

Use of ICT for Administration and Management: Case Study, EMU

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ABSTRACT

Information Communication Technology is the most vital specialty in both working and educational environment, and newer drifts in higher educational researches are finding results regarding the usefulness of ICT towards facilitating education and work conditions for intending users. The major significance of this study is centered on the evaluation of ICT uses for the administration and management of educational institution; using EMU as a case study. This study investigated on the major importance of ICT to staff of EMU and also conducted a test to determine if significant difference exists between items and data variables such as age, gender, years of experience, usage of ICT tools, educational level, etc.. Information was collected from respondents via the use of questionnaire. 72 EMU staff was examined according to the various demographics of the study. Critical examination was made of the total data collected for this study by adopting ANOVA and t-test, frequency and percentages.

Findings of this study shows that majority of the EMU staff agreed and strongly agree that ICT can be of pertinent help to them and also that ICT helps their work move smoothly and properly and in a timely manner. The study also goes to prove that male and female of EMU staff have different notions on their opinion on been comfortable when using ICT tools in their daily job. But more than 90% of the staff shows that no significant difference exist between male and female staff of EMU on their various uses of ICT for managing and administering education. Crosstabulations was further done on several significant points of the t-test and ANOVA test of the study, such as on gender and their comfortability when using

ICT tools in their daily jobs, results showed that male held the larger percentage as to the agreement to the subject matter than their female counterparts.

Keywords: Administration, Management Information and Communication Technology

ÖZ

Bilişim İletişim Teknolojisi çalışma ve eğitim ortamının en önemli özelliğidir, ve eğitim alanındaki araştırmalar içerisindeki daha yeni eğilimler BİM'in niyetli kullanıcılar için eğitimi ve çalışma koşullarını kolaylaştırma alanında kullanışsızlığı ile ilgili sonuçlar bulmaktadır. Bu çalışmanın en büyük özelliği, DAÜ'yü örnek olay incelemesi olarak kullanarak BİM'in idare ve eğitim merkezleri yönetiminin gelişimi üzerinde yoğunlaşmasıdır. Bu çalışma BİM'in DAÜ çalışanları için en büyük önemi araştırmış ve maddelerin ve yaş, cinsiyet, yıllık deneyimleri, BİM kullanımı vb veri değişkenlerinin arasında önemli bir farkın olup olmadığını belirlemek için bir test yapmıştır. Bu veriler cevaplayıcılardan anket aracılığıyla toplanmıştır. Çalışmanın çeşitli toplumsal istatistiklerine göre 72 tane DAÜ çalışanı incelendi. Bu çalışma için elde edilen toplam veri ANOVA ve t-test, frekans ve yüzdelerle ciddi bir incelemeden geçti.

Bu çalışma gösteriyor ki çoğu DAÜ çalışanı BİM'in onlar için uygun bir yardımcı olduğunu ve işlerinin rahatlıkla ve düzgün bir şekilde ve zamanında akması için yardımcı olduğunu şiddetle kabul etmişlerdir. Bu çalışma erkek ve kadın DAÜ çalışanlarının günlük işlerinde BİM kullanımı hakkında farklı görüşleri olduğunu da kanıtlamıştır. Ama çalışanların %90'ından fazlası erkek ve kadın çalışanların eğitimi uygulamak ve idare etmek için BİM kullanımı arasında önemli bir farkın olmadığını göstermektedir. Çalışmanın T-test ve ANOVA testlerindeki cinsiyet ve günlük işlerde kullanılan BİM rahatlığı gibi çeşitli önemli noktalarda çapraz tablolama yapılmıştır ve sonuçlar erkek çalışanların kadın meslektaşlarına kıyasla mevzulara uyma konusunda daha büyük bir yüzdeliği oluşturduğunu göstermiştir.

Anahtar Kelimeler: İdare, Bilişim İletişim Teknolojisi

DEDICATION

I dedicate this work to almighty Allah for His mercies and wisdom, to our greatest and most honored prophet Mohammed – May peace and grace from Allah be upon him; I use to succeed all through my studies. Also, dedicate this work to my parents for their total supports all through my studies.

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Chapter 1

INTRODUCTION

Information and Communication Technology (ICT) is a technological mean that enables processes related with designing, saving operation and passing of information, jointly with the interrelated methods, administration and implementation. ICT permits the tracing, saving, processing, gathering and communicating of data. It integrates new technical tools like laptops, facsimiles, mini-electronic gadgets and other telecommunication tools etc. Outdated-technological gadgets, like a filing systems for storing files and documents, manual accent tools, printing and care drawings are also integrated in the “words” Information Technologies. Globally, ICT is seen as a technology which enables us to establish effective and useful communication and aid us in the handling of information now is a vital tool in gathering and disseminating knowledge Soneye (2012). Not considering e-learning alone, ICT tools are largely been adopted for sustaining teaching, administration and management, research activities in institutions and organization of higher learning, such ICT tools include mobile device, discursive, interactive white board, visual literacy, intra – internet and customized software. ICT, especially the internet, is currently broadly adopted as means of interacting, organizing, arrangement and management for researchers and learners of tertiary institutions. ICT requires numerous features which have to do with proper provision of data to the user (Fountain 2001).

Administration as a term refers to the process of adopting human assets and capital in achieving planned goals by institutions and organizations; directing, organizing and appraising programs for the purpose of achieving organizational goals; Soneye (2012), further states that, the major aim of management is to carry out assessment and decisions, most importantly in the accomplishment of organizational plans. The desired information or data of a particular organization is dependent on the decision and assessment made.

Administration and Management is a social procedure that has to do with classifying, preserving, inspiring, directing and combining formally coordinated individual and material assets within an integrated setting distinctively made to achieve preplanned goals and objectives (Soneye 2012). Administrators always implement ICT tools to convey instructions and provide organizational training in an interesting style. Managers and instructors possess advantageous character to such information in this style (Chen, 2012). Mwalongo (2011), discovered that management and administration adopt ICT tools, in preparing organizations and institutions announcements, papers for meetings with clients and students, learners enrollment and registration, and also instructors and staff recruitment. ICT tools also are properly adopted by managers and administrators in decision making, data saving and also online requests of clients and users (Selwood 2004 & Afzaal, 2012).

In time, ICT has altered the way organizations work and how affiliate institutions and how staff communicates with one another and their clients. Organizations are said to become transcend to the technological age according to (Hood and Margetts 2007). The field of information technology in institutions and its effects for management, for administration and for running the affairs of such institutions have

gained a growing awareness from various works in education administration and management. (Frissen et al. 1992). ICT influences communications within organizational settings between staff and administrators and leaders in management of the educational institutions (Snellen 2002). Despite ICTs relevance, it is most likely to be abandoned in the works of education management researches (Pollitt 2003).

Institutional administration especially larger institutions have been a challenging task considering the growing complexity of the contemporary organizational system in the world. As the community needs and wants are modified, the organizational system encompasses innovations. In addition, there is a global technological advancement that has, most often, influenced all parts of the organizational administration system (Rosen 1995). The management of the general records of an institution, such as academic records, admission records, financial records, operational records, enrollment and placement records, staff and student's records, managerial and administrative records are never left out during this modification and innovation.

Each year, upgraded systems and numerous information and communication technology machines are developed (Singh et al. 2012); these new systems and ICT machines provide new opportunities specifically in the administration and management of education in order to ensure that management processes operate in an easier, faster and cheaper way. By this, it is clear that there are some ICT applications that have supported numerous institutional administrations and managements, for example, computers, projectors, scanners, multimedia projectors and filming, digital cameras, photocopiers, radio and TVs, laptops etc (Kawade

2012). Such ICT applications and tools have been adopted to save numerous files and documents of the administration of instructors, learners and other staff members. Educational management and administration adopt numerous applications software in achieving their job administration. Software applications and tools that are mostly adopted by the educational management and administration are Microsoft Office tools and tally (Mwalongo, 2011). Administrators are currently abreast with different types of application softwares that operate information and data, especially databases and spread sheets. Databases specifically support much more in an efficient and effective manner to manage information which many institutions now adopt. Educational institutions have adopted a lot more application ICT tools for administration and management, such as Education Management Information System (EMIS), a semi-system of an educational setting which focuses on collecting, saving, processing, analyzing and distributing information to users (Susmita 2007).

