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Exploring the Impact of Information Technology on Employees and Organization Performance

Muhammad Waqas Chughtai
Assistant Professor, NTI School of Management Sciences, Pakistan
Nabeela Khalil
Research Scholar, NTI School of Management Sciences, Pakistan

Abstract:
Information technology refers to those applications and processes that create new and innovative methods to solve difficult tasks. Technology is used to solve problems and helps to meet the human wants and needs according to their standards. Information and Communication Technology and internet are the important technologies of 21st century and considered as the knowledge century. This research is based on primary data that have been collected from selected respondents of UFONE Islamabad Office; a well structured questionnaire has been designed to gather the relevant information from respondents by using the convenience sampling technique. A simple descriptive statistics has been applied to interpret the data. Overall results conclude that the technology has a positive impact on working practices, worker performance, collaboration processes and organization productivity. . It is mainly suggested that Information technology should compulsory for every employee to improve their performance and enhanced their qualities regarding organization demands and make fruitful outcomes for the business and brilliantly participate among growing global competition.

Keywords: Information technology, computers, organization productivity, Pakistan

1. Introduction

Information Technology is computer based technology, which is being used to store, retrieves, manipulate, and process the distribution of data. Technology is used to solve problems and helps to meet the human wants and needs according to their standards. The role of information technology is to extend human capacity of knowledge creation through the speed, memory, extension and communication facilities of technology. Information and Communication Technology and internet are the important technologies of 21st century and considered as the knowledge century. New Information and Communication Technologies (ICT) in specific fast speed internet are changing the method of organizations for doing the businesses, converting public services delivery and manageable innovation. The first business trend is the use of information and communication technology to decrease cost and increase capabilities. Among all technologies, mobile telephony takes a special delivery and accessible innovation for everyone. It has the excellent spread in the last few years. The mobile technology is emergent as the most influential mode to spread the profitable opportunities and significant services to number of peoples, by using the mobile telephony in developed countries reduces the inefficiency and increasing the prosperity. The advances in Information Technology enable the business to respond to the new and urgent competitive forces by providing effective management of interdependence.

Mobile phone as an advance telephony system can be moved quickly and easily. Mobile phones were once used by the rich and busy managers who could afford. Mobile phones are now ICT that is reforming and modernizing the communication worldwide. It has the impressive impact on trade and industry activities of nation-state, business and small entrepreneurs. The accessibility of this technology increases the economic, cultural and political relationship between countries. In particular, the information communication technology penetration has risen in many countries by the advancement of technology. It lifts more and more people towards their work to improve their skills and work efficiency with other remarkable developments. Information technology has become integral part of every industry in the world some objectives of information technology is as follows:

- Globalization: The information technology brings closer to everyone it helps to communicate effectively and easily share the ideas and information to each other.
- Cost effectiveness: With the information technology all the business process becomes computerized and easy to manage and it will also increase the productivity of an organization.
- Process improvement: Information technology improved the process of businesses thus the internal and external process become more effective and reliable.

- • Competitive advantage: Information technology increases the competitive advantage by the process improvement; cost saving and fast product developments maintain and gain the competitive advantage among market.

1.1. Role of Information Technology

Information technology can lead to improve performance and increases productivity. Technology is the process of relating and rearranging knowledge to generate new ideas and things. With the improvement in information technology globalization is increased and it provides the latest happening around the globe, business uses the advance technology to make sure that their departments are run smoothly like human resource department, finance department, security department. People can also conduct the online business through advance technology. Information technology replaces the traditional modes of business into the innovative technological tools. There are the following key roles of information technology:

- ➢ Promoted self-service and web enabling to employees and managers.
- ➢ Helped in quick and efficient decision making.
- ➢ Reduced administrative and training cost effectively.
- ➢ To save the cost and time consumed transactional and repetitive human resource activities.
- ➢ Identifying potential applicants.
- ➢ Maintain the personnel records.
- ➢ Information technology re-engineering the work practices.
- ➢ Organizing the information into useful form.
- ➢ Increased visibility and opportunity.
- ➢ Improve performance and create competitive advantage
- ➢ Check and evaluate output or performance.
- ➢ Enhance employee efficiency and rapid growth.

