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Changing Lanes: Enabling New Skills to Succeed in Nigeria

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ABSTRACT

Scholarly studies on employability and promotion are substantial but little has been done on the effect of changes in skills demand on employment opportunities for the job seekers and graduates of the Nigerian tertiary institutions. This study, therefore, examines the changes in skills requirements in the Nigerian and global labour markets occasioned by technological advancement, climate change, globalization, and demographic changes with a view to creating awareness on the new skills necessary for job seekers beyond formal training; as a way of promoting employability and career development of Nigerian youths in the labour markets. This study uses multidisciplinary approach of data gathering and analysis. It makes use of secondary sources in addition to interviews conducted with purposively selected stakeholders in human capital development; information, communication and technology industry; teaching and non-teaching staff of selected universities- University of Ibadan, Ibadan; Adeleke University, Ede, Osun state, and Osun state University, Osogbo, Osun state. The research findings reveal the staggering skill gaps in the

labour markets; the necessary skills for employability in the 21st century digital age; the weakness and strength of career and counselling units in the selected universities.

Keywords: *Changing Lanes, New Skills, Nigeria and Digital Age*

1. INTRODUCTION

Wage employment has been an age long global options for job seekers either in the skilled, the unskilled and even semi-skilled labour markets. Countries with a strong formal education system and high literacy levels such as the (developed countries), there was the tendency to value paper qualifications more. In that case, skills recognition procedures aiming at formal knowledge are much more likely to succeed. But where there is a strong informal sector and or low level of educational attainment, the value of formal qualifications may matter less. In such countries, other forms of skills recognition may however, succeed.

In most African countries, particularly in Nigeria, labour in the indigenous economy did not attract wages in the pre-colonial period. The household provided the bulk of the labour supply. If a man had many wives and children, he had that size of labour under his control (Oyemakinde, 2003:92) Also; mutual labour transaction provided additional hands as might be needed. It involved the farmer associating with his age mates to provide labour force for the farms of individual members of the group, on a rotational basis, until everybody would have its due (Oyemakinde, 2003:92). But when the entire local community needed to work on a common project, like constructing a building to house the village shrine or clearing the road leading to the central market place, the able-bodied men would rise as one man. Rather than being expected to be paid for their services, men would consider it enough for the head chief to feed them on their return from the assignment if he had the means to do so (Oyemakinde, 2003:93).



It was with the advent of the colonial economy that labour began to regularly attract wages. The British colonial authorities wasted no time in establishing an administration that had to be manned at the lower levels by indigenous workers. Products of missionary education were at hand for this purpose and when later the imperial rulers participated in the provision of educational facilities, the products of such institutions joined the workforce (Oyemakinde, 2003:93).

Between 1960 and 2020, the labour market has witnessed a lot of dynamism, particularly in the area of changing skills required for jobs in industries, administrations, production, agriculture, supply chain, distribution channels, health care delivery, personnel management, and consultancy. These changes have been attributed to technological advancement; climate change; globalization; migration and demographic changes. Thus, the reality is that some jobs may disappear completely, a lot of jobs will undergo major changes and a number of tasks will be automated. Therefore, jobs seekers would face the challenges of lifelong learning, which are skilling, re-skilling and up-skilling to be employable and sustain employment.

2. THEORETICAL FRAMEWORK

This study adopts the skill mismatch framework which stipulates that skill mismatch is multi-dimensional and encapsulates a number of measures of both education and skill asymmetries, some of which are very loosely connected to each other. This theoretical framework requires greater clarity in the form of mismatch that is to be addressed, because the interdependence to address one form of mismatch may well have spill over effects to other related forms of mismatch. Therefore, the range of policy levers likely to be implemented in order to combat problems of skill mismatch will tend to vary according to the type of asymmetry being considered. This framework identifies two types of skill mismatch; the vertical mismatch (surplus human capital) and horizontal skill mismatch (deficit human capital) (McGuinness, Pouliakas and Redmond: 2017:24). It is within this framework that this study will examine horizontal skill mismatch, that is, problems of deficits in human capital



(skill gaps, under-education and under skilling), and skill obsolescence will be discussed in the context of finding ways to incentivise training.

3. RESEARCH METHODOLOGY

This study adopts the multidisciplinary approach in data gathering. This is done given the nature of the research topic. Thus, the thematic study of *Changing Lanes: Enabling new skills for Nigerians to succeed* was carried out using a blend of historical narrative and eclectic method of analysis to understand the dynamism of skills requirements in the labour markets, and the existence of new skills for job seekers in order to be employable, and achieving upward mobility on the job through lifelong learning of up- skilling and re-skilling.