ICT is widely known and used in so many organizations or educational institutions in many countries, and the evidence on the use of ICT in those countries institutional administration, especially in educational management, has been vastly proofed (Singh et al., 2012); they further stated that, in most educational settings, instructors permit their students to discuss and connect with them directly and officially via mail discussion forums or interactive networks like Twitter, Facebook and so forth. ICT is also adopted to upload and download student files, files of applicants, clients, and research works and for submitting and receiving assignments of students, and other mutual users of the same ICT platform. Ghavifekr et al., (2012), states that ICT, for interacting and management of activities and materials, directly or indirectly, develops organizational performance. Also, ICT tools and applications have produced large openings for educational administrations and management to control

their resources by appearing to be the most prevailing supporter towards cost effective, quick and having a good approach in controlling the administration and management of day to day tasks like, transferring, saving, retrieving and processing data (Susmita 2007). Therefore, organizational and institutional administrators and managers have to give immense concentration and awareness to the knowledge and data access on ICT educational tools to every academic and non-academic staff.

Information and communication technology application tools can also be adopted by the management staff in carrying out their day to day activities faster and much more accurately. Management and administrative staff adopt various kinds of ICT tools to keep interactions and connections, operate financial works, save records, process files and documents and collect data (Singh et al., 2012).

This research analyzed the influence of ICT with respect to relevant factors, such as, administration and management of activities within the operations and control of educational settings and systems. The major aim is the adoption and influence of ICT instruments and a general focus on the relationship between ICT and administration and management of institutions with the focus on Eastern Mediterranean University's General Administration and Management. By using information and communication technology tools, many responsibilities can be operated more effectively and efficiently. Also, adopting ICT tools would assist them in keeping record of the academic financial documents like payment slips, audit statements, balance sheets, non-remuneration grants, stock recordings as well as students appraisal reports and cumulative documentations of students' future references (Kawade et al., 2012).

1.1 Problem of Study

A newly technological application tool brings fun and thrill, yet it also brings concerns and uncertainties. As large amount of funds, time and energy is devoted into these ICT tools, they should, therefore, produce a whole lot of administrative, managerial and educational value for staff and instructors who are users of such tools, in order to validate their worth and costs. Information and communication technology has been broadly used as a term. Nonetheless, as it is broadly adopted, it has neither been deeply studied nor deliberated on. For the fact that these technological tools are developing and widely available in the conventional work or environmental setting, it is therefore pertinent to identify the level of use and usefulness of ICT tools in various settings or offices of institutions or organizations, with a broad focus on the Eastern Mediterranean University as this will enable planners and administrators of educational institutions determine the important and necessary technological applications and tools to invest on, for the betterment and the general growth of the organizational performance.

Staff in institutions and organizations are said to be the users of such ICT administrative and managerial application tools as they use such tools for interactions, enrollments, remunerations, record keeping, recording minutes, information distribution, documents uploads and downloads of files and documents. Thus, there is a huge call for the evaluation on their use of various ICT tools in order to determine their skills and usage of such ICT tools and also how helpful it is to their daily work activities and performances. Though ICT usage has developed, several organizations and institutions have not had a wider institutional vision or

techniques on its general usage for their work performance and growth (Cross and Adam 2007).

1.2 Aim of Study

The major focus of this thesis is to investigate the use of information and communication technology (ICT) in the administration and management of the Eastern Mediterranean University, Famagusta Northern Cyprus.

1.3 Research Questions

This study answers the research questions below:

RQ1: Does ICT improve the performance of the management and administration of institutions?

RQ2: How does the organizational staff adapt to the use of ICT for the management and administration of institutions?

RQ3: How frequently is the adoption of ICT tools for institutional management and administration?

1.4 Significance of the Study

This investigative study is important to the point that the results would help Northern Cyprus Ministry of Education, National Education Agencies and foreign bodies in executing their educational plans in accordance with E-administration and management of the universities and higher institutions of learning.

Due to the constant growth of ICT application tools, it is, thus, pertinent to embark on a quantitative examination on its usefulness in the administration and management of educational institutions or organizations. It is important to research on staff attitudes in using the ICT tools for carrying out their daily activities and responsibilities at work.

1.5 Limitation of the Study

The researcher will only focus on EMU administrators and managers/staff in Northern Cyprus, as a case study for this investigation.

1.6 Definition of Key Terms

ADMINISTRATION: is a collective practice relating to recognizing, upholding, inspiring, arranging and joining officially prearranged individuals and material property inside an incorporated structure planned specially to start prearranged objectives (Soneye 2012).

MANAGEMENT: This has to do with planning, organizing, enrollment, or directing, and leading an association to achieve an objective.

INFORMATION AND COMMUNICATION TECHNOLOGY: this concerns technologies that decide the effectiveness and usefulness that interact with and with the gadget that helps in handling information (Soneye 2012).

Chapter 2

LITERATURE REVIEW

This chapter aims majorly on reviews of related researches and similar works that have been carried out concerning the topic of this study being, the use of ICT for administration and management.

2.1 Review of Related Literature

This part breaks down published works of authors that focused on the title of this study, they are thus reviewed below.

Aubrey, (2012) in his study titled “state, adoption and use of ICTs by students and academic staff at Mzuzu University, Malawi”, aimed to find out the recent condition of ICTs at Mzuzu University, decide the stage of approval and the adoption of ICTs by learners and educational workers at Mzuzu institution of higher learning, distinguish different conduct of obtaining internet for equally learners and school staff, create problem effects on learners and educational workers make use of ICTs at Mzuzu institution of higher education. He embraces an analysis process which made a whole model of 431, which incorporated 317 learners, 113 educational personnel and one documentation personnel. Information for the lessons was composed by means of a conference channel and consistent opinion poll that contain both closed and imprecise enquires. The information composed was evaluated by means of SPSS application. In provisions of opinion poll, the learning attained a 97 per cent counter speed for learner and 73 per cent counter speed for educational workers while the

documentation leader of ICT segment was also discussed with. Information compilation was prepared in October 2011. Findings of the revision are that the condition of ICTs at Mzuzu institution of higher education was meager. Regardless of this, approval and application of ICTs was outrageous. ICTs were mostly adopted for educational associated globe dispensation responsibilities, as well as internet right of entry. On the other hand, majority of the participants adopts individual mini hand held computers linked to a dongle, a private GSM handset, or profit-making internet cafés outside university grounds to use the internet. The school net was not used. Hindrance to the acceptance and application of ICTs includes bad net facilities, the inadequate amount of computers, and the expensive price of internet right to use, constant current failure, and the short of related ICT know how, in the midst of others.

Stephen, Maurice & Vicent (2012), in his study titled “Information Communication Technology (ICT) utilization in private universities in Uganda: Exploring strategies to improve, a case of Uganda Christian University” aim exploring strategy for Information and Communication Technology (ICT) uptake development in the midst of workers in personal higher institutions. The lessons used mainly were a measured study method. The information gathering device to support this design was a close finished opinion poll. The things in the opinion poll were graded with a five point rating balance which varies starting from strongly agree toward strongly disagree. To be certain of the procedures, Cronbach’s alpha co-efficient was put together designed for all elements and it definite the dependability of the device that was previously used in the learning since each and every one elements show cases numbers above 0.8. Validity was gained by means of Content Validity Index that was gained as 0.906 more than the suitable limit of 0.7. Information was inspected by means of

three stages. The initial stage had graphic information mostly mean and standard deviation. The next stage was for relational information by means of Pearson's Product Moment linked Co-efficient to set up the connection among factors and ICT use. Thirdly on knowing if connection exists, hypothesis was experienced by means of numerous weakening methods to create the array of informal control of factors on ICT exploitation.

