can include activities with questionable or undesirable societal outcomes. Therefore, entrepreneurial talent can be allocated among a range of selections with varying effects (Wider, 2010).

Essentially, employees and volunteers are often just minions contributing to the development of an entrepreneurial enterprise, and are deemed a necessary means to an end, viz: to build up the entrepreneur’s kingdom. Alarming, little else matters in the mind of many a project-orientated builder who uses people as pawns on their chessboard of creativity.

The endorsing of the above research underwrites the epic works of Scotland’s famous son, Adam Smith (1723 – 1790) who exposed the *selfish* component behind entrepreneurial creativity:

‘Every individual ... neither intends to promote the public interest, nor knows how much he is promoting it ... he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.’ (Book IV, Chapter II, page. 456, paragraph. 9).

‘It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our necessities but of their advantages.’ (Book I, Chapter II, pages 26-27, paragraph 12).

³ There is a gradual cultural shift by many eastern conglomerates toward fairer employment models.

⁴ cf Duncan, B.R. (2011)

THE ABSENCE OF MANAGEMENT SKILLS SYNDROME

Entrepreneurs rarely make good managers' the two functions are light years apart. Drucker's paradigm, as an example, is not readily acceptable to most kingdom builders and when merged, their distinctive purposes clash.

'Management is but "a force" and an entire ecosystem that organizations fit and thrive in ... it deals with the fundamentals of knowledge, wisdom, and leadership; an "art" because of its practice and application. Managers [should] draw on all the knowledge and insights of the humanities and the social sciences – on psychology and philosophy; on economics and history, on ethics as well as on the physical sciences. *But they have to focus this knowledge on healing a sick patient, teaching a student building a bridge, designing and 'selling' a user friendly software program (italics are those of the writer)*" (Maciariello, citing Drucker, 2008).

Currently, psychologists know 'little about the psychology of entrepreneurship in an empirical way - although interest and research in the subject has begun to blossom. [However,] what happens when [entrepreneurs] are in charge? The bottom line is that they make disastrous managers' (Science of Personality, 2011). Alarming, many entrepreneurs could be accused of replicating the feudal model of serfdom – albeit in a more sophisticated manner.

For example, how does their authoritarian behaviour relate to the *X* and *Y* Theory of Management⁵? Does their behaviour adversely impact on the longer-term effectiveness, growth of business goodwill, efficiency and staff morale?

Additionally, due to a fixation with *self*, many entrepreneurs are often (possibly, unconsciously) the prime cause of communication chaos, apathy and staff distress within their organisation. Paradoxically, their valued outstanding abilities tend to disregard civility in, and the necessity for, communication, planning, responsibly honoured schedules, transparency, accountability to stakeholders and working within any framework other than their egocentric worship of *self*.

Sadly, already cowed staff members are reticent about going against the grain for fear of being targeted as "uppity" and subsequently being side-lined or fired.

'It is important to understand that the entrepreneur is usually a maverick who starts his [her] own business [and] generally does so because he [she] is a difficult employee ... does not take kindly to suggestions or orders from other people ... his [her] idiosyncrasies

do not hurt anybody so long as the business is small, but once the business gets larger requiring the support and active cooperation of more people he [she] is at risk if he [she] does not change his [her] approach. It has been correctly stated that the biggest burden a growing company faces is having a full-blooded entrepreneur as its owner. (Harvard Business Review, citing du Toit, 2011).

From a management perspective, the conventional manager is very conscious of rules, structures and taboos, whereas the entrepreneur interprets and views regulations as mere guidelines to be used as lifeboats, when necessary - and are otherwise largely ignored (Jamaican Cleaner, citing Thomas Zimmerer and Norman Scarborough, 2006).

Entrepreneurs tend to bypass many structures to "do their own thing". The theoretical constructs necessary for a business are often contained only within dusty files. However, window dressing cannot shield (forever) this entrepreneurial dark side from tension and well-founded allegations of manipulative subterfuge from employees and volunteers who possess a modicum of insight, intelligence and perceptivity.

THE CONTROL FREAK SYNDROME

Interestingly, Fayetteville University, citing Osbourne (1991), 'identified the Dark Side [of the entrepreneur] as the corrupting power of ownership ... in which the power of ownership corrupted the organization'.

The majority of entrepreneurs are usually control freaks. Their internal locus of control and self-bestowed freedom (volatility) to act and take unilateral decisions precludes them from working in a formally structured group – they have to be the "top dog", barking dictates, and "don't like someone having authority over them, so don't tell an entrepreneur what to do.' (op cit: Harvard Business Review, 1985).

Why do many entrepreneurs not accept that humility and a willingness to learn also about management practises that would be of benefit to them, others and their enterprise? Sadly, many are aware of a need to change but seldom take counsel to address their destructive modus operandi. Is obstinacy (not a synonym for determination) their Achilles heel?

THE SABOTEUR SYNDROME

Sadly, some entrepreneurs feel threatened by individuals who possess talents that outshine their own. To secure and protect their kingdom of *self* they will sabotage the input of others by firing, marginalising or forcing from their organisation any challengers whom they perceive might want to steal some of their thunder⁶. Henry Ford⁷, for example, was not only a

⁵ See <http://www.netmba.com/mgmt/ob/motivation/mcgregor/> (Accessed 30 January 2012).

⁶ British employment law protects against "constructive dismissal" tactics.

virulent ant-Semite but a harsh and dictatorial individual who dismissed any who became “too uppity”, including an individual who had contributed much to the early years of the Ford enterprise (The Day the Bubble Burst, Chapter 3).

Is this culling of talent advantageous to their longer-term business practice and reputation? Why is the *selfish* gene *allowed* to dominate? Does this exclusively disfiguring blemish of feudal modus operandi sit well in the modern world of teamwork, co-operation, efficiency, consultation, succession-planning, transparency and the mutual sharing of valuable expertise?

THE SUN KING/QUEEN SYNDROME

Does the grandiose, autocratic spirit of the French Monarch, Louis XIV, the Sun King (1638-1715), (Encyclopaedia Britannica) live on in the consciousness of many entrepreneurs (cf Alan Sugar, 2010)?

The dark side of a *self*-inflated ego and aggrandisement causes some entrepreneurs to believe that ‘they’re the best person for the job; [they] like to control, they have trouble delegating [and]; if they do hand over a task [tasks do not equate with delegated functions], you can bet [they] are keeping tabs and checking over shoulders to make sure it’s done [their way and remove any sense of fulfilment from the chosen appointee]. Don’t check over an entrepreneur’s shoulder... that’s a recipe for disaster and will invoke a furious reaction.’ (Men With Pens, 2008).

Does this approach not parallel that of the emotionally disturbed individual who acts because he/she has heard voices (their ID⁸) telling them what to do? In the case of some entrepreneurs, their childhood-formed ID takes full control and they regress into infantile mode (Psychology 1010). Or, on another level, would transactional analysis exhume and then placate the cry of the insecure and frustrated inner child wanting to be recognised, acclaimed and acknowledged – if so, by whom (I’m OK, You’re OK)?

Additionally, rather than delegating to reach an objective, their line interference often mutates also into manipulation and scheming (divide and rule) to get people to do what they want and thus form / reinforce cliques comprising the US and THEM cohorts (Bauman, 1993). Is it a good practice to turn employees and volunteers into performing seals?

Covert influence can also be strengthened by dictatorially forcing subordinates towards a desired outcome. Does this dark side not dampen and eclipse

⁷ Veritas Vol 2 Number 3, 2011.

⁸ See

<http://psychology.about.com/od/theoriesofpersonality/a/personalityelem.htm>

the creativity, initiative and loyalty of serving stakeholders who could further enhance the growth of the enterprise? It is understandable that many informed employees choose to walk the plank rather than stay on board the ship named, Megalomania.

Written across the lintel of the temple of Delphi were the words γνῶθι σεαυτόν and, indeed, is to “*know thyself*” and then adjust appropriately, not the sine qua non for disciplined, humane entrepreneurship?

THE BOTTLE NECK SYNDROME

The bottle neck syndrome is another concerning dark side blotch. In the days of the Divine Right of Kings, petitioners to see the monarch often had to wait lengthy periods of time before being granted an audience. One of the negatives of the non-delegation practice of the pre-occupied, ego-centric entrepreneur is the frustrating, unfair waiting process for decisions and sanction to proceed along lines of action. Time is money.

THE READ ME SYNDROME

Many entrepreneurs conceitedly expect their subordinates to be able to know instinctively what is required from them. Due to the entrepreneur’s marked inability and unwillingness to explain time-consuming instructions and read lengthy documents⁹, there is an irrational demand for omniscience from employees. Sadly, this leads to miscommunication and a gradual distancing between the lower to higher level of interactive contact.

Readers familiar with the United Kingdom’s travel network will be aware of the warning to *MIND THE GAP* between the train and the platform when entering or alighting from the train. It might be that within the entrepreneurial world this advice could, when applied to human interaction, be a metaphor of relevance.

THE ESCAPIST SYNDROME

Many entrepreneurs belong to the army of global workaholics. Apparently, there are two main types of workaholic: ‘The attention seeker who fills his life with the excitement of work — and the escape workaholic who works to get away from his or her problems’ (Mitchell Wallick, PhD, 2011). In parallel, Kathryn Cunningham, the director of the Center for Addiction Research at the University of Texas Medical Branch in Galveston writes, ‘Some ... also may have a fear of failure or loss of position in society’ (ibid).

⁹ Winston Churchill, ‘Please be good enough to put your conclusions and recommendations on one sheet of paper in the very beginning of your report, so I can even consider reading it’. Is this not arrogance, personified? http://thinkexist.com/quotes/winston_churchill/2.html (Accessed 6 February 2012).

Assuming that there is value in those noted opinions, this raises the issue of *why*. If not working all hours of the day to pay bills et al, then what is the reason for seeking 24/7 fulfilment in the workplace? Is it not true that the bee will always fly to where the honey is?

Whatever the reasons, the person who is *driven* is not motivated by the same force that *drives* others towards success. The *driven* individual is in danger of burnout and professional counselling is a positive option.

THE MARTYR SYNDROME

Due to the entrepreneur's squirrel-like gathering of the workload, the understandable pressure on this adventurer is huge. It is then that the martyr emerges – especially during crises. Many become upset because nobody will/can help out, and the collateral damage caused by their drained emotions should not be underestimated. Is such acting out not also a primal cry to be noticed; admired and respected and an opportunity to affirm their “divinity”?

As an example, religious history records that Joan of Arc heard the voices of St. Michael (and his angels), St. Catherine and St. Margaret - this ultimately led to her being burnt at the stake fuelled by English revenge and with piously encased bigotry (Catholic Encyclopedia). Is the moral of the story not to submit to one's own “inner voice”, to submit to peer review and consider subsequent feedback?

Joan was eventually canonised some 600 years later (1920); 30 May is now her feast day but was the pain and suffering necessary?

CHANGING THE LEOPARD'S SPOTS

Is it feasible to challenge the *selfish gene*¹⁰ that secures the hegemony, secret plans and control ethos of entrepreneurs?

It is established that pioneers are not ipso facto those who epitomise ‘... leadership as symbolic performance, expressing the hope of control over destiny; management as the activity of introducing order by coordinating flows of things and people towards collective action ...’ (Czarniawska-Joerges and Wolff, 1991). Each role ‘embodies the different fears and hopes of those who create organizations by their daily performance’ (ibid). A harmonious, separate partnership for each role is imperative to organisational growth, goodwill and enrichment.

- This Paper does not support the belief and practice endorsing every *leader* as ipso facto an

entrepreneur, and strongly emphasises that not every *entrepreneur* is a *leader*.¹¹

- Research findings, experience and anecdotal feedback affirm that few entrepreneurs are managers of people.¹²
- Entrepreneurs lead in selected expertise and products, but this rarely equates with the necessary leadership and management of people.
- Sadly, not all adventurers accept these distinctions and the possibility of more organisational chaos, conflict and unhappiness within their kingdom usually follows.

Whilst acknowledging the above, would it not be possible for entrepreneurs to channel their creativity into also contributing to the development of staff so as to enrich the mission of their enterprise?

The majority of entrepreneurs are not *people centred*. Consider, for example, the developing scenario encompassing the renowned, controversially viewed founder of Amstrad, Lord Sugar. This media personality and ex-political advisor is reportedly being taken to an Industrial Tribunal by an ex-employee (Daily Record, 2012). Allegedly, the tycoon reneged on an employment agreement made with an individual chosen to be his personal assistant. Apparently, she was not given the advertised position.

WHAT NEXT?

Happily, entrepreneurs are here to stay but, hopefully, with less of their dark side eclipsing their brilliance. So much more can be accomplished if each entrepreneur allowed other talented individuals to exercise *leadership* where they cannot; to *manage*, because their great work demands this; to receive criticism with an open mind, because it is important that they understand, accept and then address their limitations.

What would happen if the dark side allowed light to enter and dispel the blemishes?

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¹¹ Leadership training might develop the desired expertise.

¹² Management training might develop the desired expertise.

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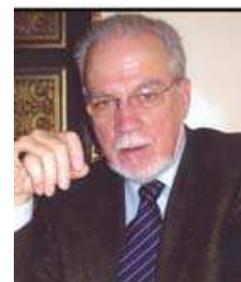
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PUBLIC PLANNING IN THE GAMBIA

Dr Frederick Ozor*

The study of public planning has continued to engage the attention of public managers and researchers on corporate governance in developing countries. In particular, researchers are interested in finding better ways of achieving state objectives, overcoming organization threats and exploiting opportunities, developing appropriate strategies, changing the fortunes of the organization or a nation's economy, and achieving competitive advantage and agency effectiveness.

The Gambia political decision-makers and managers are beginning to recognize the potential value of comprehensive planned interventions for achieving national economic growth objectives. In particular, the government of the Gambia acknowledges the critical role of public financial management as the catalyst for economic growth and development. And this requires that the government and its agencies raise and manage and spend public resources in efficient and transparent manner. A new Program for Accelerated Growth and Employment (PAGE), aimed at reducing poverty and youth unemployment, is employing good practices of budgeting, planning and monitoring of national economic performance.

This paper reports a study that took a macroeconomic and financial management approach in investigating the effectiveness of public planning in terms of its impact on three economic growth criteria in the Gambia. Economic growth may be defined in terms of the increased ability of a nation to produce goods and services, i.e. the expansion of a country's productive capacity leading to a rise in total national product output. The use of gross national product (GNP) permits the study to account for the contributions of nationals abroad to total national product output. It is also possible to look at national economic growth in terms of gross national income, which is the aggregate income of all gainfully employed citizens both within and outside the country. But the study reported here did not focus attention on quantitative measures of economic growth, rather it looked at how public planning impacts on the three economic growth criteria: factor productivity, aggregate national investment (or capital accumulation), and waste (or error) reduction.

Macro-economic measures embodying public plans and budgets consist of public policies, programs and program implementation. These measures would generally include planning, programming, and budgeting for human resources development, significant changes in employment levels, aggregate income, savings, and investment, and necessarily, projections designed to minimize or even eliminate

waste from the national economic process. In this context, planning effectiveness or impact is measured in terms of size and rate of economic growth using as proxies changes in the three economic growth criteria. The assumption is that changes in these growth criteria would reflect corresponding changes in growth rate. Factor productivity refers to contributions of production resources- physical capital, human/labor, natural resources and entrepreneurship- to total national product output. Aggregate national investment means the sum total of human and capital expenditures and, for the purpose of this study, it refers to the annual level of private and public capital expenditures (i.e. capital accumulation). Since economic growth can also be conceptualized in terms of processoral, structural and institutional change possessing both monetary and non-monetary properties, waste reduction or elimination represents a state of transition to waste free economy that results from elimination or reduction of 'corrupt' (out-of-the-normal, economically irrational), counter-productive economic and bureaucratic practices and procedures including economic crimes (and perhaps, the institutionalization of free market enterprise economy and liberalization), which represents a necessary condition for effective economic production and growth. This paper therefore works on the hypothesis that public planning is essentially a change directed process, and that national economic growth is a function of macro-economic planning.

LITERATURE REVIEW

Literature on macro-economic theory is varied and extensive showing correlations between several factors, which include public investment and economic growth. Annual public plans are currently replacing development plans as major instruments of economic development and regulation of the economy through fiscal and monetary policies of state. This new public management philosophy, requiring reduction of state direct role in national economy and achieving fiscal consolidation appears to be gaining wider acceptance across most of the developing world. Based on the recommendations of the advanced donor countries, most developing countries have implemented reforms requiring less state role in the economy and increased effectiveness of public bureaucracy included downsizing of the public service de-bureaucracy, measures to combat corruption and enhancing performance (Hughes 2003; ECA 2003). According to Sharma, (2006) these reforms included reduction in direct involvement of state in economic process, enhancing private sector role in the economy, creating enabling environment for the private sector and developing public-private sector partnership. The spirit of new public management requires the principles applicable to the private sector as a basis for enhancing the efficiency and effectiveness of public institutions (Mhone, 2003)

Evidence from literature appears to show that public plans could be instrumental in stimulating economic growth. In this context, Premchand (1984:199) in a search for answer to the question of what should be the role of the public sector in generating growth, argued that Mexico employed fiscal policy as a major instrument to promote rapid growth since 1971 the outcome of which was 'boom and bust' as growth was followed by high rates of inflation and assorted economic disequilibria. Moreover, (Barro and Xarier 1992; Ben-David and Papell, 1997) underscored the important place of technology in economic growth process. But can technology really be transferred or imported for that matter by developing countries? In the search for answer this study directs attention to management and development of local capacity (an attribute of public planning) and to the examination of contribution of public planning variable to economic growth.

The relevance of macro-economic indicators engaged the interest of some growth researchers in recent years. (Barro, 1997; Cameron, 1997; Blomstrom and Meller, 1991) investigated and presented theoretical elaborations of relationships between economic growth and education, good health, low fertility, rule of law, lower government expenditures, and trade as factors that contribute to economic growth. Other authors correlated a number of variables to economic growth such as technological accumulation (Archibuji et al, 1998), level of national savings (Baldassari et al, 1993), human capital development (Steve and Mintz, 1992), public expenditure including defense or military spending (Bruton and Hill, 1996; Steve and Mintz, 1992; Ansari et al, 1997), population growth, import substitution and exchange rates in developing countries (Clausen, 1986; Vinay, 1993) and 'right policies by governments (Bruton et al, 1996). Studies of economic growth have also identified other economic growth factors of macroeconomic and structural reforms, including the unification of foreign exchange markets and better public expenditure and financial management, a high degree of macroeconomic stability, state of civil and political governance, supportive international economic environment, increased foreign direct investment (FDI), official development assistance (ODA) inflows and a reduction in the stock of debt. However, this study makes use of new growth theories that are outgrowths of the classical view (Swan, 1956), which emphasize human capital, though constructed differently both as skill embodied in a worker (Lucas, 1988) and knowledge and ideas (Romer, 1990). The effect of technology on quantitative measures of growth operates through the level of human capital either because human capital produces new technology directly or because it is used as input in Research and Development related activities (Sianesi and Van Keenen, 2003:163). Drawing insight from previous studies closely relating economic growth to a number of factors (physical capital, human/labour, and the residual, interpreted as growth of efficiency or Total Factor Productivity, containing among others the

effect of technology and causing long-run growth (Denison, 1962; Mankiw, Romer, and Weil, 1992), this paper developed three economic growth criteria on the basis of which planning effects are measured. Moreover, Leeuwen, (2007) recognized the importance of cross-country differences not often accounted for in empirical research. Drawing on the author's insights, this paper examined the effect of public planning on economic growth within a country, The Gambia though in a context largely influenced by environmental forces. Public sector planning environment in the Gambia is more or less shaped by several often contending internal and external policy actors.

RESEARCH METHODOLOGY

The research strategy is basically positivist based on predetermined hypothesis and clearly defined variables, which are tested using primary data generated from the Gambia. The study employed a Likert type rating device to measure relevant data and analyze how public planning impacts on the three economic growth criteria: factor productivity, aggregate national investments, and waste or error reduction. The nomothetic approach relied on quantitative analysis of a sample drawn from a large population in order to test hypothesis and make statistical generalizations concerning the impact of public planning on the economic growth criteria. The target population included business executives and consultants, economists, top political officers, public bureaucrats, and the academia. These groups appeared to share common characteristics as well as significant elements that satisfied the sample selection criteria, which include:

- Experience with public agencies located in the Gambia
- Probability for securing informed opinion about policy issues and national economy.

