



## **AN EXPLORATIVE STUDY OF HIGHER EDUCATION'S STUDENTS AND TEACHING STAFF PSYCHOLOGY IN AN USING OF INFORMATION, COMMUNICATION, TECHNOLOGY WITH SPECIAL REFERENCE TO LUSAKA, ZAMBIA**

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### **Abstract**

*Though it has been rightly said that what is wrong with education cannot be fixed with technology; there is no doubt that modern life is dominated by technology. There is universal recognition of the need to use Information and Communication Technology (ICT) in education as we enter the era of globalization where the free flow of information via satellite and the internet hold sway in global information dissemination of knowledge. Already, Zambia*

*Is having Lack of infra-structure in technology as it has not made significant effort to integrate ICT into Higher education so that students, Staff are still lacking of having good technology. So this paper, therefor examines through explorative study of students and staff Psychology in an using of technological device and its major obstacles against the use of technology in higher education in Zambia. For this study researcher used descriptive research design to present the research report and then secondary data which were collected from ICT Related articles, journals and website, and also the primary data Primary data was collected from structured questionnaire with the sampling method convenience sampling from 110 respondents residing in and around Lusaka, Zambia and data were analysed through SPSS Software.*

**Keywords:***Information And Communication Technology, Cyber Education, Virtual Learning Environment, Internet Gateway, Zambia's Telecommunication.*

### **Intorduction**

This work investigates Students and Staff Psychology using of(ICT) technological device in an education is taken to consider and its attainment levels, the different learning and studying approaches adopted by students, Staff involved in the Teaching and learning of Economic and Management science ,Commerce. The learners' attitudes towards engagement with their programmes are examined as well as the impact of technology on learning. Some of the major challenges arising from institutional and individual experiences and awareness of the ICT that permeates all people in developing countries are highlighted. Globally and most especially in developing countries, the advent of information and communication technologies has meant great changes in the manner of thinking and doing things both at home and in business, in education establishments and in society. For higher education institutions especially in developing countries, there has been the introduction of various types of information systems and the implementation of policies to facilitate the integration of new technologies in teaching and administration of new curricula. This paper examines students and Staff Psychology of using (ICT) technology in an engineering, management commerce, Economics studies at the higher level education Lusaka, Zambia.

Educational technology is not restricted to high technology.<sup>[3]</sup> Nonetheless, electronic educational technology, also called e-learning, has become an important part of society today, comprising an extensive array of digitization approaches, components and delivery methods.<sup>[4]</sup> For example,



m-learning emphasizes mobility, but is otherwise indistinguishable in principle from educational technology.<sup>[5]</sup>

Educational technology includes numerous types of media that deliver text, audio, images, animation, and streaming video, and includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local intranet/extranet and web-based learning. Information and communication systems, whether free-standing or based on either local networks or the Internet in networked learning, underlie many e-learning processes.<sup>[6]</sup>

### **Review of Literature**

Wright and Lauda (Wright & Lauda, 1993, p.4) defined technology education as, "...an educational program that assists people develop an understanding and competence in designing, producing, and using technology products and systems, and in assessing the appropriateness of technological actions". This definition was followed by the statement that the technological literacy developed in technology education can be assessed through seven competence measures, one of which was a statement of social and personal impact: "Assess the personal, social, economic and environmental impacts of technology." (p. 4).

In 1985 the International Technology Education Association (ITEA) published a collection of papers written by prominent scholars in the field. The intent of the publication was "...to give the interested professional educator a broad perspective of the of the technology education emphasis that is becoming so prevalent in our schools today." The personal and social impacts of technology education was recognized in this publication when it was stated that, "Technology education can help the student...uncover and develop individual talents. (ITEA, 1985, p. 25).

A similar ITEA publication in 1988 spoke of "technological literacy through technology education" including the belief "...that understanding of technology – its evolution, its utilization and its significance – which would enable the individual to function effectively as a citizen as well as in those specialized roles that one plays in a given society." (ITEA, 1988, p. It is generally believed that ICTs can empower teachers and learners, promote change and foster the development of '21st century skills, but data to support these beliefs are still limited: There is widespread belief that ICTs can and will empower teachers and learners, transforming teaching and learning processes from being highly teacher-dominated to student- centred, and that this transformation will result in increased learning gains for students, creating and allowing for opportunities for learners to develop their creativity, problem-solving abilities, informational reasoning skills, communication skills, and other higher-order thinking skills. However, there are currently very limited, unequivocally compelling data to support this belief.

