

Business Skills Required for Employability by Office Technology and Management Education Undergraduates of Public Universities in Cross River State, Nigeria

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Abstract

The study adopted survey research design to examine business skills required for employability by Office Technology and Management Education (OTME) undergraduates of public universities in Cross River State. Two research questions and two hypotheses guided the study. The study population was 2,390 Business Educators and registered entrepreneurs in Calabar Metropolis. Using purposive, accidental and stratified sampling techniques, a sample of 284 respondents comprising 50 Business Educators and 234 registered Entrepreneurs were selected to participate in the study. “Business Skills Required for Employability Questionnaire” (BSRFEQ) was used for data collection. Cronbach Alpha Reliability coefficient was used to determine the reliability of the instrument, which gave an overall reliability index of .71. Mean, standard deviation and independent t-test analysis were used in data analysis. The findings revealed, among others, that the identified items on business networking and analysis of data are the business skills required for employability by OTME undergraduates of public universities in Cross River State. It was recommended among others that seminars should be organized by the department offering OTME for students on the importance of networking, and enlighten them on the various networking skills they can use, as networking within/outside the school environment have been seen to enhance employability.

Keywords: business skills, office technology, management education, employability, undergraduates

Introduction

Business education which is a core component of the general and vocational education is structured to imbibe the learners with knowledge, skills, competences, aptitude and acumen that equip the learner for the world of work (self-reliance, business skills, career occupations and office job). Office Technology and Management Education (OTME) is a subset of business education intended to train and raise well equipped and rounded individuals to fill related manpower gaps in the society. Office Technology and Management Education (OTME) is a specialized course of study offered in tertiary institutions with a guided curriculum intended to produce hybrid administrative professionals who will be able to effectively manage the demands of intensely computerized workplace, especially in this modern era of global trends, where office work systems are always evolving as a result of modern technology (Okute et al., 2016).

The office of today is no more the traditional or conventional type where office tasks are carried out manually with paper and ink. Today, office is known as “Smart Office” dominated with sophisticated and hybrid digital gadgets and softwares to ensure efficiency, speed, accuracy and high productivity, with the help of artificial expert intelligent systems for office operations. Thus, OTME undergraduates who possess requisite business skills may have an employment edge in office jobs over their counterparts who do not, upon graduation. The 21st century office jobs are electronically and digitally driven, demanding improved office skills for employment among OTME graduates (Olumese & Ediagbonya, 2016). Therefore, business education students of OTME option are required to possess a set of business skills that are related to the needs and expectations of their potential employers in the labour market in order to secure good employment positions after graduation. Thus, the core of OTME as a progeny of business education is aimed at inculcating business knowledge and skills in students that will make them employable or self-reliant after graduation.

However, observation shows that a lot of OTME graduates turned out from Nigerian universities are still facing the challenge of unemployment; reasons could be that their training lacks the necessary modern business skills employers require from OTME graduates for effective and efficient performance in modern organizations. More disheartening, is the observation that public universities in Cross River State that are saddled with the responsibility of training OTME undergraduates as potential office and enterprise workers are still using the traditional curriculum and pedagogy that do not match with the sophistications in business and office innovations in the 21st century. It is glaring that most of the educators in these institutions may not have been themselves

trained on these modern skills and may lack the ability to teach and effectively impart these requisite business skills on the students.

Regardless of efforts put in place by the management of public universities and other stakeholders to promote and improve on the acquisition of skills for employability required by undergraduates of public universities in Cross River State, through provision of computers and internet services in Business Education Resource Centres, provision of Students Industrial Work Experience Scheme (SIWES) by Industrial Training Fund (ITF), and ICT refreshers courses and workshops for OTM educators, there still exists a noticeable gap in the acquisition of relevant skills, as no significant improvement is recorded in terms of their employability. This may be attributed to these students' deficiency in having the relevant business skills.

