
Entrepreneurial And A Functional Chemist As A Means Of Achieving The National Objectives Of Vision 2020 In Nigeria

By

ABC NZEKWE

*Science Technology Dept,
Federal Polytechnic, Oko*

Abstract

The role of the chemists in the entrepreneurial development of this country cannot be over – emphasized, more so towards achieving the goal of vision 2020. On this premise is this paper presented. Everything in the environment, whether naturally occurring or of human design, is composed of chemicals. Chemists search for new knowledge about chemical and use it to improve life. Chemical industries such as cement, cosmetics, food and drinks, beverages, paints, adhesives, lubricants, plastics etc when in place, will create employment opportunities, reduce/eliminate our over – dependence on imported finished products and preserve our external reserves. These are the characteristics of a strong economy which are the objectives of vision 2020.

Introduction

Entrepreneurship is the act of being an entrepreneur. An entrepreneur, which is a French word, refers to a person who sets up a business or businesses by undertaking ideas, innovations and financial risks in an effort to transform such into profitable economic goods (Shane, 2003). This may result in new organizations or may be part of revitalizing mature organizations in response to a perceived opportunity. The most obvious form of entrepreneurship is that of starting new businesses (referred to as Startup Company): however, in recent years, the term has been extended to include social and political forms of entrepreneurship activity.. When entrepreneurship is describing activities within a firm or large organization it is referred to as intra–preneurship and may include corporate venturing, when large entities spin – off organizations (Jacobs, 2010).

In economics, entrepreneurship is defined as the process of discovering new ways of combining resources. When the market value generated by this new combination of resources is greater than the market value, the entrepreneur makes a profit. Entrepreneurship is also defined as the act of making money by starting or running businesses, especially when this involves financial risks (Reynolds, 2007).

Entrepreneurship activities are substantially different depending on the type of organization that is being started. Entrepreneurship ranges in scale from solo projects (even involving the entrepreneur only on part – time) to major undertakings

The Coconut

creating many job opportunities. Many 'high value' entrepreneurial ventures seek venture capital or angel funding (seed money) in order to raise capital to build the business. Angel investors generally seek returns of 20 – 30% and more extensive involvement in the business (Wikipedia, 2010). Many kinds of organizations now exist to support would – be entrepreneurs including specialized government agencies e.g. Bank of Industry (BoI), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), Technology Incubation Centers (TIC), United Nations Industrial Development Organization (UNIDO) etc. For the purpose of this paper, we will adopt the definitions that relate to business formation activities and will assume that the objective of entrepreneurship is wealth creation towards fulfilling vision 2020 (Jacobs, 2010).

Qualities of an Entrepreneur

What are the characteristics of successful entrepreneurs? What traits are necessary for entrepreneurs? Here are some characteristics of a successful entrepreneur.

- **An eye for opportunity:** Many entrepreneurs start by finding a need and quickly satisfying it.
- **Independence:** Even though most entrepreneurs know how to work within the frame work for the sake of profits, they enjoy being their own boss.
- **Hard work:** A prospective entrepreneur must have an appetite for hard work. Most successful entrepreneurs work long hours and hardly give up with little pay.
- **Self – Confidence:** Entrepreneurs must demonstrate extreme self confidence in order to cope with all the risks of operating their own business.
- **Discipline:** Successful entrepreneurs resist the temptation to do what is unimportant or the easiest but have the ability to think through to what is the most essential.
- **Judgment:** Successful entrepreneurs have the ability to think quickly and make a wise decision.
- **Acceptance of Change:** Change occurs frequently when you own your own business, the entrepreneur thrives on changes and their business grows.
- **Make stress work for them:** On the uncertainty involved in business, the entrepreneur often copes by focusing on the end result and not the process of getting there.
- **Need to achieve:** Although they keep an 'eye' on profits, this is often secondary to the drive towards personal success.
- **Focus on profits:** Successful entrepreneurs always have the profit margin in sight and know that their business success is measured by profits.
- **Able to organize:** Successful entrepreneurs have the skills to organize. They allocate resources, assign tasks and establish procedures for accomplishing goals. By combining people and jobs effectively, entrepreneurs are able to transform their business ideas into reality.

