

## *Original Paper*

# Unravelling the Link between Science, Technology and Entrepreneurship for Wealth Creation

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### **Abstract**

*This paper argues that a conflation between science and entrepreneurship can improve business activities, people's welfare, stimulate economic development as well as provide science with new research avenues. Invaluable feedback from businesses will provide science with more creative ideas that will lead to more business creation and development. Mole and Ram (2012) discusses the difference between science and entrepreneurship how they can work together to foster economic development. Data is collected from a total of 100 interviewees: 42 entrepreneurs, 5 scientists 50 randomly selected consumers of various goods in the Bamenda environment and 3 engineers. The study concludes that business is responsible for bringing scientific discoveries and technological inventions that improves human wellbeing to the market. It therefore recommends that, the creation of an entrepreneurship centre that enables scientists, businesspeople and technologists to come together and discuss how they can well use their knowledge for scientific and more business opportunity discoveries. It emphasises the role of accountability, effective management, organisation participation and entrepreneurial marketing for profitable and sustainable business progress.*

### **Keywords**

*development, entrepreneurship, knowledge, science, technology*

### **1. Introduction**

There is a scientific approach in everything that we do, and these scientific steps are naturally discovered and structured by man. Entrepreneurship has no structured scientific approach, but requires a different mode of thinking that allows for its own structuring as required by the project in question.

Entrepreneurship is highly linked to business administration, and therefore requires business administrative knowledge for success. Bhaskar (1975) in Mole Kevin with Monder Ram (2012) view the scientist as one who devises an experiment to create an artificial environment that isolates the particular phenomena that they want to study. Entrepreneurship handles an environment as it is with the changing demands of people and the environment. A conflation between entrepreneurship and science is therefore, needed to transform scientific discoveries into human use, as well as improve scientific knowledge through a critical feedback mechanism. This represents a strong trend toward national development. In the 21 century, we need a Cameroon renaissance grounded on conscious scientific, technological and entrepreneurship culture to create sustainable businesses that provide people with jobs and income to better improve their quality of livelihood. Thus, we need a science culture that transforms science/technology made accessible to the common people (Forje & Jugessur, 1998). Jugessur (1998) further notes: “nations that have embraced such a culture have successfully grappled with most problems of development and have met the basic needs of the people”. Whitehead (1985) argues that our traditional educational methods are far too much occupied with intellectual analysis and with the requirements of formalised information. An interface between Science and Small and Medium Size Enterprises (SMEs) will help eradicate existing barriers that impede the growth of scientific discoveries and the transformation of research results into consumer goods. For instance, in natural sciences, entrepreneurship knowledge is needed to convert scientific results into human use. Sahal (1983) in a comparative evaluation studies found that major innovations are the result of individual research work, and by networking with other institutional bodies, the innovation becomes a generic product. Science and technology through their capability to create and discover products shape the market structure of a nation. The importance of SMEs in the phase of invention or discovery is almost undisputable (Hornschild & Meyer-Krahmer, 1992). SMEs play important roles in the diffusion of scientific and technological discoveries due to its closeness to customers that allows for focused and meaningful feedback. It also helps to further develop different application areas and market segments. Big enterprises were seen before as dominant in the further development of inventions up to their commercialisation (Freeman *et al* 1982), the situation has since changed.

African countries are faced with high unemployment rates. The government is the major employer in these countries. Unfortunately, it cannot employ all the citizens. The youths are idle; whereas there are many business opportunities around for self-employment. The state of unemployment contributes to idleness, high crime rates and other anti-social behaviour. To reduce these ills, there is need for all disciplines to come together and look for ways to create jobs for the youths. Cameroon is an agricultural based country and land as a major resource in agriculture is also fast diminishing due to poor use of land and rapid population growth. This warrants an imperative shift from farm based to nonfarm businesses. Cooperation and network is the corner stone of sustainable businesses that can

compete in the global market. Also, a move away from agricultural base to industrial base businesses requires both scientist and entrepreneurs to put their knowledge together.

Integrated knowledge is the source of innovation and new product creations. Partnership starts out with the idea that none of the partner has monopoly of wisdom or knowledge (see Linne et al., 1991). Partnership denotes a willingness to work together without either side having authority over the other, (Walmsley, 1989). In other words, partnership is cooperating to overcome individual limitations, (Chester, 1979). Partnership is one of the forms of business cooperation thoroughly investigated by researchers, but not widely practised in Cameroon. Scientists through intensive research discover and create products, while few of this research results get to consumers, majority gather dust on laboratory shelves, or let out to foreign bodies at give away prices that sometimes result in usage distortion. Cooperation between scientists and entrepreneurs will make it possible for scientific discoveries to be produced for the benefit of the country and other countries through innovation. An entrepreneur empowered with leadership skills needs to carry scientific discoveries to the market for it to be useful to mankind. (See Burns, 2007).

