

# The Design and Development of a Web-Based E-learning Platform for the Understanding and Acquisition of Various Entrepreneurial Skills in SMEs and Industry

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In recent times, the role of entrepreneurs has been recognized to be of great significance in accelerating the pace of growth of economic development of any country. Internet-enabled technologies have also challenged existing business models in numerous market sectors and offered innovation opportunities to a variety of stakeholders—not least SMEs (Small and Medium Scale Enterprises). The focus of this paper is on the development and design of an educational Web-based e-learning platform tool that presents a possible future scenario of a platform for the acquisition of innovative entrepreneurship skills and technology transfer needs of school leavers and graduates from higher institutions of learning. The platform enables the display of various product design and job-related entrepreneurship skills that are capable of bringing together students, teachers, researchers, and experts from industry and economic life. This learning in network promotion of SMEs sector offers students unlimited possibilities to acquire new knowledge and explore business linkages in various dimensions. An important ingredient of the system is a mechanism that gives illumination of basic concepts, procedures, stages, and essential indices for acquiring entrepreneurial skills through content dissemination, monitoring, evaluation, control, and accountability in globalised environment. Other features include provisions for the learning of multiple-instruments used in industries, individual and group tasks, hands-on sessions, games, and organizational learning in entrepreneurship and visual visitation display of industrial sites. The approach is cost-effective and the solution is suitable for a variety of platforms. It could, for example, be used as a platform for acquiring "online degree in entrepreneurship education". With a degree in entrepreneurship, students can develop the basic understanding that they need for starting their own business. This will ultimately promote employability of graduates in the globalised economy.

*Keywords:* SMEs (Small and Medium Scale Enterprises), entrepreneurial skills, technology transfer, product designs, industrial visitations, experiential games, entrepreneurship education

# Introduction

Historically, entrepreneurship development in Nigeria started late as many of the indigenous entrepreneurs in the country were never allowed to develop by the former colonial powers. However, with the promulgation

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of the Nigerian Enterprise Promotion Decree of 1972 when events changed, and this provided the stimulus for entrepreneurship development via small- and medium- scale enterprises promotion. As a result, private businesses sprung and grew generating employment, income, and increase in GDP (Gross Development Product), while the Nigerian government supported entrepreneurial ingenuity through various programs that were designed to encourage self-employment, income empowerment, social cohesion, technical progress, and economic development.

Since the mid 1980s, there has been increased commitment of government to entrepreneurship development especially after the introduction of the SAP (Structural Adjustment economic Program) in 1986, added to the establishment of the NDE (National Directorate of Employment), NOAS (National Open Apprenticeship Scheme), SMEDAN (Small and Medium Enterprise Development Association of Nigeria), etc...

In early 2000s, entrepreneurship studies were introduced into the Nigerian educational system especially higher institutions as a mandatory course. The CED (Centre for Entrepreneurship Development), which has the objective of teaching and gingering students of higher institutions (especially in SET (science, engineering, and technology)) to acquire entrepreneurial, innovative, and management skills, was also established. This is to make the graduates self-employed, create job opportunities for others, and generate wealth.

# **Literature Review**

Entrepreneurship sometimes cannot often be accurately defined, however, according to Evans and Volery (2001), it is a process of creating value, be it by individuals or organizations and this process involves recognition of the opportunity and use of resources. In other words, the individual or the organization gives the market place a product or service by using resources in a new way. This process is not simple as it requires the entrepreneur or entrepreneurial organization to modify the venture concept and strategy until it is right (Good, 2003). Entrepreneurship can also be defined as the ability to develop a new venture or apply a new approach to an old business (Steinfioff & Burgers, 1993). Furthermore, Laukkanen (2000) was of the opinion that entrepreneurship has emerged as a key issue and policy tool for economic growth, regional development and job creation.