1.2. Information Technology in Pakistan

Pakistan is underdeveloped country but it is not much far behind in IT sector. The IT sector of Pakistan became flourished day by day, now people are getting aware if its benefits. Information technology plays a very significant role in the organizations and employees' performance. The computers came to Pakistan in mid of 60s when second generation computers were setup at Karachi. In present day, there are 1800 mainframe and minicomputers, half of them are owned by government sectors. There is 35% growth in computer industry within last ten years. This was possible because of the government liberal policy of import and reduction of duties. There is an estimate of 450,000 new computers being used every year in Pakistan. The Pakistani government is making their best effort to improve the IT industry significantly. In this process, they improved a lot but still a strong need is felt to bring revolutionary change in IT industry in Pakistan. In Some advanced technological organizations, the workers with knowledge typically work in technological roles and their services, significant amount was spent in communicating with peers and clients, to review and produce the documents, information identification, locating the experts and performing larger collective tasks with coworkers. By using of modern technology employees can be work more in an accurate manner and it also increased their satisfaction level of working.

1.3. Objectives of the Study

- i. To explore the effects of information technology on employee performance
- ii. To find the effects of information technology on organization productivity
- iii. To give fruitful suggestions for the improvement of information technology in the organization.

2. Literature Review

Rajakumaran (2014) concluded that by using of modern technology employees can be work more in an accurate manner and it also increased their satisfaction level of working. Employees performance are highly linked with the technological changes and innovative environment of an organization by having such environments the employees can work more innovatively and according to today's technological advancement and can handle different complexities of tasks through IT .Smits and Mogos (2013) concluded that social media play different role in today's world and have great impact on the businesses performance. The social media has the more influence on it employees rather than business employees. This research conducted on an online advertising industry which provides two types of tools which has been used by today's technological organizations to enhance their business relations with customer and improved business capabilities according to modern world.

Talab and Tajafari (2012) analyzed that communication and information technology is necessary for improvement and training of employees in human resource management and there should be the programs of ICT for the staff so because of this they can work more efficiently, informatively and in a more accurate manner and because of technological advancement the technology and communication was a basic need of developing the ICT training programs of the HR employees. Sadiq et al. (2012) concluded that the IT has been used by professionals not only to increased their capacities to gather information but also to store and retrieve it in a timely and effective manner the IT also provides better opportunities to HR professionals to do their tasks efficiently . In today's world HRIS (human resource information technology) is an important factor in every organization which can help them to achieve the goal and make the decisions more strategically.

Adewoye and kehinde (2012) explored that in modern time information technology has been adapted by many of organizations and also the banking sectors as well. With the advance technology in Nigerian economy will also be taking the part on achieving the vision

of year 2020 and millennium goals for the development. It is also important to note that many banking areas or sectors became automated. Mishra and Akman (2010) concluded that with the advancement and development of the information technology and also with the reduction in the cost and improved production with quality and profitability in the area of human resource management. Advance industries use information technology to perform different HR functions effectively

Leekey (2011) analyzed that information technology investments are positive and significant impact on financial performance of banks. The technology is the force that powerfully attracts the mankind. The banking industry and development analysts declare that the change in technology is one of the important factors affecting the dynamics in industrial structure of banking and also their performance which will turn the new business ways to improve profitability through the advance technology and its processing. Dumitru et al. (2008) stated that the organization success based on following aspects like individual performance, group project performance, and overall organization performance. Organization performance is the indicator for the development of financial accounting departments of an organization and a way to access a satisfactory financial performance. The impact of information technology on financial departments arises in different ways to make better decision, identifying the potential opportunities and also the unfavorable variables effectively it also helps to control the management systems, increasing data processing speed, reduce and identify errors quickly.

Mercader et al. (2006) concluded that the data for construction both implicit and explicit became an important key factor in business administration. This kind of data construction will help to forestall the changes in the environment with the development of new services and products. With the help of information technology companies can easily use to store, exchange, process the information. Breu et al. (2005) concluded that the knowledge workers feel free by using different technological devices in their workplace like WLANs, internet enabled mobile phones, handy computers and wireless ICT that all help out the knowledge workers, by using such advance technology the employee can improved their performance and productivity without wasting of time.