Research of this learning show cased that directorial hold up did not have a firm association and optimistic power on ICT consumption. The outcome for this learning is in deviation with Stephen (2012) who stated that top organization was a tough forecaster of ICT exploitation in the midst of local government personnel.

The next aim was required to discover the power of ICT facilities on ICT exploitation in high level education institute. The outcome exposed that ICT facilities don't have no major power on its exploitation. The outcome of this learning is in accord with Rogers' diffusion hypothesis of improvement which backs this learning. It affirms that representative of a societal scheme get used to the latest modernization to exploit ICT only while they are permitted to have right to the latest modernization and are licensed via a nonstop interaction to use it via choice makers. This, hence, demonstrates that it is not just an issue of having a well-to-do ICT facilities, but as well licensing user to exploit it during experienced improvement as the exposure of the learning via (Stephen 2012).

The relationship outcome of this learning are more in deviation with Sunday et al., (2012) who coordinated a related learning in South Africa to look into features that prejudiced school stage approval of ICTs with the speculation of intended conduct.

The learning exposed that there was a tough affirmative connection among accessible ICT income and ICT exploitation in colleges. On advancing their study by means of several regressions, their learning exposed comparable outcome toward individuals of this learning, finalizing that, at the same time much tough connection be extant, at hand was no major power at all.

The third aim wanted to look into the power of users' awareness on ICT exploitation. As of Pearson's correlation outcome the learning exposed a tough along with important connection and regression examination and as well exposed a major power on ICT exploitation. The outcome of this learning are in accord amid Stewart et al., (2015) who state that in an actual labor setting, emphasizing behaviors purpose are established mainly on act connected fundamentals, fairly than on the member point of view regarding a conduct. This, therefore, implied that users of such sector will think about ICTs if they envision price calculation to their job responsibility. The theory of diffusion of improvement that backed this learning states that individuals will get used to a modernization and make use of it once attempt is made to influence and generate consciousness of them as an attempt to modify their pessimistic insight that fall out in refusal of an modernization. Temporarily, the outcome of this learning verify Stewart et al., (2015) research that also exposed that the superior the usability, the superior the prospect of ICT acceptance and exploitation in the midst of SMEs. Likewise, Sunday et al., (2012) bring into being that simplicity of use gear up qualified worker and administrator to make use of PC and were more expected to make use of computer know-how if they believe that it is useable and can progress their output.

Snellen (2002) in his study titled “the Administration of ICT Utilization for Teaching-Learning in Basic Elementary School in Thailand” focused on studying the perspective and connection of the school management to information technology staffs of ICT exploitation for coaching Learning in fundamental Elementary School. Furthermore also to measure up to perspective of the school administrators and information technology workers for coaching-learning in fundamental elementary school in Thailand alienated by positions, size, and location. The specimen in this exploration includes 191 school administrators and 191 information technology workers in fundamental elementary education in Thailand. The main implements were opinion poll. The arithmetical information was used to evaluate by percentage (%), mean (\bar{X}), standard deviation. (S.D.), t-test, F-test and numerous links (The spearman rank difference method). The implements used in this revision were 6 parts of opinion poll developed by the examiner. The subjects made available their replies on the opinion poll forms. The opinion polls were authenticated for content authenticity by a jury of five specialists from the section of fundamental Elementary at the Ministry of Education, Thailand by means of content ratio (CVR) and authenticated for reliability by means of alpha coefficients. Thirty subjects of each one model cluster were used for trial for each one of the opinion poll. The arithmetical wrap up for the Social Science for Window (SPSS/FW) was used for computing the dependability coefficient of the opinion poll. Chronbach’s Alpha (α) was .92. Internal regularity reliabilities were recognized due to trial on this learning. The information were received from School management and information technology workers in which school list name by Ministry of Education, Thailand by means of a mail analysis to member. Information were received via mail analysis incorporated the approved letter with The Eastern University of Management and

Technology. Analysis was mailed to all School management and information technology workers in Thailand. The analysis incorporated guidelines concerning how to finalize the implement and where and at what time to return the implement, a opinion poll concerning the perspective and association of ICT exploitation for Teaching-Learning in fundamental Elementary School. An embossed envelope amid the analysis name and address was included. Members were asked to bring back the analysis within two weeks of collecting the implement. A reminder was mailed four weeks after the first mailing with the similar directives. It was projected that roughly 191 school management and 191 information technology workers replies are going to be returned.

The outcomes of the study showed that there were 164 deputy executives in a whole high rank and 187 information technology workers. Most school supervisors and information technology workers were in undersized school lesser than 499 learners. The learning of view of school supervisors and information technology workers of ICT exploitation for Teaching-Learning in fundamental Elementary School normally concurred at the reasonable stage of exploiting technology for the scheme. The association of the school management to information technology workers about ICT exploitation for Teaching-Learning had not linked statistically at .01 stages. The spot, site, and mass of school were diverse statistically important at .01 stage.

In addition, the outcome authenticated to W. Attasit, who bring into being that the teacher and management observes the state of the whole exploitation of information technology and communication to be at reasonable stage. When human beings features were in use into account, it was discovered that the performance on the exploitation on the information was at an elevated stage at the same time as the

exploitation of internet and communication and the application of computer in teaching and education were at a reasonable and little stage respectively.

Davis et al., (1989) in their study “Performance management practices, information and communication technology (ICT) adoption and managed performance” revealed the must for directors of free universities to give concentration to performance administration practices and information communication technology (ICT) acceptance in order to accomplish triumphant administered routine. Suggests three theories which are H1., Performance management practices encompass a optimistic affiliation with information and communication technology implementation. H2. Information and communication technology encompass an optimistic liaison by means of administered performance. H3. Performance running practices encompass a positive association with administered routine. The revise is pedestal on review information put together from staffs in Community institution of higher education in Uganda. An uneven stratified purposive case approach was taken up. The opinion poll were disseminated and put together via the researcher. Opinion poll was purposively disseminated to a preferred set of staffs recognized amid the aid of directorial representatives from the superior center and minor stages of executive in organization. In deciding on workers for contribution, attempt was prepared to consist of people from diverse hierarchical. The chosen members mainly comprises of directorial workers and educational workers. A quantity of call backs to the respondents was ready to guarantee utmost reclamation of the opinion polls. This was a cross-sectional review propose by means of a quantitative approach to information compilation and scrutiny. All the assembles were calculated by means of a four-point Likert scale on a range of (“1 ¼ strongly disagree” to “4 ¼ strongly agree. Desai et al., (2008) asserted with the intention of this was a general crisis in

Uganda. Omitted values (maximum 2.5 per cent) were restored by means of the succession means approach in a arithmetical software wrap up for societal scientists (SPSS version 16). Through the inconsistency increase aspect at 1.00 and acceptance figures all well above 0.90, specified that there was no co linearity surrounded by the information shows that the substances were different for the constructs under sizing (Jones 2004). Factor scrutiny was carried out to point out the level to which substances quantify the different variables to set up the discriminator legitimacy (Stallard et al., 2001). Jones (2004) stated optional that it is soothing to cover at slightest 300 cases for factor scrutiny, which this revise satisfied. All substances to facilitate were cross loading on other mechanisms with figures more than 0.5 were not added in the study collectively with those figures had figures lower 0.5. Rubina et al. (2011) disagreed that factor study is acknowledged as “an authoritative and vital method of erect justification” that “is at the heart of the measurement of mental constructs”, a key motive for having carrying out a factor loading in this revise The zero-order Pearson association coefficient was used to inspect the dealings among the revise variables. Hierarchical regression analysis (HTA) inspected the intervention and forecast supremacy of the learning variables.