The Nobel- prize winner for example, is a classic example of the role of science, technology and business in a nation's economic development. Alfred Nobel, the inventor of dynamite was also a great industrialist. He endowed a \$9 million fund in his will to be used as awards for people whose work most benefited humanity. The first of the award was in 1901 (Note 1). This great achievement is the result of a blend between science and business. His industrial affiliation made dynamite, though explosive and seen as dangerous, useful to mankind in many ways; socially, financially and developmentally. His generous acts of using the profit from his marketable discovery to set up a World Wide Prize "The Nobel Prize" encouraged the inclusion of many other disciplines e.g. Economics and peace. This indicates the benefit of multi-disciplines approach to development. Without the industrial part played, the discovery of the dynamite might have passed unnoticed, the Swedish society and the World at large would have missed an endless source of motivation, development resource and popularity. The problem in the society is that the relationship between science and entrepreneurship is not very well understood by many people, and this reduces the importance of scientific discoveries and entrepreneurship in the economic development of a nation.

### *1.1 Objectives*

The objective of this study is to outline the relationship between science and entrepreneurship and investigate the benefit of a conflation between entrepreneurship and science and its impact on the Cameroon society for example. The study neither touches on the technicalities of science nor technology. It seeks to explain the links between scientists and entrepreneurs, and the important role played by entrepreneurs to turn scientific discoveries into consumable products. The focus is on putting education; science; technology and entrepreneurship at the services of the people. The interface

between the state's research institutions, private sector and civil society is observed to be grossly absent in giving added value to the resource potentials of the country. The country's agro-ecological zones which provide vast opportunities are not well developed; large agro-industrial structures like SODEBLE, UNVDA the upper Num Development Corporation are abandoned. Kodama (2018) looks at sustainable growth through strategic innovation, an act that seems to bypass the country in its development initiative and transformation agenda. A new strategy is required. This necessitates the deepening of the knowledge-base on entrepreneurship; for example, Jones Collins (2014) challenges students to develop the competency and act entrepreneurially in order to create consumable goods. Enlightening the people on a number of issues of vital importance about creativity, innovation, research and entrepreneurship helps to stimulate interests and turn the young ones away from the idea of looking on government as the sole employer in society. The educational curricular of African countries needs serious restructuring: The ideological orientation should focus on "education for job creation, innovation and not for job-seekers in the public service sector". Fayole et al. (2019) delve into bridging persistent research gaps in entrepreneurship education and practice.

## **2. Views on Science and Entrepreneurship**

Entrepreneurship is defined in many ways: It is seen by Mosakowski (1998) as the propensity of an individual to behave creatively, act with foresight, use intuition and be alert to new opportunities. Zucchella et al. (2018) present extensively researched author's account of extant perspective on the theory and practice of entrepreneurship enriching discussion with illustrative case studies and vignette. Sharon Alvarez and Lowell Busenitz (2001) also treat the process of combining and organising resources as a resource. Entrepreneurship research takes place in an open system in the uncontrolled world, whereas, scientific research takes place in an isolated created environment. This therefore, suggests that entrepreneurial approach must take into account factors in an environment, an act that cuts through all walks of life. Knowledge integration is a strategic cooperation between disciplines for development, (see Das & Teng, 1998; Tsang, 2000). Knowledge, research and consumption must be shared by what may be seen as the triple heritage: knowledge, the corporate world and civil society to improve and sustain a quality living standard of the people. In today's environment of globalization and heightened competition nations need to develop their industrial base in order to have a share of the global cake. Cooperation between entrepreneurship and science is particularly important for Cameroon to establish a sustainable business base to enable it use its resources meaningfully and compete in the global market. Successful marriage between entrepreneurs and scientists helps a country to build strong business and development strategies.

One of the major weaknesses in the private sector of many African countries, Cameroon in particular is lack of a network between science/technology and business development. Businesses start and fail

almost immediately. The roots of business continuity lie in creativity, new products discoveries and innovation. Hawkins, Blind and Page (2017) presents a tour de force of our understanding of standardisation in relation to innovation and markets. To create such product, entrepreneurs need to intensify their critical thinking capability and this requires good collaboration between entrepreneurs and the scientific community. Such a link would enhance business sustainability which is necessary for the economic development of a country. The link would also enable the country to be competitive in this era of market globalisation, and makes its impact and contribution felt. Bringing disciplines having specialised knowledge and skills together can create generic products that may not be easily competed away. Rene von Schomberg and Jonathan Hawkins (2019) provide interdisciplinary policy communities addressing the challenge of driving innovation towards socially desirable outcomes.

To achieve such products, requires extensive communication between entrepreneurs and scientists. Successful execution of a product developed depends highly on how individual knowledge bases are integrated (See Dougherty, 1992). Understanding the linkage between science, scientific creation and entrepreneurship empowers people with good knowledge to embrace the couple and construct a powerful and sustainable economic development network. Advances in scientific researchers have led to an increase in individual lifespan in the Western World (Note 2). Moving scientific work from the laboratories to practical use requires a multi-disciplinary cooperation and integration. Small business is a channel for introducing and accelerating new products in society due to its closeness to people and low capital demand. The function of science is to establish general laws covering the behaviours of the empirical events, and thereby enable us to connect our knowledge of the separately known events, and make reliable predictions of the events yet unknown” Braithwaite (1955 in Kerlinger, 1964, p. 10). Therefore, this suggests that a network between entrepreneurship and scientists would smooth entrepreneurial processes. Gabrielsson’s (2017) publication provides wide ranging uses of corporate governance in entrepreneurial context, including start-ups, owner managed firms growing firms, leadership and corporate governance associated with entrepreneurship and innovation in both small and large established companies.