Entrepreneurship education, according to Isaac, Visser, Friedrick, and Brijlal (2007), is the purposeful intervention by an educator in the life of the learner to survive in the world of business. It has as its focus on action orientation primarily embodied in teaching students how to develop a business plan. Bassey and Archibong (2005) were of the opinion that the goal of entrepreneurship education should be to empower our graduates irrespective of their areas of specialization with skills that will enable them to engage in income yielding venture, if they are unable to secure jobs in the public sector. Hence, today, entrepreneurship education has come to denote all forms of knowledge delivery that seek to empower the individual to create real wealth in the economic sector, thereby advancing the cause of development of the nation as a whole. One major rationale of including entrepreneurship curricula in universities, according to Cotton, O'Gorman, and Stampfi (2000), was that it will help graduates to acquire increased understanding of entrepreneurship, equip them with entrepreneurial approach to the world of work, and prepare them to act as entrepreneurs and managers of new businesses.

In the literature, it has been established that the development of technical innovation and the capacity to translate such innovation into entrepreneurial ventures is a positive step in the direction of socio-economic development. There is underdevelopment when this step is missing. In Nigeria, technical innovation and

entrepreneurship are conditioned by the political economy, the institutions, the socio-cultural opportunities, and constraints. Fundamentally, innovation has to do with changes leading to improvement in the quality and quantity of products as well as techniques of doing things. Innovation is dynamic and creates new things out of existing ones.

Through innovation, the entrepreneur introduces new production techniques, new commodities, improves existing ones, opens up new markets, explores new source of raw materials, and designs new techniques of management. Research and development programs are formal avenues of introducing or inculcating innovative skills in the entrepreneur. These skills are what the entrepreneur translates into business establishment and development.

Previous research studies have shown that there exists a significant relationship between entrepreneurship education and students' career intention. One such study carried out by Kolvereid and Moen (1997) revealed that students with a major in entrepreneurship have a higher intention to engage as entrepreneurs and are likely to initiate business. Another study carried out by Noel (2001) equally showed that students who graduated in entrepreneurship reached higher scores in entrepreneurial intention and entrepreneurial self-efficacy than students who graduated in other disciplines. Bassey and Olu (2008) also investigated how students' perceptions of tertiary entrepreneurship education relate to graduate self-employment potential in Nigeria using a sample of 690 students in three universities. The result of their work showed that there was a significant relationship between students' perceptions of university administration's provisions for tertiary entrepreneurship education and curriculum objectives for tertiary entrepreneurship education.

# The Problem

Nigeria is the most populous country in Africa, with a population of 140 million. According to the 2006 provisional census, Nigeria has a youth population of 80 million, accounting for 60% of the population. The country suffers from extreme poverty: Over 70 million people live on less than \$1 a day. Today, there is a growing problem of youth unemployment in Nigeria, with over 64 million young people being unemployed, and of the 16 million employed, 1.6 million are actually underemployed. In addition, only 10% of the graduates released into the labor market annually by universities and other tertiary institutions are able to obtain paid employment. The problem, therefore, is one that keeps recurring every year, hence, the directive of the Federal Government to all tertiary education regulatory agencies to establish necessary mechanisms for the introduction, development, and sustenance of entrepreneurial culture among Nigerian youths. To make up for the curricula inadequacies in meeting employment problem, the NUC (National Universities Commission) in July, 2004, organized a workshop on entrepreneurship for Nigerian universities as a way forward. The NUC workshop produced a draft curriculum on entrepreneurial studies for Nigerian universities. Consequently, many universities have initiated entrepreneurship education programmes in an attempt to reverse graduate unemployment trend by giving the needed training in entrepreneurial skills to students for setting up businesses and to consider self-employment as a viable career option.

Technological developments in the past few years have seen the startups of Internet cafes, new Internet service providers, computers in some schools, and connectivity hubs that provide access to information at high speeds. The Nigerian government has created and adopted policies promoting the use of technology in education. Furthermore, the Nigerian Economic Policy 1999-2003 is a comprehensive compendium of President Obasanjo's policies and guiding principles for the nation. The Nigerian Economic Policy 1999-2003

(1999) stated, "Government will provide affordable quality education for all Nigerians, the universal basic education and mass adult literacy programs will be pursued in earnest", and in particular, "Government will create incentives to expand access to information and communications technology which will facilitate leap-froging in order to short-circuit the longer span of development". The policy even recommended partnerships with national and international agencies, including the United Nations transfer of knowledge through expatriate nationals program.