Primary data were collected from a sample of 208 respondents using structured questionnaires. This is considered a significant explanatory/predictor variable for economic growth in terms of increase in factor productivity, rate of waste reduction (including intensity of waste), and increase in the volume of aggregate investment. However, it would appear that criteria for measuring economic growth in developing countries may differ significantly from those conventionally employed for developed economies. Ackley (1966: 505) urged for economic growth conception in two broad senses, one representing a shift from 'underdeveloped to developed' economy, and the other quantitative changes or growth that occur in developed economies, though both are associated with 'increases in per capita income'. Economic growth in the first sense means a shift from non-economic to economic motivations, from political and cultural dominance in economic affairs to rational, goods centered, free market economy. This concept of growth for developing countries retains considerable

empirical validity even today because economic production in these countries is still associated with socio-economic distortions and corruption. Consequently, this paper assumes that an important aspect of change, or growth for that matter, is a transition to corruption free market economy which would permit more efficient allocation of means of production and the application of best practices in the process. The assumption here is that these changes imply opportunity costs representing potential or alternative investment spending. Waste elimination is tantamount to output saved, which nevertheless constitutes an addition to total national product output. The label, or variable, 'waste reduction' represents change in this direction, a change and transition not only to 'real' production condition but also in itself representing real product addition or economic growth for that matter. This change is considered 'real' because what is produced is no longer wasted as it represents tangible and sustainable addition to gross national product output.

The Nigerian economy is characterized by varied often subtle economic crimes and illustrates this kind of 'waste' condition. In this case, the opportunity cost of 'waste' can be measured in terms of what would have been produced using the same resources, which nevertheless could add to gross national product output. The opportunity cost of waste could have larger implication, if calculated in terms of additions to aggregate investment or capital accumulation. Therefore, waste reduction is the creation of conditions for meaningful, tangible and sustainable additions to total national product output - releasing and directing productive resources towards the goal of economic growth. For this reason, the paper conceptualizes 'waste reduction' as a major criterion for economic growth. Theoretically, the assumption is that quality of governance measured in terms of level of corruption and quality of the national bureaucracy can impact on the efficacy of public spending (and by extension, the overall public planning), to produce expected results (Rajkumar and Swaroop, 2007). It follows, at least conceptually, that the ability to formulate and implement appropriate, problem-solving and effective public policies and programs, which embody and articulate public sector plans can significantly reduce waste. In this context, public sector economic planning is also about governing behaviors involved in formulating and implementing economic plans; it is about managing the national economy.

KEY FINDINGS AND DISCUSSION

There were significant differences of opinion on the impact of public planning on the three economic growth criteria.

Table 1: Gambia-Impact of public planning on growth criteria (2002 -20012)

i. Influence of public planning on capital accumulation/aggregate

	x	f	fx	x	s	%
Very High	5	1	5	3.14	.61	2.4
High	4	15	60			37
Moderate	3	25	75			61
Low	2					
Very Low	1					

ii. Influence of public planning on Error/waste reduction

	x	f	fx	x	s	%
Very High	5	12	55	4.14	.45	26
High	4	35	140			74
Moderate	3					
Low	2					
Very Low	1					

iii. Influence of public planning on factor productivity

	x	f	fx	x	s	%
Very High	5	10	50	4.24	.43	24
High	4	31	124			76
Moderate	3					
Low	2					
Very Low	1					

Table 1 shows the impact of public planning on economic growth criteria: factor productivity, aggregate national investment, and waste reduction.

Table 2 below shows the overall picture of public planning impact on economic growth indicating summary of chi-square tests results.

Table 2: Gambia- Impact of public planning on economic growth Criteria

Derived Hypotheses	N	x	s	Min.	Max.	χ^2
Public planning enhances aggregate national investment	41	3.14	0.61	1	5	0.370
Public planning reduces Waste	47	4.14	0.45	1	5	0.2025
Public planning promotes factor productivity	41	4.24	0.43	1	5	0.1849

Test results ($\alpha = 0.10$, $df = 4$). Since $\chi^2(C.V.) < 7.779$, there is not enough evidence to reject the claim. The result is not significantly different from what is stated in the null hypothesis.

Very High= 5 High = 4 Moderate= 3 Low= 2 Very Low= 1

Summary of results: Public planning tends to promote economic growth. The result is highly significant at 0.10 (or 10% probability that the statistical decision is untrue). Overall, results show that public planning impacts positively on all growth factors. Besides, chi-square tests produced significant results ($\chi^2 < 0.10$) for public planning impact in respect of each growth criteria. Respondents believe that public planning impacts positively on all growth criteria. However, the calculated mean shows varying levels of impact, the more closely related being error/waste reduction (4.14) and factor productivity (4.24).

Table 3: The Gambia Macro-economic assumption

	2003	2004	2005
Real GDP growth (%)	6.0	6.0	6.2
Inflation rate (%)	4.0	3.0	3.0
Growth of exports (%)	4.5	3.5	5.0
Growth of imports (%)	0.6	1.9	2.5
Domestic revenue/GDP (%)	12.9	11.2	9.1
Gross investments/GDP (%)	19.7	20.1	22.1
Gross domestic savings/GDP (%)	6.1	7.1	9.9
Fiscal deficit/GDP (%), excluding grants	2.7	2.3	1.9
Reserves, as months of imports	5.2	5.4	5.5

Source: The Gambia MDG Report, 2003-05, Second Strategy for Poverty Alleviation (SPA II)/ Poverty Reduction Strategy Paper (PRSP).

The finding showing aggregate national investment with a mean of 3.14, though close to 4, suggests that public planning has not created sufficient conditions to raise and sustain appropriate level of national savings needed to foster increased aggregate investment. This result corroborates the finding from analysis of secondary data (see Table 3), which indicates that public planning tends to impact on aggregate

investment. Gross investment rose from 19.7% of GDP in 2003 to 20.1 % in 2004 reflecting no change in real GDP growth within the period (6.0%) while a further rise to 22.1% of GDP in 2005 produced 6.2 % real GDP growth rate, though domestic savings rose progressively from 19.7 % of GDP to 22.1% in the same period. These figures show generally low level of gross investments, which though increased slightly progressively up to 2012 due largely to foreign direct investments. Besides, fiscal deficits declined progressively from 2.7% of GDP to 1.9% within the period. A possible explanation for this very low growth change (0.6%) within the period is a missing strategic foresight in public sector planning, which suggests that public sector planning capacity remains a critical factor in stimulating growth in aggregate national investments or capital accumulation. A further implication is that the low level of capacity development has a major effect on economic growth, which supports the assertion in literature that capacity constraints in the Gambia tend to impede program implementation (Human Development Index for The Gambia, UNDP Draft Country Program for The Gambia, 2007). Thus, this corroborative finding that draws attention to the strategic significance of skills, technical expertise, and sophistication in public sector planning that is need to achieve a necessary synergy in pursuit of human resources development and economic growth objectives.

Moreover, the Gambia Investment Act 2001 & Promotions Act 2001 provided incentive packages to encourage inflow of investment to certain areas but made no distinction between domestic and foreign investors. These packages included exceptions from a wide range of taxes and legislation aimed at creating conducive investment climate. The value of foreign direct investments fell from USD 39.4 in 2009 to USD 37.4 in 2010 (IMF Balance of Payments Statistics Yearbook and Data Files). These figures thus suggest the apparent necessity for government to adopt more effective macroeconomic policies designed to encourage greater domestic and foreign investments in such sectors as infrastructures and power supply to boost economic growth. It seems equally important to encourage greater domestic investment and greater role of the middle class and of the private sector in the economy.

Table 4: Macroeconomic Indicators

	2010	2011	2012	2013
Real GDP growth	6.3	5.5	5.6	5.6
Real GDP per capita growth	3.6	2.7	2.9	2.9
CPI inflation	3.9	4.7	4.8	5
Budget balance % GDP	-5.4	-4.2	-3.8	-2.8
Current account % GDP	-17	-17.5	-16.9	-16.4

Figures for 2010 are estimates; for 2011 and later are projections. Source: Adopted from <http://dx.doi.org/10.1787/888932602255>

In addition, the calculated Likert mean of 4.14 and 4.24 indicate that public planning is positively related to error/waste reduction and to factor productivity respectively, though however, the results indicate the need for a more outcome-oriented program approach to achieve overall growth and development objectives. However, the estimated mean of 4.14 for error/waste reduction indicating positive planning impact suggests the need for greater economic system's discipline and progressive transition towards fully-fledged market economy. On the other hand, the estimated mean of 4.24 for factor productivity also indicates positive and significant effect of public planning ($p < 0.10$). Overall, these results indicate that, in the context of the powerfully articulated government economic policies within the period under study, there is apparent missing gap between 'espoused theory' and 'theory in action' in the area of economy management and system's discipline. Results thus suggest that greater efforts are needed in dealing with distorting influences on the economy that perverse the course of growth and the need for further reducing various kinds of 'waste' that derail the course of economic growth. The observation that about 70% of total money supply in the economy revolves outside of the banking system (Gargbo, 2006) supports the finding that distortions are still found in the economy, which slows down economic growth process. The implication of lower level of growth in the direction of 'waste reduction' is that elimination or reduction of corrupt and counterproductive bureaucratic practices could positively impact on national economic growth. Further, finding from analysis of secondary data supports this view indicating in particular that macroeconomic performance declined in 2002-03, which reflects a loose fiscal policy and accommodating monetary policy. However, greater fiscal discipline, control over extra budgetary expenditures and adequate auditing of fiscal and monetary accounts, a more tightening of fiscal and monetary policies from late-2003 upwards, tended to restore macroeconomic stability and a sustained economic growth reflecting a fiscal surplus that average of nearly 9% of GDP in the period 2004-07 (Gambia Information Site-Economy, available at <http://www.accessgambia.com/information/>).

Though the estimated mean score for factor productivity (4.24) indicates positive planning impact, overall, this result suggests that agency capacity for dealing with program implementation is still much constrained, providing the insight that in the Gambia there is the important need for the government to beef up its capacity building efforts, overcome its capacity limitations, its extensive reliance on foreign technical expertise, and strengthen local capacity. Capacity limitations appear to be one most significant

constraining factor in public planning process. Findings from analysis of existing data on budgeting plans for 2005/06 and 2006/07 budget years in respect of public sector agencies including the University of The Gambia reflects these capacity limitations. These findings indicate that management and financial plans tended to exhibit some features of both traditional and program based budgeting approaches. Greater emphasis appeared to be placed on details of items of expenses and departmental activities, which though included in the budget document, did not embody clearly articulated program objectives. Besides, programs had limited life-span of one year and essentially recurrent in nature. Consequently, planning and programming processes tended to retain some dominant features of line-item budgeting. However, planning picture at the national level, particularly the Central Bank of the Gambia seemed to have met the technical requirements of PPBs. However, the program based budget of the Central Bank of The Gambia (CBG) for 2006 generally indicated program objectives. Annual financial plans appeared to be integrated with national economic objectives and development goals. Analysis of these data indicates limited skills and technical expertise in public sector planning, which suggests that public planning could have direct effect on factor productivity and its contributions to economic growth. This view underscores the critical role of technical capacity in public sector planning as well as in setting up and sustaining a manufacturing sector nearly absent in the Gambia economy, which could boost economic growth. For these reasons, it is evident that economic growth in real GDP (Table 4) actually decelerated from 6.3% in 2010 to 5.5% in 2011, though projected to stabilize to 5.5% in 2012 and 2013 (African Economic Outlook, 2012). These results thus provide the insight that the Gambia economic planner need to develop more integrated approach to performance planning and a more strategic focus to national economic plans in order to achieve long term public objectives. This suggestion supports the assertion in literature that strategic plans are critical in achieving economic objectives of the public bureaucracy. In this context, Dzimbiri, (2008:56) in a study of the Botswana public service, underscored the importance of strategic plans and argued that "without strategic plans, there is no common focus and actions are performed at the expense of service delivery and productivity in the public service".

CONCLUSION

In summary, quantitative analysis of data, using the Likert type scale and chi square tests, indicated that public planning positively impacts on all three growth criteria, though with varying levels of impact. Results suggest, first, that public planning has not created sufficient conditions to raise and sustain appropriate level of national savings to foster increased aggregate investment. This suggestion underpins the insight that, in order to boost economic growth, it is necessary for

government to adopt more effective macroeconomic policies to encourage greater domestic and foreign investments in manufacturing as well as infrastructures and power sectors and encourage greater domestic investment and greater role of the middle class and the private sector in the economy. Second, result showing positive impact of public planning on waste reduction growth criteria suggests greater discipline in macroeconomic management. Third, the estimated mean score for factor productivity (4.24) indicating positive planning impact however indicates that agency capacity for dealing with program implementation is still much constrained suggesting that a more integrated approach to performance planning and a more strategic focus to national economic plans are needed in order to achieve long term public objectives. Besides, planning innovativeness within the local capacity resource requires that the Gambia public planners should develop modalities for more innovative use of International Volunteer Scheme in order to strike a balance between local and foreign expertise in implementation of budget programs, if objectives must be achieved in ways capable of addressing economic growth challenges. It is evident that for these reasons, gross domestic savings and investments (as percentages of real GDP) generally remained low. The Gambia has no significant mineral or natural resource deposits, a near absence of a manufacturing sector and a limited agricultural base, though however, economic growth recorded since late 2008 were driven by improved performance in the agricultural sector. Youth unemployment estimated at over 40% remains a major challenge to the Gambia economic planners.

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COMPARING THE OLD LIBYAN AND EGYPTIAN LANGUAGES

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First of all, we have to determine the terms selected for this research. Western writers who were affected by the Old Testament used the terms: (Semitic and Hamitic) when speaking about old languages; they said that the Canaanite languages were from Semitic origin and the Egyptian languages were from Hamitic origin. But the Arab writers prefer using the term “The Old Arabic Language” for both origins, because the first language or the proto-Sumerian language had come from the Southern Arab Peninsula as many historians have emphasized. This uncertainty in the selection of the appropriate term for the Arab language also affected the ancient language spoken by the Old Libyans. We prefer using the term “The Old Libyan Language” rather than “Berber”, “proto-Berber”, “Numidian” and “Tamazight” language. We will use the term of “Tamazight” only to determine the actual North African dialects and slangs.

PART I: LANGUAGE FIELD

In this research, we cannot access the old Libyan language from the door of the scientific principles like grammar and other linguistic rules, because it were not a language in its scientific sense but a number of slangs belonging to many tribes and cities. The actual Tamazight dialects have enabled us to get an overview of the unknown old Libyan language, which no doubt was derived from the ancient Canaanite languages, then affected by others during hundreds of years and several civilizations.

We could study these slangs only within their linguistic phenomena not scientific rules. But comparison of a specific Tamazight word with an ancient word in Arabism or Canaanite language will be difficult because of the incompatibility of both words in terms of usage time, in this case we could raise that old word to the current level of Arabic which had derived its roots from those old languages to be compared with the current Tamazight word. What applies to the wordings applies as well to the linguistic phenomena. The verbal and linguistic phenomenon still maintained by the Tamazight dialects, may be as old as the Arab dialects derived from the intermediate languages which remained in circulation in the Arabian Peninsula as accents used in the period prior to the reign of Islam, therefore we do not have to upgrade them to a certain temporal level because of the compatibility.

It is difficult now to invent modern scientific rules and impose them on the current Tamazight dialects or ancient Libyan language because they had never gained such studied scientific bases, as happened with the Arabic language since the beginning of Islam. We cannot study all the phenomena in this quick review;

we will mention some of them, just to show the linguistic link between old Arabism, Egyptian or Canaanite languages and the current Tamazight dialects to understand some specifics of the ancient Libyan language.

Because of the similarity between the old Libyan and Egyptian languages, some authors have declared that the old Egyptian language is similar to the Semitic languages in many rules, but it is very close in its vocabulary origins to the Berber (=Tamazight) and East Africa languages¹. On the other hand, there are commonalities between the ancient Libyan language and the ancient Arabism languages such as Akkadian and dialect derivatives. We can follow these examples from the Tamazight dialects, although we do not find their explicit forms in the current Arabic language which indicates that they are old and go back to the ancient Libyan language:

LINGUISTIC PHENOMENA

The Infinitive Balance of the Verb

In the Tamazight dialect we find that the past tense verb is balanced on the Arabic present tense construction, like: ‘yousid’ = *he came*, and ‘yattis’ = *he slept* (in simple past tense) and considered as infinitive. It sounds as the Arabic simple present or present continuous tense because of the initial ‘ya’ in the Arabic grammatical rule the infinitive must be balanced on the past tense ‘ja-a’ = *he came*, and ‘naama’ = *he slept* (in simple past tense), but without the initial ‘ya’, because ‘yajji-u’ = *he is coming* or *he comes*, and ‘yanamu’ = *he is sleeping* or *he sleeps* (in present continuous or simple present). But it is not considered as infinitive formula. In some cases the initial ‘ya’ changed into ‘i’ in the Tamazight dialect, but still sounds as ‘ya’, like ‘ikerrez’ = *he tills*. The infinitive balance in the Acadian language (3000 years BC) is similar to the Tamazight dialect, for example: ‘isbat’ = *he takes*, and ‘ikshud’ = *he arrives*, there is no big difference between ‘i’ and ‘y’ in the Eastern languages including Arabic. In the old Egyptian language we find the same phenomenon, for example: ‘yernef’ = *he makes* (it is formed in Arabic simple present tense but indicates the past tense as an infinitive formula).

The Semantic Evolution of the Term

We have selected from the Tamazight dialect Gabailiya the word *sif* = *river*², perhaps the names of Asfi, Tensift river and Guersif on the Malwiya river in Morocco were coming from the root of this word. We also find in Dr. Khushaim’s book “The Arabic Gods of Egypt” the old Egyptian word *isif-t*. It was translated as error, sin, crime, evil, injustice and so on. In the context of semantic development the root of the ancient Egyptian *isif* reaches to the meaning of ‘cut’, while the sword in Arabic language is *sif*; it is well known that the sword is for “cutting”. Returning to the Tamazight

word *sif*, we find that the river naturally cuts the plain between the mountains and the sea. The sands which run across the road in the Libyan slang called *siyuf*, the plural of *sif*. This means that the semantic development affected the triple root 's i f' and its binary root 's f' to have several meanings which are not far from the old Libyan and Egyptian signification, and similar as the Arabic synonyms: *saft, safah, safak, safal, safar...*, all of which carry the meaning of cutting, fissure, wretched, reducing and loss of things.

Bilateral Sign

In Tamazight there is no distinctive sign of bilateral form like in Arabic 'a' + 'n' or 'i' + 'n' to show that the name is not in single or plural but in dual form, for example: 'najm' = *star*, 'najman' or 'najmein' = *two stars*. Tamazight dialects use the verbal 'sin' = 's n' + the plural of the name to express the bilateral sign, like 'sin itran': *two stars*. In this it is completely like the old Egyptian 'sin we': *two brothers*³. According to the Eastern exchange between the 's' and 'th' like in Arabic, the Libyan and Egyptian 'sin' could be changed and turned 'thin' = 'th' + 'n' which is the bilateral of 'ithnin' = *two*, in actual Egyptian slang pronounced 'isnin'.

The Attached Absent Pronoun

The attached absent pronoun in Tamazight slangs is pronounced 's' instead of the Arabic 'h', like 'baba-s' = *his father*, instead of the Arabic slang 'baba-h' = *his father*. But in the plural form, the Tamazight add 'n' which is an Arabic Eastern symbol of plural, like the Tamazight 'mawnin-sn' = *their mouths*. We find the same phenomenon in the old Egyptian language, like attaching (s) to the feminine verb: 'szm-s'⁴ = *she hears*, the 's' represents the Arabic 'hya' = *she*, or 'howa' = *he*. Also the old Egyptians added 'n' to prove the plural form, like 'szm-s-n' = *they hear*, in Arabic 'yasma-ou-n' = *they hear*.

The Separated Pronoun

The separated pronouns in both old languages Egyptian and Libyan were similar in two main Arabic Eastern and Southern phonetic phenomena: 1st - Alternation of the letters 't' and 'h' into 's' = 'anna-s → anna-t' = *the people*, and 'baita-h → baita-s' = *his house*. 2nd - Keeping on the letter 'n' in most Arabic pronouns, like: 'a-n-a' = *I*, 'n-ahnu' = *we*, 'a-n-ta' = *you...*, 3rd Alternation of the letter 'm' into 'n', like: 'hu-m' = *they* (for masculine); 'hu-n' = *they* (for feminine). These phenomena exist widely in many Tamazight dialects. Now, we will see the relationship between the old Egyptian pronouns and the actual Tamazight ones within the previous specifications:

- The old Egyptian pronoun 'you' is 'nt.k'⁵ its opposite in Tamazight (Yefren-Libya slang) is *inshik*⁶.