Knowledge integration is receiving considerable attention, and market globalisation exemplifies this move, making knowledge codification an important investment effort, as it makes easy the understanding of causal links between the decision to be made and the performance outcomes to be expected (Zollo & winter, 2002). Archer (1995) differentiates between downward conflationists and upward conflationists, arguing that those analysts who privilege the impact of structures on agents are downward conflationists, in which actions are simply an epiphenomenon of deep structures. In this case, once the structure is set, different disciplines can come together to work. Archer (1995) found those who focus on human interaction to be upward conflationists. The author therefore suggests that what is important is for both agency and structure to explore the relationship between the two. The author

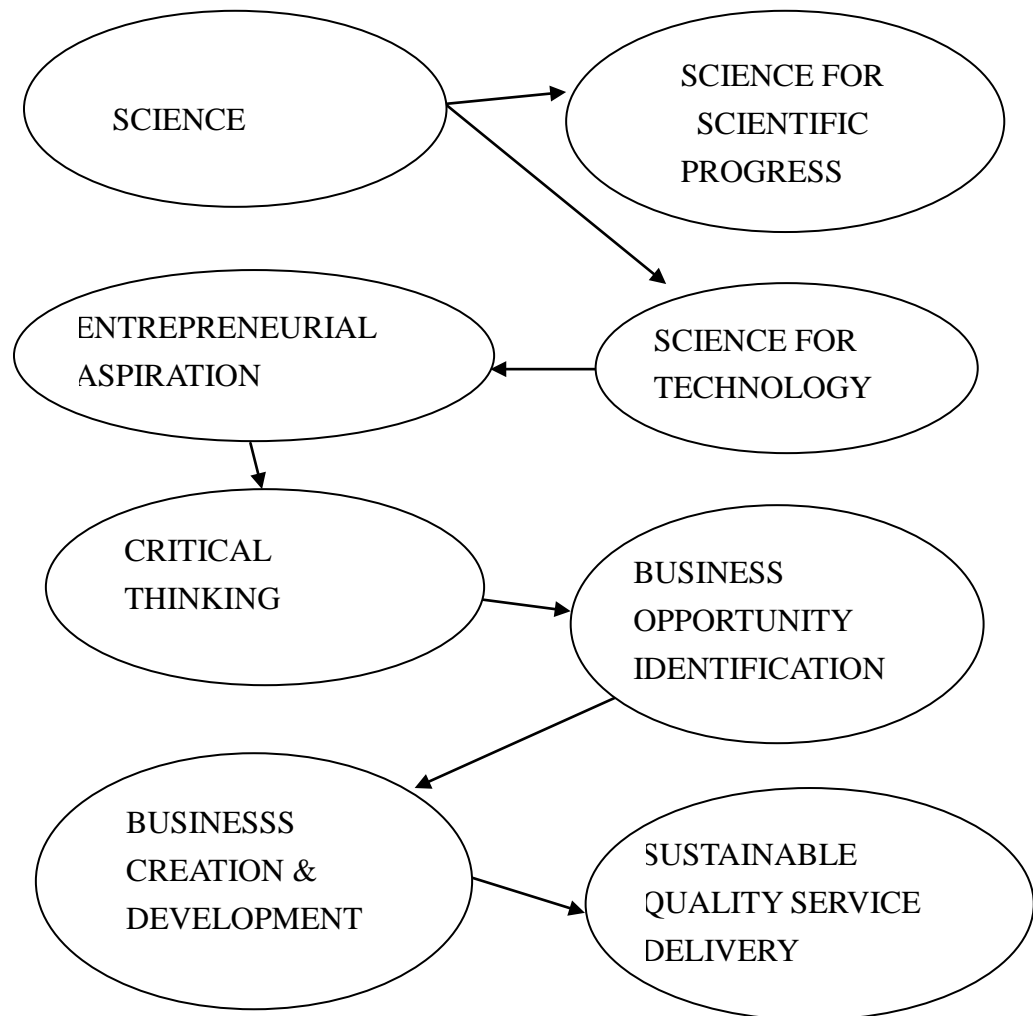
terms this a “morphogenetic” approach, which “morpho” is an acknowledgement that society has no pre-set form or preferred state: the “genetic” part is recognition that it takes its shape from, and is formed by agents, originating from the intended and unintended consequences of their activities (Archer, 1995). It is therefore hoped that a morphogenetic cycle characterised by: a given structure; a complex set of relations between many disciplines can contribute enormously to the growth of sustainable small businesses in Cameroon. System theories see groups as a system of interlocking elements, having members with unique abilities which can only function well when in cooperation with other variables. This suggests that scientists as a group, and entrepreneurs as a group can function well as individuals, but better by cooperating with each other.