The focus of this paper, therefore, is on the development and design of an educational Web-based e-learning platform tool. An important ingredient of the system is a mechanism that gives illumination of basic concepts, procedures, stages, and essential indices for acquiring entrepreneurial skills through content dissemination, monitoring, evaluation, control, and accountability in globalized environment. Other features of the system have the following functionalities:

- (1) Provisions for the learning of multiple-instruments used in industries;
- (2) The system will have e-lectures based on learning objects;
- (3) The system will enable students to submit assignments, evaluate their understanding, and help them acquire more knowledge;
  - (4) The system will allow for group collaboration individual and group tasks;
  - (5) Platform for acquiring online degree in entrepreneurship education.

# Method: Systems Design and Development

The methodology used in this study consists of the followings.

# **Software Requirements**

The following software is required to be installed on the server before running the application:

- (1) Microsoft Windows XP, 2007 Professional;
- (2) Macromedia Dreamweaver MX;
- (3) Microsoft FrontPage;
- (4) Microsoft Access;
- (5) Personal Web-server or Internet Information Server;
- (6) Visual Basic Enterprise Edition.

# The Design and Development of the Website

In developing the Website, the use of a well-defined methodology is quite important. Hence, the focus is using a clear logical structure to present the available material without losing users in insignificant details or links, which is capable of distracting the attention of the users from the educational goals it is intended to achieve. The research aims at developing a Web application that can be hosted with a domain name on the Internet server. This application will be designed such that things like passwords, registration for courses, course texts, assessment, tutorials, examination, and collaborative learning will all be available online.

# **Analysis of Requirements**

The requirements for specifications of the system are:

- (1) It must have an Interface for registering users and will also be able to store their details in a well-normalized database;
  - (2) It must have an Interface for registering users;

- (3) It must make it available for users to be able to download lecture series for their private studies;
- (4) It must enable users to do assignments and take short tests and make results available to students online;
  - (5) It must provide for collaborative activities among users.

The objectives of the site are as follows:

- (1) The site should be able to attract and retain users' interests;
- (2) The site should be able to maximize the audience, thereby ensuring that the largest possible number of people use it;
  - (3) The site should provide access to a large amount of information, tasks, and resources;
  - (4) The site must have a presentation structure and a storage structure.

The two structures must be similar to make it easier to maintain the Website. The presentation structure is the mental model of the Web-based classroom's structure formed by visitors as they browse through the pages of the site. It is the collection of hyperlinks that ties the materials together. The storage structure is the hierarchy of files and directories (often called folders) used on the Web-server to store the classroom's Web-pages and other data. It is created and maintained by the researcher. The storage structure of the Website is shown in Figure 1, while Figure 2 shows the screen shot of the CEDESA (Centre for Entrepreneurship Development and Skills Acquisition) homepage.

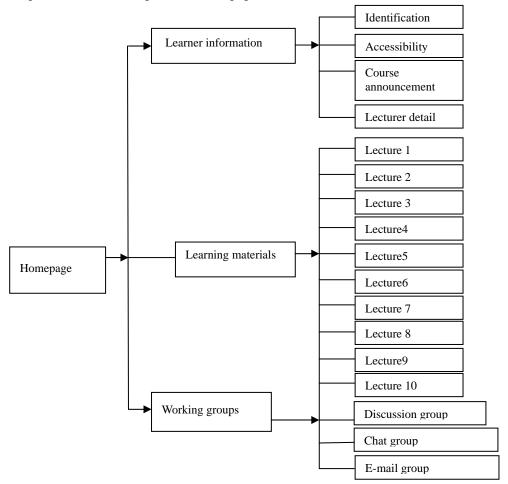


Figure 1. Storage structure.



Figure 2. Centre for entrepreneurship development and skills acquisition homepage.

# Results

#### Features of the Website

Welcome to CEDASA. Welcome to the CEDESA located at the University of Lagos, Akoka-Yaba. The centre aims at disseminating best practices on the design, implementation, evaluation, and promotion of entrepreneurship and SMEs (Small and Medium Enterprises) policies and local development initiatives. It seeks to foster the development of an entrepreneurial society, capable of innovating, creating jobs, and seizing the opportunities provided by globalization, while helping to promote sustainable growth, integrated development, and social cohesion.