- The old Egyptian pronoun 'he' is 'nt.f' its opposite in Tamazight (Jadu, Zwara, Yefren and Nalut⁷ - Libya) is 'n-tt'⁸.
- The old Egyptian pronoun 'she' is 'nt.s' its opposite in Tamazight (Kabaou and Yefren-Libya) is 'ni-tt'. We notice that the Egyptian 's' and the Libyan 't' can be exchanged by 'h' in the Arabic pronoun -by reversing- 'h-ya' = *she*, as we have previously said.
- The old Egyptian pronoun 'they' is 'int.sn' its opposite in Tamazight (Jadu, Kabaou, Nalut and Yefren - Libya) is 'nit-nt' for masculine and (Jadu-Libya) for feminine. We notice the alternation of the Arabic 'h' and the old Eastern 's', and the usage of the 't' as general mark of feminine.

The most notable thing is that the Old Egyptian separated pronouns that are similar to their opposite in the Eastern-Arabic pronouns, by exchanging the old 's' into 'h', as we previously have said. We can see this from samples showing the old Egyptian pronoun allied with its Arabic opposite, then with its meaning in English: 'wa' = 'ana' = *I*, 'n' = 'nahn' = *we*, 'tu' = 'anta' = *you*, 'tn' = 'anti, antum, antun' = *you* (single + plural, masculine + feminine), 'su' = 'hu' = *he*, 'si' = 'hi' = *she*, 'sn' = 'hum, hun' = *they* (masculine + feminine). Those old Egyptian pronouns look like some actual Tamazight separated and attached pronouns, for example [Tamazight = Arabic]: 'nagh' = 'na' attached to a verb acted by (*we*), 's' = 'h' attached to a verb acted by (*he*) or (*she*), 'sn' = 'hum, hun' attached to a verb acted by (*they*, masculine and feminine).

On the other hand we can compare those old Egyptian, Arabic and Tamazight pronouns with their opposites in the Acadian language (3000 years BC)⁹. All of these pronouns may approach each other and could be fully in the same line with slight variations. For example, by comparing the old Acadian pronoun with its Arabic opposite, then with its meaning in English: 'anaku' = 'ana' = *I*, 'ninu' = 'nahn' = *we*, 'atta' = 'anta' = *you* (masculine), 'atti' = 'anti' = *you* (feminine), 'attunu' = 'antum' = *you* (plural masculine), 'attuna' = 'antunna' = *you* (plural feminine), 'shu' = 'hu' = *he*, 'shi' = 'hi' = *she*, 'shunu' = 'hum' = *they* (masculine), 'shina' = 'hunna' = *they* (feminine).

COMMON DICTIONARY BETWEEN OLD LIBYAN AND EGYPTIAN LANGUAGES:

Common Roots

Western historians and linguists often take the ancient Libyan language as a field of comparison when they study the ancient Egyptian language, this indicates that two languages were from the same linguistic origin. For example the Englishman Oric Bates in his monograph "The Eastern Libyans" cited a group of Egyptian roots and compare them with Libyan words.

We have selected some of them¹⁰ and will try to add the equivalent meanings in actual Arabic as much as possible:

- The Egyptian root 'FḲ' has the meaning of (*win an award*), and meets the Libyan root 'FK' which has the meaning of (*present or give a gift*), also may be reversed in the Arabic root 'KF' → 'KaFa-a' = (*he rewards*).
- The Egyptian root 'MṢ' has the meaning of the verb (*bear*), and meets the Libyan root 'MĠ' which has the meaning of the verb (*bear*) or the adjective (*alive*), and leads to the prefix 'MES-' which sometimes refers to the meaning of (*son, or baby*) as we will see later.
- The Egyptian root 'MS' has the meaning of the name (*master*), and meets the Libyan root 'MS' which has the same meaning. From the Arabic root 'MZ' we find the word 'al-MiZ' = (*credit and appreciation*)¹¹, the master must be appreciated and favorite.
- The Egyptian root 'SR' has the meaning of (*prince or chief*), and meets the Libyan root 'ZR' which means (*who reaches a high-ranking*). The term 'SaRa' in (Lisan al-Arab Dictionary) refers to (*the height of honor and chivalry*).
- The Egyptian root 'MT' has the meaning of (*death*) and meets the same Libyan root 'MT' and has the same meaning. Also it existed in many old Canaanite languages including the actual Arabic.
- The Egyptian root 'M' has the meaning of (*water*) and meets the same Libyan root 'M' and has the same meaning. In Arabic (Ma) = *water*.
- The Egyptian root 'GṢ' has the meaning of (*knife*) and meets the Libyan root 'ḲS' and has the same meaning. In Arabic 'ḲaSsa' or 'ḲaTta' = *cut*, we clearly observe the alternation between the 'S' and the 'T'.

Words with Shared Meanings

Dr. Khuchaim cited in his famous book "The Arabic Gods of Egypt" several Egyptian words, compared them verbally with Libyan ones and added their equivalents in actual Arabic, we have selected some names and adjectives¹²:

- **bull**: its Egyptian verbal is 'JO' or 'GO' = 'KA' or 'GA' it completely means (*bull*), and 'GW' means a kind of bull, corresponded by the Libyan verbal 'AGWI', 'AGGU' or 'AGU', in Arabic 'عجل' – iGL' = *calf*, with drop of the letter 'ع' and missing of the letter 'L' in the hieroglyphic alphabet. We find in actual Arabic dialects, especially in the actual Egyptian slang, the word 'GA-MOUS' = *buffalo*, which is clearly composed on two parts:

'GA' = *bull*, and 'MOS' = *boy, like or peer, picture or copy..*, perhaps it gets the meaning of (the son of the cow, or looks like the cow).

- **wolf**: its Egyptian verbal is 'WNSḤ' pronounced 'winsh', it reversed to the Libyan verbal 'WṢN' or 'ṢN' preserving the same meaning. In the Arabic dictionary 'AWS' and 'OWIS' = *wolf*.
- **chin**: its Egyptian verbal is 'TaMRT' corresponded by the Libyan verbal 'TaMRT' = *chin*. In the Arabic dictionary 'MaRT' = *the man who has no hair in his chin*.
- **lipid**: its Egyptian verbal is 'SMi' pronounced 'SuMi' corresponded by the Libyan verbal 'ISM' = *fat*. In the Arabic dictionary 'SaMN' = *fat*, 'SM' is a dual of the root 'DaSM' = *creamy, fat*.
- **gift**: its Egyptian verbal is 'FQa' corresponded by the Libyan verbal 'iFFK'. In Arabic language KaFaā' = *gives a gift*, the original is 'KF' overturned of 'FK'.
- **basis (formality)**: its Egyptian verbal is 'ṢNTT' pronounced 'SHuNTa' corresponded by the Libyan verbal 'iSNTi'. In Arabic language 'SuNanun' plural of 'SuNNa-tun' = *rubric*.
- **flower**: its Egyptian verbal is 'ḤRRT) pronounced 'ḤaRaRT' corresponded by the Libyan verbal 'aRiRaT' and 'aRiRi'. In Arabic dictionary the triple root 'ḤRR' gives the meaning of (*tenderness, beauty and purity*) like flower.
- **corrupted**: its Egyptian verbal is 'BWT' pronounced 'BaWT' corresponded by the Libyan verbal 'BOWIT', in Arabic dictionary 'BATA' in simple past, 'YABOUT' in simple present = *if a man humiliates after dignity or lacks after richness*, so it gives the sense of corruption.

Oric Bates transferred some old Libyan words that had been engraved in hieroglyphic alphabet on old Egyptian graffiti, most of them were personal and tribes names¹³, we have selected the following samples:

- 'MṢKN': a particular name, afterword it was taken as a name of the Nomidian king (Massinissa), it is composed on two parts: 'MS' = *son*, and 'KN' which corresponded 'GN' in some actual Tamazight dialects¹⁴ in the form of 'aGGaNa' or 'aJJaNa' = *sky*, the complete name is (Misagenes) = *the son of the sky*. In Arabic language (ajjanna) = *the paradise*.
- 'KPPUR': a personal name, in Zwara Tamazight slang 'aKaBBaR' = *the claw*.

- ‘RBW’: the name of the old Libyan tribe ‘RiBW’ which was transferred to ‘LIBU’ and afterword in the Hebrew texts to ‘LBKI’ = *Libya*. Some of them suggests that this verbal was the first name of (Leptis) city = ‘LBTS’¹⁵ which could be the original name of all Libya, with consideration of the ‘S’ as an identified letter and the ‘T’ as a feminine mark.
- ‘BḲR’: the name of the king’s dog, quoted from an obelisk dating back to the pharaoh (Intif 1st) from the 11th dynasty 2133-2123 BC. Perhaps it was a Libyan - Egyptian ancient name for that type of dogs, or that dogs had been imported from Libya or had been fetched within the spoils of Libyan prisoners. The name were engraved in hieroglyphic letters, and compared with the Touargui (Libyan tribes) verbal ‘aBaiKuR’ which means “saluki, greyhound” = *hunting dog*.

CONCLUSION

We did not expand much in the search and comparison, and we did not dive much in the depths of the ancient languages to show the strong relationship that linked the two ancient peoples Egyptian and Libyan, but as a result of the scarcity of sources we have provided as much as possible some examples and samples that have been caught from here and there, it may be the appropriate keys to open the doors of this kind of researches in the future. We are quite sure that the ancient Libyan and Egyptian languages were twin elements of one civilization, regardless of the names and titles. This has been confirmed by ancient Greek classical writers and was newly proven by Western scientists.

PART II: WRITING FIELD

Writing symbols are the visual images of pronounced words, so it is necessary to study these symbols when talking about any language. In the second part of this research we aimed to compare the Old Libyan inscription with the Old Egyptian inscription. We believe that there was a great similarity between both inscriptions.

The Old Libyans of the southern mountainous area did not use a particular kind of writing, like other peoples of their age, to identify and record their daily affairs in readable texts. All they used were painted panels representing hunting, gathering harvests, domestication of animals and other scenes which seemed to be within particular religious ceremonies. Scientists have found thousands of carved and painted rocks in twenty locations in current Libya alone “mostly in Fezzan, Zawet Brak, Morzok, Sabha, Tebisti mountains, Cyrenaica and near the border with Egypt and Sudan, also in four places on the mountains of Tripoli area”¹⁶. Western archaeologists were concerned the paintings, they observed in the Neolithic age were expressions of ideas after he had saved time for intellectual capacity

and accuracy of observation, “so he produced many inscriptions on ostrich eggs and rocks of hills and mountains which reflected his economic and religious concepts”¹⁷.

The first man who noticed the importance of those paintings was the German researcher Henric Part in 1850, but they have not been studied in details until the last thirty years, and many paintings still need to be tested and studied¹⁸. The inscriptions have given general impressions of the life of these ancient men in terms of their methods of dealing with domestic duties and wild animals, the limited means used and the way they expressed simple ideas. Researchers did not benefit more than that, because the discovered paintings have not enabled them to learn more and determine their dates precisely.

The Frenchman Henri Lhot discovered thousands of paintings, in a valley named by the local citizens as ‘Wadi-Jabbarin’ (=river of Canaanite) in the Tassili area, southern Libya. Among those paintings were two of them that were important and attractive, and formed a puzzle to Lhot who could not read them but gave them two titles: The Young Goddesses Panel and The Sacrifices Offering Panel. He wondered whether the drawers of the paintings had been captured Egyptian traders who reached ‘Tassili’ region, or Libyans that had been staying in Egypt voluntarily or prisoners that had carried to their homeland the Egyptian method of drawing¹⁹. He saw that some of the content was similar to those that had appeared in Egypt before the founding of dynastic families²⁰, i.e. within the limits of the fourth millennium BC, which was the time that the Libyans had settled in the Delta and Upper Egypt. Upon The Sacrifices Offering panel we choose a Libyan personality to be compared with an Egyptian famous personality (see Fig.1):

- The Libyan personality is chosen from the Sacrifices Offering Panel. The Old Libyans drew this man in an abstraction mode without attention to details, though it clearly shows the bird’s mask with a long beak like the bird (ibis), head scarf or artificial hair, a belt covering the privet and in the back a line appears similar to the tail which is a habit of most ancient Libyans. We also notice the holy snake on the front of the head which is known as a protection symbol appears on the Egyptian holy people.

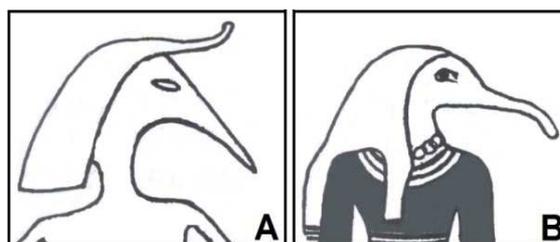


Figure 1. A: Face of a Libyan personality on the Sacrifice Offering Panel and B: Face of the Egyptian Thoth, god of inscription.

B. The chosen Egyptian personality is Thoth, the god of inscription. He was drawn as a human with the head of the bird ibis²¹. The image is rich in detail, clearly showing the ibis's mask, headdress or artificial hair, necklaces around the neck, chest stripe links between the right shoulder and the left side of the belt, the skirt that covers a part of the down body, and what looks like long tail that reaches the ground.

This comparison shows the strong similarities between the two characters. However, the Libyan character (Offerings' Plate) was dated before the founding of the dynasties in Egypt, before the fourth millennium BC, prior to the time of drawing the Egyptian character Thoth. This view is confirmed by some French archaeologists, who said: "One African tribe dating back to 4000 years BC raided Egypt by force and mingled with its people. They formed together Egypt under the rule of the first dynasty of Pharaohs, the people who invented hieroglyphics and collected its rules"²². So, can we consider that Thoth of the Sahara was earlier than Thoth of the Nile?!

The Hieroglyph Impact on Libyan Graphics: At the beginning, we have to admit that the expression hieroglyph to describe the old Egyptian writing was first launched by the famous Greek historian Herodotus in his visit to Egypt in the fifth century BC, before him was not described as such.

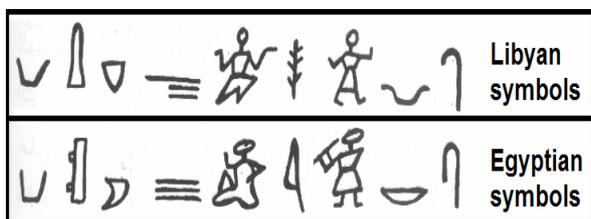


Figure 2: a quick comparison between the old Libyan symbols and Egyptian hieroglyphic symbols

Figure 2

It is noticeable on the forms of hieroglyphs that recorded thousands of texts and Egyptian antiquities, that they are consistent on the same scale line, and canceled the logical proportions and dimensions between objects, i.e. the picture of standing person fits in length with small bird feather. This is what made the Egyptian symbol lose its shape of drawing real things and highlighted its abstract form to represent the writing symbols²³.

After we reviewed the Egyptian alphabet, we found that a number of symbols that in Jabbarin Panel (The Sacrifices Offering) is very similar to the hieroglyphic shapes, regardless of the verbal meaning of the Egyptian characters that became clear to the researchers and the verbal meaning of the Libyan symbols which have not been deciphered yet. Taking into account the time dimension which spanned between the period in which the panels of Jabbarin in Libya were completed, and the latest development

phase of the Egyptian hieroglyphic symbols until they became a separated alphabet, this is a preliminary comparison between the Libyan and Egyptian symbols (Fig.2).

CONCLUSION

The Libyan writing, despite the lack of symbols, number and ambiguous meaning, is worthy to be studied carefully. We tried to read it and spell its few symbols in the sense of the Egyptian characters that matched them in shapes without success. We believe that the Egyptologists have the means to do so; may one of them one-day illicit the true meaning of the contents of the Wadi Jabbarin panels and other rocky paintings which are scattered in thousands along the Libyan desert.

NOTES

¹ Zekri, Antwan (2003): Muftah al-Lougha al-Masriya al-Qadima (=Key of the Old Egyptian Language), 1st Ed. Dar al-Aafaq, Cairo/ Egypt, p 12.

² This word is in: Saadi, Dr. Othman (2007): Moojam al-Judur al-Arabiya gig-Kalimat al-Amazighiya (= The Dictionary of the Arabic Roots in the Tamazight), 1 edition, Majmaa al-Lugha al-Arabiya, Tripoli/ Libya, p 12.

³ Zekri, op. cit. p 55.

⁴ Zekri, Ibid. p 61.

⁵ These Egyptian pronouns are taken from: Zekri, Ibid. pp 60-63.

⁶ These Tamazight pronouns are taken from: Swei, Dr. Abdullaziz Saeed (2003): Usul al-Lugha al-Libiya al-Kadima, (=Roots of Old Libyan Language), 1st edition, Dar al-Multaka, Beirut/ Lebanon, pp 336-339.

⁷ These are names of cities and towns where the Libyan Amazigh are living.

⁸ The Libyan pronouns could be seen in: Swei, Dr. Abdullaziz Saeed (2003), Usul al-Lugh al-Libiya al-Qadima (=Roots of the Old Libyan Language, 1st ed. Dar al-Multaqa, Beirut/ Lebanon, pp 336-339.

⁹ The Acadian pronouns could be seen in: Suleiman, Dr. Amer (2005): al-Lugha al-Accadiya (=The Acadian Language), 2nd ed. Ad-Dar al-Arabiya lil-Maousuat, Beirut/ Lebanon, p 225.

¹⁰ Bates, Oric (1914): The Eastern Libyans, Macmillan and Co. Limited, London, pp 81-83.

¹¹ Ibnu Mandhur (?): Lisanu al-Arab (=The Arab Tong), classified by Yussef al-Khaiyat, Dar Lisan-al-Arab, Beirut/ Lebanon, article of (MaZaZa).

¹² Khuhsaim, Op. Cit. pp 149-150.

¹³ Bates, Op. Cit. pp 80-81.

¹⁴ Zwara (Libya), Mzab and Tawat (Algeria), Rif (Morocco).

¹⁵ Camp, J. (2005): al-Barbar a-Dhakira wa al-Hawiya (= The Berber, Memory and Identity), translated by Jad-Allah Azzuz Al-Talhi, 1st ed. Markaz Jihad al-Libieen, Tripoli/ Libya, p 118.

¹⁶ Right, John (1972): Tarhikh Libya munthu akdam al-usur (=The History of Libyan from the ancient ages), translated by Abdelhamid Mayar and Ahmed al-Yazuri, 1st ed. Dar al-Ferjani, Tripoli/ Libya, p 13.

¹⁷ Nadhuri, dr. Rashid (1981): Tarikh al-Maghreb al-Kabir (=History of Great Maghreb), Dar an-Nahdha, Beirut/ Lebanon, pp 138-139.

¹⁸ Right, Op. Cit. p 14.

¹⁹ Lhot, Henry (1976): Laouhat Tassili (=Panels of Tassili), translated by Anis Zaki Hassan, 1st ed. al-Ferjani, Tripoli/ Libya, p 69.

²⁰ Bazama, Mohammed Mustafa (1972): Tarikh Libya (=History of Libya), published by the Libyan University, Benghazi/ Libya,

²¹ Zekri, Op. Cit. p 12.

²² Zekri, Ibid, p 13-14.

²³ Swei, Op. Cit. p 249.



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EMPLOYERS' SATISFACTION WITH POLYTECHNIC EDUCATION

Dr Godfred Kwame Abledu *

SUMMARY

Employers are concerned with how adequate or otherwise polytechnic education in Ghana provides for the manpower needs of manufacturing industries. Up until now, no study had been carried out by Koforidua Polytechnic which has been involved in developing human resources through regular, evening and doorstep programs. Until now no study has been undertaken to determine the influence of its programs in meeting human resources needs of the economy. In order to respond to these concerns a tracer study was undertaken to ascertain the effectiveness of Polytechnic education with regard to employability of its graduates.

The objective of this study was, in particular, to assess the extent to which Polytechnic education produces the types, mixes and qualities of skilled human resources that meet the demands of the current labour market in Ghana. It also aimed to identify the perception of employers concerning the employability skills needed by polytechnic graduates.

The target population comprised 5,015 graduates from the Departments of Accountancy, Marketing, Purchasing and Supply, Statistics, Computer Science and Networking Management from 1999 to 2009. The study targeted 40% of the graduates from each cohort. This gave a sample of 2000 graduates. Questionnaires were used to collect data from the employers of these graduates.

Principal Components and Ordinal Regression Analysis of the results indicated that employers' were satisfied with Polytechnic education. Knowledge and skills gained by the students during their studies were useful and relevant to their jobs, and to the developmental needs of the country. However, the study also revealed that there are supply-demand gaps in graduate output which contribute to the problem of graduate unemployment in the country.

INTRODUCTION

From its humble beginning in the late 90's Koforidua Polytechnic has been the only public institution of higher learning in the Eastern Region of Ghana. As such it has been entrusted with the responsibility of providing the trained personnel required both in government and industry, carry out research and provide leadership in all aspects of national development. Koforidua Polytechnic granted the first certificates to its deserving graduates in 2003. By 2009 the polytechnic had turned out 5015 graduates in the fields of Accountancy, Marketing, Purchasing and

Supply, Statistics, Computer Science and Networking Management respectively.