Reflecting on the afore discussed points, we find the properties of entrepreneurship to be very open. Lema Forje (2010) suggests that since, Accounting, Management, Marketing and Organisation is in all discipline, it should form the bases of entrepreneurship to allow it go a long way to promote entrepreneurial endeavour to success. The interaction between science and business is best explained by the “cone theory” which suggests that research results can be arranged in the basic application and the distance of the final products, Mayer (1978). This theory suggests that science discovers products and entrepreneurs transform it into useable products. Sustainable business development is related and tied to science and entrepreneurship as Mare and Sevrin (2001) uses the light-cone frame to tie together the super-space with the external symmetry (Note 3). Whitehead (1985) presents a most provoking and challenging expositions and critiques of modern made science—noting that the world view created by the scientific revolution has been made much subtle, but its basic picture of nature – matter, motion and number has remained in force for over three centuries, that is constantly shaping changes in the world. An issue which underscores Grant and Moses (2017) challenging exposition of the intriguing levels and assessment of the new worlds of modern technologies, philosophy of history and the relation between law, regulation and technology as we have over ages succumbed to the successive mythologies of Deity, State and Market, that take responsibility for our lives.

### *2.1 The Network of Scientific Discoveries, Technology and Entrepreneurship*

Science and technology are not monasteries of knowledge free from meeting the need of people. For science to achieve a balance in its functional role and self-understanding and not create undesirable consequences, universities and industrial researches should be complementary with common purpose. For example, “the innocence of science was irrevocably lost when Einstein wrote a letter to the President of the United States which triggered the development of nuclear arms”, (Einstein.stanford.edu/content/sci\_papers/manage.html). Scientific knowledge cuts across all disciplines and its products serve everybody. Similarly, entrepreneurship knowledge cuts across all walks of life, and more importantly brings scientific discoveries to human use through its critical thinking and creative capabilities. Such a suggestive connection will take the form as illustrated in

Figure 1.



**Figure 1. The Functional Link between Science and Entrepreneurship**

### 2.2 Understanding Science and Entrepreneurship

Often, and unfortunate the term entrepreneurship is equated with new business creation and small business management Gibb (1996). Entrepreneurship goes beyond mere business creation. Managing a business is never the job of a single individual; it is in collaboration with other people: employees, suppliers and consumers. So, many share the profit generated by a business, including the government in the form of taxes. Relationships are the glue that holds a business network together. Scholars within each of the areas acknowledged the limitation imposed by the lack of shared concepts and causal frameworks linking institutional ideas. In the realm of economic development, the call to examine the effects of embeddedness has grown stronger in recent years, enlarging the scope of inquiry beyond the analysis of the outcome of a single institution. A nation's economic development is a combination of

many input factors, and marketable product development is an essential projectory in the process. Exploring the cartography of scientific discoveries has several analytical advantages. It allows for the construction of a localized theory of development that puts the use of domestic resources in the centre and acknowledges individual contribution. A centre having people with diverse knowledge allows for interpersonal settings that serve as simulations or microcosms of a larger firm in which ideas can be indepthly examined. We should learn to harness individual talents for the sustainable development of society and the general welfare of the people. Take the case of the University of Ngaoundere through its biochemistry students have unveiled to the public two quality drinkable beers made from (domestic materials) cassava and millet.

The production of these two brewery products would (a) intensify the cultivation of more cassava and millet; (b) create more jobs in the industrial sector; (c) spur interest in the agricultural sector; (d) intensify cooperation between the State University research institutions; private sector and civil society. Fomuso Sandra (2021, p. 10) points out that the priority that government has on “made in Cameroon” products is a motivating factor towards economic growth. Going by the national development strategy 2020-2030, the manufacturing industries should record an average growth of about 5.3% in the 2021-2030 periods. However, development is not only going to come from the notion of “made in Cameroon”, equally important is “consuming what is made in Cameroon by Cameroonians”. The more we consume what we produce, the more the chances for stepping up investments in the private sector, thereby reducing the unemployment rate in the country. Bengt Johannisson (2018) looks into the concretes doings, the practices of entrepreneurship, thus amalgamating the researcher and entrepreneur identities, science and technology. It is only through knowledge creation and innovation that value can be added to whatever resources we have; the continent has resources but lacks people with the ability to put these resources into useful and meaningful use. So, the continent needs to dig into creativity, innovation and knowledge creation, shaping markets and dialoguing with entrepreneurship to move things forward under the canopy of research, science and technology. “Cameroon’s future is inescapably linked to its ability to create an effective marriage between culture, science, technology, indigenous knowledge, and entrepreneurship of which education plays a decisive part” (Fore, 2019, pp. 83-84.).

Science Parks as a meeting venue for researchers, universities, private sector and civil society should be encouraged. Cameroon’s Government National strategy 2020-2030 could be attained with the collaboration of the key players, researchers, universities, private sector and civil society working together for the common good. In the same vein we can state that the full realisation of United Nations Sustainable Development Goals (2020-2030) and African Union (AU) 2063 Development plans hangs much for its realisation on the interplay between university, research institutes, private sector and civil society interface. Educating the people across the board on this is an imperative. The role of the media



is imperative in informing and educating all parties. We should at all cost ensure public access to information.