Faculty, staff, and students of the center are passionate about entrepreneurship and the impact it will have on job-seekers, hence, it offers a wide range of activities, programs, speakers, and initiatives. Here, at the center, we harness the wisdom, experience, and perspective of the business community and our alumni. We provide our students with opportunities to participate in student organizations, quality advising and internships as well as scholarship assistance to students.

CEDASA is a center of excellence in human resources development through the use of visual learning, gives thrust to the endeavors that goals as a nation for the inculcation of self-employable skills are amongst the young graduates. The diversion of a significant percentage of the graduates from wage employment to self-employment or entrepreneurial careers is a matter of urgent need, hence, the policies and programs are designed specifically for entrepreneurship promotion which can greatly affect the growth of entrepreneurs and also contribute towards a higher form of entrepreneurship which is technically more superior

The use of the Web-based e-teaching and learning systems is another training delivery platform with value-added benefit to participants. This supports face-to-face and hands-on sessions for this program, and essentially embodies key principles in utilizing effective technology-based modes in teaching and training the participants. This kind of Web-based teaching and learning system is one of the best systems and is the first of its

kind in any university in Nigeria.

This Web-based teaching and learning system is in accordance with the vision, mission, and goals set under the corporate plan of the centre which is being implemented under the guidance of good and enables team of experts comprising of faculty, software engineer, multimedia artists, Web designer, programmers, and network administrators to use all the in-house resources. They deserve congratulations and thanks for the day-and-night work in producing an excellent Web-based multimedia material.

**Vision.** The vision is to help build a fully industrialized Nigeria through the catalytic and pioneering role of the micro/small/medium enterprises.

**Mission.** The mission is to make any person understand, actualize, and energize his/her inner potential for positive action by promoting entrepreneurial culture, skills acquisition, self-employment, economic independence, and self-actualization.

CEDASA objectives are as follows:

- (1) To stimulate an entrepreneurial attitude in students, lecturers, researchers, support staff, and in employees and employees in general;
  - (2) To enhance employability of educated youth through industry specific skill training;
  - (3) To empower women to acquire the necessary skills for personal development;
  - (4) To provide skills to equip the youth for gainful employment or to establish one's own enterprises;
  - (5) To reduce unemployment and the number of the youths engaged in dysfunctional pursuits;
  - (6) To reduce poverty and provide for additional sources of income;
  - (7) To arrange interactions with successful entrepreneurs;
  - (8) To arrange factory visits;
  - (9) To provide hand-holding support after the training;
- (10) To build NGO (Non Governmental Organizations) capacity for generating mass employment and women empowerment;
  - (11) To build up entrepreneurship potentials of Nigerian youth;
- (12) To motivate and equip Nigerian youth to access their entrepreneurial potentials to start and manage small business enterprises.

# **Entrepreneurship Development Module Lectures**

The entrepreneurship development module lectures are as follows:

- (1) Module One: Introduction to small business enterprises;
- (2) Module Two: Introduction to entrepreneurship;
- (3) Module Three: Unlocking entrepreneurship competencies;
- (4) Module Four: Business orientation;
- (5) Module Five: Market plan;
- (6) Module Six: Production plan;
- (7) Module Seven: Organization and management plan;
- (8) Module Eight: Financial plan;
- (9) Module Nine: Developing a viable business plan;
- (10) Module Ten: Presentation (and appraisal) of business plan.