3. Research Methodology

This research is based on primary data that have been collected from selected respondents of UFONE Islamabad Office; a well structured questionnaire has been designed to gather the relevant information from 121 respondents by using convenient sampling technique. A simple descriptive statistics has been applied to interpret the data.

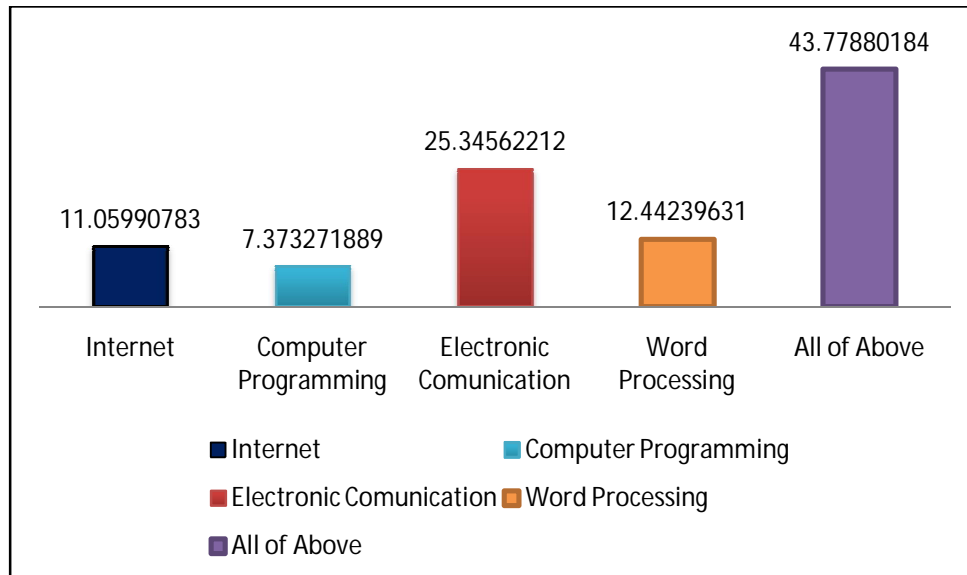## 4. Results & Discussion

4.1. Purpose of Using Computer

Figure 1: Purpose of using computer in the organization
Source: Author's Calculations

The above Figure 1 shows using computer is a fundamental part of UFONE. The large Number of respondents using all mediums which are mentioned for using computer, There are 43.7% of the total respondents used these Means through computer to accomplish their tasks because by implementing all these mediums they can control over their work and saves the effort of individual, they prefer all these mediums for improving the business process, besides this can help to do tasks smoothly without any error.

While very few 7.37% of the total respondents said usage of computer for the programming in UFONE they used computer programming software's include MS power point, MS word, MS excel, MS access which support to perform their daily work.

 As there are 11.05% of the total respondents that they used internet in computer by using internet they get independence of connectivity they used wireless internet cables in the company to direct connect anywhere to any business partner of organization get to know the feedbacks for their performance and easy to deliver fast information in timely manner.

Data processing was a real innovation just to figure out how to put information in a form that could be consumed by computers, therefore 12.4% of the total respondent said it helps to write business letter or other type of important documents and it facilitate to efficient management of writing for the organization.

Likewise, there are 25.34% of the total respondents give their response about this question that the electronic communication through computers are majorly used in an organization, it increased the social connectivity across the employees and organization by electronic communication it would help in better communication of information between employees and their employer.