While many higher education institutions provide training to a variety of students, most forget them as soon as they graduate and leave the institutions' environment. This is unfortunate. Institutions should know the fortunes of their graduates in order to monitor how well the educational process has impacted on their graduates. With this type of data, they are able to make modifications that could enhance their students' chances of achieving success.

For the purpose of quality assurance of course programs, higher education institutions can contribute meaningfully by applying the principles of tracer study to create sustainable learning empowerment environment for the continuous professional development of past students. The ILO Thesaurus 2005 defines a tracer study as an impact assessment tool where the "impact on target groups is traced back to specific elements of a project or program so that effective and ineffective project components may be identified." In educational research the tracer study is sometimes referred to as a graduate or alumni survey since its target group is former students. Schomburg (2003) notes that graduate surveys are popular for "analysis of the relationship between higher education and work." They provide quantitative-structural data on employment and career, the character of work and related competencies, and information on the professional orientation and experiences of their graduates. Although the usual end of the course evaluation can ask for the student to assess whether they have gained the knowledge and skills necessary for fulfilling their personal objectives, there is really little proof of this until the student has completed the entire course of study and has entered the workforce.

The Polytechnics have been criticized for being slow in responding to the idea that learning must be continuous and continually accessible. They are accused by some people of concentrating on functional subject areas at the expense of interpersonal skills and of reacting to change instead of influencing it. There have also been suggestions that there has been deterioration in the quality of education as a result of scarce resources. Further, the economy has sometimes been unable to absorb the majority of the high level manpower produced by the Polytechnics. This has led to a high unemployment rate among the graduates due to a mismatch between available job opportunities and University/ Polytechnic output of graduates. Concerns have been raised on the content, relevance and performance of the polytechnic graduates in meeting the changing needs of the Ghanaian society.

Several factors contribute to the ultimate success of a tertiary education and training system, including infrastructure, finance, governance and leadership (Effah, 2003). Employers are concerned with how adequate or otherwise, Polytechnic education in Ghana

provides for manpower needs of manufacturing industries.

Since its inception a decade ago, Koforidua polytechnic has had no formal feedback either from graduates or from employers regarding the relevance, usefulness, strengths and weaknesses of its programmes. Koforidua Polytechnic therefore, has had no basis on which to review its own performance. The Institution does not know how its graduates are performing at their places of work, nor does it know the strengths and weaknesses of its programmes as perceived by graduates and by employers. Meanwhile, programs have remained unchanged since they were introduced.

Ensuring the supply of well-trained people by researching and then communicating the industries' needs to the Institution will assist in the development of future skills and career development policies (Bennell et al, 2003). This survey looked at the tracer study as a means of maintaining curriculum relevance to enhance the marketability of polytechnic graduates.

STUDY OBJECTIVES

The objectives of the study were to:

1. Determine the extent to which graduates use knowledge, attitudes and skills acquired during their study at the Polytechnic in their present jobs.
2. Identify the essential skills that are needed by different categories of employers.
3. Identify the relative importance of the skills required by the different categories of employers.
4. Identify the perception of employers concerning the employability skills needed by polytechnic graduates.

MATERIALS AND METHOD

Population and Sample

The target population for this study comprised 5,015 graduates from the Departments of Accountancy, Marketing, Purchasing and Supply, Statistics, Computer Science and Networking Management from 1999 to 2009 graduates (Table 1). The study targeted 40% of the graduates from each cohort. This gave a sample of 2000 graduates.

Design

The study used a combination of quantitative and qualitative research methodologies to collect and analyse the data. Two survey questionnaires were designed for data collection from graduates, as well as from the employers. The questionnaire for graduates solicited information on their personal details, training details, employment status, what they considered as strengths and weaknesses of the polytechnic system and satisfaction levels of the graduates with the system.

It also contained items on the factors they perceived were used in employing them.

The employers' questionnaire sought information on the views of employers on training their staff, whether there is some kind of relationship between employers and institutions, the extent to which the employee acquired the skills and attributes needed for the job before he/she was employed and the extent to which the skills and attributes are required in the current work. It also contained items on the factors they perceived were used in employing them.

Strategy for Tracing Graduates

Tracing of the graduates was both capital and labour intensive. It involved moving from one department to another. The Snowball technique was the method used in tracing the graduates. After graduates were traced they were asked to provide information on other graduates from their cohort or other cohorts. Questionnaires were then administered to the employers after the students were traced. Some of the employees were also interviewed.

So far, 2000 questionnaire for Polytechnic graduates and 500 for polytechnic employers had been printed. Out of this number, 1200 questionnaires have been administered to polytechnic graduates and 152 to Polytechnic employers. Out of the target of 40% of the graduates from each cohort, about 36% has been achieved.

Data Analysis

Statistical tools like descriptive statistics, reliability coefficient, multiple regressions principal component and exploratory factor analyses were used to evaluate the employers' satisfaction. A principal component is a linear combination of optimally-weighted observed variables. The first principal component of the observations X is that linear component

$$Y_1 = a_{11}X_1 + \dots + a_{p1}X_p$$

$$= \sum_{i=1}^n a_{i1}X_i \quad (1)$$

where coefficients a_{i1} are the elements of the characteristic vector associated with the greatest characteristic root λ_1 of the sample covariance matrix of the responses. The a_{i1} are unique up to multiplication by a scale factor, and if they are scaled so that $\mathbf{a}'_1 \mathbf{a}_1 = \mathbf{1}$, the characteristics root λ_1 is interpretable as the sample variance Y_1 . The response whose sample variance

$$S_{Y_1}^2 = \sum_{i=1}^p \sum_{j=1}^p a_{i1} a_{j1} S_{ij}$$

$$= \mathbf{a}'_1 \mathbf{S} \mathbf{a}_1 \quad (2)$$

is greatest for all coefficient vectors normalized so that $\mathbf{a}'_1 \mathbf{a}_1 = 1$. To determine the coefficients we introduce the normalization constraint by means of the Lagrange multiplier, λ_1 , and differentiate with respect to \mathbf{a}_1 :

$$\begin{aligned} \frac{\partial}{\partial \mathbf{a}_1} &= [\mathbf{S}\mathbf{v}'_1 + \lambda_1(\mathbf{1} - \mathbf{a}'_1 \mathbf{a}_1)] \\ &= \frac{\partial}{\partial \mathbf{X}} [\mathbf{a}'_1 \mathbf{S}\mathbf{a}_1 + \lambda_1(\mathbf{1} - \mathbf{a}'_1 \mathbf{a}_1)] \\ &= 2(\mathbf{S} - \lambda_1 \mathbf{I})\mathbf{a}_1 \end{aligned} \quad (3)$$

The coefficient must satisfy the \mathbf{P} simultaneous linear equations:

$$(\mathbf{S} - \lambda_1 \mathbf{I})\mathbf{a}_1 = \mathbf{0} \quad (4)$$

If the solution to these equations is to be other than the null vector, the value of λ_1 must be chosen so that

$$|\mathbf{S} - \lambda_1 \mathbf{I}| = 0 \quad (5)$$

λ_1 is thus a characteristic root of the covariance matrix, and \mathbf{a}_1 is its associated characteristic vector. To determine which of the \mathbf{P} roots should be used, premultiply the system of equations (5) by \mathbf{a}'_1 . Since

$$\lambda_1 = \mathbf{a}'_1 \mathbf{S}\mathbf{a}_1 = \mathbf{S}\mathbf{v}'_1 \quad (6)$$

But the coefficient vector is chosen to maximize this variance, and λ_1 must be the greatest characteristics root of \mathbf{S} . The second principal component is that linear compound

$$\mathbf{Y}_2 = \mathbf{a}_{12}\mathbf{X}_1 + \dots + \mathbf{a}_{p2}\mathbf{X}_p \quad (7)$$

whose coefficients have been chosen, subject to the constraints

$$\mathbf{a}'_2 \mathbf{a}_2 = 1 \text{ and } \mathbf{a}'_1 \mathbf{a}_2 = 0 \quad (8)$$

so that the variance of \mathbf{Y}_2 is a maximum. The first constraint is merely a scaling to assure the uniqueness of the coefficients, while the second requires that \mathbf{a}_1 and \mathbf{a}_2 be orthogonal. The immediate consequence of the orthogonality is that the variance of the successive components sum to the total variance of the response. The coefficient of the second component are found by introducing the constraint by the Lagrange multipliers λ_1, λ_2 and μ differentiating with respect to \mathbf{a}_2 :

$$\frac{\partial}{\partial \mathbf{a}_2} = [\mathbf{a}'_2 \mathbf{S}\mathbf{a}_2 + \lambda_2(\mathbf{1} - \mathbf{a}'_2 \mathbf{a}_2) + \mu \mathbf{a}'_1 \mathbf{a}_2] = 2(\mathbf{S} - \lambda_2 \mathbf{I})\mathbf{a}_2 + \mu \mathbf{a}_1 \quad (9)$$

If the right – hand side is set equal to 0 and pre-multiplied by \mathbf{a}'_1 , it follows from the normalization and orthogonality conditions that

$$2\mathbf{a}'_1 \mathbf{S}\mathbf{a}_2 + \mu = 0 \quad (10)$$

Similar pre-multiplication of the equation (6) by \mathbf{a}'_2 implies that

$$\mathbf{S}\mathbf{a}_2 = \mathbf{0} \quad (11)$$

and hence $\mu = 0$. The second vector must satisfy

$$(\mathbf{S} - \lambda_2 \mathbf{I})\mathbf{a}_2 = \mathbf{0} \quad (12)$$

and it follows that the coefficients of the second component are thus the elements of the characteristic vector corresponding to the second greatest characteristic root. The remaining principal components are found in their turn from the other characteristic vectors.

If the first \mathbf{P} components explain a large amount of the total sample variance, they may be evaluated for each subject or sampling units and used in later analyses in place of the original response. For components extracted from the covariance matrix the component score of the i th subject are

$$y_{i1} = \mathbf{a}'_1(\mathbf{X}_i - \bar{\mathbf{X}}), \dots, y_{ip} = \mathbf{a}'_p(\mathbf{X}_i - \bar{\mathbf{X}}) \quad (13)$$

where \mathbf{X}_i is the i th observation vector and $\bar{\mathbf{X}}$ is the sample mean vector.

RESULTS

Profile of Graduates

The results of the survey revealed a fair proportional representation of graduates within the categories resulting from the classification of the graduates by their various programs (see Table 1). The course of study of the graduates revealed that while 43.6% did Accountancy, only 14.3% of them did Statistics. The low representation of graduates of Statistics in the list of surveyed graduates was due to the fact that few students were admitted into this program. The gender of the graduate respondents showed a high percentage of males (72.8%) as against (22.2%) females (Table 1). The gender of the respondents was further examined by programs of study of the respondents. The result showed a fairly well distribution of females among the chosen courses of Accountancy, Marketing, Purchasing and Supply, Statistics, Computer Science and Networking Management respectively. The low number of female respondents in the statistics discipline is consistent with the earlier data on student graduation by field of study (Table 1).

The data on employment status show that 92.3% of the graduates have full time employment, 2% are contract workers while only 5.7% are graduates undergoing their one year National Service. The graduates'

employers were almost equally shared into public and private sectors in a ratio of 98:2.

Reliability Analysis for Employers' Satisfaction Dimensions Scale

Zero-order correlations were computed using pairwise deletions among the subscale scores of the basic academic skills, personal qualities and higher-order thinking skills. Table 2 shows the component and total reliabilities of employers' satisfaction dimensions scores. The findings show that the reliability coefficients for all dimensions are above 0.80 which indicates a high level of internal consistency for the scale (George and Mallery, 2003). Corrected item-total correlations were also studied; that is, the scores for an item and the summated scores of the rest of the items comprising a subscale were correlated.

The coefficient alpha values for the satisfaction subscales were .972, .825, and .911 for basic academic skills, higher-order thinking skills, and personal qualities, respectively. When using Likert-type scales it is imperative to calculate and report Cronbach's alpha coefficient for internal consistency reliability for any scales or subscales one may be using. The analysis of the data then must use these summated scales or subscales and not individual items (Gliem and Gliem, 2003).

Recruitment Criteria of the Employer

Respondents were asked to rate how important the following factors were in employing Polytechnic graduates. The results of the survey (Table 3) showed that study related factors were rated very high by both employers and employees as a factor which was used for deciding on the employment of the Polytechnic graduate. These were field of study (86.3% and 87.2% respectively), grades obtained in school (85.6% and 84.9 respectively), while reputation of the school for Polytechnic graduates was 83.1% and 79.1% for employers and employees respectively.

Besides these factors, the other issues that seemed to be significant on the criteria hierarchy were that of personality of the graduate (78.9% and 75.3% respectively) and Government employment policy (66.3% and 68.4% respectively). On the contrary previous work experience featured high for the employers but was rated low by the employees as a factor of consideration for employing Polytechnic graduates (74.8% and 51.7% respectively). The theme of project work did not seem to matter to the employers whereas it mattered to the employees (58.2% and 78.3% respectively). There is no significant difference between the overall percentage ratings of the perceived factors in employing polytechnic graduates by the employers and the employees ($t = 95.6, p < .001$).

Employers' Satisfaction with the Employability Skills of the Employees

Responses to the 56-item questionnaire were subjected to a principal component analysis (PCA) using ones as prior communality estimates. The majority of the items were excluded because of low communalities or factor loadings. Some were excluded because they were loaded on the wrong dimensions, or else on two dimensions. The purpose of PCA was to define the components under which the questionnaire items were loaded (Tabachnick and Fidell, 2007). Before conducting the PCA, Kaiser-Meyer-Olkin (KMO) test was used to test the adequacy of the sample size for factor analysis. The measure of sampling adequacy is calculated for each indicator as

$$MSA = \frac{\sum_{k \neq j} r^2_{jk}}{\sum_{k \neq j} r^2_{jk} + \sum_{k \neq j} P^2_{jk}} \quad (14)$$

This relates to the extent to which an indicator is suitable for factor analysis. In the formula, r_{jk} is the correlation between two variables, and P_{jk} is the partial correlation. Ideally this value is to be greater than 0.7. According to Kaiser, a KMO measure of 0.9-1.0 is marvellous, 0.8-0.9 meritorious, 0.7-0.8 middling, 0.6-0.7 mediocre, 0.5-0.6 miserable, (Schmidt and Hollensen, 2006). Table 3 shows the degree of employers satisfaction, Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) is 0.814.

Additionally, the Barlett test was used to test the normality of the distribution of the sample. The Barlett test statistic is designed to test for equality of variances across groups against the alternative that the variances are not equal for at least two groups. This is calculated using

$$\chi^2 = \frac{(N - K) \ln(S_p^2) - \sum_{i=1}^k (n_i - 1) \ln(S_i^2)}{1 + \frac{1}{3(k-1)} \left(\sum_{i=1}^k \left(\frac{1}{n_i - 1} \right) - \frac{1}{N - k} \right)} \quad (15)$$

In the formula above (15), S_i^2 is the variance of the i^{th} group, N is the total sample size, N_i is the sample size of the i^{th} group, k is the number of groups, and S_p^2 is the pooled variance where

$$S_p^2 = \frac{1}{N - k} \sum_{i=1}^k (n_i - 1) S_i^2, \quad \text{and} \quad N = \sum_{i=1}^k n_i S_p^2 \quad (16)$$

The Bartlett's Test of Sphericity was found to be significant (Chi-Square $\chi^2 = 59.2, p < 0.01$), and

therefore the factor analysis was considered suitable for this dataset (Leech, Barrett, and Morgan, 2005).

The principal axis method was used to extract the components, and this was followed by a varimax (orthogonal) rotation. Only the first three components displayed eigenvalues greater than 1, and the results of a scree plot test also suggested that only the first three components were meaningful. Thus, only the first three components were retained for rotation. The retained solution had 3 factors with 28 items. Combined components 1, 2, and 3 accounted for 87.3% of the total variance. Questionnaire items and corresponding factor loadings are found in Table 4.

For a good factor solution, a particular variable should load high on one factor with a factor loading of 0.40 or greater and low on all other factors with a factor loading less than 0.40 in the rotated factor matrix (Ajai and Sanjaya, 2006; Renganathan, 2011). Using these criteria, five items were found to load on the first component, which was named basic academic skills component. This was the most significant factor which explained 30.7% of total variations. The second factor, personal qualities component, explained 30.2% variations, which meant that this factor was equally important as factor one. As many as eighteen variables were loaded on this factor. Five items also loaded on the third component, which was labelled the higher-order thinking skills component. The third component explained 26.4% variations. (see Table 4).

In order to find which of the components contribute significantly to the satisfaction of employers the multiple regression was used. Preliminary examination of the results indicated there was no extreme multicollinearity in the data. The regression results indicate that the set of independent variables explained 84.7% ($F(2,26) = 95.6, p < .01$) of the variance in employers' satisfaction; with three of the two component having a significant unique influence on satisfaction (Table 5). In order of significance, they are basic academic skills ($\beta = .771$), personal qualities ($\beta = .337$), and higher-order thinking skills ($\beta = .017$). The findings suggest that higher-order thinking skills do not have any significant contribution to employers' final satisfaction scores.

DISCUSSION AND CONCLUSIONS

The objective of this study was to assess the extent to which Polytechnic education produced the types and qualities of skilled human resources that met the demands of the current labour market in Ghana. It was also to identify the perception of employers concerning the employability skills needed by polytechnic graduates. Employability Skills can be defined as the transferable skills needed by an individual to make them 'employable'.

The study identified 28 employability skills needed by polytechnic graduates. The principal component factor

analysis was used to extract three components-basic academic skills component, the higher-order thinking skills component and personal qualities component. Although the academic skill level required by some entry level jobs may be below, basic academic skills as this study revealed, are still essential for high job performance (Needleman, 1995).

Ideally, new graduates will have the ability and will want to learn. They also need the ability to listen to and read instructions and then to carry out those instructions. When asked for information, graduates should be able to respond appropriately both orally and in writing, including recording and relaying information (Needleman 1995).

Reading ability includes comprehending what has been read and using a variety of written materials, including graphs, charts, tables and displays. Entry-level employees also need the ability to complete basic math computations accurately. Perhaps even more important to job success than having good basic academic skills, is having good higher-order thinking skills. The ability to think, reason, and make sound decisions is crucial for employees desiring to do well and advance. A person who can think critically, act logically, and evaluate situations to make decisions and solve problems, is a valuable asset (Needleman, 1995). Application of higher order thinking skills in the use of technology, instruments, tools and information systems takes these higher orders skills to a new level making the employee even more valuable.

Component and reliabilities of employers' satisfaction dimension scores indicated high level of internal consistency for the satisfaction dimension scale. Employers are satisfied in terms of two of the satisfaction dimension. Employers expressed fairly high levels of satisfaction with employees' basic academic and personal qualities skills.

The majority of the employers interviewed stated that Polytechnic graduates have the necessary skills to perform their duties. There are however skills that they can acquire whilst on the job, such as supervisory skills and customer service skills. The results however, also show that some of the employers that have employed Polytechnic graduates ended up having to train these employees further in the work place since they did not possess the relevant skills. They indicated that the graduates have very limited exposure to the complexity of equipment and industrial experience. There was a general view that graduates should be sponsored for attachments so that they get practical skills in the industry before completing their studies.

There are other employers who stated that at times the Polytechnic graduates found themselves having to do a job that they were not trained for. This on its own is a set back because the employee would have never been trained, for example, as a salesperson, but due to lack

of employment opportunities in the fields they were trained in they ended up being salespersons.

There is not much difference between graduates of different programmes in terms of the skills they possess. It was reported that a lot depends on the individuals' performance, attitude towards work and willingness to learn on the job. There were some key areas that could be improved like the use of latest technology and equipment during training. Lack of industrial exposure and internship could not be over-emphasized by the employers.

Training is generally seen as very essential to enhance productivity and competence in the workplace. Most of the employers placed a lot of value on investing in training their employees. The employers stated that training enabled their employees to be both regionally and internationally competitive.

The study revealed some cases of "skills mismatch"; cases where graduates did not get employed because the qualifications and training they had has was not what the market or industry is looking for. This kind of mismatch is also referred to as a mismatch between demand and supply of training (ILO,2002).

The views of the employers on mismatch are that the programs were not meeting the needs of the industry. A recent evaluation of the apprenticeship programmes commissioned by the Ministry of Labour and Home Affairs recommended that the scheme be modernised and made more flexible to accommodate ongoing training for workers as technology and skills requirements change (ILO, 2002). The revised National Policy on Education directed that new programs be introduced to cater for the growing number of school leavers to prepare for both formal and informal sector activities. The policy states that government should cater for the initial broad-based training, while the employers should provide the specialized skill training.