Business skills are the basic knowledge, abilities and attitude that the offering of business education inculcates in the individual in Book keeping or accounting, Business management, Marketing, Business communication, Records management, and other vocational and creative skills necessary for self-reliance or gaining employment (Amadi et al., 2020). According to Birth (2023), business skills are those competencies that help an individual or professionals to thrive in the workplace and make significant and strategic contributions. These skills help individuals to understand both the internal and external factors that impact an organization's success and the processes involved in carrying out business goals (Reynolds, 2019). The authors highlighted a set of skills needed to be successful in business to include but not limited to soft skills, such as leadership and communication, as well as hard or technical skills like financial accounting. This study focused on business networking skills and data analysis skills, as employability skills required by OTME undergraduates of public universities in Cross River State, Nigeria.

Business networking skill is a critical business skill employers are looking for in graduates. It is the ability to interconnect with others, especially those in the same or similar career. It is a means of creating new relationships in order to enlarge the scope of opportunities and sharing of useful ideas (Reynolds, 2019). Through the social networking platforms, a lot of businesses are transacted, and official duties are carried out easily and cost effectively with a wider coverage. Batistic and Tymon (2017) stated that business networking was positively related to internal and external perceived employability through increased access to resources. Similarly, Levin et al. (2015) identified information sharing, the management of diversity, adaptation and adjustment, integrative negotiation, and the creation and management of relationships as focal areas of networking skills. In

the same vein, Batistic and Tymon (2017) stated that business networking was positively related to internal and external perceived employability through increased access to resources. Furthermore, multinational cooperation and teamwork as well as the development of creative and innovative projects call for interpersonal relationships and social networks consisting of those relationships. Expertise is no longer something that an individual can create and enhance alone, but rather it is an ability to create a team and a community in which each individual's personal areas of expertise complement the knowledge and skills of others. In line with this, Bensaou et al. (2014) stated that business networking is one of the key skills and qualifications required in the future job market.

Another important business skills is data analysis skills. Data analysis or analytic skills involves the ability to know how to generate and summarize datasets, recognize trends, and test hypotheses resulting to data analysis framework for approaching complex business problems, which help in making informed decisions that could benefit the firm or workplace. Analytical reasoning is one of the most sought-after business skills in today's job market. Ramanan et al. (2016) examined analytical and problem-solving skills for employability of engineering graduates in India – An employers' perspective and found a significant relationship between data analysis skills, problem-solving skills and employability of engineering students in India. Kim and Lee (2016) revealed that statistics, data modelling, programming, database systems and understanding of specific business domains were the main requirements for the data scientist positions. Also, results from studies by Azevedo et al. (2012) and Barker (2014) found that employers were not very confident regarding business graduates' abilities in key knowledge areas and in key generic competencies that seemed to be essential in long term employability.

Given the afore stated background knowledge, one could ponder on the paradigm shift that now exists between the type of education provided to graduates and the skills required in performing the real job. The disparity makes most graduates turn out from universities as misfits and unemployable in the job market, while some are rendered incapacitated of creating jobs for self-reliance as intended in the various policy frameworks of education in most developing countries like Nigeria. It is an observable fact that unemployment of graduates, OTME graduates inclusive, is a reoccurring decimal among top ranking socio-economic challenges confronting the national development agenda of nations, with particular reference to Nigeria as one of the major victims (Ukabi et al., 2021). It was against this backdrop that this study identified business skills (that is, business networking and data analysis skills) required by OTME undergraduates of public universities in Cross River State, Nigeria.

Purpose of the study

The main purpose of this study was to identify business skills required for employability by office technology and management education undergraduates of public universities in Cross River State. Specifically, the study sought to identify the:

1. business networking skills required for employability by OTME undergraduates of public universities.
2. data analysis skills required for employability by OTME undergraduates of public universities.

Research questions

The following research questions were posed to guide the study:

1. What are the business networking skills required for employability by OTME undergraduates of public universities?
2. What are the data analysis skills required for employability by OTME undergraduates of public universities?