The historical approach was used to explain the past situation of the labour markets in Nigeria from pre-colonial to the present. Also, this approach was employed to explain the effects of Information, Communication and Technology (ICT), globalization, climate change, migration and demographic changes on skills demand in the Nigerian labour markets. Thus, it helped to identify the skill gaps between the qualifications (knowledge) and skills (ability to apply knowledge) in order to create awareness for job seekers on the need for re-skilling for employment opportunities.

This paper focused on the level of awareness of job seekers and graduates of Nigerian tertiary institutions to the new skills demand in the 21st century labour markets. For the purpose of research survey, three universities in the Federal, State and Private levels were used. The University of Ibadan, located in the city of Ibadan in Oyo State of Nigeria; Osun State University, located in the city of Osogbo in Osun State of Nigeria; and Adeleke University, located in Ede town, Osun State of Nigeria.

From 22 October to 20 November 2020, final year students and members of staff of these Universities were interviewed and interacted with. In addition, interviews were conducted with experts in the industry, Human Resources experts in employment and training consultancy as well as experts in Information, communication and technology. These



interviews were complemented with data from secondary sources and subjected to interpretation and analysis.

Experts are of the views that by 2030 combine skills such as digital with technical, soft and behavioural skills will be critical for employability, and that some employers might ignore university degrees for skills - ability to apply knowledge (Interviews with Hussein and Raji). Meanwhile, Nigerian Universities and Departments want to retain or have all courses from colonial era. Even specialised universities established to focus on specialised fields have deviated and adopted the broad based curriculum to accommodate programmes outside the purview of their mandates (Oyeweso, 2020:536). Examples of these are Universities of Agriculture and Technology now offering courses outside their initial focus. Federal University of Agriculture, Abeokuta (FUNAAB) established the college of management sciences (COLNAS) in 2012, while Federal University of Technology, Akure founded the school of management technology in 2015.

The report from the field on the other hand, raises a fundamental question? Should university degrees be dismissed for the new knowledge of digital skills in employment consideration? The answer is NO. While computer literacy and application of technology will succeed in the future, problem solving, adaptability and resilience as well as character and behavioural skills are very important. These skills are taught in the universities, and are needed in the industry and service sectors to achieve desired goals. Therefore, job seekers and new graduates would only have to re-skill in the computer/technological skills required in the labour markets to be employable in the future.

There are two main groups of people who are most likely to fall into the "skill gap": new graduates and those who have been made redundant due to unemployment. This is because new graduates by their very nature tend to have very little work experience. They therefore, lack proof that they have the soft skills needed to get on in the workplace. In the case of those made redundant, they tend to have stigma on them why they were made redundant? For the purpose of this research however, attention is focused on new graduates and final year undergraduates in



the Nigerian tertiary institutions. The identified skills necessary for employability; level of awareness about these skills, and the challenges associated with adapting these new skills into teaching curriculum in the Nigerian universities shall be discussed in the next paragraph.

4. DISCUSSIONS AND FINDINGS

Higher institutions in Nigeria have the responsibility to produce work-ready graduates. However, after interacting with stakeholders in human resources consultancy, and experts in the Information, communication and technology industry, it becomes apparent that the employability of graduates in the 4th industrial revolution age would not be determined based on what is studied in the university alone. Whether a graduate studied ancient history or computer science, it does not matter because the skills employers are looking for are generic, meaning- above and beyond academic achievements. They are the skills graduates need to get and maintain jobs. This attests to the fact that there exists skill mismatch or gaps in the labour markets. And for employability to be achieved, the gaps must be filled or reduced. What then is the skills gap?

Skills gap is a difference or gap between the skills employers want and the skills that young people develop whilst in education. The Accounting and consulting firm PricewaterhouseCoopers (PwC) stipulates that companies around the world have identified a shortage of suitably-skilled employees as a barrier to growth. That is, industries and service providers are in demand of skilled manpower in the new areas introduced by technology and digitalization but job seekers do not have the requisite skills to fill the vacancies. In fact, PricewaterhouseCoopers (PwC) global survey of over 1,300 CEOs in 68 countries in Africa, South East Asia and South Africa shows that business leaders are more concerned than ever before about being able to find the right people to fill the vacant roles due to shortage of skilled manpower. This is the skills gap.