Entrepreneurship and Nation Building

In the contemporary Nigeria, government at all levels have suddenly woken up to the realization that our educational system had been flawed such that there is a wide gulf between principles taught in schools and practical application of the principles to solving problems of the society, thus lately there is a strong push to introduce entrepreneurship in school curricula as well as strengthening the practical aspects of science and technical education. This is indeed a welcome development as no nation can grow if devoid of entrepreneurship (Nwogu, 2009).

All the industrialized countries of the world got to their present level of industrialization because through appropriate policy measures, they deliberately created environment that encourages entrepreneurship. Unfortunately, one cannot say the same for Nigeria, where there appears to be a myriad of problems and challenges confronting a prospective entrepreneur, as well as the unfortunate perception of entrepreneur as someone to be exploited by government and the community. A typical entrepreneur in Nigeria is faced with numerous challenges which can be encapsulated into the following:

- **Lack of Basic Infrastructure**
Lack of power supply, running water, poor road network, poor communication network etc.
- **Multiple Taxes and Levies**
Imposed by federal, state and local governments, and also by the host community in the way of social corporate responsibilities.
- **Insecurity**
An ineffective police force, incessant cases of armed robbery, kidnapping and car snatching and harassment by security agents on the highway (Jacobs, 2010).

More worrisome is the fact that some governments, either out of ignorance, political exigency, selfishness or sheer mischief on the part of the executives, fail to recognize the role of local entrepreneurs but devote substantial effort fruitlessly at attracting elusive foreign investors. Charity, they say, begins at home.

Despite the problem and challenges highlighted opportunities still abound for entrepreneurship because Nigeria is endowed with abundant natural resources and the Federal government is making a conscious effort to encourage entrepreneurship (Jacobs, 2010).

Vision 2020

What is Vision 2020?. Vision 2020 is a comprehensive framework designed to stimulate economic growth in the country. The framework also offers a blueprint for sustainable political development in Nigeria. Vision 2020 is aligned with the goals of the National Development Plan NDP (Abdullah, 2009).

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One of the main objectives of Vision 2020 is to place Nigeria in the top 20 leading economics of the world by the year 2020. To achieve this objective, Nigeria would have to compete with nations like the United States, Japan, Germany, China and the United Kingdom, which have traditionally maintained the top five ranking of the International Monetary Fund. In 2007, IMF ranked Brazil 10, India 12, South Korea 13, and Indonesia 20 respectively. These nations are expected to vigorously compete with Nigeria in the global economy. Nigeria is ranked 41. The IMF uses criteria based on several benchmarks such as the Gross Domestic Products (GDP), the Gross National Product (GNP), the rise in personal income etc (IMF, 2007).

Who is a Chemist?

A Chemist is a scientist trained in the science of chemistry. Chemists study the composition of matter and its properties such as density, acidity, size and shape. Chemists carefully describe the properties they study in terms of quantities, with details on the level of molecules and their component atoms. Chemists carefully measure substance proportions, reaction rates and other chemical properties. (Wikipedia, 2010). Chemists use this knowledge to learn the composition and properties of unfamiliar substances, as well as to reproduce and synthesize large quantities of useful naturally occurring substances and create new artificial substances and useful processes.

The importance of Chemistry in our lives can better be appreciated when one considers the myriad of products, which are produced via the application of chemistry in industry. The essential drugs that ensure our good health, the pesticides that destroy disease-causing pests and the herbicides that make it possible to practice large-scale agriculture are all products of chemistry. The present-day convenient modes of transport including automobiles, ships, aircrafts and bicycles are products of the steel industry which would not have been possible if iron was not extracted from iron ore by the Chemist (Jacobs, 2010). Our buildings are constructed from concrete blocks, which are products of cement concocted by the Chemist. Some of the clothes we wear are made from polyester or nylon, which are products of modern chemistry.