Hypotheses

The following hypotheses were formulated to guide this study:

Ho1: There is no significant difference in the mean ratings of business educators and entrepreneurs on the networking skills required for employability by OTME undergraduates of public universities.

Ho2: There is no significant difference in the mean ratings of business educators and entrepreneurs on the data analysis skills required for employability by OTME undergraduates of public universities.

Methodology

The researchers adopted a survey research design. The study was carried out in Cross River State, Nigeria. The population of the study was 2,390; consisting of 50 business educators of public universities (34 and 16 business educators in UNICAL and UNICROSS respectively) in Cross River State and 2,340 registered entrepreneurs operating in Calabar Metropolis (1,510 from Calabar Municipality and 830 from Calabar South). The population distribution is shown on Table 1. Purposive, census, proportionate and accidental sampling techniques were used in the study to select 284 respondents for the study. Purposive sampling technique was employed to select only Business Educators of public universities in Cross River State and registered entrepreneurs in Calabar Metropolis with five years' experience. Census was used to incorporate all the business educators of public universities to participate in the study. Proportionate sampling was

used to select 10 percent of the population of registered entrepreneurs in Calabar Metropolis to participate in the study. Lastly, accidental sampling was used in administering the copies of the questionnaire to respondents (registered entrepreneurs) the researchers met at the time of the administration of the questionnaire and were willing to respond to the questionnaire. This comprises of 50 business educators of public universities in Cross River State and 234 registered entrepreneurs in Calabar Metropolis of Cross River State representing ten percent (10%) of the population of registered entrepreneurs.

The instrument for data collection was a structured questionnaire titled “Business Skills Required for Employability Questionnaire” (BSRFEQ) which was responded to by Business Educators of public universities in Cross River State and registered entrepreneurs in Calabar metropolis with at least five years of experience. BSRFEQ was divided into two sections, namely: A and B. Section B had four response options of Very Highly Required (VHR), Highly Required (HR), Slightly Required (SR) and Not Required (NR). Two business educators and one measurement and evaluation expert validated the instrument. To ascertain the reliability of the instrument, a trial test was carried out using 30 respondents from the University of Uyo, Akwa Ibom State, who are not part of the study’s sample. The data collected was subjected to Cronbach Alpha Statistical Analysis, which yielded an overall reliability index of .71. Copies of the questionnaire were distributed to the respondents and the researchers were able to retrieve 218 copies. Research questions were answered using mean and standard deviation while hypotheses were tested using independent t-test at 0.05 level of significance.

Table 1: Population distribution of business educators and registered entrepreneurs in Calabar metropolis

Names of Institutions	No. of business educators	No. of registered entrepreneurs	Total	
UNICAL	34	Calabar Municipal	1510	1544
UNICROSS	16	Calabar South	830	846
Total	50		2,340	2390

Source: Records from the office of the Head of Departments/Business Education Unit of UNICAL and UNICROSS, Calabar, 2024.

Department of Investment and Promotion, Business Registration Unit, Calabar, Cross River State, 2024.

Table 2: Sample distribution of registered entrepreneurs in Calabar metropolis

No. of registered entrepreneurs		Sample (10 percent)
Calabar Municipal	1510	151
Calabar South	830	83
	2,340	234

Presentation of results

Research question one: What are the business networking skills required for employability by OTME undergraduates of public universities?

The data providing answers to the above research question are presented in Table 3.

Table 3: Mean ratings of respondents on business networking skills required for employability by OTME undergraduates of public universities (n=218)

S/N	Business networking skills	\bar{x}	SD	Decision
1	Ability to create and manage social relationships	2.53	1.100	Highly Required
2	Ability to manage group conflicts	2.89	.906	Highly Required
3	Ability to manage diversity	3.06	.872	Highly Required
4	Ability to create work collaborations	3.00	.840	Highly Required
5	Teamwork ability	2.59	1.092	Highly Required
6	Ability to connect with people within and outside	3.30	.825	Highly Required
7	Ability to communicate effectively with others	2.94	.875	Highly Required
	Grand Mean	2.90	1.20	Highly Required

Ho1: There is no significant difference in the mean ratings of business educators and entrepreneurs on the networking skills required for employability by OTME undergraduates of public universities.