Technological change requires new skills for the effectiveness and adaptability of the labour force in the production, management and distribution process. Therefore, lifelong learning of skilling, re-skilling and up-skilling are inevitable for job seekers and those on paid employment globally. The nature of the global economy is such that economies have witnessed specialisations in production, increase exchange of goods and services and movement of people with less transportation and communication barriers. New skills and technological innovations have translated into industrial and economic growth across the globe. For instance, Germany currently operates an industrial setting with a combination of indigenous/local craftsmanship and modern technological innovations leading to unique and quality assured German products (Ihuoma, 2020:4). Similarly, in Asia, vocational education and skills practice occupy a veritable position in the economic developments of countries like Japan, China, Singapore, Taiwan, South Korea and Malaysia (Ihuoma, 2020:4). In fact, in the global economy, China's rapid economic progress has driven per capital income of a hitherto poor country to the second largest economy in the world, having progressed from one with basic agriculture and technology to a powerhouse in the area of manufacturing (Akpan, 2020:417). These two examples and many more attest to the fact that there is need for new skills to be enabled to succeed in the developing countries, especially in Nigeria.

5. WHAT ARE THE SKILLS NEEDED TO SUCCEED IN NIGERIA?

Before discussing the skills needed to succeed in Nigeria, it is apposite to first identify the existing job markets in Nigeria. This is because the needed skills cannot be discussed in isolation from the active and prevailing industries and economic sector in Nigeria. Some of the industries are: Petroleum, Mining, Agriculture, Banking and Finance, Telecommunication, Information and Communication, Knowledge Industry (Education), Health and Care, Manufacturing and Construction industry as well as the trade and informal sector.

Trade and informal sector no doubt provide employments for a larger percentage of the population. In fact, Nigerians have not wake up to the reality that not everyone needs to go to the university. Skills and trade

like occupations: carpentry, electrical work, plumbing, bricklaying, aluminium construction, vehicle repair, phone repairs, welding and fabrication, fashion design and garment making, cake and confectioneries, wholesale and retailing etc needs to be promoted, recognised and encouraged among the youths to minimise unemployment rate. But as long as university graduates are not trained for the vocational or trade markets, there is need for them to be aware of, and acquire the necessary skills that will stand them out as employable graduates in the 21st century labour markets.

Some of the 4th industrial revolution skills identified as necessary for graduates and job seekers to succeed in Nigeria are classified into four categories: learning and innovation skills, life and career skills, digital skills, and industry experience. Employers in the digital age are looking for ways of: automating processes to reduce or discard manual processing, reduce bottleneck or constraints associated with delivery/supply chain, human resources management, finance and accounting, budgeting, products coding and products delivery etc.

1. Learning and Innovation skills include: communication skills, creativity, critical thinking, collaborative skills and problem solving. These are traditional skills that are embedded in the university curriculum. While these learning and innovation skills enable graduates to be trainable, they are not enough in this age of digitalization when employers are in demand of graduates with additional skills, especially digital and hard skills synonymous with information and communication technology.
2. Life and career skills deal with flexibility, adaptability, perseverance and leadership traits. These skills are natural but can also be acquired in the university and on the job. Most importantly, they are more of behavioural and character imbued skills which are not general but varies in individuals. As much as they are important for success in employment, they still cannot stand alone but requires additional skills in innovation, industry and digital skills to be able to guarantee employment and sustain jobs in the 21st century.
3. Digital skills are skills of the 4th industrial revolution which includes but not limited to computer skills, Information technology programming, software and apps development, cyber security, security architecture, coding, clouding, infrastructure development, block chain technology,



networking and telecommunication, robotic technology and artificial intelligence etc. These are some of the digital skills in high demand by the employers in the 21st century. These skills are recommended for graduates and job seekers in addition to their degrees and formal training in order to stand out for employment and to sustain employment.