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**DOSSIER**

ENTREPRENEUR

**“Made in Cameroon” products**

## Highly promoted at Ngoundere University

**The University Institute of Ngoundere through its biochemistry students has unveiled to the public two quality drinkable beer made from cassava and millet. This “made in Cameroon” products that was closely supervised by Pr Steve Carly Desobgo, exp in food engineers, have been on promotion for few days now.**

**T**he students of the University of Ngoundere succeeded in producing local beers in the laboratories of the university institute. These beers were made from locally produced cassava and millet. Given that it is locally produced and bottled, it has adopted the appellations: “Mbong” meaning (cassava in Ewondo local language) and “Sembe” (millet from cereal).  
 Though the promotion is not yet done on a large scale, the production of these two brewing products would intensify the cultivation of more cassava and millet. Certainly, the Agricultural

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Markets Investment and Development Project (PIDMA), a



beers, the impact will be considerable in that, it will offer alternatives to fill the raw material shortage that often force brewer companies to resort to imports in order to meet their corn grist need. It has also been revealed that the company dupped, (Maïscam), a company that deals with the production of maize with bare 10,000 tonnes of gritz, is not enough to meet market demand. This pushes other brewer companies like UCB and Guinness to resort to importing corn to produce beer.  
 The priority that government is putting on “Made in Cameroon” products these days is a motivating factor towards growth. Going by the National Development Strategy 2020-2030, the manufacturing industries should record an average growth of about 5.3% in the 2021-2030 periods. The government will also focus on increasing the productivity of agricultural products and competitiveness of agricultural products which is also another pull factor for growth. Meanwhile, the primary sector is expected to grow at an average rate of 5.7% over the 2021-2030 periods, the NDS30 revealed. **S.**

pioneering tool at the service of second-generation agriculture in Cameroon will boost crops with high nutritional, commercial and economic potential like: corn, cassava and sorghum in order to improve the supply and add value to these products as well as to enable them to meet up the demands of agro-businesses. Given that it is indeed a question of promoting the production of both quality and quantity maize to satisfy the market and to improve the incomes and daily life of producers in the five agro-ecological zones of Cameroon. With the production of these two

**Agricultural production**

Figure 2.

This beer production is the result of a marriage between science, technology and entrepreneurship which is likely to encourage collaboration between entrepreneurs and the universities. Just imagine what other products can be made out of the vast natural resources of the country. Thus, cooperation between the State universities, research institutions, private sector and civil society interface is imperative in driving the country toward sustainable development and quality livelihood of the people.

### 3. Methods

The validity of qualitative research, its generalisability to larger populations, and the possible anecdotal basis of its claims is a real one which does not exist just in the minds of policy-makers (Silverman,

1993). As Collis and Hussey (2003) also emphasis, methodology chosen should reflect the type of research paradigm. Entrepreneurship/entrepreneurial problems cannot be resolve by cookbook recipe. Entrepreneurship involves change and uncertainty, which according to Henderson (1992) constants, together with principles of redistribution and recycling of all elements, hierarchy, complementarily, interconnectedness and indeterminacy exist. Harrison (2018) underscores the importance of entrepreneurship and leadership, providing wealth knowledge on a wide range of cultures, entrepreneurship, and leadership ecosystem.

This study is based on a combination of direct interviews using open-ended question with a total of 100 selected interviewees: 5 scientists, 3 engineers, 42 entrepreneurs, 50 randomly selected consumers of various goods and desk research. Questions were directed on the benefits to be derived from a marriage between entrepreneurship, scientist and technology. Key questions were focused on:

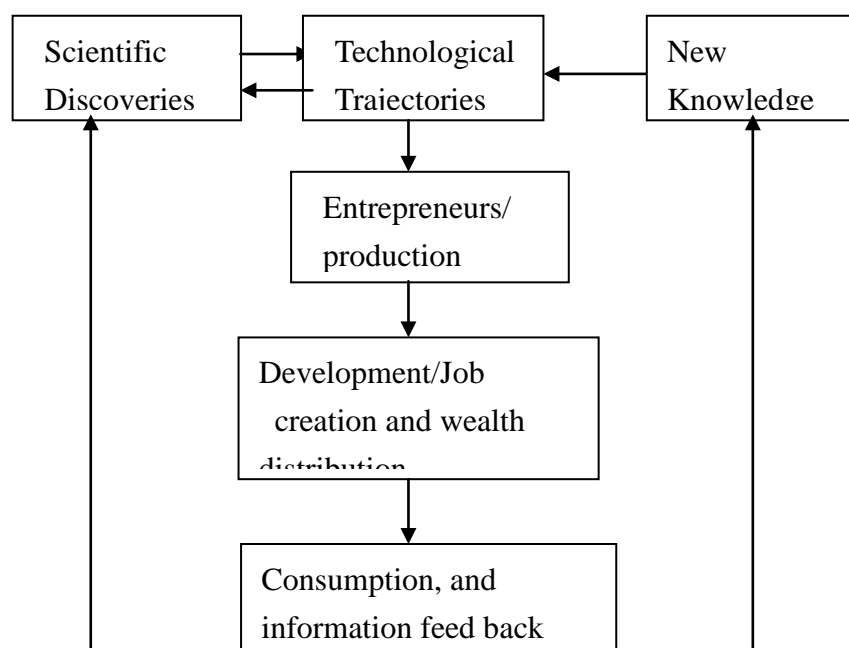
- Benefit of a link between Science/Technology, Entrepreneurs & Development;
- How such a link can be improved for scientific discoveries to serve humankind more; and
- How such a link can be established.