2.2 Conclusion of Review

In conclusion, this reviews shows to prove a general aim on how ICT is been executed and implemented in several universities and learning institutions in various sections ranging from classrooms, administrative offices, students and staff portals, enrollment and creating measures for both staff and students of the various universities and finally for the general growth of the institutions.

Findings from this study showed that the University's administration generally believes that ICT practices are feasible and should be embraced, and major key issues for its adoption are addressed. A few work discovered that managerial sustenance never had a tough association and optimistic power on ICT use. Likewise, additional study revealed the effortlessness of utilize of ICT encourages expert and director to adopt PCs and they mostly adopted computer tech if seen useful and can improve work rate.

Further result in this examination also makes known that the better the adoption, the greater the opportunity of ICT usage in managing schools of higher learning.

Most research showed that ICT usefulness has an optimistic association combined with controlled presentation in a theory, additionally, it was showed some instructors adopts ICT for education purposes and some for administrative aim. Moreover, instructors had incomplete self-assurance in adopting ICT to help precise ideas or talents to sustain creativeness, and to sustain learners to gain knowledge of difficult conception. Further reviews showed different educational softwares to be adopted and also enlisted reasons for the lack of utilization of such educational software that enhances administrative and managerial operation of ICT use in higher learning.

Finally, result showed that computer and internet were the major ICT tool used to carry out major administrative and managerial works in institutions, like organizations of exams, keeping students grades, communication between staff and also amongst students. Most importantly the safe storing of school documents and

records, calculation of students CGPA, registration of students and also keeping quota of registered and prospective students of a particular university.

At the end it was finally proved that ICT is much more reliable and further enhances school administration and management.

Chapter 3

METHODOLOGY

This section of this thesis work aims at analyzing different research methodologies that will be used in embarking on the investigation of the case study of this title; which focuses on analyzing the use of ICT tools in administration and management: case study EMU. In depth analysis will discuss regarding the research design, data sampling and case study, collection of data, techniques and analysis of data of the study.

3.1 Research Design

This research will focus on adopting a methodological pluralism also called a multi-methodological research so as to implement different methods in analyzing and evaluating the issues in this investigative research. This kind of method purposely integrates several techniques and processes so as to discover the weight, strength, quality, validity and reliability of such methods (Johnson et al., 2007).

Devin Kowalczyk (2015), states that explorative research is a basic research into a theoretical or hypothetical assumption; he further states that this kind of research lays a background for future investigations or studies and to find out if what is being researched on can be described currently by an already existing hypothesis. Descriptive analytic study is the process of exploring unclear issues, and establishing a larger x-ray of is being observed; it is neither as hypothetical as exploratory research, nonetheless, the researcher is never still completely certain about his

findings but rather has an idea (Gelsne 1998). This research work will therefore adopt an explanatory study style which is exploratory in nature and will involve a correlational element.

Quantitative research is usually used for deductive researches, mostly when it involves the investigation of theories and assumptions and also evaluating connections between variable or demographics (Gay and Airasian 2000).

3.2 Research Group

People that have one or numerous features related to a researcher's interest are known to belong to a particular research group (Best 1993). The participants aimed in this research are staff in EMU Famagusta for the fall semester 2015-2016.

3.2.1 Sample

A simple random technique sampling method would be used to collect information from the case study of this research, i.e., EMU administrative and management staff. This process or pattern should maintain an impartial or balanced representation of the cluster when choosing the research participants. Gay (2000), states that a random sample method utilizes a distinct approach to carryout descriptive evaluation of a sample. Staff were randomly sampled in their various work stations (offices) and was done during the hours of work to gather information needed for the investigation of this study. Furthermore, a purposive sampling method would be adopted in order to get proper and accurate responses from the sampled participants. 72 sets of questionnaires were issued to respondents and the questionnaire contains 18 questions that cover the total areas related to the research questions. Participants for this research work are made up of 72 staff of EMU that have work responsibilities in all areas of academics such as, faculties and schools, institutes, boards.

Administrative units and services which includes also, registrar’s office, international office, students services office, alumni directorate social and cultural centers, students clubs, social media units, transportation offices, security department, library, post office, bank and ATM, dormitories and accommodation, canteens and cafeterias, sports complex, rectors office, senates and university executive board. They were all selected in a random manner.

Table 1: Data Variables

		Frequency	Percent
Gender	Male	51	45.1
	Female	21	18.6
	Total	72	100
Age	23-30	2	1.8
	31-40	17	15.0
	41 and older	53	46.9
	Total	72	100
Year of administrative experience	1	5	4.4
	2	4	3.5
	3	6	5.3
	4 And Higher	57	50.4
	Total	72	100
Educational level	Bachelors	16	14.2
	Masters	13	11.5
	Doctorate	41	36.3
	Total	72	100
Usage of ICT tools	Regularly	66	58.4
	Sometimes	6	5.3
	Rarely	-	-
	Don't use	-	-
	Total	72	100
Administrative position	Coordinator	11	9.7
	Vice chair	7	6.2
	Vice dean	10	8.8
	Vice director	5	4.4
	Chair	16	14.2
	Dean	5	4.4
	Director	15	13.3
	Vice rector	3	2.7
	Total	72	100
ICT tools use at work	Laptops and Computers	19	16.8
	Internet	33	29.2
	Telephone	10	8.8
	Interactive whiteboard and others	10	8.8
	Total		
		72	100

Table 1 shows that 51 of the participants are male staff having 45.1% and 21 are female having 18.6% of the total participants for the study. The ages of the participants showed that staff in the age range of 22-30 are 2 and just have 1.8% of the total participants, staff with age range of 31-40 are 17 and are 15.0% of the total age population of the study, while staff within the age range of 41 and above are 53 and are 46.9% of the study participants. The years of administrative experience of staff showed that staff on the year 1 level are 5 which are 4.4% of the total participants' years of experience, year 2 level are 4 which are 3.5% of the total participants' years of experiences, year 3 level are 6 which 5.3% of the total participants' years of experiences, while the year level 4 and above have 57 participants which are 50.4% of the total participants years of experiences. The educational level of the staff shows that 16 of them which are 14.2% possessed a Bachelor degree, 13 of the staff also which are 11.5% possessed a Master degree as well, while 41 of the total staff participants which are 36.3% possessed a Doctorate degree. On the usage of ICT tools, 66 staff which is 58.4% showed that they regularly use ICT tools for work purposes and 6 of the staff which are 5.3% agreed to sometimes use ICT tools for work purpose. One their various administrative positions of the staff, the study consisted of 11 coordinators which are 9.7%, vice chairs are 7 which are 6.2%, vice deans are 10 which are 8.8%, vice directors are 5 which are 4.4%, chairs are 16 which are 14.2% deans are 5 which are 4.4%, directors are 15 which are 13.3%, vice rectors are 3 which are 2.7%. Several ICT tools that are used at work are laptop and computer and 19 staff which are 16.8% uses it, 33 staff uses internet for work purposes which is about 29.2%, telephone and interactive whiteboard are 10 and 10 which are 8.8% and 8.8% respectively for the total percentage of ICT tools used at work.

3.3 Instrument for Data Collection and Techniques

Quantitative techniques are used for the purpose of this study to ensure the gathering of data from the population of staff of EMU, Famagusta North Cyprus through a questionnaire. The questionnaire for this research was self-developed and seriously scrutinized by Asst. Prof. Dr. Fahme Dabaj to suit the purpose and delimitation of this research, and most importantly to cover the whole relevant areas of the 3 research questions of the study. Questionnaires were shared to the respondents of this study for the purpose of gathering information pertinent for the research aim. A total of 72 questionnaires were given to sampled group, when gathering data. There are two sections of the questionnaire, where the first section is made up of demographics and the section two had 18 structured questions that connect to the whole research questions for the study. This validated and made the research reliable in analyzing the important factors meant for evaluation throughout the research.