4. Industry experience no doubt is necessary for job seekers and those already on the job but looking for better opportunities. In the case of the unemployed but fresh graduates, one may be wondering how industry experience is relevant to them and how would they acquire the experience required when they have not secured paid employment. This study found out that Nigerian graduates have not adequately explored 'volunteerism' and 'apprenticeship' as means of acquiring skills while waiting to be gainfully employed. Interaction with forty-two graduates serving under the National Youths Service Corps (NYSC) scheme in Osun state revealed that eighty percent of them do not believe in volunteerism as a way of learning skills since it is not rewarding monetary wise. This is due to their ignorance of the fact that experience acquired as volunteers would obviously add to their work experience while seeking for permanent jobs. The importance of 'volunteerism' is to take them off the 'redundant class' who in most cases are discriminated against in the labour market as inexperienced for employment. Though, almost all of them are aware of 'apprenticeship' but not as a full career but alternative skill acquisition means in the absence of paid employment. Volunteerism and apprenticeship are recommended for graduates who have identified their area of interest and core competence. Such graduates can make themselves apprentice or volunteers in order to gain experience while seeking for paid employment or in preparation to be self employed. Meanwhile, industry experience would always count for a dedicated and hardworking employee to negotiate better offer in other companies in the similar line of occupation.

Some Universities in Nigeria are aware of the importance of these additional skills, and as such partnered with internationally certified training outfits to train their students for relevant skills and certification in information, communication and technology before graduating. Some have also developed specialised centres for entrepreneurship and ICT programmes purposely to improve the training of their students for

employability and promotion. For the purpose of this research however, discussion on the level of preparedness of universities to adapting these skills into teaching curriculum and programmes shall be on the University of Ibadan, Ibadan; Osun State University, Osogbo and Adeleke University, Ede, Osun State.

6. CASE STUDY OF SAP ERP- ESEFA TRAINING IN UNIVERSITY OF IBADAN

SAP (systems application products) is a German multinational software corporation vendor that makes enterprise software to manage business operations and customer relations (Alawode, Anyaeche, Osuade, 2015:435). This is implemented through the Enterprise Resource Planning (ERP). The ERP system is a comprehensive software package that incorporates all modules: Manufacturing/operations management, accounting and finance, human resources, sales, purchasing and customer relations. ERP systems automate this activity with an integrated software application (Alawode, Anyaeche, Osuade, 2015:435). The purpose of ERP is to facilitate the flow of information between all business functions inside the boundaries of the organisation and manage the connections to outside stakeholders. The current top ERP vendors include SAP, Oracle, Sage, and Microsoft. Some of the leading companies using SAP ERP software in Nigeria are: Dangote Group, Nestle Plc, Cadbury Plc, Coca-Cola, Mobil-Exxon, Chevron, Golden Penny, Federal Road Safety Commission (FRSC), DHL Express, Jumia, telecommunication companies, Banks and other financial institutions to mention a few.

The demand of the information, communication and technology industry for skilled personnel in Africa culminated in the emergence of Enterprise System Education for Africa (ESEFA) which seeks to promote the training in Africa, through the introduction of enterprise system education in universities in sub-Saharan Africa (SSA) (Alawode, Anyaeche, Osuade, 2015:436). The enterprise education programs include the use of SAP hosting centres for access to ERP systems and ERP visiting expert teaching delivery model for SAP content and multiple SAP certification programs. The objective of the ESEFA program is to



partner at least one university in each of the ten sub-Saharan countries, implement and integrate the ESEFA's curriculum and SAP ERP system (Alawode, Anyaeche, Osuade, 2015:437). The targets/beneficiaries are the universities across sub-Sahara Africa (partners), partner university lecturers and university students. University of Ibadan is the only ESEFA partner university in Nigeria, and one of the eleven partner universities in Africa for the delivery of ESEFA curriculum. The SAP ERP/ESEFA curriculum are distinct courses but integrated into the curriculum of the participating departments at the University of Ibadan; Industrial and Production Engineering, Agricultural Economics and Computer Science as well as into courses at the UI Business School (Interview with Odedairo). Besides, the SAP ERP short courses are available for interested students of the university to obtain proficiency certificate. These include: logistic management; industrial engineering; information technology/computer science; business computing/analysis; accounting and ES fundamentals for business.