To test this hypothesis, independent t-test statistics was used and the result is presented in Table 4.

Table 4: t-test of mean ratings of business educators and entrepreneurs on the networking skills required for employability by OTME undergraduates of public universities (n=218)

Items	Category of respondents	N	\bar{x}	SD	t-cal	p-val.	Decision
1	Business educators	34	2.53	1.08	.011	.634	NS
	Entrepreneurs	184	2.53	1.11			
2	Business educators	34	2.82	.88	-	.135	NS
	Entrepreneurs	184	2.90	.90	.432		
3	Business educators	34	3.03	.87	-	.674	NS
	Entrepreneurs	184	3.07	.89	.253		
4	Business educators	34	3.06	.83	.478	.340	NS
	Entrepreneurs	184	2.98	.99			
5	Business educators	34	2.59	1.11		.153	NS
	Entrepreneurs	184	2.59	.86			
6	Business educators	34	3.26	.82	-	.562	NS
	Entrepreneurs	184	3.30	.87	.257		
7	Business educators	34	2.97	.88	.219	.593	NS
	Entrepreneurs	184	2.93	3.31			
8	Business educators	34	20.26	3.42	-	.407	NS
	Entrepreneurs	184	20.30	3.98	.062		

Df = 216; alpha = 0.05; NS = Not Significant; S = Significant

The result of the t-test analyses presented in Table 4 indicates that there is no significant difference in the mean rating of business educators and entrepreneurs on the networking skills required for employability by OTME undergraduates of public universities. This

is because data in Table 4 show that the p-val of 0.470 is greater than .05. It can be seen that the p-values of all the items are greater than p (.05); this implies that the null hypothesis that states that there is no significant difference in the mean ratings of business educators and entrepreneurs on the networking skills for employability required by OTME undergraduates of public universities is retained.

Research question two: What are the data analysis skills required for employability by OTME undergraduates of public universities.

The data providing answers to the above research question are presented in Table 5.

Table 5: Mean ratings of respondents on data analysis skills required for employability by OTME undergraduates of public universities (n=218)

S/N	Data analysis skills	\bar{x}	SD	Decision
1	Ability to think analytically	3.12	.90	Highly Required
2	Ability to collect and organize data intelligently	2.87	.83	Highly Required
3	Ability to analyze and interpret data for decision making	3.00	.84	Highly Required
4	Ability to predict the future based on facts and figures	2.52	.92	Highly Required
5	Ability to solve problems involving large data	3.17	.79	Highly Required
6	Ability to use computer-based analytical tools for solving business problems	2.82	.86	Highly Required
7	Good research skills	2.53	1.10	Highly Required
	Grand Mean	2.86	0.89	Highly Required

From the results displayed in Table 5, the grand mean of 2.90 reveals that respondents agree that data analysis skills are required for employability by OTME undergraduates of public universities. All the seven items have mean scores between 2.52 and 3.17. This indicates that all the items on data analysis skills are highly required for employability by OTME undergraduates of public universities. The standard deviations

for all the items are within the same range indicating that respondents were not too far from each other in their responses.

Ho2: There is no significant difference in the mean ratings of business educators and entrepreneurs on the data analysis skills required for employability by OTME undergraduates of public universities.

To test this hypothesis, independent t-test statistics was used and the result is presented in Table 6.