5 point rating scale was placed for the 18 questions in the other part of the questionnaire which are: Strongly Agreed, Agreed, Neutral, Strongly Disagreed and Disagreed so as to quantify and qualify research participants' responses. Explanatory studies generate easy reviews/summaries, relating to the samples and regarding the inspections that have been done; such reviews could either be quantitative or simple visual graphs that are easy to understand.

3.4 Data Analysis

Qualitative description was used to show the whole analysis of the data, by obtaining the significant point rate, P and T value figure, and mean point. The T-test was used for data variables of two levels such as gender. ANOVA was used to weigh up data

variables which has data variables, for example years of experience and age groups for the study.

Chapter 4

FINDINGS AND DISCUSSIONS

This part of this research study concentrates on evaluating and interpreting responses from participants regarding the use of ICT for work purposes by EMU staff in management and administrative work in institutions, by determining their significant differences, general frequency and percentage usage and cross tabulation based on significance.

4.1 General level of ICT Usage by EMU staff for educational management and administration

Table 2 below, analyzes staff level of usage of ICT for educational and administrative purposes, based on frequencies and general percentages.

Table 2: General usage of ICT by EMU Staff

		SD		D		N		A		SA	
		n	%	n	%	n	%	n	%	n	%
Q8	I feel more comfortable when using ICT tools in my daily job	1	.9	3	2.7	3	2.7	23	20.4	42	37.2
Q9	I feel frightened by using new ICT tools	19	16.8	28	24.8	8	7.1	12	10.6	5	4.4
Q10	I get used quickly with any new ICT tools	-	-	7	6.2	10	8.8	38	33.6	17	15.0
Q11	ICT enable me to communicate with my superiors, colleagues, subordinates or students during working hours	-	-	-	-	-	-	27	23.9	45	39.8
Q12	ICT enable me to gather data and information from students and work	-	-	-	-	5	4.4	28	24.8	39	34.5

	colleagues for my work purpose											
Q13	ICT enable to manipulate, analyze, evaluate, calculate and process students/staff and general administrative data	-	-	1	.9	4	3.5	28	24.8	39	34.5	
Q14	ICT enable me in making accurate and decisive decision in my work/place	-	-	1	.9	12	10.6	36	31.9	23	20.4	
Q15	ICT helps me in my daily operations at work/lecture	-	-	-	-	3	2.7	37	32.7	32	28.3	
Q16	ICT over time has improved the quality and nature of my work/lecture throughout my working days	-	-	1	.9	7	6.2	36	31.9	28	24.8	
Q17	ICT helps in getting my job done in a proper and timely manner	-	-	2	1.8	6	5.3	33	29.2	31	27.4	
Q18	ICT enable me in accessing data relevant for my job	-	-	-	-	2	1.8	31	27.4	39	34.5	
Q19	ICT enables me to make reports regarding my work/students and communicate it to the concerned individual	-	-	-	-	6	5.3	28	24.8	38	33.6	
Q20	ICT enables me to make reports regarding my work/students and communicate it to the concerned individual	-	-	2	1.8	11	9.7	36	31.9	23	20.4	
Q21	ICT ensure the security and safety of classified data and information relevant to my job and teaching process	-	-	1	.9	17	15.0	39	34.5	15	13.3	
Q22	Integration of newer ICT tools into teaching and	-	-	1	.9	12	10.6	32	28.3	27	23.9	

	administration leads to broader and wider performance during work										
Q23	New ICT tool usage makes work process interesting and exciting	-	-	1	.9	15	13.3	39	34.5	17	15.0
Q24	ICT tools growth will ensure a greater and quality improvement in work performance and teaching process in future	-	-	1	.9	9	8.0	39	34.5	23	20.4
Q25	ICT tools provide feedbacks guidance to user during its operations and usage for work purposes	-	-	1	.9	9	8.0	48	42.5	14	12.4

Measurement scale: strongly agree SD, agree A, neutral N, disagree D, strongly disagree SD. N=72, %=100

The table above shows that 65% of the staff strongly agreed and agreed to be comfortable using ICT in doing their daily work, while 2.7% remain undecided and 5% disagree to be using ICT for job purposes. Also, 69% of the staff proves to not be afraid of using new ICT tools for work purposes, 7.1% appears not to be decisive on being afraid of using new ICT tools, while 15% proved to be afraid of using new ICT tools. 52% of the staff agreed and strongly agreed that they quickly get used to new ICT tool, 8.8% remained neutral about it while 6.2% disagreed that they quickly get used to new ICT tools. Almost 100% of the staff agreed and strongly agreed that ICT enable them to interact with work mate, students, subordinate and as well as their superior during work. 61% of the staff agreed and strongly agreed that ICT enable them to collect information from work mates and students for work purposes, while 5% of the staff are neutral on their decision on the use of ICT for information collections. 64% of the staff strongly agreed and agreed that ICT help them to examine, process, calculate students, staff and the general managerial data of the

institution, while 3.5% of the staff are undecided on the issue as well as 0.9% of them disagreed on the same issue. 55% of the staff agreed and strongly agree that ICT help them to choose proper and articulate options during work, while 10.6% of the staff are neutral on the issue and 0.9% of the staff also disagreed on the same issue also. 59% of the staff agreed and strongly agreed that ICT enhances their nature and work quality via all work periods, while 6.2% remain indecisive on the issue, 0.9% disagreed on the issue. 64% of the staff strongly agreed and agreed that ICT assists them in their daily work activities at work or lecture hall, 2.7% of the staff remained indecisive on the subject. 59% of the staff strongly agreed and agreed that ICT assists them in getting works done in a good way and also done on time, 5.3% of the staff are neutral on this issue, while 1.8% of the staff disagreed on the issue.

68% of the staff agreed and strongly agreed that ICT helps them in accessing information useful for their work, 1.8% of them remained neutral on the subject matter. 60% of the staff agreed and strongly agreed that ICT helps them to make reports concerning their work and their students and interact it to the concerned person, 5.3% of the staff had neutral idea on the issue. 53% of the staff agreed and strongly agreed that ICT ensure the security and safety of classified information important to their job and work process, while 15% of them were indecisive and the other 0.9% disagreed on the subject matter. 54% of the staff agreed and strongly agreed that integration of newer ICT tools into teaching and administration leads to broader and wider performance during work, 10.6% of them are neutral on the subject matter and 0.9% of them disagreed on the issue. 63% of the staff agreed and strongly agreed that new ICT tool usage makes work process interesting and exciting, while 13.3% of the staff remained neutral on the subject matter and 0.9% disagreed on the issue. 57% of the staff agreed and strongly agreed that ICT tools

growth will ensure a greater and quality improvement in work performance and teaching process in future, while 8% of the staff remained neutral on the issue and 0.9% disagreed on the subject matter. 59% of the staff agreed and strongly agreed that ICT tools provide feedbacks guidance to user during its operations and usage for work purposes, 8% of the staff were indecisive on the issue and 0.9% of the staff disagreed on the issue.

In discussion, it can be generally observed that over 80% of the staff agreed and strongly agreed that ICT can be of useful assistance to them and also that ICT enables their work go properly and in a timely manner. Majority of the staff also agrees that they can handle newer ICT tools properly with fear, and can adopt ICT to evaluate, criticize and manipulate information of their colleagues and students. And no staff ever disagreed on the usefulness of ICT for work purposes.

4.2 T-test and ANOVA Examination of Variables that are Independent and Items of the Questionnaire

Table 3 analyzes the T-test variable of the (Gender) and ANOVA variables of (Age, Years of experience, Usage of ICT, Educational level, Administrative positions, ICT tools used). This analysis was based on getting the significant differences between variables of questionnaire item.