7. HOW DOES ESEFA TRAINING PROGRAM OPERATE AT THE UNIVERSITY OF IBADAN?

The ESEFA initiative is being co-ordinated by the Department of Industrial and Production Engineering. It involves the integration of Enterprise Systems (ES) curriculum into selected courses in the participating departments; Industrial and Production Engineering, Economics, Agricultural Economics and Computer Science as well as courses at the UI Business School. Also, regular SAP ERP training and courses are run for interested students of the university to obtain proficiency certificate (Interview with Odedairo). The university of Ibadan studentship is a pre-requisite for doing the training. It is restricted to final year students and also UI graduates who made first class or at least second class upper. In addition, it is extended to those on the compulsory National Youths Service Corps (NYSC) scheme. It is also extended to post-graduate students who may or might not have graduated from the University of Ibadan but studying for post-graduate degrees at the University of Ibadan. The most important thing is that UI studentship whether at undergraduate or post-graduate is mandatory to



be qualified for training in the SAP ERP programme. Between 2013 and 2017, University of Ibadan has trained over one thousand students in the different modules of the SAP ERP. It has also trained 628 candidates for certification examinations out of which 513 passed in good grades. Though the training cost is highly subsidised especially during the initial grant years 2013 – 2016, in the subsequent years, candidates preparing for certification examinations were made to pay for training.

University of Ibadan students and staff have benefited from the ESEFA programme. Since inception, over 25 members of staff have been globally certified as SAP ERP trainers while thousands of students in the selected departments have also benefited in the skills acquisition training (Interview with Odedairo). And those who could afford the examination fees also sat and passed the certification examinations. Despite this resounding success story of ESEFA training programme in UI, the level of awareness of the programme to undergraduate students is very low. Interaction with final year students across all faculties revealed low level of awareness. This was corroborated by Odedairo(2020), the technical officer in charge of the programme who opines that the initial publicity for the programme was carried out using handbills, and that few individuals were also saddled with the responsibility of creating awareness in all the faculties (Interview with Odedairo). This study also observed that the programme is not promoted by the student affairs unit of the university to the students probably because of the low level of awareness about the existence of the program in the university.

In 2015, the University of Ibadan established the Career and Counselling Centre headed by Professor.D.A.Adeyemo of the Guidance and Counselling Department. This centre should have been a good platform to organise annual workshop on skills acquisition just like the annual 'career fair' of the student affairs unit but the centre has not been well equipped for proper functioning (Oladejo). The career unit of the student affairs division is synonymous with organising annual 'career fair' in which experts are brought in to talk to students on career development (interviews with Oladejo and Adeoye). This has been going on since 2013, and none has been dedicated to promoting the importance and existence



of SAP ERP skills acquisition program in UI. The only effort closely related to this was the workshop organised by the Deputy vice-chancellor, Research, Innovation and Partnership, Professor Adenike Adeyemo in 2019. This workshop was targeted at Academic staff of the university on the existence of the ESEFA education scheme in UI.

There are some constraints affecting the optimal delivery of SAP ERP software skills in UI. Participants are often confronted with cost of infrastructure which includes electricity supply, computer system and networking, internet access and training venue. Besides, the inability to pay the training fees and procurement of training materials, and payment for the proficiency examination to obtain the certificate has reduced the participation in the acquisition of the skill since students in the public universities barely cope with tuition, accommodation and other fees.

In terms of adapting the course modules to the university of Ibadan curriculum, the full integration has not been achieved. Though some of the courses are being taught at 300 and 400 levels for students in the participating departments, there has been no complete integration of SAP ERP courses to the University of Ibadan curriculum. This in essence is a serious limitation to achieving ESEFA main objective in Africa unlike what obtains at the University of Cape town, South Africa where the courses have been integrated completely into the curriculum. In the alternative, university of Ibadan has succeeded in incorporating entrepreneurship course into the General Studies programme as GES 301 which must be taken by all students before graduating. This is designed to train students in the act of entrepreneurship. Another limitation is the fact that SAP ERP training is limited to the participating departments rather than extending it to the rest of the departments in the university. There is therefore, the need to create more awareness among students for the existence of the SAP ERP training in UI, involve more departments in the participation, and probably elaborate the programme to accommodate more participation of undergraduates in the training.

8. CENTRE FOR ENTREPRENEURSHIP AND INNOVATION (CEI), UNIVERSITY OF IBADAN



In January 2008, the Senate of the University of Ibadan approved that the Centre for Entrepreneurship and Innovation (CEI) should be established to equip all the students of the university with marketable entrepreneurial skills and strategies which will make them become enterprising in their academics, future life and career pursuit. On the same day, an approval was given for the introduction of ETR 301(Introduction to Entrepreneurship and Innovation) being offered as an elective course by 300 level students of the university.

Furthermore, in April 2008, The National Universities Commission (NUC) communicated the Presidential directives to all universities:

“...to urgently pursue a programme to ensure that their graduates actively partake in a general course in entrepreneurial studies as part of their learning opportunities while in school...”