4.2. Information Technology Improved Work
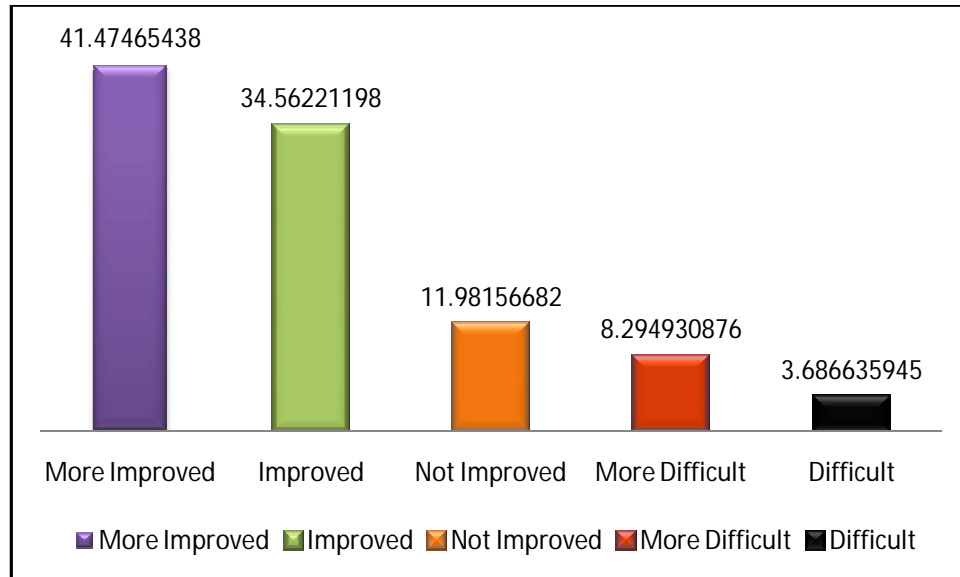
Figure 2: Information Technology Changed the Work
Source: Author's Calculations

The above Figure 2 shows that 41.47% of the total respondent feels that information technology has more improved the work at UFONE, it empowers employees to work in efficient manner and all the organization operations whether technical or transactions, Can be completed smoothly and excellently, As 34.56% of the total respondent said that technology improved their work because having knowledge environment of organization gains the confidence of employees, however 11.98% of the total respondent said by the technology uncertain problems come and it takes time to figure out these difficulties, while 8.29% of the total respondents said that information technology somewhat difficult to understand due to their lack of interest in technology. Though 3.68% of the total respondent who are old aged said that information technology make difficult their work to be done.

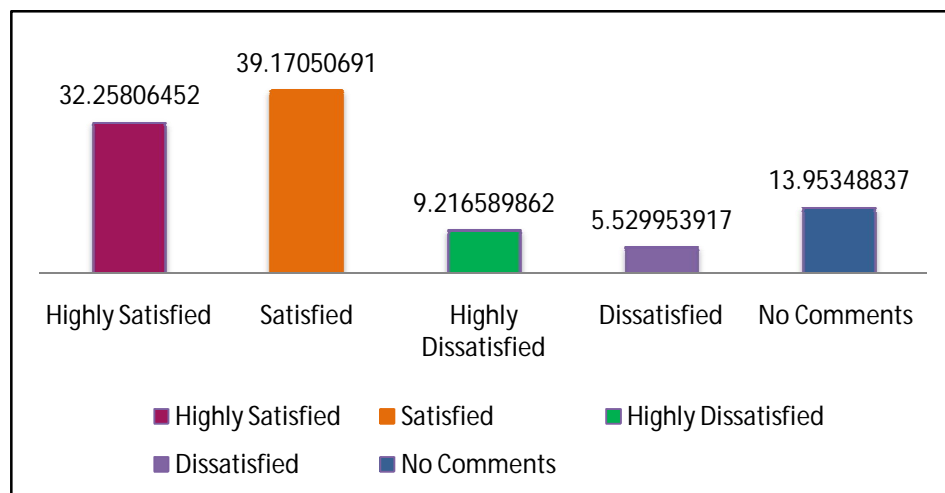*4.3. Services Provided by Technology*

Table 3: Variety of Services provided by Information Technology Division
Source: Author's Calculations

The above Figure 3 shows information technology provides variety of services which are helpful for organization and it provide great ease to employee task. The above figure shows that 39.17% of the total respondent stated that they are highly satisfied with the services provided by information technology, it creates disciplined in the environment of UFONE and employees feel encouraged to do their job in organized way, whereas 39.17% of the total respondent feels satisfied with the technology services because it saves the time of routine work rather than moving from one place to another, while 9.21% of the total respondent are highly dissatisfied with the services provided by information technology because they feel technology creates distance between face to face meetings it gives shortcut of everything and effort of mankind not gives any value, likewise 5.52% of the total respondent are also dissatisfied with it because they are not much knowledgeable and 13.95% of the total respondent are not interested to give any comment regarding this question.