The cosmetics that make our ladies luscious as well as the soap that are necessary for cleaning our body and wares are products of the Chemist. The atomic bomb that abruptly brought to an end the senseless and devastating World War II remains the handiwork of Chemists. The list is so long that one can state without fear of contradiction that modern man cannot do without chemistry. From the foregoing; it is obvious that the Chemist has the potential to impact favorably or unfavorably on the lives and activities of mankind.

Opportunities Available to the Chemist

Nigeria is an industrially and technologically 'Virgin' country since only very few chemicals are produced in the country. The industrial chemicals are undoubtedly

very essential for sustaining manufacturing. Most of these chemicals are however, unavailable locally, and have to be sourced through importation.

The status of technology in Nigeria's local drug production has remained predominantly in the processing of dosage forms in a few pharmaceutical industries (Wikipedia, 2010). Presently, tablets and liquids constitute the majority of all production, which consists mostly of analgesics, haematinics, antimalarial, cough and cold preparations and Antibiotics.

About 60% of all pharmaceutical industries in Nigeria are engaged in secondary manufacturing (ie processing medicinal substances with formulated additives into pharmaceutical dosage forms) while the rest are engaged mainly in tertiary manufacturing. The chemists can tackle the raw material needs of the pharmaceutical industries by establishing laboratories for the synthesis of the active ingredients used in production. Chemical industries can also be established that would process pharmaceutical grade chemicals such as paracetamol powder, ascorbic acid powder, starch etc into synthetic medical compounds including intermediate substances. This will go a long way in discouraging the continuous importation of chemical raw materials.

The table below gives a list of very few companies involved in the production of a few number of chemical compounds. The list does not include the very essential basic industrial chemicals such as sulphuric acid, sodium hydroxide etc. With these one can therefore appreciate the low level of activities in chemical manufacturing in the country and thus the opportunity open to the chemist.

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Table 1: Chemical Companies and their Products (Jacobs, 2010).

S/N	COMPANY	PRODUCTS
1	Rodco Nigeria Limited.	Chemical for toiletries and cosmetics.
2	Syngenta Nigeria Limited.	Agricare, Medical, Personal care related chemicals.
3	Fine Chemical limited.	Amino acids, Organic intermediate synthesis
4	Henkle Chemicals Limited.	Detergents, Adhesives, Chemicals.
5	Stellar Company Limited.	Chemical raw Materials, COSWAX NF, COSWAX PARAFFIN, Cosmetic consultants offering advice and guidance.
6	Air liquid Nigeria Plc.	Acetylene, Argon, Electronic Gases, Helium, Hydrogen, Medical Gases, Nitrogen, Nitrous Oxide, Oxygen, Special Gases, Welding Gases, Carbon dioxide.
7	Air Separation Nigeria Limited.	Industrial and Medical oxygen.
8	F&G International Limited.	Kaolin, Baryte, CaCO ₃
9	Metoxide Nigeria Limited.	Titanium dioxide, Zinc oxide, Sulphur.
10	Nycil Limited.	Resin/ Polymers.
11	Unikem Industries Limited.	Refining Ethanol
12	Universal Gases Limited.	Oxygen, Nitrogen, Acetylene, Argon, Helium, Hydrogen, Carbon dioxide

The sorry state of the petrochemical industries in the country is another area of concern that offers a great opportunity to the Chemist. The Kaduna Refining and Petrochemical Company (KRPC) has not been producing any chemical for a long time. Warri Refining and Petrochemical Company (WRPC) currently produces only carbon black while Eleme Petrochemical Company produces close to full capacity. Other entrepreneurial activities of the chemists in such industries as cable wire, cement, cosmetics, electronic components, adhesives, lubricants, food and drinks, beverages, plastics, paints, sugar, salt, foam etc will no doubt streamline the economy of the nation by preventing over – dependence on importation of these finished products, thus making us capable of achieving the goal of Vision 2020.

Conclusion

The establishment of chemical industries as enumerated above, will no doubt provide employment for our teeming population, reduce our over – dependence on imported products, and help preserve our external reserves and then position the economy of this country into achieving the goals of Vision 2020. These, a chemist can do.

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