Table 3: T-test and ANOVA (Significance)

		t-test	ANOVA					
		Q2	Q1	Q3	Q4	Q5	Q6	Q7
Q8	I feel more comfortable when using ICT tools in my daily. job	.020	.615	.510	.108	.846	.992	.465
Q9	I feel frightened by using new ICT tools.	.102	.686	.933	.181	.244	.725	.021
Q10	I get used quickly with any new ICT tools.	.077	.314	.579	.059	.678	.512	.030

Q11	ICT enable me to communicate with my superiors, colleagues, subordinates or students during working hours.	.948	.922	.133	.452	.235	.278	.127
Q12	ICT enable me to gather data and information from students and work colleagues for my work purpose.	.708	.484	.082	.541	.076	.375	.053
Q13	ICT enable to manipulate, analyze, evaluate, calculate and process students/staff and general administrative data.	.811	.105	.084	.804	.598	.240	.016
Q14	ICT enable me in making accurate and decisive decision in my work/place.	.568	.202	.729	.008	.986	.047	.028
Q15	ICT helps me in my daily operations at work/lecture.	.253	.320	.441	.337	.413	.233	.072
Q16	ICT over time has improved the quality and nature of my work/lecture throughout my working days.	.865	.880	.455	.592	.397	.107	.026
Q17	ICT helps in getting my job done in a proper and timely manner.	.696	.041	.615	.161	.265	.758	.000
Q18	ICT enable me in accessing data relevant for my job.	.307	.011	.806	.018	.980	.716	.111
Q19	ICT enables me to make reports regarding my work/students and communicate it to the concerned individual.	.143	.816	.314	.384	.639	.502	.002
Q20	ICT ensures high performance during my daily work activities.	.259	.979	.942	.135	.554	.092	.136
Q21	ICT ensure the security and safety of classified data and information relevant to my job and teaching process.	.507	.537	.806	.833	.873	.021	.692
Q22	Integration of newer ict tools into teaching and administration leads to broader and wider performance during work.	.196	.294	.425	.051	.574	.337	.243
Q23	New ICT tool usage makes work process interesting and exciting.	.470	.542	.021	.087	.979	.676	.553
Q24	ICT tools growth will ensure a greater and quality improvement in work performance and teaching process in future.	.578	.185	.853	.264	.885	.366	.220
Q25	ICT tools provide feedbacks guidance to user during its operations and usage for work purposes.	.433	.080	.791	.343	.709	.848	.864

Significant point = $p < 0.05$.

Table 3 above showed the indication regarding to T-test and ANOVA comparison with questionnaire items regarding usefulness and use of ICT for administrative and managerial purposes.

The significant level point was set for 0.05 p value point, and for the gender analysis, using t-test(Q2), Q8 with p value 0.020, showed that staff exhibited a significant differences in their opinion regarding been comfortable when adopting ICT tools in their daily job. This statistically means that male and female of EMU staff have different notions on their opinion on been comfortable when using ICT tools in their daily job. But more than 90% of the staff shows that no significant difference exist between male and female staff of EMU on their various uses of ICT for managing and administering education.

The significant level point was set also 0.05 p value point, and for the (Age, Years of experience, Administrative positions, ICT tools used, Educational level, Usage of ICT) analysis, using ANOVA (Q1, Q3, Q4, Q5, Q6, Q7), Q9 with 0.021, showed that significant difference exist between EMU staff usage of ICT and how they feel frightened using new ICT tools. Also Q10 with 0.030, showed that significant difference exists between EMU staff usage of ICT tools and how they get used quickly with any new ICT tools. Q13 with 0.016 shows to proof also that a great significant different exists between ICT usage in comparison on how ICT enables them as a staff to interact with their various superiors and subordinate or students during working hours. Q14 with 0.008, 0.047 and 0.028 shows that a great significant difference exist based on EMU staff administrative positions, educational level and usage of ICT respectively in comparison on how it enables them in making accurate and decisive decision in their various work place. Q16 with 0.026 shows that significant difference exists based on the usage of ICT by EMU staff in comparison with how ICT has helped in improving the quality and nature of their work. Q17 with 0.041 and 0.000 shows that a great significant difference exist based on age differences and usage of ICT respectively in comparison with ICT helping the

staff members in getting job done in a proper and timely manner. Q18 with 0.011 and 0.018 shows that significant difference exist based on age and ICT tool used respectively in comparison with how ICT enables them to accessing data relevant for their job. Q19 with 0.002 also shows that significant difference exist between EMU staff usage of ICT in comparison how ICT enables them make reports regarding their work/students and communicate it to the concerned individual. Q21 with 0.021 shows that significant difference exist based on educational level of staff in comparison with the security and safety of classified data and information relevant to their job and teaching process. While Q23 with 0.021 shows that a great significant difference exist between EMU staff based on their different years of experiences and the comparison of how new ICT tools usage makes works pcess more interesting and exciting.

4.2.1 Cross tabulations

This section shows the cross tabulation based on the significant results gotten from the t-test and ANOVA results in table 3 above. Each cross tabulation was against the questionnaire items with the p value level having 0.05 significant level points.

Table 4: Cross tabulation of gender and the questionnaire item

		I FEEL MORE COMFORTABLE WHEN USING ICT TOOLS IN MY DAILY JOB					Total
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
GENDER	Male	33	15	2	1	0	51
	Female	9	8	1	2	1	21
	Total	42	23	3	3	1	72

Table 4 above showed that, 48 (60%) staff which are male strongly agreed and agreed that they feel comfortable when they use ICT tools in their daily job, 2 (3%)

were neutral on the decision and 1 (1%) disagreed that they feel comfortable using ICT tools for their daily job. 15 (40%) of the female staff agreed that they feel comfortable using ICT for their daily job, while 3 (2%) of the female staff remain indecisive on the matter and 4 (6%) of the female staff disagreed that they feel more comfortable using ICT tools in their daily job.

Table 5: Crosstabulation of usage of ICT tools and the questionnaire item

		I FEEL FRIGHTENED BY USING NEW ICT TOOLS					Total
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
USAGE OF ICT TOOLS	Regularly	4	9	8	26	19	66
	Sometimes	1	3	0	2	0	6
	Total	5	12	8	28	19	72

Table 5 above showed that 45 (69%) of the staff that uses ICT tools regularly disagreed that they feel frightened by using new ICT tools, 8 (7%) of the staff were neutral on the issue and 13 (15%) of the staff strongly agree that they feel frightened when they use new ICT tools on a regular basis. 4 staff who sometimes use ICT tools also agreed that they feel frightened using ICT tools for the first time, while 2 staff also disagreed to be frightened when using new ICT tools sometimes.

Table 6: Crosstabulation of usage of ICT tools and the questionnaire item

		I GET USED QUICKLY WITH ANY NEW ICT TOOLS				Total
		Strongly agree	Agree	Neutral	Disagree	
USAGE OF ICT TOOLS	Regularly	17	36	7	6	66
	Sometimes	0	2	3	1	6
	Total	17	38	10	7	72

Table 6 above showed that 53 (80%) of the staff that regularly use ICT tool strongly agree that they get used quickly with the use of any new ICT tools. 7 staff remained neutral on the issue and 6 staff disagreed that they get used quickly when they use any new ICT tool in a regular manner. 2 other staff agree to sometimes get used to ICT tool use and 3 staff remained neutral on the decision and 1 disagreed on the opinion.

Table 7: Crosstabulation of ICT tools used at work and the questionnaire item

		ICT ENABLE ME IN MAKING ACCURATE AND DECISIVE DECISION IN MY WORK/PLACE				Total
		Strongly agree	Agree	Neutral	Disagree	
ICT TOOLS USE AT WORK	Laptops and computers	4	11	4	0	19
	Internet	15	13	5	0	33
	Telephone	0	6	3	1	10
	Interactive-whiteboard and others	4	6	0	0	10
	Total	23	36	12	1	72

Table 7 above shows that 15 (85%) of the EMU staff strongly agree that they use laptops and computers and it enables them to make accurate and decisive decision in their work place, 4 staff remained neutral on the subject matter. Also, 28 (87%) of the staff agreed that they use internet for work and it enables them in making accurate and decisive decision in their various work place, 5 of the staff gave a neutral opinion. 6 staff agreed that they use telephone for work purposes and it is helpful in allowing them make accurate decision while 1 disagreed. 10 of the staff uses interactive whiteboard for work purposes and it enable them make accurate decisions also.