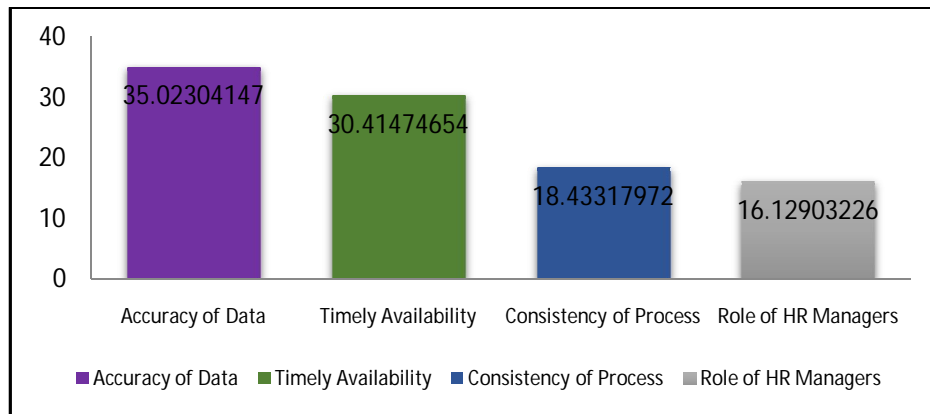### 4.4. IT for Potential Improvements

Figure 4: IT helps in Human Resource Management Activities for Potential Improvements in Organization
Source: Author's Calculations

In the above Figure 4 , It has been viewed by the this survey that information technology activities helps human resource management in a significant way for the potential improvements in an organization, In the above figure 4.12 shows that 35.02 of the total respondents said that by the implementation of information technology in UFONE helps to determine accurate results easily and frequently they have high tech computers and software's to record and maintain their data of organization and employees as it is helpful for them to take whatever accurate information they need in a time .As 30.41% of the total respondent state that timely availability of problems solution and any information that is required can get by using advance technology in the organization the timely solution helps to improve company performance by this company can easily get to know where they are lacking and how much they produces the outcome so they can work according to it. Whereas 18.43 of the total respondent said that consistency of process is important part in the maintenance of company's information to make truthful relationship with in the organization and outside, the UFONE worked with the IT company (techlogix) to handled their services effectively and fulfilling the customers demand and services in a consistent manner , likewise 16.12% of the total respondent said that role of HR managers has been improved by the IT systems it is helpful to get best for the company and fast communication to their internal and external management global and on local scale the company has the HR leaders with understanding of high tech technology so they can efficiently handle the technologies and implement in order to reduces the burden of administration and reduces cost of an organization.
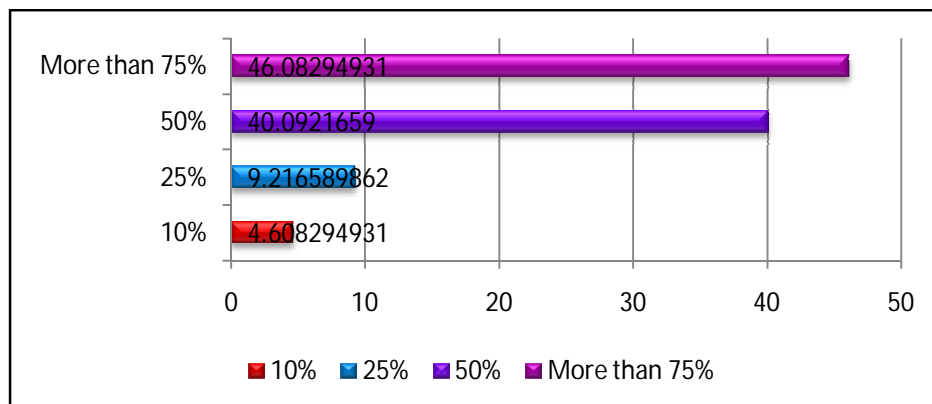
4.5. Employee and Organization Performance