Consequent upon this, GES 301: “Introduction to Entrepreneurship Skills” was introduced into the University curriculum. The introduced GES 301 and ETR 301 operates in such a way that students are expected to get introduced into entrepreneurship by taking GES 301, and builds further on the skills acquired by auditing ETR 301. The main goal of ETR 301 is to assist students in developing business plan models by acquiring necessary knowledge skills and understanding existing businesses. The business plans are assessed for feasibility and viability. The aim of the University of Ibadan is that students would benefit greatly from these courses as they would provide them the extra edge they need to become employable and be competent for relevance in the present global economic climate. All the University of Ibadan students regardless of their course of study have indeed passed through this entrepreneurial curriculum since 2008 unlike the SAP ERP programme that is limited to selected departments and UI Business School.

9. CASE STUDY OF NEW SKILLS TRAINING PROGRAMME AT OSUN STATE UNIVERSITY, OSOGBO

Osun state University (UNIOSUN), Osogbo is a leading state university in the use of information, communication and technology in the day to day running of higher institution in Nigeria. The university desire to



produce graduates that are skilled in the software and digital skills culminated in the establishment of UNIOSUN Computer Information System Company (CISCO) Networking Academy. This is in addition to the existing centre for entrepreneurship and vocational training. The former is saddled with the responsibility of providing training in information technology and career enhancement for the graduates of the institution; while the latter's daily activities include training students in the vocational acquisition and entrepreneurship skills.

UNIOSUN CISCO networking academy was established in 2010 by the pioneer vice- chancellor, Professor Sola Akinrinade. At inception, he invited experts from the Obafemi Awolowo University, Ile-Ife and the National Information Technology Development Agency (NITDA) to assist in setting up the centre as well as the training of members of staff. The university community has benefited a lot from the academy through its numerous IT interface in the daily running of the university. This was also demonstrated during the Covid - 19 lock down period when the university with the help of the CISCO networking academy was able to deliver lectures online to students via LMS – Lecture Management System package developed by the centre. This centre has been responsible for training of interested students in the CISCO certified networking courses, software engineering courses, web design and development courses and IT fundamental courses. The academy is a CISCO certified centre for the training of candidates in IT essentials (compTia A+), networking essentials, CCNA, MATLAB, Python, website Design, Graphic Design, computer studies and information technology.

The academy is an independent training centre and the courses taught are not incorporated into the curriculum of the university. This programme is not run free of charge. Interested students are expected to pay for training and certification examination fees. The Principal support administrator at the centre engineer Olawuyi opines that he once submitted a proposal to a former vice-chancellor, Professor Bashir Okesina to facilitate the incorporation of the courses in the academy into the school curriculum to enable all students benefit. Though the vice-chancellor bought into the idea, he could not achieve the goal due to his



concern not to overburden students with additional payment in addition to school fees. Despite this however, the students are very much aware of the existence of the academy because it enjoys wide and sophisticated publicity. Thus, some students according to records enrolled before graduating from the university, while some enrolled after graduation. While pre-graduation participants were put at 5%, the post-graduation participants were estimated to be 15%. Meaning students subscribe more to the programme after graduation than while still school. In addition, the centre since inception has trained 337 students and recorded 95% success. The ratio of male participants to female stood at 70:30, indicating that more males participated in the academy training and certification examinations than their female counterparts (Interview with Olawuyi).

Similarly, the centre for entrepreneurship of the university is dedicated to vocational training. Unlike in the case of the CISCO networking academy, courses in the entrepreneurship programme are incorporated into the curriculum which all students must take before graduation. The training is practical oriented and students are also attached to experts for internship to enable them gain practical knowledge. Some of the skills available to students at the centre includes: plumbing, welding, leather work, fashion design, cosmetology, soap and dettol making, tie and dye, catering and confectionaries, 3D technology, Photography, real fruit juice making and branding of cloth (Interview with Yussuf).

The major constraint of CISCO networking academy has been financial. This is because the training is not subsidised by the university such that students' participation is determined by their ability to pay for training and certification examinations. This is a serious limitation because the tuition fee at Osun state University is higher compare to what obtains in the Federal universities. The only avenue for the programme to be more effective is if the courses are incorporated into the school curriculum for the benefit of all students even if sitting for certification examination will be made optional subject to interest and ability to pay for it. It is therefore, safe to submit that as far as the new skills to succeed are concerned, Osun state university has the necessary manpower and infrastructure to deliver at the CISCO Networking Academy only if the courses could be

incorporated into the curriculum for the benefit of all or the training is subsidised.