Table 8: Crosstabulation of administrative position and the questionnaire item

		ICT ENABLE ME IN MAKING ACCURATE AND DECISIVE DECISION IN MY WORK/PLACE				Total
		Strongly agree	Agree	Neutral	Disagree	
Administrative Position	Coordinator	5	5	1	0	11
	Vice chair	1	3	3	0	7
	Vice dean	5	5	0	0	10
	Vice director	1	1	2	1	5
	Chair	6	9	1	0	16
	Dean	1	4	0	0	5
	Director	4	7	4	0	15
	Vice rector	0	2	1	0	3
	Total	23	36	12	1	72

Table 8 above shows that 10 (95%) of the coordinator in EMU agreed that ICT enable them in making accurate and decisive decision. 1 staff remained neutral on the opinion. 4 (55%) of the vice chair in EMU strongly agreed that ICT enable them in making accurate and decisive decision in their various workplaces, while 3 vice chairs were indecisive on the subject matter. 10 (100%) of the vice dean wholly agreed that ICT enables them in making accurate and decisive decision in their work place. 2 vice director agreed on the same subject matter while 2 vice director remained neutral on their decision and 1 vice director disagreed on the subject matter. 15 (97%) of the chair in EMU strongly agreed that ICT enables them in making accurate and decisive decision in their work places while 1 chair staff has a neutral opinion on the subject. 5 deans strongly agree that ICT enable them in making accurate and decisive decision. 13 (93%) of the directors strongly agreed and 4 has a neutral opinion on the subject matter. 2 vice rectors agreed that ICT enables

them to make an accurate and decisive decision and 1 rector also has a neutral view regarding the subject matter.

Table 9: Crosstabulation of usage of ICT tools and the questionnaire item

		ICT ENABLE ME IN MAKING ACCURATE AND DECISIVE DECISION IN MY WORK/PLACE				Total
		Strongly agree	Agree	Neutral	Disagree	
USAGE OF ICT TOOLS	Regularly	22	35	8	1	66
	Sometimes	1	1	4	0	6
	Total	23	36	12	1	72

In table 9 above it shows that 57(87%) of the staff agreed that ICT enable them to make accurate decisions whenever they regularly use such ICT tools for work purposes, while 8 staff has neutral opinion on the issue and 1 disagreed on the subject matter. 2 staff which sometimes uses ICT tools agreed that it enable them make accurate decision and decisive decision in their work place, while 4 remained neutral on the subject matter.

Table 10: Crosstabulation of usage of ICT tools and the questionnaire item

		ICT OVER TIME HAS IMPROVED THE QUALITY AND NATURE OF MY WORK/LECTURE THROUGHOUT MY WORKING DAYS				Total
		Strongly agree	Agree	Neutral	Disagree	
USAGE OF ICT TOOLS	Regularly	28	32	5	1	66
	Sometimes	0	4	2	0	6
	Total	28	36	7	1	72

In table 10 above 60 staff agreed to regularly use ICT tools for work purposes and it has improved their quality and nature of their work. 5 staff remained neutral on their subject matter and 1 disagreed. 4 staff also agreed that they sometimes use ICT tools for work purposes and 2 staff where just left with neutral responses.

Table 11: Crosstabulation of age and the questionnaire item

	ICT HELPS IN GETTING MY JOB DONE IN A PROPER AND TIMELY MANNER				Total
	Strongly agree	Agree	Neutral	Disagree	
AGE 22-30	0	1	0	1	2
31-40	8	7	2	0	17
41 AND OLDER	23	25	4	1	53
Total	31	33	6	2	72

Table 11 above shows that 1 staff in the age range of 22-30 agreed that ICT helps in getting his job done in a proper and timely manner and 1 also disagreed. 15 (89%) of the staff in the age range of 31-40 agreed that ICT helps them in getting their job done in a proper and timely manner and 2 staff in that same age range have neutral responses on the issue. 48 (80%) of the staff in the age range of 41 and older agreed that ICT helps them in getting their job done in timely manner, while 4 staff have neutral opinion and 1 staff disagreed.

Table 12: Crosstabulation of usage of ICT tools and the questionnaire item

		ICT HELPS IN GETTING MY JOB DONE IN A PROPER AND TIMELY MANNER				Total
		Strongly agree	Agree	Neutral	Disagree	
USAGE OF ICT TOOLS	Regularly	30	32	4	0	66
	Sometimes	1	1	2	2	6
	Total	31	33	6	2	72

Table 12 above shows that 62 (98%) of the staff agreed to regularly use ICT tools in helping to get their job done in a timely manner. And 4 staff has a neutral opinion on the subject. 2 staff agreed to sometimes use ICT tools for getting their job done in a timely manner, while 2 have a neutral opinion and the remaining 2 disagreed on the subject matter.

Table 13: Crosstabulation of age and the questionnaire item

		ICT ENABLE ME IN ACCESSING DATA RELEVANT FOR MY JOB			Total
		Strongly agree	Agree	Neutral	
AGE	22-30	0	1	1	2
	31-40	12	5	0	17
	41 AND OLDER	27	25	1	53
Total		39	31	2	72

In table 13 above, 1 staff in the age range of 22-30 agree to that ICT enable him access data that are relevant to his job, and 1 staff has a neutral opinion on the subject matter. 17 (100%) of the staff in the age range of 31-40 all agree that ICT enable them in accessing data relevant for their job. 52 (98%) of the staff in the age range of 41 and above have agree that ICT enable them in accessing data relevant for their job and 1 staff has a neutral idea on the subject matter.

Table 14: Crosstabulation of age and the questionnaire item

		NEW ICT TOOL USAGE MAKES WORK PROCESS INTERESTING AND EXCITING				Total
		Strongly agree	Agree	Neutral	Disagree	
YEARS OF ADMINISTRATION EXPERIENCE	1	3	2	0	0	5
	2	1	0	2	1	4
	3	0	4	2	0	6
	4 AND HIGHER	13	33	11	0	57
Total		17	39	15	1	72

In table 14 above 5 staff that has 1 year administration experience agreed that new ICT usage makes work process interesting and exciting. 1 staff who has 2 years admin experience strongly agreed that new ICT usage makes work process interesting and exciting while 2 have a neutral opinion on the subject matter and 1 disagreed on the same issue. 4 staff with 3 years administration experience agreed that new ICT usage makes work process interesting and exciting, while 2 staff have neutral view on the subject matter also. 46 (60%) of the staff with 4 years and above administration experience agreed that new ICT usage makes work process interesting and exciting and 11 staff with the same administrative year of experience have neutral view on the subject matter.

Chapter 5

CONCLUSION

This particular research was conducted to investigate the use of ICT tools for the administration and management of education, with a case of the administrative body of EMU staff Famagusta, North Cyprus. The information for this study was gotten by survey method, which produced a broader view on the title of this topic. This study also went further in discovering the significant differences on data variables as to their relationship with the questionnaire item. 72 EMU staff from all offices of the institution are the participants of the study.

The results of this study goes to prove that a majority of the staff of EMU agreed and strongly agree that ICT can be of pertinent help to them and also that ICT helps their work move smoothly and properly and in a timely manner. Over 85% of the staff agrees that the introduction of newer ICT tools would not be a problem to their usage of such tool. Also, that no staff ever disagreed the importance of ICT for work purpose.