Figure 5: Technology Improve Employee and Organization Performance
Source: Author's Calculations

The above Figure 5, It has been observed through the survey that information technology has vital impact on employee and organization it improves the regular performance of company whereas 46.08% of the total respondent stated that IT can improve the performance of employee and organization up to 75% likewise 40.09% of the total respondent said it could improve to 50% as 9.21% respondents say 25% and at the end 4.60% of the total respondents state only 10% IT could improve their and organization performance the important aspect is that IT possibly influence every business today by their helpful tools and can reduced the reworks in an organization.
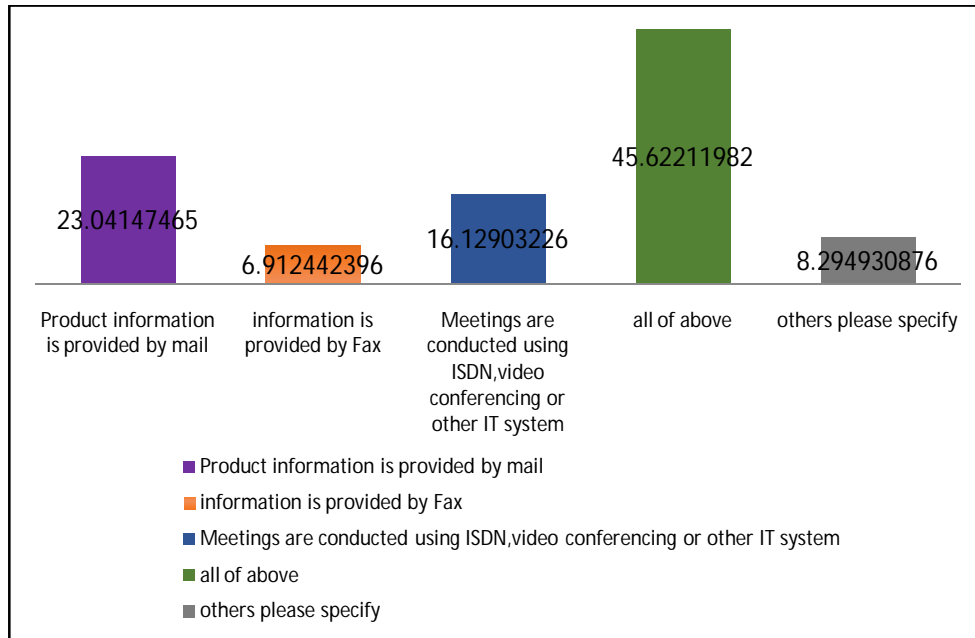
4.6. Relations with Other Companies

Figure 6: Company Conduct Relations with Other Companies through
Source: Author's Calculations

In the above Figure 6 shows that UFONE conducting the relation with other companies by using advance mediums there are 23.04% of the total respondent said the information about new services and products can be delivered through E- Mail the UFONE has the mailing site in which information about product whether good or bad will be discussed with customers or the third party whereas 6.91% of the less total respondent used fax to provide information because with advance technology of communication faxes methods will be changed into electronic cellular phones and devices to provide reliable information, as 16.12% of the respondents used advance medium to communicate with each other like the ISDN (integrated service digital network) for the faster communication ,video conferencing can be easily done by wireless internet connections and used other advance means like pc electronic telephone systems that can easily move from one place to other by using these modes conducting online meetings is easy in the organization, majority from the total respondents 45.62% said they used all these methods to conduct better relations with the other companies due to advance economic environment the social interactions through technical ways plays a vital role to increase the company efficiency and some of the respondents used other ways like going their organization and having face to face meetings which is 8.29%.