Table 6: t-test of mean ratings of business educators and entrepreneurs on the data analysis skills required for employability by OTME undergraduates of public universities (n=218)

Items	Category of respondents	N	\bar{x}	SD	t-cal	p-val.	Decision																																																																				
1	Business educators	34	2.91	.90	-1.462	.654	NS																																																																				
	Entrepreneurs	184	3.16	.90				2	Business educators	34	2.74	.79	-1.039	.605	NS	Entrepreneurs	184	2.90	.84	3	Business educators	34	2.76	.87	-1.782	.473	NS	Entrepreneurs	184	3.04	.86	4	Business educators	34	2.44	.79	-.565	.071	NS	Entrepreneurs	184	2.54	.94	5	Business educators	34	3.15	.78	-.182	.687	NS	Entrepreneurs	184	3.17	.79	6	Business educators	34	2.59	.78	-1.729	.207	NS	Entrepreneurs	184	2.86	.87	7	Business educators	34	2.50	1.05	-.160	.431	NS
2	Business educators	34	2.74	.79	-1.039	.605	NS																																																																				
	Entrepreneurs	184	2.90	.84				3	Business educators	34	2.76	.87	-1.782	.473	NS	Entrepreneurs	184	3.04	.86	4	Business educators	34	2.44	.79	-.565	.071	NS	Entrepreneurs	184	2.54	.94	5	Business educators	34	3.15	.78	-.182	.687	NS	Entrepreneurs	184	3.17	.79	6	Business educators	34	2.59	.78	-1.729	.207	NS	Entrepreneurs	184	2.86	.87	7	Business educators	34	2.50	1.05	-.160	.431	NS	Entrepreneurs	184	2.53	1.10								
3	Business educators	34	2.76	.87	-1.782	.473	NS																																																																				
	Entrepreneurs	184	3.04	.86				4	Business educators	34	2.44	.79	-.565	.071	NS	Entrepreneurs	184	2.54	.94	5	Business educators	34	3.15	.78	-.182	.687	NS	Entrepreneurs	184	3.17	.79	6	Business educators	34	2.59	.78	-1.729	.207	NS	Entrepreneurs	184	2.86	.87	7	Business educators	34	2.50	1.05	-.160	.431	NS	Entrepreneurs	184	2.53	1.10																				
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7	Business educators	34	2.50	1.05	-.160	.431	NS																																																																				
	Entrepreneurs	184	2.53	1.10																																																																							

8	Business educators	34	19.09	3.40	-	.634	NS
	Entrepreneurs	184	20.21	3.49	1.724		

Df = 216; alpha = 0.05; NS = Not Significant; S = Significant

The result of the t-test analyses presented in Table 6 indicates that there is no significant difference in the mean rating of business educators and entrepreneurs on the data analysis skills required for employability by OTME undergraduates of public universities. This is because data in Table 6 show that the p-value of 0.634 is greater than .05. From Table 6, the p-values of all the items are greater than p (.05); this implies that the null hypothesis that states that there is no significant difference in the mean ratings of business educators and entrepreneurs on the data analysis skills required for employability by OTME undergraduates of public universities is retained.

Discussion of the findings

The findings with regard to business networking skills for employability revealed that business networking skills are highly required for employability by OTME undergraduates of public universities; the test of hypothesis revealed that there is no significant difference in mean rating of business educators and entrepreneurs on business networking skills required for employability by OTME undergraduates of public universities. The findings of the study is in line with that of Batistic and Tymon (2017) who found that business networking was positively related to internal and external perceived employability through increased access to resources. The findings also align with that of Levin et al. (2015) who found information sharing, the management of diversity, adaptation and adjustment, integrative negotiation, and the creation and management of relationships as focal areas of networking skills.

The finding also agrees with Batistic and Tymon (2017) who stated that business networking was positively related to internal and external perceived employability through increased access to resources. Furthermore, multinational cooperation and teamwork as well as the development of creative and innovative projects call for interpersonal relationships and social networks consisting of those relationships. Expertise is no longer something that an individual can create and enhance alone, but rather it is an ability to create a team and a community in which each individual's personal areas of expertise complement the knowledge and skills of others. In line with the finding, Bensaou et al. (2014) stated that business networking is one of the key skills and qualifications required in the future job market.

