The Role of Information and Communication Technologies in the Development of Management Manpower in Nigeria

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Abstract

In Nigeria, there are management institutions which are saddled with management manpower preparation. It is an obvious fact that in management, as in other sectors of the economy, the role of Information and Communication Technology (ICT) cannot be over-emphasized. ICTs are a diverse set of tools and resources used to communicate, create, disseminate, store, and manage information. Thus, the paper attempted to investigate the role of ICT in the preparation of management of human capital for the economy. A rating scale on the role of ICT in management preparation developed and validated by the researchers was administered on a sample of 250 management trainees and 50 management educators in a specialized management institution in Nigeria. Findings showed that ICT played significant role in the development of managers for the Nigerian economy; ICT had significantly improved teaching and learning in management courses and the trainees' achievement in courses like Planning, Statistics, Management Communication, Quantitative Analysis and Operations Research. It was recommended that every institution involved in management development should be well equipped with ICT facilities and educators in order to further the improvement of management development system in the country. It was further recommended that management trainees should be sent on practical exposure programmes outside the institution to enhance their knowledge and application of ICTs in management practices.

Introduction

That management permeates every facet of human life is a verity which cannot be faulted by any human beings as we all undertake one act of management or the other. Thus Onuka (2004) posits that development management is for man and by man. However, it is equally true that though every human being seemingly gets involved in the act of managing, yet everyone is not a management as it is not everyone who possesses the knowledge and skills for effective and efficient management. Hence the need to develop the management staff of any organisation/institution in the art and science of management. In fact, the study of management is a collage of the arts and the sciences (Onuka, 2004). In other words, management is multidisciplinary, and Umoru-Onuka, (2001) puts it, it is also a communicative profession; thus, implying that without effective management, communication becomes nothing more than a mere mirage. It invariably portends that the importance of information and communication technology in modern management cannot be overstressed.

According to Onuka (2004) the society cannot develop without the concomitant human capital development. This is in agreement with the proposition of Iwayemi (2001) that development has evolved beyond being seen as synonymous with rising level of per capita income to the more embracing concept of sustainable human development. Thus, it cannot be disputed that human beings are the authors and executors of all developmental efforts. Therefore, managerial human capital development cannot be anything than being imperative and should thus be taken seriously.

It must be planned, organised and developed in such a way that national development becomes assured. Ladipo (2010: 53) views leadership as follows:

- The organising and coordination of resources, energies and relationships in a productive context for an intended outcome, it is simply managing of managers towards common goals.
- Therefore, leadership incorporates a clear purpose and vision which provides the fuel for inspiration, motivation and mobilisation. Invariably, we thus can conclude that there are two components of leadership: 1) vision and 2) values.

The implication of the above is that since manager is leadership, management and leadership (as higher level of management) must be developed through continuous education in modern techniques of management particularly ICT, to enhance its communicative ability for greater and better management outcomes. Umoru-Onuka (2003) and Durwoju (2010) both agree that management is the business of initiating, planning, organising, implementing, directing/controlling, motivating, monitoring and evaluation (for systemic maintenance and improvement). The import of this and the other views expressed above is that management without information and the resultant communication is nothing but a futile exercise. Thus we cannot overstress the important role of both information and communication in management.

Akorede (2010: 49) posits that information is 'the collection and management of information from one or more sources and the distribution of that information to one or more audiences.' While Durowoju (2010) believes that there is synergy between communication and managements in the ways listed below:

✓ Setting objectives for using available resources

✓ Formulating plans for accomplishing these objectives

✓ Identifying the requisite activities to be performed

- ✓ Organising these requisite activities into appropriate groups/departments
- ✓ Defining the requisite tasks to be done
- ✓ Assigning each task to the appropriate staff
- ✓ Initiating relevant work activities
- ✓ Supplying the necessary incentives to stimulate appropriate level of productivity
- ✓ Setting up controls and measuring the achievement of the set objectives
- Taking any required remedial actions, where a deviation from set objective had been discovered.

The foregoing depict the fact that both management and communication are related, since management decisions are only effective to the extent to which they were properly communicated i.e. transmission, reception and utilisation of information being passed from management to the persons responsible for making use of them for the overall benefit of an organisation/institution. There is no doubt that in this age of advanced technological development where

communication has out-grown the realm of traditional written and spoken forms to computer-based communication pattern presentations, from e-mail to video-conferencing and other electronic form of information transmission, the effective manager must communicate with brevity and clarity using the appropriate communication mode. Therefore, his training must make provision for inclusion of modern information and communication technology. The modern Nigerian manager has to be equipped with adequate knowledge and skills, and thus, competence in information and communication as the world has today been reduced to global village, because globalisation is primarily defined by modern information and communication (Onuka, 2005). This underscores the important role ICTs must play in the life of the manager and in the management process. Thus, it does portend the need to incorporate ICTs into the management education curriculum of management training institutions in Nigeria in particular and in Africa generally, Yet, Onuka, Adewale and Ajayi (2007) in their study on how much university teachers were utilising ICT in teaching and research, found out that only an insignificant fraction possesses the requisite knowledge and skills in ICTs (some 14%), and a smaller fraction regularly utilised ICTs in their daily transactions (11.2%). This shows that interest has to be developed in the use of ICTs in the training of the management trainee, if he were to meet the modern demand of technologically knowledgeable manager.