# Sourcing for Capital to Start a Small Business of Your Own

Many young entrepreneurs have dreams and ideas to become a successful businessman. But maximum of them cannot become successful due to insufficiency of funds. Start-up loan is very much necessary for them. There are lots of hard-working young people around the world. Many of them have some great ideas which have chance to become successful in future. But most of the ideas cannot get the fate they expect due to insufficiency of funds. To start up a business, even it is small, a huge amount of money needed, which cannot be carried by the owner. So he/she started to run into the banks and the companies who lend money. But hardly, any bank or financing company provides a loan, because the young people are unable to mortgage any property. And the banks also want a secured investment. There are lots of talents in the young people, but all his/her talents are gone to destroy only for funds. A person or institution can help him/her to become a successful. There are lots of examples available who lose their souls to find a loan. But somehow when any of them could manage funding, they have the ability to become one of the most successful business institutions in the world. If we see the starting of some most successful organizations, we would notice this fact. But, all of the ideas would not be acceptable. Of course, we have to analyze their thoughts and maximum time, which the result would be positive. All young entrepreneurs would not be successful, but every talented person should get the chance to become a successful entrepreneur. For this reason, funds for the start-up small business loan are very necessary.

There are several sources of financing which include:

- (1) Personal savings;
- (2) Family and friends;
- (3) Commercial banks;
- (4) Trade credits;
- (5) Angel investors;
- (6) Thrift and credit cooperatives;
- (7) Partnership funding;
- (8) Retained earnings.

# Catalogue of Small/Medium Scale Businesses

Businesses owned and operated by entrepreneur take different forms. While some are owned by an individual, others are owned by two or more persons. The form of business ownership that an entrepreneur selects may be dependent upon his/her circumstances, abilities, resources, environment, and the characteristics of the business. The prospective owner should evaluate in detail the characteristics of each form of business and their advantages and disadvantages and then select a form of business ownership that matches his/her interest. Several small business ideas abound from agriculture to manufacturing, construction to transportation and communication. The important thing here is to seek the Lord and not to jump presumptuously into any venture. On the other hand, you must beware of remaining in the camp of those who claim to be seeking the Lord for months and years on end without rising to do anything. To remember, whatever is not of faith is sin. To take a step of faith and God will bless the work of your hand (see Appendix).

### **Conclusions**

Entrepreneurship development and innovations in Nigeria are at the peak of awareness, creation, and participation by both the people and government. Policies of government should now be shifted to addressing

the problems of infrastructural decay and finance. The problem of power supply is still very much on ground while credit framework via microfinance banks put in place to assist entrepreneurs with soft loans is still in infancy. The attainment of Nigeria's vision of becoming one of the top 20 leading economies of the world by the year 2020, otherwise known simply as vision 20:20 is a more compelling for us to energize our entrepreneurship activities. The government and development/change agencies must in the society. The implication is that if Nigeria expects its technical innovativeness and entrepreneurship to play a crucial role in its socio-economic development, it should endeavor to harness the positive factors and counteract the negative ones. To this end, the following recommendations are made:

- (1) There should be an inventory for use as a data base of all technical innovations in Nigeria. This can be done effectively by a team of researchers, each assigned to different sectors;
- (2) The government should create social and political conditions that are favorable to indigenous innovation and entrepreneurship and provide sufficient funding facilities;
- (3) The government should use appropriate national agencies to develop in entrepreneurs' aggressive marketing skills they need to commercialize innovations;
- (4) To support innovations, international agencies, and multinational corporations should invest in small-scale industries;
- (5) Research should be undertaken to develop better processing equipment. Research costs money. Research funds and venture capital are needed to exploit the results of research. Government and the research institutions should try to bridge the communication gap between the producers of technologies and potential users, and thus, move the innovation from the workshop to the doors of the people;
- (6) Linkages should be established between all the actors in technical entrepreneurship: government, funding agencies, universities, research institutions, innovators, manufacturers, entrepreneurs, and users;
- (7) The government should formulate truly protective patent laws. The assurance of protection against copying can stimulate an inventor. However, patent laws in Nigeria are said to be so fluid that they hardly provide any protection. The ineffective patent system is a disincentive to innovation;
- (8) Nigerian entrepreneurs should have tax relief and easy access to venture capital to encourage them to invest in manufacturing, rather than in buying and selling;
- (9) Parts of the engineering curriculum at Nigerian universities and polytechnics should be critically examined and reorganized, entrepreneurs should seek the assistance/incorporate the services of other persons in skills that they lack but highly need for their business to succeed or grow;
- (10) Promotion of micro-, small-, and medium- scale enterprises should be intensified and entrepreneurship development activities incorporated in Nigeria's industrial blueprint by government.