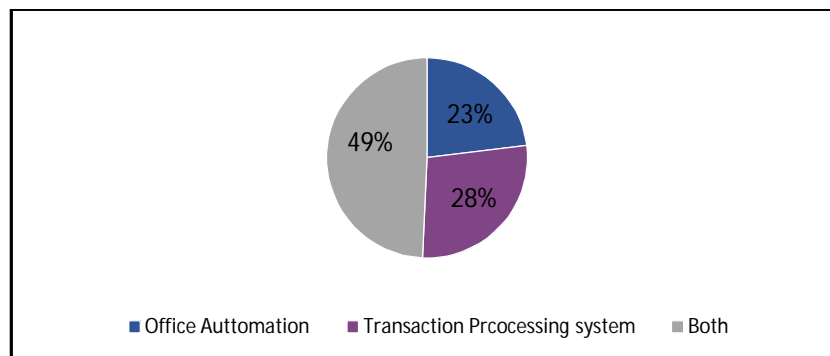*4.7. Technology Indicators Increased Organization Productivity Indicators*

Figure 7: Technology Indicators Increased Organization Productivity
Source: Author's Calculations

The above Figure 7 shows that technology indicators play a supporting role to increased organization productivity three type of responses take from the respondents of UFONE in which 23% of the total respondents said that automated office system made their tasks easy going in this advance globe, All the manual work is changed into computerized work that makes calculations and control over the work easy to be done and helps to expand the company outcomes whereas 28% of the total respondent say that transaction processing system has a very dominant role to facilitate the growth of organization it is convenient for the company to send money quickly through online banking to other branches all their budgeting has become technological by this they can easily find out their financial records whenever they required by this proper management of transactions can increase the productivity of organization likewise 49% of the total respondents stated that both indicators uses by organization that will help to enhance the employee skills, saves the time and feasible to increase the productivity of organization through these indicators.
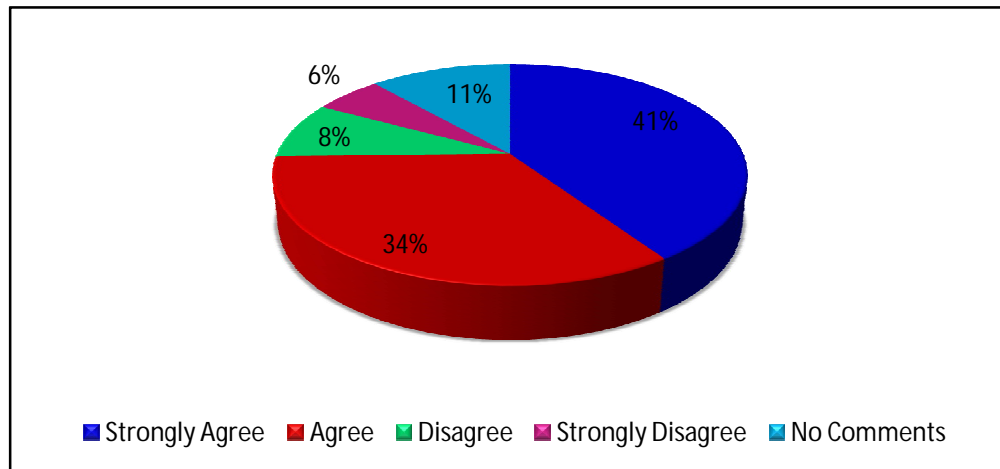
4.8. Automated Office System

Figure 8: Automated Office System made Customer Service Experience more Satisfying
Source: Author's Calculations

The above Figure 8 shows that automated office system made customer service experience more satisfying by the digital system in the organization can easily allot a new number in a second to the customer who have lost or stolen their number the company having the digital record system of their customers that will help in this type of situation by the system company having satisfying customer service experience, As 41% of the total respondent are strongly Agree with this question, 34% of the total respondent are agree, 8% of the total respondent are disagree, 6% of the respondents are strongly disagree and at the last 11% of the respondents are not interested to give comment on this question.