ICTs are very rarely seen as central to the overall learning process even in the most advanced schools in OECD countries, ICTs are generally not considered central to the teaching and learning process. Many ICT in education initiatives in LDCs seek (at least in their rhetoric) to place ICTs as central to teaching and learning. An enduring problem: putting technology before education:

One of the enduring difficulties of technology use in education is that educational planners and technology advocates think of the technology first and then investigate the educational applications of this technology only later.

Johnson, in the Report of the Project 2061 Phase I Technology Panel discussed at some length the interface between technology and society with emphasis on the teaching of this interface. He stated, “Two principles must be developed, articulated and illustrated: (1) technology affects society, and (2) society affects technology.” (Johnson, 1993, p. 9) Johnson emphasized the importance of understanding of the technology-society interface: “To live a fruitful and rewarding life in the twentieth-first [sic] century will require a knowledge of technology and society learned from historical examples, contemporary illustrations, and informed prognostications. It will be necessary to understand some of the basic precepts of the social sciences and their application to what occurs at the interface of technology and society.”(Johnson, 1993, p. 12).

### Objectives of The Study

1. To study the impact of ICT in on Higher Education in Zambia.
2. To know the Staff and Students psychology Towards ICT environment Prevailing in Zambia.
3. To evaluate the Staff and Students level of awareness towards ICT environment.
4. To measure the Satisfaction Level of Staff and Students towards ICT services.

### Scope of The Study

The study is undertaken in one of the Province Lusaka, Zambia. For data analysis and conclusion of the results of the survey, statistical tool like ANOVA test was performed.

### Research Methodology

The present study has been conducted on the basis of primary data and was descriptive in its nature. Primary data obtained by interacting with various people, getting the questionnaires filled by them. The data was collected by means of questionnaire and was classified and analyzed carefully. Questionnaire was constructed innovatively and systematically distributed to respondents in the study field. In this research, the questionnaire was formed as a direct and structured one. The questions were mostly close-ended questions. Open-ended question has been used only for deriving suggestions from the respondents.

### Sampling Design

**Table: 1 Sampling Design To Meet Objectives**

<b>Location</b>	Lusaka, Zambia
<b>Sampling units</b>	Higher Education Staff and Students
<b>Sampling method</b>	Non Probability Convenience Sampling
<b>Sample Size</b>	110 Respondents
<b>Instrument for data collection</b>	Structures Questionnaire

### Tools And Techniques of Data Analysis

The statistical analysis carried out in the study by using MS-Excel and SPSS (Statistical Package for Social Science) Software. The statistical technique like Chi-square, ANOVA, has been used for the analysis. Analysed & interpreted data have been presented in the form of tables, charts and figures.

### Questionnaire Reliability Test

The researcher has used Cronbach’s Alpha reliability test to evaluate the reliability of the questionnaire for the survey study. The analysis was done using SPSS.

**Table 2: Cronbach's Alpha Reliability Statistics**

Cronbach's Alpha	N of Items
.943	19

(Data Compiled by using SPSS)

As statistics tells more the Alpha value near to 1 more will be the reliability.

The above table-2 reveals that the **Cronbach's Alpha value = .943**. Therefore based on the Alpha value it can be decided that the framed questionnaires are more reliable with each other and the questionnaire survey can be conducted by using the questionnaire.

### Data Analysis & Interpretation

#### Hypothesis: 1

H0: There is no significance difference between Gender and their awareness about ICT.

H1: There is a significance difference between Gender and their awareness about ICT.

H0: There is no significance difference between Staff and Student's Awareness about ICT.

H0: There is no significance difference between Respondents Income and Their awareness Of using ICT Technologies.

H1: There is no significance difference between Respondents awareness and un Awareness of ICT Technologies.

### Research Limitations

The current investigation focuses on Students psychology in an using of technology and its impacts in Educations particularly Lusaka, Zambia Future work intends to extend this to other disciplines and investigate ways of enhancing education provision to meet the diverse needs of learners of mixed technological abilities and from diverse cultures as applied to other comparative countries.