# References

Anyakoha, E. U. (2006). Practical tips for economic empowerment and survival. Nsukka: AP Express.

Bassey, U. U., & Archibong, I. A. (2005). Assuring quality graduate output through entrepreneurial oriented education in Nigerian universities. *Nigerian Journal of Curriculum Studies*, 12(3), 18-23.

Bassey, U. U., & Olu D. (2008). Tertiary education and graduate self-employment potentials in Nigeria. *Journal of the World Universities Forum*, 1(3), 131-42.

Cotton, J., O'Gorman, C., & Stampfi, C. (2002). Can national education policies meet the call for more entrepreneur? A project supported by the European community (Project Number-FIN/00/C/P/RF/92650), March, 2005. Retrieved from http://www.google.com

- DiaBelen, A., Oni, B., & Adekola, A. (2000). Labor market prospects for university graduates in Nigeria. Washington, D. C.: World Bank.
- Diejomal, U., & Orimolade, W. (1991). Unemployment in Nigeria: Economic analysis of scope, trends and policy issues. Nigerian Journal of Economic and Social Sciences, 13(2), 127-132.
- Egai, N. A. (2008). Entrepreneurial development: For increased competitiveness and business growth. *Institute of Chartered Economists of Nigeria's Seminar*, June 6, 2008. Abuja: National Centre for Women Development.
- Etuk, E. (2000). Great insights on home creativity. U. S.: Morris Publishers.
- European Union. (2002). Final report of the expert group "best procedure" project on education and training for entrepreneurship. Brussels: European Commission Directorate-General for Enterprise.
- Evans, D., & Volery, T. (2001). Online business development services for entrepreneurs: An exploratory study. *Entrepreneurship* and Regional Development, 13, 333-350.
- Good, W. S. (2003). *Build a dream: A Canadian guide to starting a business of your own* (5th ed./higher education ed.). Toronto, Canada: McGraw-Hill Ryerson Ltd.
- Hisrich, R. D., & Peter, M. P. (2002). Entrepreneurship. Singapore: McGraw-Hill.
- Igbo, C. A. (2005). Modern institutional techniques and their application in technical vocational education programs of polytechnic and monotechnics. ETF Capacity Building Workshop, Auchi.
- Igbo, C. A. (2006). Developing entrepreneurship through entrepreneurship education. *Journal of Home Economics Research*, 7, 50-54.
- Isaacs, E., Visser, K., Friedrich, J. C., & Brijlal, P. (2007). Entrepreneurship education and training at the further education and training (FET) level in South Africa. *South African Journal of Education*, 27, 613-629.
- Kolvereid, L., & Moen, O. (1997). Entrepreneurship among business graduates: Does a major in entrepreneurship make a difference? *Journal of European Industrial Training*, 21(4), 154.
- Laukkanen, M. (2000). Exploring alternative approaches in high-level entrepreneurship education: creating micro-mechanism for endogenous regional growth. *Entrepreneurship and Regional Development*, 12, 25-47.
- Madumere-Obike, C. U. (2000). Reposition education for employment: Implications for educational management. Multidisciplinary Journal of Research Development (MIKJORED), 7(3), 43-52.
- National University Commission. (2004). Labor market expectations of Nigerian graduates. Abuja: Education Trust Fund (ETF).
- Noel, T. W. (2001). Effects of entrepreneurial education on student to open a business. *Frontiers of Entrepreneurship. Research, Babson, Conference Proceedings*, Babson College.
- Nwangwu, I. O. (2007). Entrepreneurship in education: Concept and constraints. *African Journal of Education and Developmental Studies*, 4(1), 196-207.
- Ocho, L. (2005). National development and curriculum issues. In S. O. Oriafo, B. S. Edozie, & D. Eze (Eds.), *Contemporary education* (pp. 23-30). Benin City: DaSylva Fluence.
- Onu, V. C. (2006). Practical tips to successful entrepreneurship. Journal of Home Economics Research, 7, 12-19.
- Onuma, N. (2009). Rationale for youth preparation and entrepreneurship education in the face of global economic crisis in Nigeria. *Annals of Modern Education, 1*(1), 224-232.
- Osuala, E. C. (2004). Principles and practice of small business management in Nigeria: A didactic approach. Nsukka: Fulladu Publishers.
- Owusu-Ansah, W. A. (2004). The impact of entrepreneurship education on career intentions and aspiration of tertiary students in Ghana. A paper presented at *The 49th World Conference of International Council for Small Business*, June 20-23, 2004, Johannesburg, South Africa.
- Schumpeter, J. A. (1975). Theory of economic development. Cambridge: Howard University Press.
- Schumpeter, J. A. (2001). *Role of the entrepreneur in economic growth*. Retrieved May 11, 2009, from http://www.en.wikipedia.org/wiki/entreprenurship
- Steinhoff, D., & Burgers, J. (1993). Small business management fundamentals. New York: McGraw Hill International.