The findings in regard of data analytical skills revealed that data analytical skills are highly required for employability by OTME undergraduates of public universities; the test of hypothesis revealed that there is no significant difference in mean rating of business educators and entrepreneurs on data analytical skills required by OTME undergraduates of public universities for employability. The findings of the study were in line with that of Ramanan et al. (2016) who examined analytical and problem-solving skills for employability of engineering graduates in India – An employers’ perspective and found a significant relationship between data analysis skills, problem-solving skills and employability of engineering students in India.

Similarly, the findings of the study were in line with that of Kim and Lee (2016) who also revealed that statistics, data modelling, programming, database systems and understanding of specific business domains were the main requirements for the data scientist positions. The finding is supported by the results from studies by Azevedo et al. (2012) and Barker (2014), who found that employers were not very confident regarding business graduates’ abilities in key knowledge areas and in key generic competencies that seemed to be essential in long term employability.

Conclusion

Most employers want employees who will be effective in today’s changing economy. The need for possession of business skills in the 21st century labour market cannot be overemphasized. From the findings of the study, students require business networking and data analysis skills for employability. These business skills serve as critical asset, bridging the gap between academic knowledge and workplace readiness.

Recommendations

Based on the findings of the study, it was recommended that:

1. Seminars should be organized by the department offering OTME for students on the importance of networking and enlighten them on the various networking skills that they can use, as networking within/outside the school environment have been seen to enhance employability.
2. The management of the institution should procure and install relevant data analysis software, for example, Ms Excel, on available computer systems within the Department, and students should be made to use this software when being taught ICT/accounting related courses.

References

- Amadi, E. A., Eme, F. & Anireh, U. N. (2020). Utilization of business education skills and the recovery of Nigerian economic value. *International Journal of Innovative Development and Policy Studies*, 8(1), 125-132.
- Azevedo, A., Omerzel, D. G., Andrews, J., Higson, H., Caballero, A., & Frech, B. (2012). Satisfaction with knowledge and competencies: A multi-country study of employers and business graduates. *American Journal of Economics & Business Administration*, 4(1), 23-39.
- Barker, B. (2014). Employability skills: Maintaining relevance in marketing education. *Marketing Review*, 14(1), 29-48.
- Batistic, S., & Tymon, A. (2017). Networking behaviour, graduate employability: A social capital perspective. *Educational Training*, 59(1), 374-388.
- Bensaou, B. M., Galunic, C. & Jonczyk-Sédès, C. (2014). Players and purists: Networking strategies and agency of service professionals. *Organization Science*, 25(1), 29-56.
- Birth, J. (2023). Six business skills you need and how to improve them. Retrieved on July 7th, 2023 from <https://www.indeed.com/career-advice/career-development/business-skills>.
- Kim, J. Y. & Lee, C. K. (2016). An Empirical analysis of requirements for data scientists using online job postings. *International Journal of Software Engineering and Its Applications*, 10(4), 161-172.
- Levin, D. Z., Walter, J., Appleyard, M. M. & Cross, R. (2015). Relational enhancement: How the relational dimension of social capital unlocks the value of network-bridging ties. <https://doi.org/10.1080/23752696.2020.1847162>.
- Okute, A. L., Olom, P. A. & Ewuru, A. A. (2016). Artificial intelligence and expert systems in information processing: An imperative for global competitiveness. *African Journal of Vocational Education (AJOVED)*, 6(2), 197-208.
- Olumese, H. A. & Ediagbonya, K. (2016). Influence of teaching methods on the implementation of the curriculum content of secretarial education in selected colleges of education in south-south, Nigeria. *Journal of Educational Policy and Entrepreneurial Research (JEPER)*, 2(3), 27-35.

- Ramanan, L., Kumar, M. & Ramanakumar, K. P. V. (2016). Analytical and problem solving skills for employability of engineering graduates in India – An employers’ perspective. *International Journal of Engineering Research*, 4(1), 92-102.
- Reynolds, M. (2019). *The importance of business skills*. New York: Harvard Business School.
- Ukabi, O. B., Enang, B. E. & Patrick, E. O. (2021). Inclusive business education: A requisite for sustainable development of Nigeria. *Education for Today*, 16(1), 190-199.