10. CASE STUDY OF ADELEKE UNIVERSITY PARTNERSHIP WITH NEW HORIZONS COMPUTER AND IT LEARNING CENTRE

Adeleke university, Ede, Osun state identified the value of partnering and supporting ICT and E-business digital training in providing students with “hands on” experience through New Horizons computer learning outfit. This partnership was sealed with the aim of producing graduates with sound ICT, E-business knowledge and high employment prospect. The partnership between Adeleke University and New Horizons computer learning centre is very robust because the students are made to go through the training on a daily basis just like normal lectures (Interview with Johnson). All students in the various faculties are expected to participate in the training which has been heavily subsidised. Meanwhile, only those interested in certification are expected to pay for certification examinations individually.

New Horizons computer and IT learning centre has a well equipped computer laboratory in Adeleke University to facilitate ‘hands on’ practical training for students. The tutors are certified experts in digital skills and information technology. The training programme operates like the normal degree programme because students are made to go through the training from 100 levels to 400 or 500 levels as the case may be for engineering and law students (Interview with Johnson). The course modules are designed to fit into the skill needs of all the faculties. The courses are run concurrently on the same university time-table as the degree programmes (Interview with Johnson). Some of the modules includes but not limited to: customer relationship management; SAP enterprise planning; supply chain management; business intelligence tools; SPSS software; accounting and excel packages; software development; project management skill; Microsoft based courses; server administration; geo-informatics; apps development; programming and robotic /artificial intelligence. The only module left out is security architecture according to Aremu, the New Horizons coordinator at Adeleke University. This was deliberate because it is feared that

students' knowledge of IT security might encourage them to hack the result server of the university which would impact negatively on the originality of the graduates' class of degrees.

The beauty of this partnership with New Horizons computer and learning centre is that all students in Adeleke University are made to learn relevant skills directly related to their course of study before graduating from the university without paying for the training. Besides, those who are interested in getting certified professionally would only pay for the certification examinations. Despite this impressive arrangement of enabling new skills amongst the students in order to position them for employment opportunities after graduation, the New Horizons team are still confronted with challenges (Interview with Aremu).

The first challenge is failure of students to turn up for classes and practical (Interview with Aremu). This is because the courses are incorporated into the curriculum as courses to be taken by all, but do not add to the students Cumulative Grade Point Average (CGPA). This has generated poor attitudes to lectures on the part of the students. The second challenge is that not all the students that subscribe for the courses are interested in sitting for certification examinations. Nevertheless, the centre had produced certified students who recognised the importance of running the skills programme concurrently with their academic programme. In terms of awareness, the students in Adeleke University are aware of the skills training programme since it has been incorporated into their curriculum from year one of their degree programmes. This study, however, found that the career and counselling unit of this university engages more in character moulding and counselling than career talk because more of career discourse is usually done for students during the one week orientation programme at the beginning of every session (Interview with Akinsola).

Table 1: Names of internationally certified it & e-business professional courses at Adeleke University, Ede

S/N	NAMES OF STUDENTS	COURSE TRAINED	INTERNATIONAL CERTIFICATE	INTERNATIONAL VENDOR
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			OBTAINED	
1	BADMUS YETUNDE .A.	CUSTOMER RELATIONSHIP MANAGEMENT	CERTIFIED E- BUSINESS PROFESSIONAL IN CUSTOMER RELATIONSHIP MANAGEMENT	EC-COUNCIL (USA)
2	ADEYEMI OLUWASEUN .E.	CUSTOMER RELATIONSHIP MANAGEMENT	CERTIFIED E- BUSINESS PROFESSIONAL IN CUSTOMER RELATIONSHIP MANAGEMENT	EC-COUNCIL (USA)
3	EZEULO JANE .M.	CUSTOMER RELATIONSHIP MANAGEMENT	CERTIFIED E- BUSINESS PROFESSIONAL IN CUSTOMER RELATIONSHIP MANAGEMENT	EC-COUNCIL (USA)
4	ATOLAGBE OLUFEMI	ADVANCED MICROSOFT OFFICE EXCEL 2013	MICROSOFT OFFICE SPECIALIST (EXCEL)	MICROSOFT (US)
5	ONIFADE OLUWAPELUMI	ADVANCED MICROSOFT OFFICE EXCEL 2013	MICROSOFT OFFICE SPECIALIST (EXCEL)	MICROSOFT (US)
6	ABAYOMI OLUMIDE .A.	ADVANCED MICROSOFT OFFICE EXCEL 2013	MICROSOFT OFFICE SPECIALIST (EXCEL)	MICROSOFT (US)
7	ADEOLA JESULAYOMI	WEB COMMUNICATION (DREAMWEAVER CS6)	ADOBE CERTIFIED ASSOCIATE (WEB COMMUNICATION AND DESIGN)	ADOBE (US)
8	OLAGUNJU CALEB	WEB COMMUNICATION (DREAMWEAVER CS6)	ADOBE CERTIFIED ASSOCIATE (WEB COMMUNICATION AND DESIGN)	ADOBE (US)
9	AYENI BOLUWATIFE	WEB COMMUNICATION (DREAMWEAVER CS6)	ADOBE CERTIFIED ASSOCIATE (WEB COMMUNICATION AND DESIGN)	ADOBE (US)
10	GBADEBO OYEBOLA	CERTIFIED SECURE COMPUTER USER (CSCU)	CERIFIED SECURE COMPUTER USER	EC- COUNCIL (US)