The strengths in the Polytechnic education system was generally viewed as having good administration and competent instructors since it prepares its graduates for working life and self-employment. In most cases it equips the trainees with the right skills. 46.7% of the employers agreed that the Polytechnic education system in Ghana prepares learners for the work place and even self-employment.

The main weakness of the Polytechnic education system in Ghana as stated by the employers is that the Polytechnics do not liaise with employers when it comes to developing curricula. This suggests that Polytechnics might form a forum where they could meet with employers to discuss Polytechnics issues. One highly cited weakness was that the curriculum is sometimes irrelevant and not up to date. The "other" category included weaknesses such as training without looking at future needs of the country, inadequate attention to interface personal and communication

skills, irrelevant skills especially practical ones, lack of industrial exposure. They indicated that graduates from the polytechnics lack confidence and leadership skills.

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Table 1: Gender and Program of Respondent

Department	Gender		
	Male	Female	Total
Purchasing & Supply	38	13	51
Marketing	49	15	64
Statistics	21	7	28
Accountancy	92	32	124
Computer Science	2	1	3
Networking Mgt	1	1	2
Total	203	69	272

Table 2: Result of reliability analysis for Employers' satisfaction dimensions

Dimension	Number of items	Cronbach's Alpha
1. Basic academic skills	5	.972
2. Higher-order thinking skills	5	.825
3. Personal qualities	18	.911

Table 3: Factors used for Employing Polytechnic Graduates

Factor	Importance (%)	
	Employer	Employee
Field of study	86.3	87.2
Theme of thesis/project	58.2	78.3
Grades at the polytechnic	85.6	84.9
Reputation of the polytechnic	83.1	67.5
Reputation of the department	87.5	79.1
Previous work experience	74.8	51.7
Personality	78.9	75.3
Government employment policy	66.3	68.4

Table 4: Rotated factor loadings for employability skills

Statements	Factors			Communality
	1	2	3	
Basic academic skills				
Reading	0.892	-0.179	0.24	0.719
Writing	0.784	0.097	0.146	0.816
Numeracy	0.947	-0.201	-0.039	0.48
Oral Communication	0.679	0.073	0.321	0.98
Listening	0.846	0.066	0.064	0.982
Higher-order thinking skills				
Learning	0.134	0.933	0.054	0.982
Reasoning	0.038	0.891	0.229	0.98
Thinking Creatively	0.081	0.933	0.002	0.882
Decisions Making	0.102	0.891	0.031	0.855
Problem Solving	0.147	0.881	0.268	0.801

Personal qualities				
Responsible	0.123	0.266	0.953	0.751
Self Confidence	0.86	-0.09	0.953	0.98
Self Control	0.917	0.306	0.883	0.904
Social Skills	0.904	0.289	0.932	0.98
Honesty	0.501	0.522	0.911	0.904
Have Integrity	0.335	0.167	0.921	0.856
Adaptable and Flexible	0.693	0.237	0.839	0.942
Negotiation skills	-0.029	0.751	0.306	0.901



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FACTORS INFLUENCING THE SALES PERFORMANCE OF SMEs

Dr Kao Kvang Hong*

Small and medium enterprises play an important role for the socio-economic development of a nation. In Cambodia, the SMEs including micro enterprises accounted for 99 per cent of firms and employed 45% of the labor force market in 2006. But the SMEs in the country have been confronting sales problems like competition with imported products, smuggled products from the countries like Thailand and Vietnam, dominance of wholesalers, fluctuation of exchange rates of Thai Bath and Vietnamese Dong in terms of Cambodian Riel, poor quality products due to the use of outdated technology and unskilled labor, high cost of production, expensive advertising cost, etc. The above sales problems were found to be more among the small enterprises than medium enterprises. The SMEs in Cambodia, more particularly in Phnom Penh, compete with each other, and use different sales strategies to increase their sales (Reynolds et al., 1994; Afzal, 2007).

This research study aimed to find out the factors influencing sales performance of small and medium enterprises in Phnom Penh City, Cambodia.

BACKGROUND

SMEs contribute to economic growth, develop social infrastructure, create employment opportunities and help in regional and local development of an economy (Scupola, 2001). But, most SMEs lack technical expertise (Barry and Milner, 2002), and adequate capital for making technological improvements (Barry and Milner, 2002; Raymond, 2001). At the same time, many SMEs suffer from inadequate organizational planning and sales strategies (Tetteh and Burn, 2001; Miller 2001). SMEs are different from large enterprises in terms of the scope of the products or service varieties available to the customers (Reynolds et al., 1994; Afzal, 2007). The essential characteristics and sales strategies of SMEs are also different from large enterprises. In this regard, Westhead and Storey (1996), and Hill and Stewart (2000) mention the key issue as "Uncertainty" which originates from the lack of control over external environment, better to say "The Market and Sales Environment" and consequently this is an external factor that characterizes smaller organizations. Due to lack of control over market place and the external environment, SMEs mostly set and run short term policies and strategies, including sales strategies, which enable them to change the strategies whenever necessary by looking to the market situation. But such scenarios lead to uncertainty (Afzal, 2007).

The Asian Development Bank (ADB) in 2006

pointed out four main barriers to SME development:

- The lack of an SME development framework
- Business registration
- Business license system
- Assessment of finance to limit the growth.

The ADB aimed to solve this problem by working in cooperation with the government to strengthen banking supervision, supporting money and interbank market development, creating a legal framework in supporting money and interbank market development, creating a legal framework in support of cooperate borrowing, including a body of civil commercial law and system, secure transaction and account standard, and supporting investment in long term development of human capacity (ADB, 2006).

The Mekong Project Development Facility (MPDF), a private organization supported by International Finance Corporation (IFC), has also been conducting research on SMEs in Cambodia and helping to contribute to the development of the private sector not only in Phnom Penh capital but also in other provinces through a number of programs. Furthermore, the government of Cambodia has committed to make reforms and tried to create better business environment for all investors. As a result, various laws have been passed by the parliament and many others are being drafted and sent to the parliament for discussion and approval. By perceiving the significance role of SMEs in economic development of Cambodia, the government has given more emphasis on the development of private sector.

Sales strategies are the important key to boost and survive the sales of an organization. These come from marketing activities to drive the sales volume. It is difficult to use the sales strategies successfully without the support of marketing activities; companies cannot do business without the customers or sales. There are many key factors, which is influence to sales strategy and sales performance of the SMEs in Cambodia (Rana, 2004).

In this context, the present study has made an attempt to find out and analysis the key factors, which influences to the sales performance and the sales strategies of SMEs in the study area.

LITERATURE REVIEW

The success of sales strategy and the effectiveness of sales force are based on sales forces that include technologies, good salespersons and customers' satisfaction. The study on the information sources for manager and development on the topic "What makes the sales forces great", with the help of consultants from Towers Perrin, an international human resources and management consulting firm, indicated that using technology (e-commerce), finding and keeping good salespeople (appropriate individual), and fixating on customers (customer relationship) were the most

important factor resulting sales force success (ID, 2001).

Tommy Ouzoonian, Director of sales and marketing at Athens Services, a waste disposal company, who had stepped up its advertising and marketing to battle in a cooler market, also believed that, 'Increased sales performance and marketing efforts have made up for whatever slowdown there may be' (Rana, 2004).

Entrepreneurs need to prepare detailed marketing plans and the objective should cover customer concepts and Customer Satisfaction as well as link the study between customer and business. Le Boeuf Michael says "Every company's greatest assets are its customers, because without customers there is no company" (DDD, 2006).

The existing customers' relationship and building customers' loyalty will return the huge volume sales revenues. Marketing concepts and sales strategies need to concern on these cases by reason that incomes are none paid marketing practices. To find new customers, it is necessary to spend money and time to create marketing activities leading to sales strategy and the results are not exactly positive. So, maintaining the existing customers means that maintaining the incomes. Craig Shields, a senior marketing consultant at Patrick Marketing Group (PMG) says, "The existing customers are considered as sources for new revenue. Marketing executives increase their revenues by paying more attention to the existing customers and reducing wasteful marketing practices" (PMG, 2001).

The development of significant customer and trade analysis is seldom an easy task. Marketing writer Philip Kotler put it this way: "customers are neither so simple that they do not require study nor so complex that there are no rewards from study" (John et al., 1988).

Based on the survey on 183 executives of PMG, 70 per cent said that the factor challenging the success of their sales force was the expanding relationship with existing customers. Forty five per cent said that the successful factor was defining the most effective sales message, 39 per cent said that it was sales force automation, and 37 per cent said that it was building a database of qualified prospects.

All of the above questions are helpful to understand the need of customers and what is important to them. It is important for sales process and to build customer relationship in order to provide the value to customers as per their needs. Aggressive competition in the market forced all the companies to try to attract and retain customers. Consequently, the statements emphasized on customer relationship were promoted in their mission and vision in order to get optimum productivity (Rana, 2004).

Churchill (2007), a freelance author with over 200 articles on various subjects said that the idea that

spending more time and energy, and gaining and developing customers seems logical and clearly results in increased sales and revenue. The benefits of a customer relation management (CRM) strategy would therefore be aimed at improving the business's profitability and stimulating sales growth. In the past, CRM was out of reach for most SMEs business and only truly applicable to large corporation because the CRM strategy was complicated and expensive to implement mainly due to labor intensive approach. There was no IT integration to the sales tactic of SMEs and the sales people just sold without customer relation management. In UK, CRM and CRM Technology were most valuable to SMEs who could adopt a CRM strategy to compete with larger competitors in their market.

SMEs which produced organic products put their salespeople in the shop or showroom to explain to the customers and make publicity of the products, and to educate the consumers to get to know the characters and functions of their products. Some organizations had a formal system to document customer feedback through the availability of a suggestion box or a notebook kept by the owner of the shop. So, this marketing strategy may attract many customers, but would fail to keep them if the person buying the products was not serviced in a satisfactory way (IFOAM, 2003).

Proactive sales managers need to focus on the culture, because the sales culture is the infrastructure of a successful team and company. All things will fall out from being a culture-creator. Sales managers needs to focus on the future and balance the tactics of today by being available to the sales team, whose job is to live in the present. Proactive sales team is the kind who will make things happen rather than wait for things to happen (ibid).

The importance and complexity of motivation and its effect on performance have led to the idea to motivation mix, which represents the combination of factors to be considered including training, leadership skills, remuneration, and incentive, management controls and feedback mechanisms. These factors, which managers can influence and control, will affect individuals' work and, ultimately their job performance (Jobber, 1997).

Sales person's traits are crucial items in the success of sales strategy because traits are a motivation key to keep the salesperson in good relation to customers.

The success of leaders can be linked to the success of organization and influence to the success of sales as well. Rana (2004) stated about scientific management, human relation movement, leadership theories (situation, path goal, contingency, etc.) and their corresponding effect on the organizational effectiveness, productivity and sales performance.

Satisfying customers is an important key to induce more sales in sales strategy. Communication with the work force is essential, as it is gaining the cooperation of the front line people in the continuous improvement effort. Brennan emphasizes the connection between organizational success and effective leadership (Brennan, 1997).

According to Miller (2001), effective sales leaders understand that they have the trait of sales leadership by allowing their people to sell and they manage those people through their people-management skill, they create culture (motivation), and they effectively communicate it to both up and down of the organization.

The modern field of organizational behavior is based upon the large numbers of systematically designed research studies which analyzed the behavior, action, attitudes of people at work. There are many books which states on organizational behavior and its effect on sales performance of an organization (Robbins, 2001).

Rana (2004) argues that organizational behaviour is one of the factors, which affects sales performance of the organization. This makes organizational behavior a challenging, interesting, and relatively important for organization to work more effectively for enhancing the sales performance.

Improving outputs obviously needs factor efficiency. The following factors related to organizational behavior are taken into account to achieve the desired efficiency: compensation plan, flexible time, working layout, training, and sales structure (Rana, 2004).

SMEs' sales strategies begin with the process of effective selling skills to the contacting of all the intermediaries (retailer and wholesalers, etc.). To solve sales problems and convince the intermediaries to accept the products, SMEs must develop the advertising materials, public relations and marketing activities to support and build brand image of their products (Kawasaki, 2007).

SMEs' sales strategies begin with the process of effective selling skills to the contacting of all the intermediaries (retailer and wholesalers, etc.) to convince them to sell the product or display the product on the shelves. Moreover, to convince the intermediaries to accept the products, SMEs must provide the advertisings, public relations and marketing activities to support and build brand image of the products. Those help the sellers and intermediaries sell the product to their consumers. Additionally, sales promotions at any seasons can help to improve sales volume and it was considered as a supporting component in sales strategies (ibid).

Based on Cambodia Craft Cooperation (CCC) in 2005, entrepreneurs had no professional sales strategies, sales

supporting activities and business plan. Due to the high cost of advertisement, the sales promotion to increase sales was done by flyers, word of mouth and internet which were supported by CCC. International Trade Center (ITC) of the CCC, an association of small business enterprises has performed as the chamber for professionals and micro-enterprises of Cambodia (CPM) by legal basis of the Royal decree, signed by King Sihamoni on 28th December, 2005 which consisted of 2,000 SMEs, as members, showed that some products had been successfully exported to international markets like United States and Europe since the quality and design had met the needs of the international markets. The success was due to teamwork capacity building and differentiation the products from others. Nevertheless, many manufactures had failed because of low technologies and techniques, lack of production skills, and high cost of input. These caused decrease in the standard of production and increase in the prices of the productions.

The factors affecting the sales performances of SMEs were name, image and logo of the company, and packaging, location, exterior and interior building, attractive price, quality products, advertisement, technology version, transport and communication facility, growth of population, competitors, income of the people, arrival of tourists, political stability, social factor, employee training, customer satisfaction, maintenance of good relationship of sales persons with customers, management style of the organization, leadership skill of manager, organizational behavior, advertisement in the magazine, advertisement in the radio, advertisement in the television, advertisement in outdoor, and advertisement in calendar, carry bag, pen or hat. Because of these factors, the medium enterprises had more benefits in terms of increase in their sales compared to small enterprises (Kawasaki, 2007, CCC, 2005).

Thus, the above reviews of literatures show that there are many factor effecting to the Sales Performance of SMEs and difference countries has the level of difference in term of effecting to the sales performance.

STUDY OBJECTIVES

The objectives of the study were:

- To find out the factors affecting the sales strategies of small and medium enterprises in the study area.
- To review the literatures on concepts, status of small and medium enterprises in different countries, and factors affecting sales strategies of SMEs, and other related literatures.
- To examine and compare the factors influencing the sales performance of small and medium enterprises in the study area.

METHODOLOGY

Both descriptive and quantitative approaches have been used to meet the objectives and test the hypotheses of the study. In descriptive approach, the study has depended on relevant literatures, whereas, in quantitative approach, necessary tables, graphs and statistical models have been used. Secondary data have been collected from the National Institute of Statistics, Ministry of Planning, Government of Cambodia; Ministry of Industry, Mines and Energy, Government of Cambodia; International Labor Organization; Mekong Project Development Facility; and SMEs Association.

For the collection of primary data, 32 small enterprises and 32 medium enterprises producing consumer products (food and beverages) have been taken into account for the study. The above sample sizes of small and medium enterprises have been determined on the basis of the scientific sample size formula, and systematic random sampling method has been used for the selection of both small and medium enterprises. The data have been processed through the use of SPSS and Excel Programs. In order to know the significance of difference between the sales strategies of small and medium enterprises, 't' test has been used.

The study looked at small and medium enterprises, which were producing consumer products, especially foods and beverages. There are many reasons to study the SMEs producing consumer products. Based on the Cambodia Media Monitoring (CMM) in 2007, the first reason is that companies are trying to turn their budgets to invest on consumer products, especially foods and beverages, as a second option after the option of investing in the field of construction failed. Secondly, the percentage of aggressive brand marketing activities of consumer products, which are mainly foods and drinks, is 40%. Thirdly, 60% of consumer product brands are at the top of investments made on advertising. Fourthly, local small and medium food and beverage enterprises as well as the new enterprises fail to compete in the market because they don't have the funds to advertise or conduct marketing activities to compete with imported products. Further, the Cambodian people do not like local food and beverage products much.

The study was confined to the small and medium enterprises of consumer products in Phnom Penh city. This area was selected because Phnom Penh city has 60% of the companies located in Cambodia. Of the total consumer products produced in the country, 60% are sold in Phnom Penh (FCB, 2006).

The data for this study have been gathered mainly from primary sources, which have been collected from a sample of SEs and MEs through structured questionnaires. The primary data have been collected from the general managers, sales and marketing managers, supervisors and sales representatives of the

selected enterprises. The data have been gathered through face to face interviews with structured questionnaires that included both quantitative and qualitative data.

The data from small enterprises were compared with medium enterprises using the 't' test.

FACTORS INFLUENCING SALES PERFORMANCE OF THE SMES

The data provided a list of factors influencing sales performance. The factors may be grouped into twenty four categories, viz:

Name, Image and Logo of the Company, and Packaging

Factors such as product name, image, company logo and packaging may influence sales performance of small and medium enterprises. In the study: 56% of SMEs said that the above factor had a strong influence on sales performance, 22% said moderate influence and 16% very strong influence.

Among the 32 selected small enterprises, the percentages of enterprises giving opinions of strong influence, moderate influence and very strong influence of the factors on sales performance were 50%, 25% and 13% respectively. The corresponding figures for medium enterprises were 63%, 19% and 19%. According to the 't' test result there was no significant difference between the sales performance of small and medium enterprises due to the factors 'name, image and logo of the company, and packaging'.

Location, Exterior and Interior Building

Other studies have shown that location, exterior and interior building of the enterprise influenced the sales performance of the enterprises. Out of 64 SMEs surveyed, 42% said that the above factor had a moderate influence, while 36% were of the opinion that it had a strong influence on sales performance.

The percentages of small enterprises having opinion on moderate influence and strong influence of the above factor on sales performance were 38% and 31% respectively. The corresponding figures for medium enterprises were 47% and 41%, suggesting that location, exterior and interior building of location, exterior and interior building of the enterprise had more influence on sales performance for medium enterprises compared to that for small enterprises. The 't' test suggested that there was a significant difference between small and medium enterprises with regard to the effect of factor location, exterior and interior building of the enterprise on sales performance at one per cent level of significance.

Attractive Price

Other studies have suggested that price influenced the sales performance of small and medium enterprises. The percentages of SMEs expressing moderate influence, strong influence and very strong influence of the above factor on sales performance were 48%, 33%, and 6% respectively.

Among the small enterprises, 50% of them said that the influence of price on sales performance was moderate followed by 31% said price had a strong to very strong influence. The corresponding figures for medium enterprises were 47% each. The 't' value suggested that there was a significant difference between the sales performance of small and medium enterprises due to the factor 'attractive price'.

Quality Products

With regard to the influence of product quality, 61% of SMEs said that it had a strong influence on sales and 28% said it had a very strong influence.

The percentages of small enterprises with the opinion strong and very strong influences of quality products on sales performance were 60% and 22% respectively. Amongst medium enterprises, 63% had said strong and 34% said very. The 't' test results suggested that there was a significant difference between small and medium enterprises with regard to their opinions on the effect of quality products on sales.

Advertisement

Most of the respondents of surveyed of SMEs said that advertisement had the influence on the sales performance. The percentages of SMEs having opinions on moderate influence, strong influence, and very strong influence of the above factor on sales performance were 45%, 33%, 8% respectively.

Fifty per cent and 34% per cent of the total number small enterprises said moderate and strong influence of the factor on sales performance respectively. The percentages of medium enterprises having the opinions on moderate influence, strong influence and very strong influence were 41%, 31% and 13% respectively. According to the 't' test there was no significant difference between the opinions of small and medium enterprises with regard to the effect of advertisement on sales performance was found.

Technology Version

According to the majority of the SMEs in the study, the version of the technology used in the production of the product also influenced the sales performance. SMEs having opinions on moderate influence and strong influence on their sales due to the technology version were 39% and 31% respectively.

In case of small enterprises, 47% said that the above factor had a moderate influence followed by 28% who said strong influence on the sales performance. Amongst medium enterprises, it was found that the percentages of enterprises having opinions on moderate and strong influence of technology version on sales performance were 31% and 34% respectively. The difference between the small and medium enterprises with regard to their views on the effect of technology version on sales performance was found to be not significant.

Transportation and Communication Facility

Transport and communication facility is important for sales. Products can be brought to the market easily, and good network communication between seller and buyer can be done due to the availability of proper transport and communication facility. Among the surveyed SMEs, 42% said that transport and communication facility had a moderate influence on their sales performance while 41% of enterprises said it has a strong influence.