**Table:3: Respondent Awareness Aboutict Devise And Its Environment**

Sno	Details	Aware		Un Aware		Total
		Count	%	Count	%	
1	E-Learning	80	73	30	27	110
2	M-Leaning	100	91	10	9	110
3	E-Portfolios	15	14	95	86	110
4	Podcasts	0	0	110	100	110
5	Join Online Discussion Group	90	82	20	18	110
6	Testing, surveys, job aids and just-in-time (J.I.T.) learning	0	0	110	100	110
7	Location-based and contextual learning	0	0	110	100	110
8	Social-networked mobile learning	87	79	23	21	110
9	Mobile educational gaming	75	68	35	32	110

10	Delivering m-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting (podcasting to phones with interactive assessments	0	0	110	100	110
11	Cloud computer file storage	18	16	92	84	110
12	PDA Smart phone/ I Phone	47	43	63	57	110
13	Pocket PC / Tablet	91	83	19	17	110
14	satellite TV	83	75	27	25	110
15	intranet/extranet and web-based learning	102	93	8	7	110
16	virtual learning environment (VLE)	12	11	98	89	110
17	wikis, blogs, RSS and 3D virtual learning spaces	16	15	94	85	110
18	M-learning or mobile learning	45	41	65	59	110
19	Video conferencing / Tele conferencing	45	41	65	59	110

**Table 4: Chi-Square Tests**

Respondent Awareness about ICT devise and its Environment	Value	Df	Asymp. Sig-(2-sided)
Pearson Chi-Square	32.378a	4	.005
Likelihood Ratio	34.002	4	.002
Linear by Linear Association	26.059	1	.000
N of Valid Classes	220		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.55.

From the table 3 it was calculated based on except awareness and using of normal Cell phone and Computers, internet, E-mail, Tablet phone and then it calculated based on other technologies related to Educations and it showed that both aware and un aware about the ICT related technologies and its education environment usage in which most of the respondents were found not knew it with 100% on Testing, surveys, job aids and just-in-time (J.I.T.) learning, Delivering m-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting, podcasting to phones with interactive assessments with 100% .

In these above cases, the p value equals 0.005, 0.002 and 0.000 which are lesser than the level (.05), so we reject null hypothesis and say that, there is significance difference between the respondents' awareness and un awareness about ICT related technologies and its environment.

**Table 5: Gender Wise Awareness Aboutict Devise And Its Environment**

Sno	Detail	Having Idea				No idea				Total
		Male		Female		Male		Female		
		Count	%	Count	%	Count	%	Count	%	
1	E-Learning	40	67	45	90	20	33	5	10	110
2	M-Leaning	55	92	50	100	5	8	0	0	110
3	E- Portfolios	12	20	8	16	43	71	47	94	110
4	Podcasts	0	0	0	0	60	100	50	100	110
5	Join Online Discussion Group	40	67	50	100	20	33	0	0	110
6	Testing, surveys, job aids and just-in-time (J.I.T.) learning	0	0	0	0	60	100	50	100	110
7	Location-based and contextual learning	0	0	0	0	60	100	50	100	110
8	Social-networked mobile learning	37	62	50	100	23	38	0	0	110
9	Mobile educational gaming	46	77	29	58	14	23	21	42	110
10	Delivering m-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting (podcasting to phones with interactive assessments	0	0	0	0	60	100	50	100	110
11	Cloud computer file storage	10	17	8	16	50	83	42	84	110
12	PDA Smart phone/ I Phone	17	28	30	60	43	72	20	40	110
13	Pocket PC / Tablet	46	77	50	100	14	23	0	0	110
14	satellite TV	43	72	40	80	17	28	10	20	110
15	Intranet/extranet and web-based learning	60	100	42	84	0	0	8	16	110
16	Virtual learning environment (VLE)	7	12	5	10	55	92	43	86	110
17	wikis, blogs, RSS and 3D virtual learning spaces	9	15	7	14	51	85	43	86	110
18	M-learning or mobile learning	25	42	20	40	35	58	30	60	110
19	Video conferencing / Tele conferencing	27	45	18	36	33	55	32	64	110

**Table 6: Chi-Square Tests**

Gender wise Awareness about ICT devise and its Environment	Value	Df	Asymp. Sig-(2-sided)
Pearson Chi-Square	32.578a	4	.070
Likelihood Ratio	34.002	4	.060
Linear by Linear Association	23.259	1	.000
N of Valid Classes	220		

0 cells (.0%) have expected count less than 5. The minimum expected count is 9.55.