How much do the management educators and managers in Nigerian management training institutions appreciate this fact of incorporating ICTs into management training programmes and its usefulness is as obvious as it is expected to be. Hence, the need to investigate their perception of the role ICTs play in the development of managers. Therefore, this study investigated the perception of the role of ICTs in the development/education of the future manager.

Research Questions:

The following two research questions were raised:-

- 1. Have ICTs played significant role in the developing the manager's capacity to contribute the Nigerian economy?
- 2. Has ICT had played significant role in improving management education in Nigeria?

Methodology

Procedure:

The study which was carried out ex-post facto (since no variable was manipulated) had a randomly selected sample of 250 traineemanagers and 50 management educators (making a total of 300 subjects) from a computerized leading public sectoral management training institution in Agriculture in a central Nigerian State. A rating scale on the role of ICTs in management preparation was developed and validated by the researchers. The instrument consisted 24 items addressing the two questions in the study, broken to sections A and B with the former having 13 items, while the latter section was made up of 11 items respectively. It was pilot tested on 50 student-managers and ten management educator similar to the subjects used in this study, though they were not included in the study. Using administer-re-administer procedure on the pilot sample at two weeks interval, a reliability coefficient and index of 0.91 and 0.83 were respectively obtained, while construct validity of 0.78 was obtained using factor analysis. The instrument was administered by the researchers and their assistants on the subjects in used for the study for a whole week, personally retrieving all copies of the instrument from the subjects. The resulting data having been precoded before the field exercise were collated and analysed using simple percentage. The greater of the aggregate average of the strongly agree and aggregate average of the opposite was used in the discussion

Results and Discussion:

Table 1: The Percentage of Respondents Perceiving ICT as Contributing Positively to Manager's Capacity to Make impact on the Economy

S/No	Item	SA	A	SA+A	D	SD	D+SD	Remarks Total % agreeing
1	Facilitates quick packaging of management decisions	56	35	91	7	2	9	91%
2	Facilitates speedy package of management information	67	23	90	8	2	10	90%

3	Facilitates dissemination of management decisions to the subordinates	83	17	100	0	0	0	100%
4	Effectively communicates management decisions to the recipients	71	23	94	6	0	6	94%
5	Effectively makes management decisions clearer	47	32	79	11	10	21	79%
6 .	Elicits appropriate response from the recipients	98	2	100	0	0	0	100%
7	Reduces management time wastages	100	0	100	0	0	0	100%
8	Enables speedy production of results/outcomes	64	12	76	21	3	24	76%
9	Puts every worker on alert	53	6	59	36	5	41	59%
10	Stimulates healthy rivalry in the workers	44	29	73	27	0	27	73%
11	Reduces management and organisational cost	63	13	76	24	0	24	76%
12	Increases and also improves organisational productivity	78	22	100	0	0	0	100%
13	Increases organisationl management team-building	93	7	100	0	0	0	100%
Mean	-	-	-	79.85	-	-	19.92	80.08

Table I vividly illustrates the perception of the respondents about whether or not ICT enhances building the capacity of the management staff for greater productivity and the subsequent improvement of the economy. There were thirteen indices of the capacity of the manager to contribute to the national economy as a

result of the role of ICTs in management education in Nigeria, the average, 80.08% of the respondents perceived that ICTs enhance the ability of the trainee-manager to contribute more meaningfully to the Nigerian economy. It implies only about 20% of the respondents did perceive ICTs as enhancing the capacity of the trainee-manager's capacity to contribute meaningfully to the Nigerian economy. The import of this finding is that trainee-managers and management educators agree that ICTs play various important roles in enhancing the capacity of the trainee-manager to contribute to the economy in terms of improved productivity, effective communication, teambuilding, reduction in management cost and management time wastages, and enhances management decisions and dissemination among others. This finding agrees with the findings of Onuka, Adewale and Ajayi (2007) that ICTs increase the capacity of whoever uses it for improved productivity, effective time management (also Onuka, 2010), reduced wastages, etc. It, however, simultaneously disproved their conclusion that Nigerians are yet to appreciate the important role of ICTs play to engender greater productivity in the workplace. It also corroborates the view of Onuka (2005) and Durowoju (2010) that effective management communication is enhanced by the utilisation of ICTs. The finding equally confirms the inference made by Onuka (2005) that ICTs are effective management tools in the era of globalisation. implication of the above finding is that ICTs should be taken seriously in the training of the manager, and must, therefore, be incorporated into the curriculum of the Nigerian management education programme. Thus, all employers and trainers of managers in Nigeria must all invest both time and money in the provision of ICT equipment, and ensure that enabling environment is put in place for utilisation of ICTs in management training outfits across the entire length and breadth of the country.