#### **4. Findings and Discussion**

Findings is analysed qualitatively to enable widespread understanding. From the result, Cameroon scientists are making efforts to connect scientific discoveries with entrepreneurial practices. Take for example, the beer production by the university. Problems constantly raised were linked to the poor channels of distribution that makes information difficult to reach many people. Product distribution is a role played by entrepreneurs not scientists. The role of entrepreneurs in promoting and bringing scientific discovering closer to people was recognised, but argument rose also focused on the limited number of sustainable small businesses empowered with the knowledge to clearly explain the usefulness of a product in question. According to data collected, scientists are supposed to liaise with the community to give and take useful information that can improve the quality of products and research. The application of specialised competences through deeds, processes and performances for the benefit of other entities or the entity itself according to Lusch, and Vargo (2006) is important. Organisations and institutions exist to integrate and transform specialised competences into products that are demanded in the marketplace. Good communication between producers and those who take the products to the market place is of vital importance.

According to the result obtained, the missing link is that scientists very often do not inform and enlighten the public about new discoveries and their functions. Lack of information about products makes the society to shy away from domestically produced goods that could be beneficial to them in many ways; and move to consuming foreign goods that they equally do not quite understand, but widely advertised. This view is in line with what I gathered from the Nigerian News from the

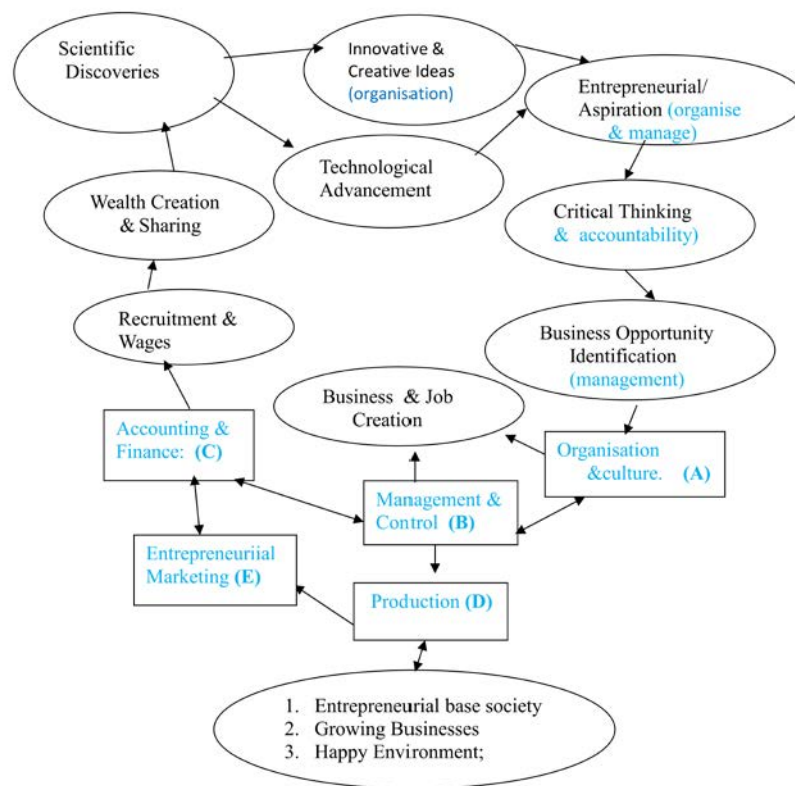
University of Makurdi NTA 22:10 on 17<sup>th</sup> January 2010 News on—Nigeria, over the fact that there is lack of interest by entrepreneurs to commercialised research findings carried out by Nigerian Universities. Educational establishments must equally market themselves. Following the views of some interviewees, such “lack of interest” may be due to ignorance of the role of science and entrepreneurship in wealth creation and development. It is important for scientists, technologist and entrepreneurs to work together to enlighten the public on the role they play in the economic and developmental process of a nation. Enlightening the public would create confidence, reduce psychological fear and motivate both the public and small businesses to produce and sell scientific discoveries. Presently, there is poor communication between the universities/researchers; the business community and the civil society. The importance of direct communication between entrepreneurs and scientists as gathered is illustrated in Figure 3.



**Figure 3. Benefit of Direct Communication between Entrepreneurs and Scientists**

Scientific research enables the creation of products that provide marketing frameworks for economic growth. Commercial exploitation is the principle means for dissemination of research and development results (see Kastrinos, 1994 opt cit.). We need a joint effort; government, academic institutions, civil society, and entrepreneurs to actualise scientific/technological inventions for human use. In Figure 2, an entrepreneur is seen as wealth creator and distributor, and he/she is in reality more a business opportunity identifier and a market channel. Without the commercialisation of a product, scientific creation will have no interaction with the society. Business people link scientists and their creations

with people and the market place. The synergetic effects of the cooperation between the two groups are that it empowers and motivates more research that result in many products that enable the growth of more small businesses. The COVID 19 pandemic for example has also stimulated innovative ideas in many scientists across the world; Changes have occurred and many institutions are taking advantage of them, Cameroon not left behind. Indigenous knowledge and technology is gaining more recognition and place within the research landscape of the country. It is important to intensify collaboration between: universities; researchers, the business sector and the civil society. Bengt Johannisson (2018) provides intellectual/theoretical views for our understanding of entrepreunering and as a methodology that can enhance the dialogue between researchers and practitioners. This whole connection can be seen as wealth creation, sharing and development cutting across all disciplines. Figure 4 illustrates this.