Forty four per cent of small enterprises said strong influence while 38% of medium businesses had the same opinion. Further, 38% of small enterprises thought it has a moderate influence as against 47% of medium enterprises having the same opinion. There was no significant difference between small and medium enterprises with regard to their opinions on the influence of transport and communication facility on sales performance.

Growth of Population

Growth of population was one of the important factors, which influenced the sales performance of both small and medium enterprises. In the study, 47% of the SMEs viewed moderate influence of the above factor on their performance of sales, whereas, 23% of them opined strong influence of growth of population in increasing the sales of the enterprises.

Specifically, 44% of small enterprises said moderate influence followed by 19% of the enterprises with strong influence of the factor on the sales performance. Further, 50% and 28% of the total medium enterprises had the opinions of moderate influence and strong influence of the factor in their sales performances respectively. Thus, most of the small and medium enterprises expressed that growth of population was affecting their sales performances. No significant difference was found between small and medium enterprises with regard to the above view.

Competitors

The sales volumes of the SMEs were decreasing due to many competitors in the market place. The percentages of SMEs expressing strong influence, moderate

influence and very strong influence of competitors on their sales were 41%, 39%, and 16% respectively.

With regard to small enterprises, 50% had the opinion of moderate influence followed by 31% strong influence and 16% very strong influence of the above factor on sales. On the other hand, the percentages of medium enterprises having the opinions on strong influence, moderate influence and very strong influence of competitors on sales performance were 50%, 28%, and 16% respectively.

The comparative analysis between small and medium enterprises with regard to the influence of competitors on sales indicated that there was no significant difference between them.

Income of the People

It is reasonable to propose that if incomes increase, the buying capacity of potential customers in increasing and this can be expected to lead to an increase in the sales volume in the market. This view was reflected in the opinions of small and medium enterprises in the study area. In total, 27% of SMEs opined that change in the income level of the people influenced their respective sales moderately and strongly.

The percentages of small enterprises arguing that increased income had a moderate influence and strong influence of income of the people on sales were 41% and 25% respectively. On the other hand, the corresponding figures for medium enterprises were 47% and 28%. No significant difference between the perceptions of small and medium enterprises was found with regards to the above factor.

Arrival of Tourists

The sales performance of the SMEs also depends on the arrival of tourists in the country, because many tourists buy the products produced by the SMEs. The percentage of SMEs who believed that tourism had a moderate influence on their sales was 45% along with 13% SMEs who believed it had a strong influence.

For small enterprises, moderate, strong and very strong registered 44%, 9% and 6% enterprises respectively. The percentages of medium enterprises having the opinions on moderate influence, strong influence and very strong influence of Arrival of Tourists on sales performance were 46.88, 15.63, and 6.25 respectively. Thus, due to the above factor, the sales of medium enterprises were found to be more affected.

With regard to the influence of arrival of tourists on sales of SMEs, no significant difference was found between small and medium enterprises.

Political Stability

The majority of the surveyed SMEs perceived that the political stability in the country had affected their sales performance; 45%, 22% and 8% SMEs said that political stability had moderate influence, strong influence and very strong influence respectively on their sales.

The percentages of small enterprises with the opinions moderate influence, strong influence and very strong influence of the above factor on sales performance were 44%, 16% and 9% respectively. In case of medium enterprises, 47% opined that they had moderate influence followed by 28% having strong influence and 6% having very strong influence of political stability on the sales.

The difference on the issue of influence of political stability on sales between small and medium enterprises was found to be not significant.

Social Factors

Social factors such as education and health status of the people affect to the sales performance of small and medium enterprises. Among the 64 SMEs surveyed, 55% perceived that their sales had moderate influence because of the social factors followed by 22% of enterprises having strong influence of the above factor.

Of small enterprises, 59% said that social factors had moderate influence on their sales in the study area, while 6% said it had a strong influence. Compared to this, 50% and 38% medium enterprises said that social factors had a moderate or strong influence on sales. The 't' test indicated that there was significant difference between small and medium enterprises with regard to their opinions on the influence of social factor on sales in the study area.

Employee Training

Employee training has a strong and positive impact on the sales performance of small and medium enterprises. In the study area, 47% of SMEs said that the above factor had a strong influence on sales followed by 34% moderate influence and 6% very strong influence.

The percentage of small enterprises that opted for moderate influence of employee training was 47% followed by 34% strong influence and 6% having very strong influence on sales. On the other hand, 59% of medium enterprises said strong influence, while the percentage opting for moderate influence and very strong influence of employee training on sales were 22% and 6% respectively.

The 't' test indicated that there was no significance between them on the issue.

Customer Satisfaction

Customer satisfaction can be expected to have an influence on the sales performance of small and medium enterprises. In the study area, 66% of SMEs revealed that customer satisfaction had a strong influence on their sales performance followed by 20% of enterprises opting for moderate influence and 9% of enterprises very strong influence.

The percentages of small enterprises expressing strong and moderate influence of customer satisfaction on sales performance were 66% and 25% respectively. The views on strong, moderate and very strong influence of customer satisfaction on sales performance by the medium enterprises were 66%, 16% and 13% respectively.

No significant difference was found between small and medium enterprises with regard to the influence of customer satisfaction on the sales performance.

Maintenance of Good Relationship of Sales Persons with Customers

In order to have better sales, sales persons need to keep good relation with customers. The percentages of enterprises that agreed with this were 52% strong, 30% moderate and 17% very strong.

In case of small enterprises, 53% opined strong influence, 31% moderate influence and 16% very strong influence. The corresponding percentages of opinions of medium enterprises were 50%, 28% and 19%.

The influence of maintenance of good relationship of sales persons with customers on sales performance between small and medium enterprises in the study area was found to be similar.

Management Style of the Organization

Different enterprises apply different styles of management to manage their organizations, and finally it affects their sales performances. This situation was observed among the studied small and medium enterprises. Management style of the organization had moderate, strong and very strong influence on the sales performance as revealed by 44%, 33% and 13% SMEs respectively in the study area.

The small enterprises expressing moderate, strong and very strong influence of the above factor on the sales performance were 47%, 38% and 6% respectively. The corresponding percentages of medium enterprises telling the influence of management style of the organization on the sales performance were 41%, 28% and 19%.

Both small and medium enterprises had similar views on the effect of management style of the organization on the sales performance.

Leadership Skill of Manager

The surveyed SMEs agreed that the leadership skill of manager had an influence on the sales performances of the organizations. The percentage of SMEs viewing strong influence of the above factor on sales performance was 41% followed by 27% expressing moderate influence and 14% very strong influence.

In case of small enterprises, 38% said that the factor had a strong influence on sales performance, and 31% said moderate influence and 9% very strong. The percentages of medium enterprises opining strong influence, moderate influence, and very strong influence of leadership skill of manager on the sales performance were 44%, 22% and 19% respectively. The 't' test suggested that there was no significant difference between small and medium enterprises with regard to their opinions on the impact of leadership skill of manager on the sales performance in the study area.

Organizational Behavior

The study reveals that the behaviors of the organizations also affected the sales performances of the SMEs. Among the 64 surveyed enterprises, 42% said that the influence of the above factor on sales performance was moderate followed by 33% having the opinion of strong influence and 6% very strong influence.

In case of small enterprises, 38%, 34% and 6% viewed that organizational behaviour had moderate, strong and very strong influences on their sales performances. The corresponding percentages of medium enterprises with the respective opinions were 47%, 31% and 6% respectively. No significant difference was found between small and medium enterprises.

Advertisement in the Magazine

Advertisement in the magazine had an influence on the sales performance of small and medium enterprises. In the study area, 27% of enterprises expressed strong influence and 23% expressed moderate influence of the above factor on the sales performance. Amongst small enterprises, 25% and 16% said of moderate influence and strong influence respectively, while 38% of medium enterprises opined that advertisement in the magazine had strong influence followed by 22% opining moderate influence. The 't' test suggested that there was a significant difference between small and medium enterprises with regard to the influence of advertisement in the magazine on sales performance.

Advertising on Radio

In the study area, 34% of SMEs felt that advertising on the radio had a strong influence on the sales performance followed by 19% expressing moderate influence and 3% very strong influence. The percentages of small enterprises viewing strong and moderate influence of the above factor were 25% and 19% respectively, while in the case of medium enterprises, 44% expressed strong influence, 19% moderate influence and 6% very strong influence. The 't' test suggest a significant difference between small and medium enterprises was found with regard to the influence of advertisement in the radio on the sales performance.

Advertising on Television

Of the 64 SMESs surveyed, 20% said that advertising on the television had a strong influence on their sales followed by 14% expressing moderate influence and 13% very strong influence. Looking to the views of small enterprises, it is found that 13% felt it had a moderate influence and 6% each opted for strong and very strong influence. With regard to medium enterprises, those expressing strong, very strong and moderate influence of the above factor on sales performance were 34%, 19% and 16% respectively. The 't' test results as shown in the table indicates that there was significant difference between small and medium enterprises with regard to the effect of advertisement in the television on the sales performance.

Advertisement in Outdoor

The percentages of surveyed SMEs expressing moderate, strong and very strong influence of outdoor advertisements such as billboard, street sign, street furniture, etc. on sales performance in the study area were 28%, 11% and 3% respectively. Among the small enterprises, 22% opined moderate influence followed by 9% strong influence, while 34%, 13% and 6% of medium enterprises viewed moderate, strong and very strong influence of the above outdoor advertisements on their sales performances respectively. The comparison between small and medium enterprises with regard to the effect of the outdoor advertisements on the sales performance showed a significant difference.

Advertisement in Calendar, Carry Bag, Pen or Hat

The SMEs expressing moderate and strong to very strong influence on the value of advertisements in calendar, carry bag, pen or hat on their sales performances were 25% and 23% respectively. In case of small enterprises, the percentages of enterprises having the opinions moderate and strong influence of the above factor on sales performance were 16% and 13% respectively. Compared to this, 35%, 31% and 3% medium enterprises said that it had a moderate

influence, strong influence and very strong influence. The 't' test suggested that there was significant difference between small and medium enterprises with regard to the effect of calendar, carry bag, pen or hat on the sales performance.

CONCLUSIONS

The main findings as to the influence of various factors on the sales performance of small and medium enterprises are as follows:

- Factors such as name, image and logo of the company, quality production, competitors, employee training, customer satisfaction, maintenance of good relationship of sales persons with customers and leadership skill of managers had strong or very strong influence on the sales performance of small and medium enterprises.
- The important factors having moderate influence on the sales performance of small and medium enterprises in the study area were location, exterior and interior building, attractive price, advertisement, technology version, transport and communication facility, growth of population, income of the people, arrival of tourists, political stability, social factor, management style of the organization and organizational behavior.
- There were significant differences between small and medium enterprises on the factors, i.e., name, image and logo of the company and packaging, location, exterior and interior building, attractive price, quality product, social factor, advertisement in the magazine, and advertisement in the radio, television, outdoor, calendar, carry bag, pen or hat, influencing sales performance.
- The factors influencing sales performance of SMEs with no significant difference between small and medium enterprises were technology version, transport and communication facility, growth of population, competitors, income of the people, arrival of the tourists, political stability, employee training, customer satisfaction, maintenance of good relationship of sales persons with customers, management style of the organization, leadership skill of manager, and organizational behavior.

The above result shows that the important factors which had strong or very strong influence on the sales performance of small and medium enterprises were name, image and logo, quality production, competitors, employee training, customer satisfaction, maintenance of good relationship of sales persons with customers, and leadership skill of managers. The factors having mostly moderate influence on the sales performance of small and medium enterprises in the study area were location, exterior and interior building, attractive price, advertisement, technology version, transport and communication facility, growth of

population, income of the people, arrival of tourists, political stability, social factor, management style of the organization and organizational behaviour. The comparative analysis between small and medium enterprises with regard to the effects of factors influencing sales performance indicates that there were significant differences between small and medium enterprises on the factors such as name, image and logo of the company and packaging of the product, location exterior and interior building, attractive price, quality product, social factor, advertisement in the magazine, and advertisement in the radio, television, outdoor, calendar, carry bag, pen or hat. The factor influencing sales performance of SMEs with no significant difference between small and medium enterprises were technology version, transport and communication facility, growth of population, competitors, income of the people, arrival of tourists, political stability, employee training, customer satisfaction, maintenance of good relationship of sales persons with customers, management style of the organization, leadership skill of manager, and organizational behavior.

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INTEGRATED MULTI - DATABASE INFORMATION SYSTEMS

Haitham Sabah & Dr Jane Jaleel*

INTRODUCTION

One way of achieving interoperability among heterogeneous and autonomous DataBase Management Systems (DBMS) is to develop a multi database system which supports a single common data model and a single query language on top of different types of existing systems. The global schema of a multi database system is the result of the integration of schema exported from the underlying databases (i.e. local databases). A global query language is made available to the users of them multi database system to specify the queries against the global schema which are called global queries (Arunk, 1997).

Types of Distributed Database System

The main thing that all such systems have in common is the fact that data and software are distributed over multiple sites connected by some form of communication network. The first factor we consider is the degree of homogeneity of the software. If all servers (or individual local DBMSs) use identical software and all users (clients) use identical software the DDBMS is called homogenous otherwise it is called heterogeneous. Another factor related to the degree of homogeneity is the degree of local autonomy. If there is no provision for the local site to function as stand-alone DBMS then the system has no local autonomy. On the other hand if direct access by local transactions to a server is permitted the system has some degree of local autonomy (Özsu, 2011).

Integration of Database

Heterogeneity may exist at three basic levels. The first is the platform level in which the database system resides on different hardware, use different operation systems and communicate with other systems using different communications protocols. The second level of heterogeneity is the database management system level in which data is managed by a variety of database management systems based of different data models and languages. Finally the third level of heterogeneity is that of semantics. Since different databases have been designed independently semantic conflicts are likely to be present. This includes schema conflicts and data conflicts. Commercially available technology offers inadequate support both for integrated access to multiple databases and for integration multiple applications into a comprehensive framework. Some products offer dedicated gateways

to other DBMSs with limited capabilities; they require a complete change of the organizational structure of existing database to cope with heterogeneity (ibid).

DISTRIBUTED DATABASE MANAGEMENT SYSTEMS (DDBMS)

A distributed database management system (DDBMS) is a software system that permits the management of the distributed database and makes the distribution transparent to the users. Distribution transparency means the independence of the application program from the distribution of data, and may be considered to be conceptually equivalent to data independences in a centralized DB. DDBMS supports the creation and maintenance of DDBs. The software components which are typically necessary for building a DDB in this case are (after Ceri, 1984):

1. The Database Management Component (DB).
2. The Data Communication Component (DC).
3. The Data Dictionary (DD), which is extended to represent information about the distribution of data in the network.
4. The Distributed Database Component (DDB).
5. The End user, i.e. terminals (T). These components are connected as shown in Figure 1 for two site network.

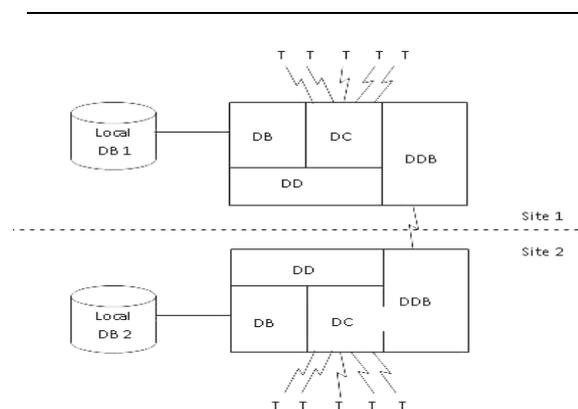


Fig. 1: Components of DDBMS (Ceri, 1984)

Functions of DDBMS

It is expected that a DDBMS has at least the functionality of a DDBMS. It also has the following functionality (Amir, 2004):

1. Extended Communication Services.
2. Extended Data Dictionary.
3. Distributed Query Processing.
4. Extended Concurrency Control.
5. Extended Recovery Services.

DDBMS Implementation Alternatives

Basically, there are dimensions for database, DDBMSs and application. Figure 2 shows the alternatives in implementing DDBMSs (after Caballero, 2006):

1. **Distribution:** means that database, DDBMSs and applications can be located centrally on the same machine or distributed in a network.
2. **Autonomy:** means that the control of database, DDBMSs and application can be done centrally, autonomous, or in between., its may be on Various versions:
 - a. **Design autonomy:** Ability of a component DBMS to decide on issues related to its own design.
 - b. **Communication autonomy:** Ability of a component DBMS to decide whether and how to communicate with other DBMSs.
 - c. **Execution autonomy:** Ability of a component DBMS to execute local operations in any manner it wants to.
3. **Heterogeneity:** means that database, DDBMSs and application can be of the same type or of different types.

Classification of Database Managements Systems

Several criteria are normally used to classify DBMSs. The first is the data model on which the DBMS is based (Özsu, 2011). The main data model used in many current commercial DBMSs is the relational data model. The object data model was implemented in some commercial systems but has not had widespread use. Many legacy (order) applications still run on database systems based on the hierarchical and network data models. The relational DBMSs are evolving continuously and in particular have been incorporating many of the concepts that were developed as object databases. This has led to a new class of DBMSs called object relational DBMSs. Hence we can categorize DBMSs based on the data model: relational object relational hierarchical network and others.

The second criterion used to classify DBMSs is the number of users supported by the system. Single user systems support only one user at a time and are mostly used with personal computers. Multiuser systems which include the majority of DBMSs support multiple users concurrently. A third criterion is the number of sites over which the database is distributed. A DBMS is centralized if the data is stored at a single computer site. A centralized DBMS can support multiple users but the DBMS and the database themselves reside totally at a

single computer site. A distributed DBMS (DDBMS) can have the actual database and DBMS software distributed over many sites connected by a computer network. Homogenous DDBMSs use the same DBMS software at multiple sites. A recent trend is to develop software to access several autonomous preexisting databases stored under heterogeneous DBMSs. This leads to a Federated DBMS (or multi database system) in which the participating DBMSs are loosely coupled and have a degree of local autonomy. Many DDBMSs use this client server architecture.

Paradigms for Data Distribution

The important paradigms of data distribution are:

1. **Client-server architecture:** separation of the database server from the client
2. **Distributed databases:** several database servers used by the same application
3. **Parallel databases:** several data storage devices and processors operate in parallel for increasing performances
4. **Multi databases:** is the software that provides for the management of collection of autonomous sites and access to them
5. **Data warehouses:** servers specialized for the management of data dedicated

Distributed Database System (DDBS)

The distribution of the data is transparent to the users who can access the data as if they were located at one site. In reality, to access data distributed in different computer sites, the transmission of data over communication links is needed. Since communication delay is substantial, an efficient query processing mechanism has to be designed (Seydim 1998). There are two equally important aspects of the distributed database: A. **Distribution:** The fact that the data are not resident at the same site (processor). B. **Logical Correlation:** The fact that the data have some properties which tie them together, so that we can distinguish a distributed database from a set of local databases or files which are resident at different sites of a computer network. There exist two types of application that are used by distributed database. These are:

A. **Global Application (or Distributed Application):** Those which access data at the discriminating characteristics of distributed database with respect to a set of local database.

B. **Local Application:** Those which can access data resident at the same site or computer that this application is working in (Ceri, 1984)

These two types of application give a complete definition of the distributed database systems (DDBS) which is a collection of data which are

distributed over different computers of a computer network. Each site of the network has autonomous processing capability and can perform local applications. Each site also participates in the execution of at least one global application which requires accessing data at several sites using a communication subsystem. The key here is integration, not centralization because the distributed database system attempt to achieve integration without centralization. Computer networks are usually classified as Local Area Network (LAN) or Wide Area Network (WAN) depending upon the distance between the sites. Usually WAN links are telephone lines, satellite channels, or microwave links (Aschermann, 1998).

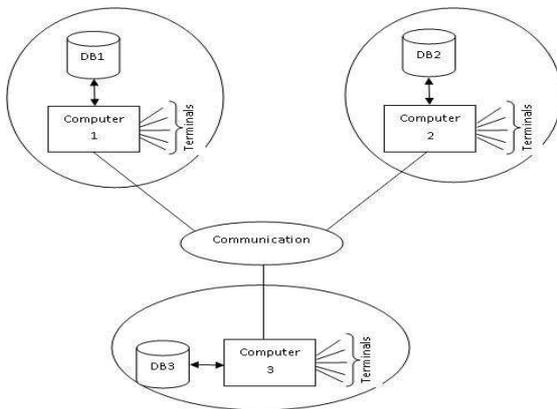


Fig. 2: Distributed Database System (Robert, 1988)

Distributed Database System Architecture

Architecturally, a distributed database system consists of a (possibly empty) set of query sites and a non-empty set of data sites. The data sites have data storage capability while the query sites do not. The latter only run the user interface (in addition to applications) in order to facilitate data access at data sites. There are two points of view for the DDBMS architecture: The level of distribution transparency and the Client/Server models, as highlighted in the subsequent sections (Özsu, 2011).