11	BATURE DORCAS	CERTIFIED SECURE COMPUTER USER (CSCU)	CERTIFIED SECURE COMPUTER USER (CSCU)	EC- COUNCIL (US)
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Source: New Horizons System Solution Limited/Adeleke University

Table 2: New skills awareness survey

Sources of data	Randomly selected final year students/ unemployed graduates	Number of those conversant with the new skills	Level of awareness in percentage %
University of Ibadan, Ibadan	30	12	40
Osun State University, Osogbo	25	20	80
Adeleke Univeristy, Ede	25	24	96
Unemployed Graduates	25	5	25

Source: Field work survey conducted by the author

Table 3: Graduates Entrepreneurship knowledge Awareness Survey

Sources of data	Randomly selected final year students/unemployed graduates	Number of those conversant with entrepreneurship knowledge	Level of awareness in percentage %
University of Ibadan	30	30	100
Osun State University, Osogbo	25	25	100
Adeleke University, Ede	25	20	80



Unemployed graduates	42	37	88
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Source: Field work survey conducted by the author

11. CONCLUSION

This study found that global skills demand in the labour markets have changed considerably from what it used to be in the last twenty years due to technological innovations, globalization, climate change and demographic changes. Thus, job seekers in the future would require digital, technical, soft and behavioural skills to succeed. Being trained and certified on the SAP Enterprise Resource Planning (SAP ERP), CISCO networking, Microsoft excel specialisation, Artificial Intelligence(AI), Web communication Dreamweaver, computer secure computer user (CSCU), supply chain technology, customer relationship management, project management and other digital skills make graduates relevant in the technology and business world because the application of these skills are highly relevant in all fields of business activities of most standard enterprises.

However, most universities in Nigeria have not integrated the courses that are associated with the highly sought skills into their curriculum for obvious reasons. Apart from the huge financial requirement for setting up the learning environment for such skills, there is also shortage of skilled manpower to handle the courses in the Nigerian universities. There is therefore, the need for re-skilling and up-skilling of university teachers to enable them train students for the 21st century labour markets demand. Besides, infrastructure deficit such as electricity supply and reliable network server, telecommunication accessibility as well as internet reliability are challenges inhibiting successful delivery of these new skills in Nigerian universities, especially public universities.

Some private universities have adopted the strategy of partnering with reliable and notable computer and networking learning outfits to train their students concurrently in the degree programmes and the new skills for better job opportunities. At the forefronts of this approach are:

Babcock University, Covenant University, Adeleke University, Bowen University and American University of Nigeria to mention a few. Similarly, University of Ibadan is also into partnership through the ESEFA ERP training in Africa as the only University in Nigeria with the necessary manpower and infrastructure to train students for the SAP ERP skills and certification.

In addition, the level of awareness of university undergraduates, final year students and graduates concerning the new skills in demand at the labour markets still requires intense effort particularly at the University of Ibadan; where the training programme is limited to a few participating departments and unknown to most undergraduates. There is also the need to incorporate the courses associated with the new skills into the curriculum of the university of Ibadan, and if possible be made compulsory for all undergraduates to enable them have the skills in addition to their formal training. The certification aspect is also important but can be made optional because of the financial requirements.

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