# Appendix: The Following Checklist (Covering Various Sectors of the Economy) Is Provided

# Agriculture/Agro-Allied Business

- 1. Carbonated beverages
- 2. Cassava starch production

- 3. Cassava/yam flour processing
- 4. Cocoa products

- 5. Fadama farming
- 6. Farm tools production
- 7. Fish farming
- 8. Fruits processing
- 9. Garri production
- 10. Goat/sheep rearing
- 11. Grains production
- 12. Grass cutter rearing
- 13. Groundnut shelling
- 14. Livestock feed production
- 15. Palm products, brooms, baskets, tooth picks, etc.
- 16. Piggery
- 17. Poultry
- 18. Rabbit farming
- 19. Rice milling
- 20. Soluble coffee making
- 21. Tractor hiring services
- 22. Tree crops production
- 23. Tubers production
- 24. Turkey farm

#### **Baby Items**

- 1. Baby powder production
- 2. Baby cream production
- 3. Baby shoes shop
- 4. Baby cloth production
- 5. Baby items shop
- 6. Baby nappy production
- 7. Baby oil production
- 8. Baby jelly production
- 9. Children's toys production
- 10. Disposable diapers production

# **Catering and Hospitality Business**

- 1. Biscuits production
- 2. Bottled water production
- 3. Bread making
- 4. Butchering
- 5. Catering school
- 6. Cold store
- 7. Cutlery making
- 8. Fast food centre
- 9. Food items sale
- 10. Hoteling
- 11. Ice block
- 12. Ice cream production
- 13. Lunch pack making
- 14. Packed rice sale
- 15. Palm oil production
- 16. Pop corn making
- 17. Restaurant operation
- 18. Sachet water production
- 19. Seafood sales

- 20. Soybeans milk production
- 21. Tea making
- 22. Vegetable oil production
- 23. Yoghurt production

#### **Chemical and Allied Business**

- 1. Adhesive production
- 2. Battery electrolyte production
- 3. Car liquid wax
- 4. Carburetor cleaner
- 5. Carpet cleaner production
- 6. Fertilizer production
- 7. Fumigation services
- 8. Glass sprayer
- 9. Herbicides production
- 10. Home disinfectants
- 11. Insecticides production
- 12. Leather preservation
- 13. Lighter fluid production
- 14. Metal polish production
- 15. Mouth wash production
- 16. Paint production
- 17. Radiator rust remover
- 18. Stain removers production
- 19. Termite proofing
- 20. Wood polish production

#### Construction

- 1. Bolt and nuts
- 2 Burglary proof constructions
- 3. General welding
- 4. Iron bending
- 5. Iron chair making
- 6. Iron doors construction
- 7. Iron table making
- 8. Iron/steel bars marketing
- 9. Local iron satellite dish construction
- 10. Stove stand construction

# **Educational Services**

- 1. Nursery/primary school operating
- 2. Secondary school
- 3. Seminar organizing
- 4. Conference organizing
- 5. Distance learning services
- 6. Day care centre
- 7. Continuing education centre
- 8. Extra-mural lesson
- 9. Computer school
- 10. Polytechnic
- 11. Resume writing
- 12. Schools bags production
- 13. Pens making
- 14. Markers making