- **Level of Distribution Transparency**

The reference architecture for a DDBS is defined to represent different level of distributed transparency. In this architecture, we can see several levels or schemas, these are:

- **Global Schema**

At the top level of this architecture, there is the global schema. It is defines all data which are contained in the DDB as if the DB were not distributed at all. For this reason, the global schema can be define exactly in the same way as in a non distributed DB .However, the data module used for

the definition of global schema should be convenient for the definition of the mapping to the other levels of the DDB. Thus, using relational module will generate a set of global relations, each one can be split into several non overlapping portion called fragments.

- **Fragmentation Schema**

These define the mapping between relations and fragments. This mapping is one too many such that several fragments correspond to one global relation, but only global relation correspond to one fragment. Fragments are logical portions of global relations, which are physically located at one or several sites of the network.

- **Allocation Schema**

Defines at which site (sites) a fragment is located. All the fragments which correspond to that same global relation are located at the same site. Constitute the physical image of the global relation.

- **Local Mapping Schema**

At a lower level of this architecture is local mapping schema which defines the map between the physical images and the object which are manipulated by the DBMSs. This mapping depends on the type of local DBMS. There are three important objectives which motivate the feature of the architecture of DDB, these are:

1. Separating the Concept of Data Allocation. This separation allow us to distinguish two different levels of distribution transparency, these are Fragmentation Transparency and Location Transparency, fragmentation transparency is the highest degree of transparency and means that the user or application programmer works on global relation. While, location transparency is a lower degree of transparency and means that the user or application programmer works on fragments instead of global relations, however, he or she does not know where the fragments are located.
2. Explicit Control of Redundancy. The reference architecture explicit control of redundancy at the fragment level. 3-Independence from Local DBMSs. Allows us to study several problems without having into consideration the data model local DBMSs. This feature may be called local mapping transparency.

Type of Distributed Database Systems

The increase in data volumes led to the categorization of DBs in two broad groups, homogeneous and Heterogeneous. The comparison is based on different levels in a distributed database: The hardware, operating system, and the local DBMSs. However, an important distinction for is at the level of local DBMSs, because differences at lower levels are managed by the communication software (Özsu, 2011).

- **Homogenous Distributed Database System (DDBMS)**

Homogeneous DDBS refers to a DDBMS with the same DBMS at each site that means, every site runs the same type of DBMS. In homogeneous DBMS, all sites have identical software and hardware (same computer and software), and appears to the user a single system.

- **Heterogeneous Distributed Database System (HDDBS)**

Heterogeneous (HDDBS) refers to different sites run different DMBS. That mean, different site may use different schema and software. Difference in schema is a major problem for query processing, and the difference in software is a major problem for transaction processing. However, in a heterogeneous distributed database the sites may not be aware of each other and may provide only limited facilities for cooperate in transaction processing. Therefore, heterogeneous DDBMSs add the problem of translating between the different data models of the different local DBMSs to the complexity of homogeneous DBMSs (Özsu, 2011).

The Aims of Use Heterogeneous DDBS

Various heterogeneous systems can be imagined different computers with different operating systems running Integrated Multi Database different DBMSs on identical computers, etc. In practice, a heterogeneous system will be useful, if it proposes the following aims and facilities: (Özsu, 2011).

1. To allow the users to manipulate a database without having to worry about the distribution of data and the diversity of local systems.
2. To provide the facility to the en-tire users to manipulate the distributed database like a unique database with different languages they use to practice. So, each language can be more adopted for each usage.
3. To make possible the integration of an existing database in a DBMS without any reorganization of this new local database and without any

modification in applications (Keeping data and Languages).

4. HDDBS allows a uniform view on the combination of data maintained by different autonomous database systems. 5. Capability of providing a view of the system which is transparent not only to data distribution, but also to heterogeneity of DBMSs, this is a very difficult goal.

Problems of Heterogeneous DDBS

In this section, summarize some of the problems of heterogeneous systems; (Ceri, 1984):

- **Selection of A Common Model and Data Manipulation Language**

One advantage of having a common data model is the possibility of using it to describe the global schema of it reference architecture. Thus, also in a heterogeneous environment view of the DB. Another relevant advantage is that mappings and translations need not be done *between each pair of DBMSs. Wherever, the* mappings and translations need to be done only between each DBMS and the common data model and DML, which requires a number of translators growing linearly with the number of DBMSs. Thus the first and more general problem in the development of a heterogeneous system is to select a appropriate common data model and DML. The selected data model and DML should have the following properties:

1. They should allow a simple translation from the data models and DML of the DBMSs constituting the heterogeneous system.
2. They should be suited to rep- resent data and processing of DDB conveniently, in particular, the data model should be capable of representing the global fragmentation, and allocation schemata, while the DML should process set-oriented” primitives (i.e. the possibility of representing layered schema architectures and set-oriented processing, such as the relational model, and algebra are good conditions).

Translation to the Common Data Model and DML

The translation between different DBMSs is not pearlier to distributed systems, Translation problems arise when- ever two DBMSs are interfaced with in the same system, or whenever the DBMS is changed and applications written for the old DBMS are interfaced with the new DBMS (similar problem can also arise when a new version of the DBMS is also introduced) (Ceri, 19984).

- **Integration of Different Schema**

Heterogeneous DDBMSs are typically built by aggregating systems, using a Bottom Up approach. Thus, it is possible that the same facts are already described in the schemata of two different DBMSs, and it is possible that the two descriptions do not agree. Different in data definition of the same facts are called conflicts. Considering the conflicts that can arise between two schemata which use the common data model, conflicts are classified as follows:

1. Name conflicts, which typically involve homonyms (Different facts decocted with the same name) and synonyms (different names used for the same facts).
2. Structural conflicts, which arise when the same facts are described in two schemata using different elements of the data model. A typical structural conflict, with a common model including entities and attributes, consists of 3- regarding the same fact as an autonomous entity in one schema and as the attribute of different entity in the other schema. Per- forming the integration of two or more schemata requires discovering and resolving the conflicts.

- **Query Processing Problems**

Most heterogeneous systems allow only distributed retrievals, while update applications must be done under the control each local DBMS, However, the heterogeneous DBs create additional (new query processing problems). The distribution of a query should now take into account the difference in performance of the various sites. Some of the functions requested by an application either might be more expensive or might not be avail- able at all remote DBMSs, and in this case it becomes necessary to transmit a superset of the data required by the application to the site of origin of the application, where those functions can be performed. Thus, query distribution should try to balance the amount of remote versus local processing very carefully.

Strategies of Distributed Database Design

There are two alternative approaches to the design of data distribution (after Ceri, 1984):

- **Top-Down Approach**

Top-Down approach is the most attractive for the systems which are designed from scratch, that means we start by designing the global schema and precede by de- signing the fragmentation of the database, and then by allocating the fragments to the site, creating the physical images. There is

complete by performing, at each site, the physical design of data which are allocated to it. However, this approach is mostly used in homogeneous systems, as shown in Figure 3.

- **Bottom-Up Approach**

Bottom-Up Approach is based on the integration of existing schema into single, global schema. By integration; we mean the merging of common data definition and the resolution of conflicts among different representations given to the same data. When existing DBs are aggregated into a distributed DB, it is possible that they use different DBMSs. However, this approach which is mostly used in the prototypes of heterogeneous system is that to select a common data model, and then to translate it into this unique representation all the different schema of involved DBMSs, as shown in Figure 4. However, the Bottom-Up design of a DDB requires:

1. The selection of a common Db model for describing the global schema of the database.
2. The translation of each local schema into the common data model.
3. The integration of the local schema into a common global schema.

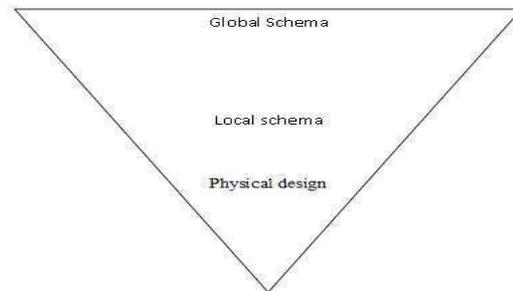


Fig. 3: Top down Approach

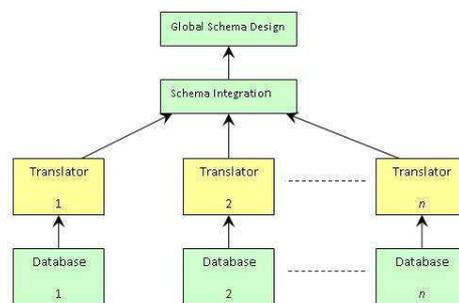


Fig. 4: Bottom-up Design Approach

METHODOLOGIES

The proposed system based on multi database system which consists of a three sites, connected together via a communication network, as shown in Figure 5. The main components of proposed system in this figure are:-

1. Master Database-FoxPro/Server: The backend of Multi-Database where the entire database is manipulated, managed, and stored.
2. Database Access/Client: The front-end of Multi-Database where the access requests are issued, which is executed under Microsoft Access environment.
3. Database SQL/Client: The front-end of Multi-Database where the access requests are issued, which is executed under Microsoft Visual FoxPro environment.
4. Communication System (CS): It enables the communication between the two clients and server.

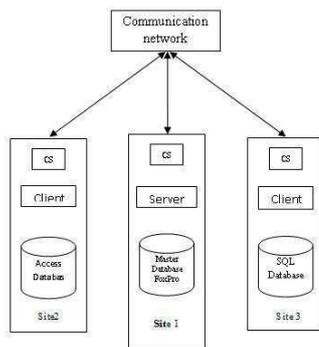


Fig. 5

Heterogeneous or Multi-Database System (MDBS)

This is a layer on top of an existing DB system that integrates different software environments and machine architectures with different DBMSs which are all heterogeneous. The DBMSs employ different data model (or models at all), i.e. hierarchical relational network and different DDLs SMLs and may have different concurrency control mechanisms and transaction processing environments. A multi-database system creates the illusion of logical DB integration without requiring physical DB integration.

Transaction Management and Concurrency and Serializability

Two types of transactions Management Local transactions executed by each local DBMS and outside of the MDBMS system control Global transactions executed under the MDBMS system control. The MDBMS has NO control over the

execution of local transactions. Each local DBMS must ensure some concurrency control such as two phase locking or timestamps and to ensure that its schedule is serializable and avoidance of local deadlocks. The design of this system requires working on three application environments:

- **Microsoft Visual FoxPro Environment**

This application is used to build FoxPro database and allocated at (FoxPro), this site contain Phone system which database consist of one database table such as in Table 1.

Field Name	Field Type
P- Name	Person Name
P-account-id	Account number of person
P-password	Account password person
P-visa	Visa card number of person
P-account	Account Value (amount of money) of person

Table 1: FoxPro Phone Database Table

This application is used to build Microsoft Access database and allocated at Access Client, this site contain information research system of university, which consists of two database tables at this site; see Tables 2 and 3.

Field Name	Field Type
Project Name	Text
Department	Text
Abstract	Text
Supervision	Text
Year	Date
Keywords	No.
Document of Project	Text

Table 2: Access Database-Research

Field Name	Field
Name	Text
Mobile	Long
Mail	Text
Address	Text

Table 3: Access Database-Research

- **Microsoft SQL Server**

This DataBase is called bank. It contains information about people accounts and visa card numbers. It contains one table.

Field Name	Field Type
Project Name	Text
Student Name	Text

Table 4: SQL Database-Research

- **Microsoft Visual Basic Environment**

The three sites interfaces built in Visual Basic Environment; Visual Basic environment provides a wealth of tools for creating and accessing database on both individual and networks. The major these tools it listed below:-

- **Data Controls**

The Visual Basic data control is the control used to gain access to database tables. You can have more than one data control in your program and more than one data control on a single form. Bound data controls are the same as any other Visual Basic control objects, except that they have been given additional properties, events, and methods that allow you to “bind” them directly to one or more data tables. This binding makes it easy to create data-aware input and display objects that you can use to perform data input and display with very little program code. The data control may be gives access to database without any programming; you can set a few properties of the control and use regular controls such as textboxes to display the values of the fields in the database. Using bound controls simplifies your programming chores a great deal. Most bound controls automatically handle the various chores related to processing data entry and display for databases. The bound controls make it easy to write Visual Basic pro- grams that handle all (or nearly all) of the following processes:

1. Loading data from the database into a Visual Basic data object.
2. Selecting the data record(s) requested by the user.
3. Loading form controls with values in the requested record(s).
4. Trapping simple user input errors.
5. Updating the data object with modified data from the form controls.

- **Data Environment**

Data Environment component lets you design a connection to database and retrieve the desired records. With Data Environment visual Basic application sees three objects:

1. A Connection Object, which establishes a connection to the database, but it a local file or a re- mote SQL server.

2. A Command Object, which executes commands against the database.
3. A Record Set Object, which holds the records retrieved from the database or records to be updated on the database.

- **Crystal Report Pro**

Crystal Reports Pro is a complete program that helps you define reports, save their definitions to disk, and then run these reports against databases to create final printouts. Crystal Reports Pro has an added feature that lets you run the final reports from within your Visual Basic 6 application using the Crystal Reports Pro control, which ships with Visual Basic 6. Crystal Reports Pro is a banded report writer. A banded report writer treats all output as “bands” of data. Each band has its own processes (such as functions it performs) and settings (properties) that you can manipulate in order to create the report layout and behaviors you need. Here are the main bands in Crystal Reports Pro.

1. The header and footer bands.
2. The detail band.

The Main Block Diagram of Proposed System

This section provides important flowcharts that illustrate the work structure and the internal design of the proposed system. The system is software program that connect and manage more than data source in one time, in our proposed system it connect to three databases (Microsoft Access, Microsoft Visual FoxPro database and Microsoft SQL Server database). The management represents the main database operations which are (insert, delete, update, search, filtering and reports) Figures (6) and (7) illustrate the block diagram of the proposed system Schema Integration

1. Pre-integration: identify the keys and defines the ordering of the binary processing approach.
2. Comparison: Identification of naming and structural conflicts.
3. Conformation: Resolution of the naming and structural conflicts.
4. Re-structuration and Merging of the different intermediate schema to the global conceptual scheme (GCS).

Schema translation means the translation of the participating local schemes into a common intermediate canonical representation

1. Schema translation is the task of mapping one schema to another.
2. Requires the specification of the target data model for the global conceptual schema

3. Some rare approaches did merge the translation and integration phase, but increases the complexity of the whole process.

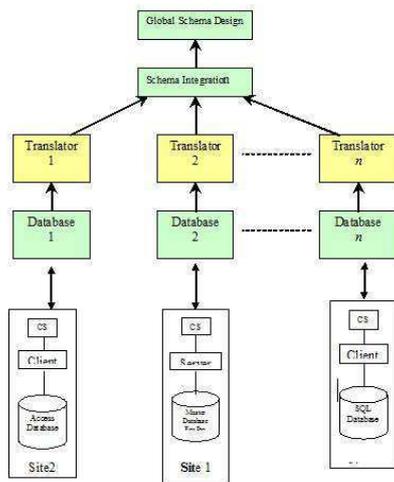


Fig. 6: Integration and Translation

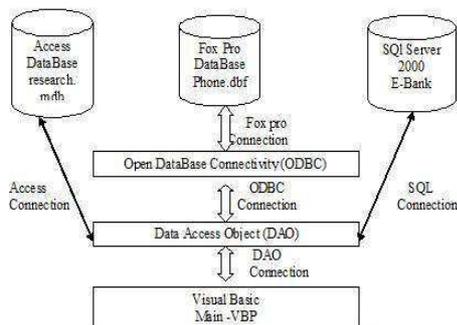


Fig. 7: Proposed System Architecture

MASTER DATABASE FLOWCHART

The main operations and real work of this project are manipulated at this site. The ODBC used to open the database from the master. The DAO used to design new database (Mastering database), this new database can be saved as binary file that contain all the required information, to retrieving from both sites. The Figure 8 shows the main flowchart for the Master database design. This site contains main menu of the proposed system.

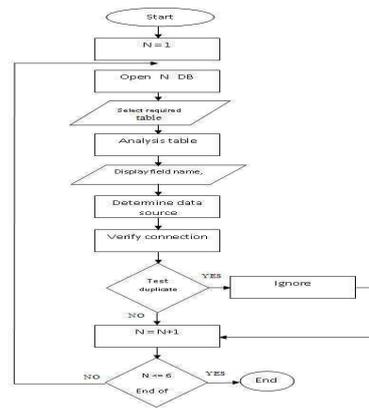


Fig. 8: Master DB Server Flowchart

Access Client Flow Chart

Active X data control is used to open access database and to bind with it tables. In this section dedicated to explain the flowchart of access client design as shown in Figure 9 which illustrates the most important operations of research proposed system step by step:

1. Select access database.
2. The required database table must be determined.
3. The user can perform the necessary operations on the opening database.
4. If the user selects add operation the user can add a new record to the database table.
5. If the user selects delete operation the user can delete the old record from the database table.
6. If the user selects query operation the user can search on this database table.
7. Finally when the user selects Exit. He can quit from this system

FOXPRO CLIENT FLOWCHART

Data Environment control is used to open FoxPro database and to manipulate the operations that performed on the table of FoxPro database. Figures 10 and 11 show the flowchart of FoxPro Client design. The database operations are:

- Add Database,
- Delete Database,
- Update Database,
- Perform Report,
- Searching Record, and
- Exit of the System

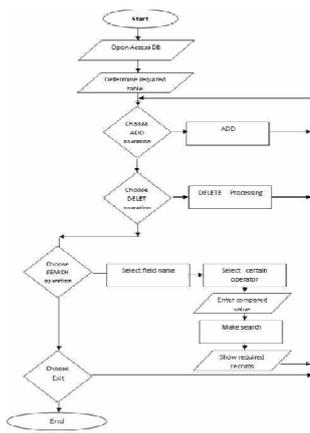


Fig. 9: Access Client Flow Chart

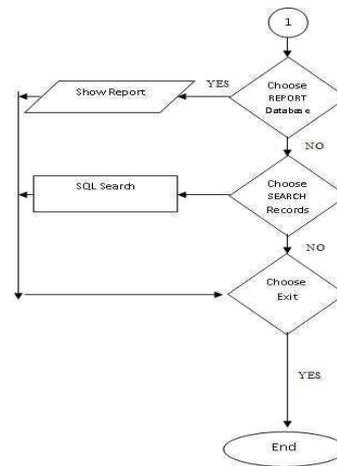


Fig. 11: FoxPro Client Flowchart

To explain the idea of the proposed university salary system at this site, and to execute and perform the most important operations, see the following steps:

1. The user must determine the database source, and the required table. After the user is completing successful all above steps, the main menu screen of this system will appear.
2. If the user selects Add new record, a blank record will display, the user must fill this blank with the required information.
3. If the user selects Delete record, the user can delete the old record from this database table.
4. If the user selects Update record, the users can update any existing record in this database table.
5. If the user select Report database, the user can see final report.
6. If the user selects Search records, the user can search on this database table; by SQL search.
7. If the user selects Exit, the user can quit from this system, else the user is still in main menu screen.

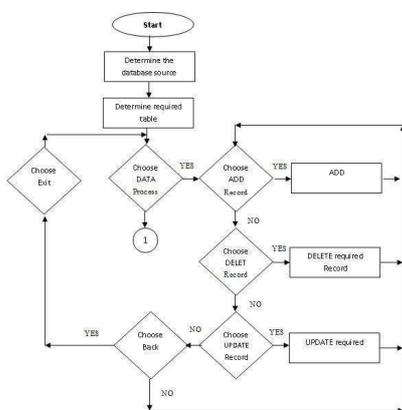


Fig. 10: FoxPro Client Flowchart

EXPERIMENT AND RESULTS

The aim of the proposed system is to implement an application interface to connect to three types of database management systems (SQL Server, Microsoft Access and Microsoft Visual FoxPro). The main program can manage these databases through the main operations (Add, Delete, Update and Search) on records. This section explains in details the interfaces of the proposed system.

Implementation

The system is programmed by using Visual Basic 6.0. When the program is running the main Login Window interface is appears as shown in Figure 12. This window used to allow accessing to program by only valid user. When the user is valid the main window will appears otherwise an error message box will appears to indicate invalid user. The main window of the proposed The Exit button is used for terminating program. The About button is used for displaying information window about the proposed system. This window is shown in Figure 13.



Fig. 12: Login form

The system contains all the buttons that make the connection with other database management systems. These buttons are Access Database Electronic Library, SQL server, Electronic Bank, FoxPro, Phone Book.