The findings also show that, male and female of EMU staff have different notions on their opinion on been comfortable when using ICT tools in their daily job. But more than 90% of the staff shows that no significant difference exist between male and female staff of EMU on their various uses of ICT for managing and administering education.

Also, findings further showed that significant difference exist between EMU staff usage of ICT and how they feel frightened using new ICT tools, and also exist between EMU staff based on their different years of experiences and the comparison of how new ICT tools usage makes works pcess more interesting and exciting.

Crosstabulations was further done on several significant points of the t-test and ANOVA test of the study, such as on gender and their comfortability when using ICT tools in their daily jobs, results showed that male held the larger paercentage as to the agrrement to the subject matter than their female counterparts. Other crosstabulations that was done on the work were usage of ICT tools either on a regular basis or sometimes; result showed that 69% of the staff who regularly use ICT disagreed that they feel frieghtened on the useage of new ICT tools. On the year of experience comepared to the new ICT tool usage, few staff with 1 year of experience agreed that new ICT usage makes work process interesting and exciting while more than average of the staff with higher level experience agreed that new ICT usage makes work process interesting and exciting.

This research work finally concludes that, EMU staff has great receptive skills as regards the handling and operating ICT tools especially newer tools for the purpose of proper work ethic and conduct. And also shows that ICT has been beneficial to the general staff of the institution, and exposes the great assist which ICT has been to the operation of academic, administrative and managerial activities of the institutions by staff.

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APPENDIX

Appendix A: Questionnaire

Dear Respondent,

My name is Said Gedwar, a master’s student in the department of **Information and Communication Technology (ICT)** in Education at Eastern Mediterranean University, Famagusta. The scope of this work focuses on investigating the use of ICT in the management and administration: using EMU as a case study. The data gathered via this survey will form a background for the scientific analysis and will not be used for any other purpose beyond this research.

Age: a) 22-30 b) 31-40 c) 41 and older

Gender: a) Male b) Female

Years of Administration Experience: a) 1 b) 2 c) 3 d) 4 and higher

ICT tools use at work (underline the appropriate one(s)):

Laptops & Computer, Internet, Telephone, interactive-whiteboard, Intranet, Electronic Application Forms, Online Registration, Portals/LMS/CMS, LCDs, Radio & TV, Social Media, Electronic Memo, Printer, Scanner, Photocopy, Speakers, e-book, Projector.

Education Level: a) Bachelor b) Masters c) Doctorate

Administrative Position (please specify):

.....

Usage of ICT Tools: a) Regularly b) Sometimes c) Rarely d) Don’t use.

Admin/Management Certificates (if available):

.....

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I feel more comfortable when using ICT tools in my daily job					
2	I feel frightened by using new ICT tools					
3	I get used quickly with any new ICT tool.					
4	ICT enable me to communicate with my superiors, colleagues, subordinates, or students during working hours.					
5	ICT enable me to gather data and information from students and work colleagues for my work purposes.					
6	ICT enable to manipulate, analyze, evaluate, calculate and process students’/staff and general administrative data.					
7	ICT enable me in making accurate and decisive decision in my work/lecture.					
8	ICT helps me in my daily operations at					

	work/lecture.					
9	ICT over time has improved the quality and nature of my work/lecture throughout my working days.					
10	ICT helps in getting my job done in a proper and timely manner.					
11	ICT enable me in accessing data relevant for my job.					
12	ICT enables me to make reports regarding my work/students and communicate it to the concerned individual.					
13	ICT ensures high performance during my daily work activities.					
14	ICT ensure the security and safety of classified data and information relevant to my job and teaching process.					
15	Integration of newer ICT tools into teaching and administration leads to broader and wider performance during work.					
16	New ICT tool usage makes work process interesting and exciting.					
17	ICT tools growth will ensure a greater and quality improvement in work performance and teaching process in future.					
18	ICT tools provide feedbacks guidance to user during its operations and usage for work purposes.					

Değerli Katılımcı,

Benim adım **Said Gedwar**, Doğu Akdeniz Üniversitesi, Gazimağusa, **Bilgi ve İletişim Teknolojileri (BİT)** bölümü yüksek lisans öğrencisiyim. Bu çalışma BİT in yönetme ve uygulama alanlarındaki kullanımını araştırmayı amaçlıyor: DAÜ vaka incelemesi olarak belirlenmiştir. Bu anket yoluyla elde edilen bilgiler bilimsel analiz için bir zemin hazırlayacak ve bilgiler bu araştırma harici hiç bir farklı amaçla kullanılmayacaktır.

Yaş: a) 22-30 b) 31-40 c) 41 ve üzeri

Cinsiyet: a) Erkek b) Kadın

Yönetim Deneyimi Yılı: a) 1 b) 2 c) 3 d) 4 ve üzeri

Çalışmada BİT araçları kullanımı (uygun olanın altını çiziniz(s)):

Dizüstü bilgisayarlar & Bilgisayar, İnternet, Telefon, Enteraktif yazı tahtaları, İnternet, Elektronik Uygulama Formları, Online Kayıt, Portallar/LMS/CMS, LCDler, Radyo & TV, Sosyal Medya, Elektronik memo, Yazıcı, Tarayıcı, Fotokopi, Hoparlör, e-kitap, Projektör.

Eğitim Seviyesi: a) Lisans b) Yüksek Lisans c) Doktora

İdari Konum (lütfen belirtiniz):

.....

BİT araçları kullanımı: a) Sıklıkla b) Bazen c) Nadiren d) Hiç kullanmam.

Yönetici/ Yönetim Belgesi(eğer mevcutsa):

.....

		Kesinlikle Katılıyorum	Katılıyorum	Nötr	Katılmıyorum	Kesinlikle Katılmıyorum
1	Günlük iş hayatımda BİT araçlarını kullanınca daha rahat hissediyorum.					
2	Yeni BİT araçlarını kullanınca ürkmüş hissediyorum.					
3	Herhangi bir yeni BİT aracına çabuk alışırım.					
4	Çalışma saatlerinde, BİT araçları üstlerimle, meslektaşlarımla, astlarımla ya da öğrencilerle iletişim kurmama olanak sağlar.					
5	BİT, öğrencilerden ve meslektaşlarımdan iş amaçlı bilgi ve veri toplamamda bana olanak sağlar.					
6	BİT manipüle etmeye, analiz etmeye, değerlendirmeye, hesaplamaya ayrıca öğrenci/personel ve genel yönetim					

	verilerini işlemeye olanak sağlar.					
7	BİT, derslerimde ya da işimde kesin ve doğru kararlar vermeme olanak sağlar.					
8	BİT, iş / konferansta günlük işleyişlerimde bana yardımcı olur					
9	BİT, iş günlerim boyunca, iş / ders nitelik ve kalitemi zamanla geliştirdi.					
10	BİT, işimi zamanında ve düzgün bir şekilde bitirmeme yardımcı oluyor.					
11	BİT, işlerim için gerekli olan verilere ulaşmama olanak sağlıyor.					
12	BİT, işim ya da öğrenciler hakkında raporlar hazırlamamda ve bunları ilgili kişilere iletmemde yardımcı oluyor.					
13	BİT, bana günlük çalışma faaliyetleri sırasında yüksek performans sağlar.					
14	BİT, sınıflandırılmış veri, işimle ilgili bilgilere öğretim işleminin güvenliğini sağlar.					
15	Yeni çıkan BİT araçlarını öğretime ve idareye katmak veya kazandırmak, çalışma sırasında daha yüksek ve geniş çaplı performans sağlar.					
16	Yeni BİT araçlarının kullanımı çalışma sürecini ilginç ve heyecan verici hale getirir.					
17	BİT araçlarının artması, gelecekteki çalışma performansı ve öğretim işleminde daha büyük ve kaliteli iyileştirme gösterir.					
18	BİT araçları, işlemleri sırasında kullanıcıya; onun iş amaçları doğrultusunda rehberlik edecek geribildirimler sağlar.					