- 15. School chalk production
- 16. Library glue production

# **Fashion and Styles**

- 1. Barbing salon
- 2. Beauty salon
- 3. Boutique shop
- 4. Undies making
- 5. Face lotion production
- 6. Fashion designing
- 7. Fashion school
- 8. Fashion show business
- 9. Hair cream production
- 10. Hand purses/wallet production
- 11. Manicure services
- 12. Sale of shale materials
- 13. Shampoo production
- 14. Sunglasses production
- 15. Tailoring services
- 16. Travel bags making

# **Forest-Based and Furniture Business**

- 1. Dye production
- 2. Firewood gathering
- 3. Home furniture making
- 4. Office furniture making
- 5. Safety matches production
- 6. Saw briquetting
- 7. Saw milling
- 8. School furniture making
- 9. Toothpick production
- 10. Upholstering
- 11. Wood carving

# **Garment Industry**

- 1. Bath towels production
- 2. Bed-sheet production
- 3. Belts production
- 4. Blankets production
- 5. Curtains production
- 6. Face caps production
- 7. Handkerchief
- 8. Factory uniform production
- 9. Neckties production
- 10. Pillow cases production
- 11. Pajamas production
- 12. Raincoats production
- 13. Suspenders production
- 14. Sweat shirts production
- 15. Swimsuits production
- 16. Under-wears production
- 17. Wooden/plastic hangers files

# **General Services**

1. Auto mechanic

- 2. Block making
- 3. Car wash
- 4. Carpentry
- 5. Chair/general rental services
- 6. Clock repair
- 7. Construction services
- 8. Digital photo laboratory
- 9. Electrical works
- 10. Fabrication
- 11. Gymnasium/fitness centre
- 12. Laundry/dry cleaning
- 13. Photo studio
- 14. Plumbing works
- 15. Tour organization
- 16. Vulcanizer
- 17. Wedding consulting
- 18. Welding works

# **Info-Tech Business**

- 1. Computer repairs
- 2. ICT Consulting
- 3. Sale of Computer accessories
- 4. Sale of laptop
- 5. Sale of PCs
- 6. Software engineering

# **Internet-Based Business**

- 1. Automobiles net marketing
- 2. Award site
- 3. Banner designer
- 4. Business software site
- 5. Cyber copywriting
- 6. Discussion boards
- 7. Download site
- 8. Free-for-air link pages
- 9. Games site
- 10. Internet press releases
- 11. Multi-media production site
- 12. News site
- 13. Search engine positioning
- 14. Sporting goods site
- 15. Travel site
- 16. Web design
- 17. Web production
- 18. Website overhaul

# **Leather Making**

- 1. Hockey/cricket balls
- 2. Leather bags making
- 3. Leather boxes making
- 4. Leather shoes making
- 5. Leather tanning
- 6. Volleyballs
- 7. Footballs

# **Printing and Publishing**

- 1. Book binding
- 2. Christian books publishing/marketing
- 3. Diary/calendars production
- 4. Exercise books / envelopes production
- 5. Foolscap/duplicating paper production
- 6. General printing and publishing
- 7. Graphic designing
- 8. Greeting cards production/marketing
- 9. Jotters production
- 10. Lithographing
- 11. Magazine publishing
- 12. Newsletter printing
- 13. Newspaper publishing
- 14. Notepad and envelopes production
- 15. Office flat files production
- 16. Past exams questions and answers publishing
- 17. Stickers production
- 18. Storybooks writing and publishing
- 19. Textbooks publishing
- 20. Vernacular books publishing

# **Professional Services**

- 1. Accounting practice
- 2. Architectural practice

- 3. Auction service
- 4. Educational consulting
- 5. Engineering consulting
- 6. Estate valuing services
- 7. Graphic art & design
- 8. Investment consulting
- 9. Legal services
- 10. Management consulting
- 11. Marketing consulting
- 12. Medical practices
- 13. Outdoor advertising
- 14. Stock analyst
- 15. Veterinary services
- 16. Wight loss centre

#### Rubber/Plastic

- Buckets
- Chairs
- Layers
- Toys, etc.
- Rubber production
- Balloons
- Feeding bottle nipples
- Pipes
- Shoes