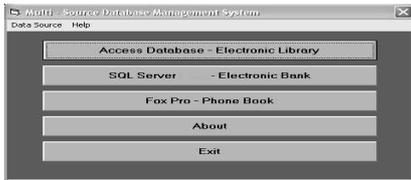


Fig. 13: The proposed main window

About button is used for displaying information window about the proposed system. This window is shown in Figure 14.



Fig. 14: About Window

Adding New Project

This is done by clicking projects button then Add New. This will make project display ADD window like the following windows. It contains all fields of the database.



Fig. 15: Add New Window

- **Deleting Project**

This is done by clicking projects button then delete. This will make project display Delete window like the following windows.



Fig. 16: Delete Window

- **Searching and Updating**

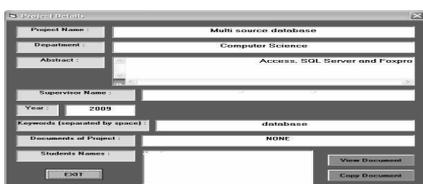


Fig. 17: Details Window

This is done by clicking Queries button then selecting one method of search (by name, student or other fields). This will make project display Details window, Figure 17.

Connecting to SQL Server Database

Connecting to SQL Server database can be done through press (SQL Server database Electronic Bank)The Electronic Bank main window contains many buttons (Add new account, Delete account, Update account, Search for account, About and Exit). The buttons used for managing user accounts in the electronic bank.

Connecting to FOXPRO Database

Connecting to FoxPro database can be done through press (FoxPro Phone Book) button from the main window of the proposed system. The Phone book main window contains many buttons. These buttons used for managing address book in the phone book.

CONCLUSIONS

The following conclusions are drawn from the design, implementation, and experimental results of the proposed system.

1. Retrieve distributed queries from client workstations.
2. Decompose the global queries to multiple local sub queries to be executed at each of the two sites.
3. Generate distribute the execution strategies for each site (this includes the global site that has to process and route the final result rows to the requesting client).
4. The system is providing almost advantages of DBMS, such as availability, reliability, distribution transparency etc.
5. The proposed system build in bottom-up approach using different active X data control, related with two different databases (Access, FoxPro); the data control that uses in the Access Client design, as well as the Data environment is uses in the FoxPro Client design.
6. It is possible to apply the pro- posed system on the Wide Area Network (WAN) rather.

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TURKO-AZERI RELATIONS

Dr Kemal Yildirim*

Azerbaijan–Turkey relations have always been strong, the two being described as “one nation with two states” by the ex-president of Azerbaijan Abulfaz Elçibay. They have a common culture and history, and the mutual intelligibility of Turkish and Azerbaijani¹.

Turkey has been a staunch supporter of Azerbaijan in its efforts to consolidate its independence, preserve its territorial integrity and realize its economic potential arising from the rich natural resources of the Caspian Sea. The countries share a short border, with the Aras River separating Turkey from the Nakhchivan exclave, for just a few kilometres.

RECENT TENSIONS

In recent times, all of this came under threat due to tensions arising from the normalisation of diplomatic ties between Turkey and Armenia which Azerbaijan feared will mean the loss of key leverage in the resolution of the Nagorno-Karabakh War. Inter-ethnic fighting between Azerbaijan and neighbouring Armenia had broken out shortly after the parliament of Nagorno-Karabakh, an autonomous region in Azerbaijan, voted to unify the region with Armenia in 1988. The Armenian demand to unify Karabakh with Armenia began in a relatively peaceful manner in the late 1980s but as the Soviet Union's disintegration neared, the dispute grew into a violent conflict between the ethnic groups in Nagorno-Karabakh. The result was ethnic cleansing on both sides². The final result of this territorial conflict was a declaration of secession from Azerbaijan.

Following a UN Security Council resolution in April 1993 calling for the immediate withdrawal of Armenian forces from the Azerbaijani district of Kelbajar, Turkey joined Azerbaijan in imposing a full economic embargo on Armenia and the border between the two states was closed.^{3,4} And it remained closed as Turkey demanded Armenia withdraw from Nagorno-Karabakh and seven other surrounding districts of Azerbaijan as a precondition for re-establishing diplomatic relations with its neighbour⁵.

Turkey supports the OSCE Minsk Group as a mechanism for resolving the territorial dispute and views it from the principle Azerbaijani integrity. It does not recognize the de facto independent republic of Nagorno-Karabakh that has emerged from the conflict and has supported various indirect bilateral talks between Azerbaijan and Armenia and initiated trilateral dialogue in Reykjavik, 2002 and the Istanbul Summit, 2004 among the Ministers of Foreign Affairs of Turkey, Azerbaijan and Armenia. Its aim has been to resolve the ongoing conflict but its diplomatic efforts in this regard are hampered by its own tensions with Armenia over the claim of Armenian Genocide and its

ongoing blockade of the country that has resulted in subsequent infrastructure projects bypassing Armenian territory.

RENEWED RELATIONS

Azerbaijan and Turkey have subsequently built upon their linguistic and cultural ties to form a very close economic partnership. This sees Turkey negotiating to buy natural gas from Azerbaijan and the two co-operating, along with neighbouring Georgia, in such infrastructure projects as the Baku–Tbilisi–Ceyhan pipeline, the South Caucasus Pipeline and the Kars–Tbilisi–Baku railway, all of which bypass Armenia despite a recent thawing in diplomatic relations between Ankara and Yerevan, that make them key players in European energy security. As BBC correspondent Chris Morris states, ‘Turkey lacks the great natural resources of the industrial age – oil and gas – and it has to import nearly all its energy supplies. But its proximity to Azerbaijan, the Caspian, and Central Asia, as well as to the Middle East, has allowed it to cultivate a new strategic role: the “missing link” in a chain connecting these new producers of vast mineral resources with consumer societies in Europe, America and beyond’⁶.

İlham Aliyev visited Turkey in 2003 shortly after first entering the Azerbaijani political scene at the behest of his ailing father Heydar Aliyev. At the time this move was interpreted as an indication of political support from Turkish Prime Minister Recep Tayyip Erdoğan⁷. Military conventions were less than next years in new political actions to make strong authority and balanced actions period. Haydar Aliyev’s balance political way made a cooperation as pragmatist mind of Azerbaijan. We will see importance of Turkish military agreements. Because if Azerbaijan want to be important actor on this region, it should regulate new relations for the USA and NATO via Turkey.

In 1996 a protocol of military cooperation was signed between the Republic of Azerbaijan and the Republic of Turkey. In 1997 a further protocol was signed in regard to the regulation of civil and military flying in 10 km of astride the Azerbaijan–Turkey border.

In that time agreements of Azerbaijan with Iran and Russia were targeting only friendship situation and solve problems on bounds. And agreements with the USA were not totally military cooperations. It is important to not forget that Russian embargo on Azerbaijan because of Chechen problem increased Turkish inclination on military subjects. Strong relations with Turkey of Azerbaijan will create new diplomatical positions from Cyprus to Yerevan.

Military positions as international importance of Azerbaijan borned with agreement between the government of the Republic of Azerbaijan and the government of the Republic of Turkey on activities of

platoon of Azerbaijan is going to the Kosovo in the staff of Turkey battalion.

Azerbaijan will keep its soldiers until the period of independence of Kosovo. With this step Azerbaijan became an important and strategic country on the East policy of NATO. Azerbaijan won a good position on the Caucasus region with taking some other military duties via Turkey in different countries.

In 2000 between the Ministry of Defense of the Republic of Azerbaijan and the Head of Naval Forces of the Republic of Turkey about giving the attack launch of AB-34 P-134 to the Azerbaijan protocol signed and :

- Protocol between the Ministry of Defense of the Republic of Azerbaijan and the Ministry of National Security of the Republic of Turkey on cooperation in the topographical area
- Protocol between the Republic of Azerbaijan and the Republic of Turkey on forming and training of professional schools of forces kind of Baku
- Protocol between the Ministry of Defense of the Republic of Azerbaijan and the General Staff of the Republic of Turkey on carrying out of the material and technical purchasing,
- Agreement between the government of the Republic of Azerbaijan and the government of the Republic of Turkey on military industry cooperation signed.

In 2001 between the Ministry of Defense of the Republic of Azerbaijan and the General Staff of the Republic of Turkey on development of Nakhchivan 5th army protocol.

In 2002 Ministry of Defense of the Republic of Azerbaijan and the General Staff of the Republic of Turkey on cooperation in the area of war history, military archive and museum work and military publication protocol and in 2003 between the government of the Republic of Azerbaijan and the government of the Republic of Turkey on training, material and technical assistance of State Border Service of Azerbaijan by Armed Forces of Turkey and Protocol between Azerbaijan, Georgia and Turkey on cooperation in the safety of the West-East energy corridor protocol signed.

In 2004 and 2005 between the government of the Republic of Azerbaijan and the government of the Republic of Turkey on long-term economical and military cooperation and between the Ministry of Defense of the Republic of Azerbaijan and the General Staff of the Republic of Turkey on application of the financial aid protocol signed.

And in 2006 between the Ministry of Defense of the Republic of Azerbaijan and the General Staff of the

Republic of Turkey on application of material and technical provision protocol shared new improvements of new actors.

Since 2006 new approaches regulated cooperations with other states :

- Supports of Azerbaijan to the Turkish Republic of Northern Cyprus
- Turkey purchases rockets from the USA
- New relations of Georgia, Azerbaijan and Turkey as a result of alternative energy way against Russia.

Same year new circumstances created balance regulations for Azerbaijan with agreement of natural gas project with Greece. It was political and military goal of Azerbaijan because Yerevan lost its good military and political relations with Greece. So it must choose a new way as balance politics.

There is a balance activities with military cooperations of Azerbaijani relations from the independence time. Pro Turkish military activities regulated international perspective on problems of Azerbaijan. Example, mainly Azerbaijan use Cyprus card about Greek support to Armenia. And also it used totally the USA and NATO supports and created new politics as alternative to Russia. We can say that experiments of Elchibey's totally Pro Turkish politics and Aliyev's balance politics which agree all region as a whole will regulate positions of the Caucasus region.

RECENT RELATIONS AND DEVELOPMENTS

Turkish Prime Ministerial and Foreign Ministerial Visit to Baku 2009

Turkish Ambassador to Azerbaijan Hulusi Kılıç met with the Head of Azerbaijan's State Committee for Religious Institutions Hidayet Orucov following reports of the imminent closure of mosques built by the Turkish Directorate of Religious Affairs which Orucov denied.

Armenian-Turkish Diplomatic Progress

On the eve of the April 2009 official visit to Turkey by US President Barack Obama sources in Ankara and Yerevan announced that a deal may soon be struck to reopen the border between the two states and exchange diplomatic personnel.⁸

This prompted concerns from both Baku and Turkish nationalists that the ongoing negotiations over the Nagorno-Karabakh dispute would be adversely affected by the lifting of the longstanding blockade. Azerbaijan Foreign Ministry spokesman Elkhan Polukhov initially stated that it was "too early" to discuss what steps his country might take in retaliation,⁹ but Azerbaijani

President İlham Aliyev boycotted the United Nations Alliance of Civilizations (UNAOC) meeting in Istanbul on April 6-7 in protest and made a quick visit to Moscow prompting speculation in the Turkish press that Azerbaijan had received distorted information on the content of the Armenian-Turkish talks through Russian channels.¹⁰

There was also heated debate in the Turkish Parliament with Nationalist Movement Party (MHP) leader Devlet Bahçeli sharing the Azerbaijani people's "rightful concerns" in warning the government, "Your approach to Armenia harms our dignity," and Republican People's Party (CHP) leader Deniz Baykal asking, "How can we ignore the ongoing occupation of Azerbaijan?"¹¹ as the two parties dispatched delegations to Baku and hosted Azerbaijani politicians in Ankara.

Turkish Prime Minister Recep Tayyip Erdoğan attempted to ease these concerns by announcing that, "Unless Azerbaijan and Armenia sign a protocol on Nagorno-Karabakh, we will not sign any final agreement with Armenia on ties. We are doing preliminary work but this definitely depends on resolution of the Nagorno-Karabakh problem."¹²

Turkish Foreign Minister Ali Babacan clarified that, "we want a solution in which everybody is a winner," in a statement made prior to the April 15 Black Sea Economic Cooperation (BSEC) Foreign Ministers Council in Yerevan, "We don't say, 'Let's first solve one problem and solve the other later.' We want a similar process to start between Azerbaijan and Armenia. We are closely watching the talks between Azerbaijan and Armenia."¹³ Azerbaijani Foreign Minister Mahmud Mammad Guliev responded that the solution to the two countries' problems should be tied to the solution of the dispute between Azerbaijan and Armenia, and that Azerbaijanis believe Turkey will protect their interests.

The International Crisis Group (ICG) issued a report on the normalisation stating, "The politicized debate whether to recognize as genocide the destruction of much of the Ottoman Armenian population and the stalemated Armenia-Azerbaijan conflict over Nagorno-Karabakh should not halt momentum." Stating that whilst, "The unresolved Armenia-Azerbaijan conflict over Nagorno-Karabakh still risks undermining full adoption and implementation of the potential package deal between Turkey and Armenia," the, "Bilateral detente with Armenia ultimately could help Baku recover territory better than the current stalemate."¹⁴

Armenian-Turkish Provisional Roadmap and Diplomatic Tension

When the announcement of the provisional roadmap for normalizing Armenia–Turkey relations was made on April 22, 2009 there was however no mention of the

dispute which is no longer believed to be part of the agreement.¹⁵

According to a statement from the office of Turkish President Abdullah Gül he initiated a phone conversation with Azerbaijani President Aliyev following the announcement to stress the importance of "solidarity and cooperation" between their nations for regional stability and speaking to the press on April 23 he reaffirmed commitment to finding a solution to the dispute stating that, "There has been unprecedented intense diplomacy," on this which, "does not only involve Turkey, Azerbaijan and Armenia," but also, "Russia, the United States, the EU, are all involved," before going on to conclude that, "If all these efforts produce a positive outcome, Turkey, Azerbaijan, Armenia and the entire region will benefit."¹⁵

Azerbaijani Ambassador to Turkey Zakir Hashimov has confirmed that there is no crisis in his country's relations with Turkey following the announcement and welcomed the reassurances from Turkish President Gül and Prime Minister Erdoğan but expressed his state's position that the opening of the border between Turkey and Armenia would only be acceptable if the Armenia evacuates five of the seven districts surrounding Nagorno-Karabakh (including the strategically important land corridor in Lachin) and subsequent discussions are agreed on for the evacuation of the remaining two and the eventual status of Nagorno-Karabakh itself.¹⁶

On April 25 reports quoted SOCAR President Rovnag Abdullayev as saying that the current deal for the supply natural gas by Azerbaijan to Turkey was outdated and that talks on a new price deal were under way. Turkish Prime Minister Erdoğan responded, "I don't have information on that. However, if it [Azerbaijan] increased prices, then according to which facts did it do this? Such a rise in natural gas prices during a period of time when oil prices in the world are on the decline will of, course, be thought provoking. These [facts] will be assessed and steps will be taken accordingly,"¹⁷ and when then Turkish Energy Minister Hilmi Güler finally emerged from the talks he stated, "These reports are not true; I have been holding meetings with the Azerbaijanis for two days. No such thing has been said; there is no rise. We have a contract, so they cannot do it."¹⁸

On May 4 Azerbaijani Deputy Foreign Minister Arza Azimov travelled to Ankara to meet with the new Turkish Foreign Minister Ahmet Davutoğlu, his first official engagement since taking office on May 2, and Foreign Ministry Undersecretary Ertuğrul Apakan for discussions reported to have been timed to ease diplomatic tensions and highlight the importance of bilateral relations.¹⁹

On May 6 new Turkish Energy Minister Taner Yıldız stated that, "Energy will play the role of a catalyst in bringing the relations among Azerbaijan, Armenia and

Turkey to a more positive level,” and, “There are no plans to delay the projects with Azerbaijan,”²⁰ as BOTAŞ President Saltuk Düzyol lead delegation to Baku to discuss gas prices and future infrastructure projects and request an additional 8 billion m³ of Azerbaijani gas to meet Turkish domestic requirements.²¹

Following a reportedly tense May 7 OSCE Minsk Group mediated peace summit between Armenian President Sargsyan and Azerbaijani President Aliyev at the residence of the US Ambassador in Prague, on the sidelines of the EU Eastern Partnership Conference,²² that resulted in “no serious progress”²³ Turkish President Gül met separately with the two leaders to propose four-way talks on the conflict to include Russia when they next met at the St. Petersburg Economic Forum in July.²⁴

Turkish Prime Minister Erdoğan confirmed during a live 9 May TRT broadcast that no problem exists in bilateral relations between Turkey and Azerbaijan and that the provisional roadmap with Armenia was linked to resolution of the Nagorno-Karabakh conflict stating that, “There is a casual link here. We closed the [border] gate. The reason was the occupation and the result was our closing the gate. If the reason disappears - then let’s open the gate.”²⁵

Turkish Prime Minister Erdoğan made a 13 May visit to Baku with a delegation that included Energy Minister Taner Yıldız, Foreign Minister Ahmet Davutoğlu, Foreign Trade Minister Zafer Çağlayan, Transportation Minister Binali Yıldırım and Culture and Tourism Minister Ertuğrul Günay to reaffirm the strained ties between the two countries.^{10, 19}

In a press conference with Azerbaijani President Aliyev, Erdoğan reaffirmed that, “There is a relation of cause and effect here. The occupation of Nagorno-Karabakh is the cause, and the closure of the border is the effect. Without the occupation ending, the gates will not be opened,” and Aliyev responding that, “There could be no clearer answer than this. There is no doubt anymore.” On the subject of gas prices Erdoğan stated that, “I cannot say that the price is fair. We will have talks to make sure the price is a fair one.”²⁵

In a speech to the Armenian Parliament in which he reaffirmed that Turkey and Azerbaijan were “one nation with two states” Erdoğan stated that, “Some reports said Turkey gave up on Nagorno-Karabakh in order to normalize relations with Armenia. This is an outright lie. I dismiss it once again here. Our stance on Nagorno-Karabakh is clear, and there has never been any deviation from this stance. We want the problem to be resolved on the basis of the territorial integrity of Azerbaijan. We have never taken any steps that could harm the national interests of Azerbaijan and will never take such steps. There will be no normalization unless the occupation of Azerbaijani territory ends.”²⁵

Turkish opposition parties responded positively to the visit with MHP Deputy Parliamentary Group Chairman Oktay Vural stating that, “The visit has been extremely positive because it reversed an erroneous policy.”²⁶

Erdoğan flew on to Sochi, Russia, for a 16 May “working visit” with Russian Prime Minister Vladimir Putin at which he stated, “Turkey and Russia have responsibilities in the region. We have to take steps for the peace and well being of the region. This includes the Nagorno-Karabakh problem, the Middle East dispute, the Cyprus problem.” Putin responded that, “Russia and Turkey seek for such problems to be resolved and will facilitate this in every way,” but, “As for difficult problems from the past – and the Karabakh problem is among such issues – a compromise should be found by the participants in the conflict. Other states which help reach a compromise in this aspect can play a role of mediators and guarantors to implement the signed agreements.”^{27, 28}

Swiss Foreign Secretary Michael Ambühl updated Azerbaijani Foreign Minister Elmar Mammadyarov on the ongoing Armenian-Turkish normalisation negotiations at an 18 May meeting in Baku. Mammadyarov stated, “The latest developments showed that it was impossible to achieve progress in the maintenance of stability and security in the region without taking Azerbaijan’s position into consideration and without a solution to the Nagorno-Karabakh conflict.”²⁹

Turkish Foreign Minister Davutoğlu met with Mammadyarov on the sidelines of the Organisation of the Islamic Conference (OIC) Council of Foreign Ministers 23 May session in Damascus with Davutoğlu subsequently announcing, “We will head to Baku together on board the same plane. This has turned out to be something like ‘one state, two nations’; ‘one nation, two delegations’,” and, “It is not possible to disagree with [Azerbaijani President] Aliyev’s remarks concerning the performance of the Minsk Group. Because no progress has been made, it is now necessary to rescue this issue from being in the status of a frozen conflict. Turkey will continue its efforts.”^{30, 31}

Davutoğlu announced, at a 26 May joint press conference in Baku, that, “Turkey and Azerbaijan are not two ordinary friend, neighbour and brother countries, they are at the same time two strategic partners. One of the fundamental foreign policy priorities which is embraced by everybody in Turkey – no matter what political thought [they] have – is the existing strategic partnership with Azerbaijan,” and, “Our message intended for actors in the region, particularly intended for Armenia, is very open and clear. The region should now be cleansed of occupation, stresses and high tension.” Mammadyarov added, “We also discussed cooperation in the fields of energy, economy and culture. Our countries have

signed around 150 documents in total, but we don't have to stop at what has been achieved."³²

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