**Figure 4. Entrepreneurs as Wealth Creators and Wealth Sharers**

To summarise, the five factors ABCDE in figure 3, what Lema (2010) calls the pillars of Business Administration, form the contour of any business or any organisation and constitute the success influence factors as well as sustainability. Starting from the idea generation phase, it has to be organised, the entrepreneurial aspiration has to be organised and manage, this is the critical phase of any creation

and warrants powerful discussion. Accounting for the idea requires critical thinking and has to do with accountability, although it is commonly said that entrepreneurs are risk-takers, the risk has to be calculated. They cannot be deep Enders (jump into the swimming pool and drown). Business opportunity identification needs to be well managed. Thereafter, organisational culture comes into play followed by management/control then production. However, right from the idea generation phase the process has to be well managed. Concerning the inclusion of text boxes ABCDE, I want to share an encounter I had with a public servant (government worker): I visited a government office, in the course of discussion I mentioned poor management and one of the workers said the following:

“Madam, may I remind you that you are in a government office and not in a business enterprise, do not bring commercial management here and again reiterated the fact that I was in a government office not in a company”.

I said am sorry, but madam how did you come about working here? She said by applying for the post of course, I said very well, the office advertised the post and you marketed yourself by applying. She kept silent.

People in all disciplines and institutions must come up with new ideas in order to survive and progress. Very often people do not think that government can go bankrupt. The concept of non-profit organization can be misleading or consumed wrongly. We have financial profit; social, cultural, developmental profit, the list is long and generating all these profits need to be financed. In any organization where accountability, organization, management and marketing are absent, that company, institution or government cannot survive. Entrepreneurship empowers people with the ability to examine and take advantage of any theory related to the four subject areas that can contribute to the sustainability of the company or government. If we want to sustain and survive, everything has to be seen from the perspective of profitability, no matter in what form. There is nothing like non-profit organization so to speak, money must come from somewhere to finance the operation. Organisation & culture sets purpose and goals and exercise expertise in the coordination of different peoples' skills needed; Management and Control; manages and controls all the organised factors including production. According to Drucker (1955), management aims at challenging all to growth and self-develop; Accounting & Finance: Analyse the main sources of finance and accounts for proper uses, and Entrepreneurial marketing goes beyond the traditional marketing method to ensure success. According to Stokes et al. (2010), entrepreneurship marketing can be in conflict with traditional marketing in that it tends to use heuristic decision making relying on intuition which is mental shortcuts to reduce information overload. It also brings about the feeling of empathy. Traditional marketing emphasises the need for structured market intelligence in order to understand customer needs including formal research and information gathering activities.

#### *4.1 The Creation of an Entrepreneurship Centre, and Implications*

A tradition of research more than a century old suggests that although persuasiveness of talk matters, co-presence itself affects the course and meaning of action (Green, 1991; Zajonc, 1965). Although some people are aware of the fact that new products are results of scientific researches, without a visible interaction between scientist and entrepreneurs, the role of scientists is downplayed, and pushed to the background when products are discussed. Sherif (1936) with his innovative experimental studies of the production of collective norms, found that norms are constructed from and rooted in an emerging group culture. Whitehead (1985) provides a real basis for achieving the sort of society that our imprint was created to serve: an association in which the free development of each is the free development of all from this perspective, we need a common ground where these groups of people can meet to discuss. An entrepreneurship centre especially in a university environment seems appropriate to create a valuable linkage or interface between researchers, entrepreneurs and provides a podium for students to contribute ideas, esteemed and spurred further research that benefits a nation. The benefit from an entrepreneurship centre would include amongst others:

Innovative ideas;

Shared cost of ideas processing and production;

Shared knowledge;

Market expansion through more business creation;

Synergy.

##### *4.1.1 Innovation*

Scientific discoveries and technological innovations play vital role in the economic strength and sustainability of a nation. Properly managed, innovation produces steady growth (Gibbs et al., 1991). Scientific discoveries and technological inventions are seen to have raised both health and economic wellbeing of people the world over. It also creates business opportunities for people to earn income and reduce the level of poverty. Entrepreneurs and scientists in partnership should therefore recognise and fulfil their responsibilities in the wealth creating sectors of a nation's economy. The mechanisms for transferring new ideas emanating from basic research housed primarily at universities provides a vital link in the chain of events leading to technological innovation, and new products creation. According to Levitt (1986) such links constitute major clearing houses for technical information arising from research at universities and government sponsored researches to small business people. The fast growing importance of science and technology outpaces the process of adjustment in the society. Political leaders for example lack behind in policies necessary to promote scientific endeavours and entrepreneurship. They are often confronted with highly complex entrepreneurial, scientific and technological issue for which they are neither competent nor prepared, but left with the burden of supreme responsibility to decide. Naturally the politician turns towards the scientist for advice, but the

scientist is as ill prepared to help decide on political issues as the politician is on technological questions, i.e. one is dealing with a situation of the “blind having the advice of a deaf” on how to play the piano as Nover 1981 claimed. Such a situation can only be rescued by creating a forum for sharing ideas. Scientists alone cannot develop a nation; neither can entrepreneurs nor politicians do it alone. There must be communication flowing through the groups. Pianist would agree that, good music can be obtained by using only the black keyboard, and good music can also be achieved by using only the white keyboards, but if we want better music we have to combine both black and white keyboards. A podium needs to be created for scientist, entrepreneurs and other stakeholders in a nation’s economic development to meet, brainstorm, and foster scientific and technological advancement for the benefit of mankind.