From the table 5 Respondents awareness, it was calculated based on except awareness and using of normal Cell phone and Computers, internet, E-mail, Tablet phone and then it calculated based on other ICT related technologies in an Educations and it showed that both Male and Female most of the respondents were found not knew the Recent ICT related Technologies particularly on Testing, surveys, job aids and just-in-time (J.I.T.) learning, Delivering m-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting (podcasting to phones with interactive assessments with 100% and in some areas Female were having more awareness with 100% on M-Learning, Social net work chat, Pocket PC / Tablet awareness and using than Male Respondents.

From the table 6 it can be identify that, the Pearson chi-square value is 32.578 and p-value is greater than .05, ( $p = 0.070$ ). So we can Accept the null hypothesis, and say, there is no significance difference between the male and female respondents awareness and having idea about ICT related technologies and its environment.

**Table:7 Respondent Income Wise Awareness About Ict Devise And It's Environment**

Sno	Detail	ICT Usage Rate among Male				ICT Usage Rate among female				Total
		<5000 K	5001 to 7500	7501 to 10000	>10001	<5000 K	5001 to 7500	7501 to 10000	>10001	
1	E-Learning	5	16	11	8	6	14	4	6	80
2	M-Leaning	15	25	10	10	8	12	15	5	100
3	E-Forfolios	0	0	9	6	0	0	8	7	15
4	Podcasts	0	0	0	0	0	0	0	0	0
5	Join Online Discussion Group	8	15	12	15	6	16	10	8	90
6	Testing, surveys, job aids and just-in-time (J.I.T.) learning	0	0	0	0	0	0	0	0	0
7	Location-based and contextual learning	0	0	0	0	0	0	0	0	0
8	Social-networked mobile learning	8	11	10	15	9	12	10	12	87
9	Mobile educational gaming	8	14	8	11	4	8	10	12	75

10	Delivering m-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting (podcasting to phones with interactive assessments)	0	0	0	0	0	0	0	0	0
11	Cloud computer file storage	0	0	6	5	0	0	5	2	18
12	PDA Smart phone/ I Phone	0	0	17	10	0	0	13	7	47
13	Pocket PC / Tablet	4	10	15	16	7	12	11	11	91
14	satellite TV	8	14	9	13	9	15	9	6	83
15	Intranet/extranet and web-based learning	7	19	21	13	9	5	16	12	102
16	Virtual learning environment (VLE)	0	0	3	4	0	0	2	3	12
17	wikis, blogs, RSS and 3D virtual learning spaces	0	0	6	3	0	0	4	3	16
18	M-learning or mobile learning	5	13	3	4	3	7	4	6	45
19	Video conferencing / Tele conferencing	4	15	2	3	4	5	2	10	45

**Table 8: Chi-Square Tests**

<b>Respondent Income wise Awareness about ICT devise and its nvironment</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig-(2-sided)</b>
Pearson Chi-Square	62.578a	12	.000
Likelihood Ratio	77.002	12	.000
Linear by Linear Association	6.109	1	.000
N of Valid Classes	220		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.55.

From the table 7 showed that the classification based on respondents' Income per month and awareness about ICT. It can be identify that, based on Income per month majority of male respondents fall under 5001 to 7500 K category to E-Learning, M-Learning, on line Discussion, Mobile Game, Social network chat s followed by 7501 to 10000 K, category on E-Learning, M-Learning, on line Discussion, Mobile Game, Social network chat but compare to female they were found less than Male.



From the table 8 it can be identify that, the Pearson chi-square value is 62.578 and p-value is less than .05, ( $p = 0.00$ ). So we can reject the null hypothesis, and say that, there is significance relationship between the customer's income and their awareness about the ICT devise and its related usage in an Educations.

**Table: 9 Students And Staff Awareness About ICT Environment**

Sno	Detail	Having Idea				No idea				Total
		Staffs	Students	Staffs			Staffs	Students	Staffs	
1	E-Learning	55	100	45	82	0	0	10	18	110
2	M-Leaning	18	30	0	0	37	67	55	100	110
3	E- Portfolios	26	43	6	11	29	53	49	89	110
4	Podcasts	12	20	0	0	43	78	55	100	110
5	Join Online Discussion Group	46	77	22	40	9	16	33	60	110
6	Testing, surveys, job aids and just-in-time (J.I.T.) learning	11	18	6	11	44	80	49	89	110
7	Location-based and contextual learning	8	13	0	0	47	85	55	100	110
8	Social-networked mobile learning	52	87	26	47	3	5	29	53	110
9	Mobile educational gaming	18	30	17	31	37	67	38	69	110
10	Delivering M-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting (podcasting to phones with interactive assessments	8	13	3	5	47	85	52	95	110
11	Cloud computer file storage	8	13	2	4	47	85	53	96	110
12	PDA Smart phone/ I Phone	55	92	33	60	0	0	22	40	110