Table 2: Percentage of Respondents Perceiving ICT as Contributing Positively to Management Education in Nigeria

S/No	Item	SA	A	SA+A	D	SD	D+SD	Remarks
1	Facilitates effective management learning	52	17	69	23	8	31	69%
2	Enables the management	76	13	89	20	1	21	89%

	educator/learner acquire and apply new management techniques speedily							
3	Prepares the Nigerian manager to compete favourably with his counterpart anywhere in the world	81	8	89	11	0	212	89%
4	Keeps the trainee-managers abreast recent developments in the management world	65	15	80	10	10	20	80%
5	Encourages networking among trainee managers	77	4	81	9	10	19	81%
6	Stimulates personal development of the worker	51	8	59	23	18	41	59%
7	Assures meritocracy in the organisation	93	7	100	0	0	0	100%
8	Motivates the trainee manager to learning effectively	67	12	79	21	0	21	79%
9	Makes the trainee-manager a future significant contributor to the economy	77	11	88	12	0	12	88%
10	Assists the trainees to grasp the import and application of the quantitative management	79	12	91	9	0	9	91%

	techniques at the workplace			- - -				
11	Improves relationship among trainee managers	80	7	87	10	3	13%	87%
Mean	-		-	82.91	-	-	17.09	82.91%

Table 2 depicts the result in response to question 2 as to whether or not ICTs contribute to effective education of the Nigerian manager. Here the result shows that ICTs played significant role in the development of managers for the Nigerian economy, ICTs had significantly improved teaching and learning in management courses and have also engender greater the trainees' achievement in courses like Planning, Statistics, Management Communication, Quantitative Analysis and Operations Research, Financial Management and Production Management. An aggregate mean of 82.91% of the total respondent perceived that ICTs contributed immensely to engendering substantially effective development of the management in the sector. This finding conforms to the conclusion made by Umoru-Onuka (2003), Knoll (2006) and Onuka, Adewale and Ajayi (2007) that ICTs can effectively engender management/educator's performance because he has become well-equipped to meet the demands on the manager or educator of the twenty first century. Invariably, therefore, it can be safely inferred that ICTs definitely contribute in no small measure to the development of the manager for the Nigerian economy. It does portend the fact that ICTs should of compulsion become entrenched in management education curriculum in Nigeria. This further implies that much investment needs to be made in equipping management institutions with modern ICTs equipment, while such equipment must be maintained and expanded with passage of time to ensure continuous advancement of the management sector of the Nigerian society. It also follows, therefore, that ICT equipment must be provided in adequate in quantity, while constant power supply must be assured.

The individual managers, on their part, must ensure that they constantly update their ICT skills, as the technologies are being updated and improved almost on 'per second, per second basis', meaning that Information and Communication grows, and improves exponentially.

Conclusion and Recommendations

Conclusion

The important role, ICTs play in the development of the manager and in his capacity to contribute positively to a national economy cannot be over-emphasised. It is essential to the growth and performance of the manager in terms of contributing to the national economy. They also enhance the process of management education and engender the trainee-managers' achievement in management learning. ICTs promote networking among the managers of an organisation and also among managers of various organisations particularly those who are not only computer-literate but also have substantially acquired high level competence in ICT skills. They were found to have become veritable management tools for substantial organisational productivity.

Recommendations

Based on the above findings and conclusion, the following recommendations were made:

- ICT equipment should be provided in sufficient quantum in all management training institutions and they should be up-to-date equipment since technological development in the information and communication sector world-wide has taken an exponential turn.
- All would-be managers should be adequately exposed to training in information and communication technologies to ensure they keep abreast of the constantly dynamic trends in the sector.
- Management trainees should be sent practical experience outside the training institution and their organisations for effective updating their knowledge and skills in ICTs and in their use for management decision, communication and implementation.
- Funds should be made available by all stakeholders in management training as well as employers of managers for the provision, maintenance and utilisation of ICTs in management of organisation irrespective of whether they are in a private or public establishment.

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