#### 4.1.2 Government

The government has an obligation to promote and encourage strong cooperation between entrepreneurship and science for the creation of sustainable small businesses. Entrepreneurship centre intended to promote the creation of small business will provide an environment for people to benefit from economies of proximity and association as well as the provision of common support and adversary services. Government needs to do everything possible to realise the National Development Strategy by increasing the productivity and competitiveness of agricultural products which is a pull factor for growth and poverty reduction. Technological changes and advancement need a conducive environment. We need a good interface with education, science, technology and entrepreneurship. Hisrich and Hamadani (2018) elaborate on new and growing ventures pointing out that the biggest knowledge gap most entrepreneurs have is how to market their products, services and businesses. The centre will help prospective entrepreneurs and existing owner-managers to acquire general business skills as well as specialist’s expertise. The government needs to introduce policies to support innovations. One set of policy can target the country’s universities and government research departments intended to encourage the commercialisation of research results. Other policies could focus on existing businesses intended to stimulate new products and process development through the provision of grants and awards. With the globalisation of science and technology, entrepreneurship becomes an inherent component of the political economy of the 21<sup>st</sup> century for nations, driven by the phenomenal growth in international trade and by aromatic improvement in information and communication technologies. For now inter—African trade is low, so also the level of communication within and between African countries. There are areas that need to be given top priority by government to uplift the trajectory of the role of entrepreneurship in wealth and job creation. This will play key roles in terms of employment, food security, and export earnings.

#### 4.1.3 Shared cost of production

The cost of developing and marketing new products is usually very high and therefore difficult for one business enterprise to foot alone. High costs of launching equally make a product too expensive for consumers. It is possible to cut down cost through partnership and continuous scientific research. Pulling resources together would build an effective and efficient vertical system, where scientific discovery or invention flows down to the public for consumption at a low cost. Scientific discoveries and entrepreneurial activities have great impact on poverty alleviation in a society. For example, the beer produced not only profit good living; it triggers down to the economic growth of the country. In the olden days, the artists depended on support of wealthy individuals for most of their work and often even for their existence (See Nober, 1981), the economies of every country today much like the artists depend heavily on the performance of Education, Science, Technology and Entrepreneurship (ESTE). Any positive outcome from science and technology will stimulate entrepreneurial activities.

In view of this, the creation of an entrepreneurship centre could be an ideal way of encouraging academicians to become entrepreneurs by commercialising their results. The conflation between science and entrepreneurs could lead to the development of clusters of high-technological new small businesses in Cameroon. Although, Massey et al. (1992) question the role a science parks could play in a local economy, from this research it can primarily kick start entrepreneurial activities particularly in a nation like Cameroon where natural resources are in abundance. An entrepreneurship centre has implications on employment, and getting the youths off the streets—either it is likely to encourage the youths to think of starting their own business after living school. The research findings suggest strong benefit from a functional network between education, science, technology and entrepreneurs. These entities could form and prepare the country for industrialisation. Business offers opportunities to scientists to generate money to support new researches to provide good marketing framework for economic development. The cooperation will enable the creation of competitive products and create space for Cameroon in the global market. The establishment of an entrepreneurship centre would create a link between many disciplines and act as a feedback loop to both entrepreneurs and future scientific researches. It was discovered that during the last 10 years, Cameroon has experienced an increase in scientific endeavours, and this is evident in the variety of medications produced and marketed. For example, it was found that the ginseng plant that has for time immemorial in Cameroon been used only as food and only by a particular ethnic group has now been transformed to serve the whole nation and beyond; this is thanks to an informal dialogue between modern scientists and the traditional herbalists in the country. An entrepreneurship centre should provide a formal and wide forum for more herbs and other food crops to be transformed into generic products. A link between entrepreneurs and scientists would enable Cameroon to carry out serious transformation of their many raw materials, and by so doing determine its own product path and identify itself in the global market.



## 5. Conclusion

The development of any society lies in the harmonious interface of various actors; the proper utilisation of its human and natural resources and education. It is imperative for the country to redefine its development strategies and approaches. Attempt is made to show how a linkage between science, technology remains the source of sustainable and successful economic development in the country. The reason for a conflation between entrepreneurship and science has been presented and discussed. Science uncovers hidden products for exploitation for the benefit of man and entrepreneurship skills provide a conduits through which scientific results get to man for consumption. This study therefore recommends that, close ties between science, technology and entrepreneurs be encouraged as it would forge long-term economic growth; promote scientific progress and proper utilisation of resources both human and material. This study suggests therefore that all these can be achieved through the creation of an entrepreneurship centre.

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### **Notes**

Note 1. [www.invet.org/hall of fame/112.html](http://www.invet.org/hall_of_fame/112.html).

Note 2. see *The Economics of Health Care. Challenges for the Nineties*. Report: Princeton University 1990.

Note 3. Mare Henneaux, Alexander Sevrin (2001 eds.). *Proceedings of the Fifth Francqui Colloquium* 19-21 October 2001, Brussels.