13	Pocket PC / Tablet	55	92	52	95	0	0	3	5	110
14	satellite TV	48	80	44	80	7	13	11	20	110
15	Intranet/extranet and web-based learning	55	92	51	93	0	0	4	7	110
16	Virtual learning environment (VLE)	24	40	6	11	31	56	49	89	110
17	wikis, blogs, RSS and 3D virtual learning spaces	26	43	9	16	29	53	46	84	110
18	M-learning or mobile learning	32	53	7	13	23	42	48	87	110
19	Video conferencing / Tele conferencing	29	48	16	29	26	47	39	71	110

**Table: 10 Chi-Square Tests**

Staff and Students Awareness of ICT	Value	Df	Asymp. Sig-(2-sided)
Pearson Chi-Square	52.578	9	.002
Likelihood Ratio	58.092	9	.001
Linear by Linear Association	29.063	1	.000
N of Valid Classes	220		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .09. (Data Compiled by using SPSS)

From the table 9 showed the classification based on respondents category like students and staff and awareness about ICT device , It can be identify that, based on students and staff awareness, having idea about ICT devise, majority of respondents fall under staff category, they were found more awareness on E-Learning 100%, satellite TV 80 % and internet, extra net usage 92% , and also it was found most of respondents (both students and staff) did not have enough awareness about Delivering m-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting (podcasting to phones with interactive assessments, Cloud computer file storage Podcasts.

From the table 10 it can be identify that, the Pearson chi-square value is 52.578 and p-value is less than .05, ( $p = 0.060$ ). So we can reject the null hypothesis, and say that, there is significance difference between the students and staff awareness about the ICT related device.

**Table:11 Reason For Not Using Ict**

Sn o	Due To Abstacles and Problem of	Male41		Female34		Total
		Count	%	Count	%	
1	Connectivity and battery life	37	62	34	68	71
2	Meeting required bandwidth for nonstop/fast streaming	42	70	38	76	80

3	Content security or copyright issue from authoring group	29	48	33	66	62
4	Limited memory	18	30	26	52	44
5	Risk of sudden obsolescence	33	55	32	64	65
6	Security	26	43	29	58	55
7	Cost of Investment	37	62	29	58	66
8	Repairing and service problem	43	72	35	70	78
9	Availability of ICT devise and its related software	44	73	37	74	81
	Avg	34	57	33	65	67

**Table 11: Chi-Squar Tests**

<b>Respondents Opinion about not Using of ICT</b>	<b>Value</b>	<b>Df</b>	<b>Asymp. Sig-(2-sided)</b>
Pearson Chi-Square	32.378a	4	.060
Likelihood Ratio	34.002	4	.050
Linear by Linear Association	26.059	1	.000
N of Valid Classes	220		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.55.

From the table 10: Respondents Opinion about not Using of ICT , it was calculated based on except using of normal Cell phone and Computers, internet, E-mail, Tablet phone and then it calculated based on Respondents opinion on other technologies related to Educations and it showed, the reasons for not using of ICT Technologies. It can be identify that, based on Gender Category both male 57 % and female respondents 65 % were found slight difference in not using of ICT device(Total % / No of reasons 9). From the table 11 it can be identify that, the Pearson chi-square value is 32.378 and p-value is greater than .05, (P = 0.060). So we can accept the null hypothesis, and say that, there is no significance difference between the male and female respondents in reasons for not using ICT device.

**Table 9: ANOVA**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig</b>
Delivering M-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting (podcasting to phones with interactive assessments)	Between Groups	1.719	3	.573	1.165	.324
	Within Groups	106.258	216	.492		
	Total	107.977	219			

Voice-based Cell Casting Virtual learning environment (VLE)	Between Groups	32.767	3	10.922	10.559	.000
	Within Groups	223.433	216	1.034		
	Total	256.200	219			
Podcasting to phones with interactive assessments , PDA Smart phone/ I Phone	Between Groups	1.834	3	.611	.933	.426
	Within Groups	141.525	216	.655		
	Total	143.359	219			
M-learning or mobile learning, wikis, blogs, RSS and 3D virtual learning spaces	Between Groups	10.395	3	3.465	5.081	.002
	Within Groups	147.314	216	.682		
	Total	157.709	219			
Satellite TV , Cloud computer file storage	Between Groups	38.044	3	12.681	12.974	.000
	Within Groups	211.133	216	.977		
	Total	249.177	219			

Respondents awareness, it was calculated based on except awareness and using of normal Cell phone and Computers, internet, E-mail, Tablet phone and then it calculated based on other technologies related to Educations and it showed that both aware and un aware about the ICT related technologies and its education environment usage in which most of the respondents were found not knew it with 100% on Testing, surveys, job aids and just-in-time (J.I.T.) learning, Delivering m-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting, podcasting to phones with interactive assessments is the between-groups degrees of freedom, 216 is the within groups degrees of freedom, 1.165, 0.933 and 1.873 is the F ratio from the F column, 0.324, 0.426 and 0.135 is the value in the Sig. column (the p value), respectively. In these above cases, the p value equals 0.324, 0.426 and 0.135 which are greater than the level (.05), so we reject null hypothesis and say that, there is no significance difference between the Respondents category Gender Male and Females awareness level about ICT related Technologies in an educational environment.

Regarding awareness level about Delivering M-Learning to cellular phones using two way SMS messaging and voice-based Cell Casting (podcasting to phones with interactive assessments, Voice-based Cell Casting Virtual learning environment (VLE), Podcasting to phones with interactive assessments , PDA Smart phone/ I Phone credit scores, M-learning or mobile learning, wikis, blogs, RSS and 3D virtual learning spaces, Satellite TV , Cloud computer file storage, 3 is the between-groups degrees of freedom, 216 is the within groups degrees of freedom, 10.559, 5.081 and 12.974 is the F ratio from the F column, 0.000, 0.002 and 0.000 is the value in the Sig.

column (the p value), respectively. In these above cases, the p value equals 0.000, 0.002 and 0.000 which are lesser than the level (0.05), so we can reject null hypothesis and say that, there is significance difference between the respondent's occupation and awareness(Student & Staff) level about credit scores, interest charges and growth benefits.

### Findings

The present study reveals that the 40 % of the students are willing to use Technology in their education and they need to have adequate expertise in technology to become active learners are reported. This will



enhance their ability to solve problems and address system requirements but due to lack of financial support from their family and university curriculum and governments support , Poor technical environment, and higher technical, equipment's costs that were main factors that determine their knowledge and 62 % percentage of the student were identified that they have no awareness about using of the technology due to the their study environment 38 % of the students were identified that they no interest on using technology but just they need to complete their degree and got job. This must be identified at the knowledge in Engineering, Management Sciences, and Commerce during curriculum development and be effectively managed.

### **Recommendations**

This paper draws on results obtained from findings that the students studying Management science and Commerce whom the researcher consider that it is important to design and implement a curriculum that actively promotes the use of systems and ICT technologies that develops such skills Enterprise resource planning ,Accounting Software ERP TALLY, Management Information system , project management Ecommerce .... etc. ,

The Zambian Higher Education institutions may conduct awareness program to higher education students regarding ICT in education and its uses and then they might have arrange special type of training and symposium with collaboration and tie up with foreign universities regarding to this so that Zambian students might have through knowledge on developing technologies.

It identifies he high cost of computer hardware and software; lack of human skills particularly software, hardware specialists and knowledge in ICT, are the major stumbling block on the adoption of ICT in higher education in Zambia. Also, At present the cost of subscribing to the Internet is too high for many of the impoverished higher education in Zambia, regarding this if Zambia higher education official , Policy Makers of the Zambia and Higher education institutions, Universities might concentrate on above said suggestions, if they will do so, no doubt that even in the competitive economic world the Zambia will shine and it will continue to be a leading in developing in IT infra structure in and around the world.

### **Conclusion**

It identifies he high cost of computer hardware and software; lack of human particularly software, hardware specialists and knowledge in ICT, are the major stumbling block o the adoption of ICT in higher education in Zambia. Also, At present the cost of subscribing to the Internet is too high for many of the impoverished higher education in Zambia. In modern society, Zambia needs ICT to aid teaching and learning and educational management. ICT is an instrument for the economic and technological development in the 21st century; therefore, Zambia cannot be survive without having of proper Technology in its Curriculum

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