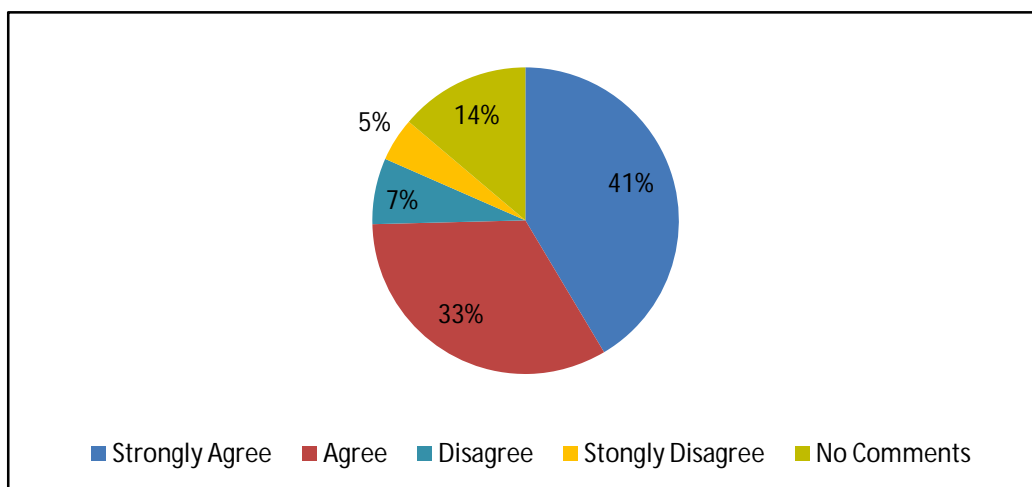### 4.9. Automated Phone System

Figure 9: Automated Phone System made Customer Service Experience more Satisfying
Source: Author's Calculations

The above Figure 9 shows that automated phone system made customer service more satisfying for both the organization and customers the UFONE is believed in using high tech automated phone services to satisfy more of their customers and can easily handle the large amount of data and dealing with the different customer behavior, they always focus on the VAS (value added services) for their customers, the company lunched the advance phone systems with low prices and lots of technological benefits for their customers, As 41% of the total respondents strongly agree with this question whereas 33% of the total respondents are agree while 7% of the total respondents are disagree although 5% of the total respondents strongly disagree with this question and at the end 14% of the total respondents have no comments regarding this question.
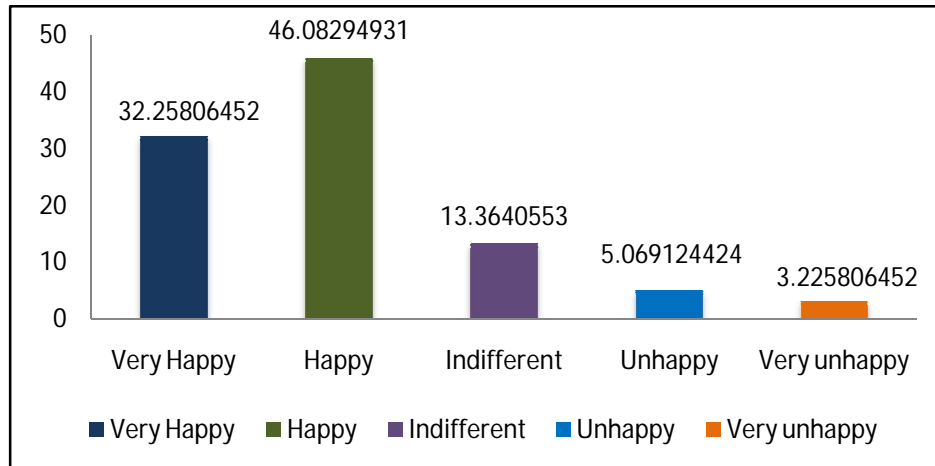
4.10. High Technological Work

Figure 10: Time Spent on High Technological Work
Source: Author's Calculations

In the above Figure 10 shows that the time spent on technological work can increase the employee motivation towards their work by using advance software's and applications increased the task efficiency and bring confidence in the employees, there are 32.25% of the employees feel very happy to spent their time on technological work whereas 46.08% of the employee are happy by doing technological work As 13.36% of the total employees feel indifferent to do the technological work, on the other hand 5.06% of the employees are unhappy because they consider technological work are difficult to handle if any uncertain happened and 3.22% of the employees respond that they are very unhappy with advance technical work in the organization.
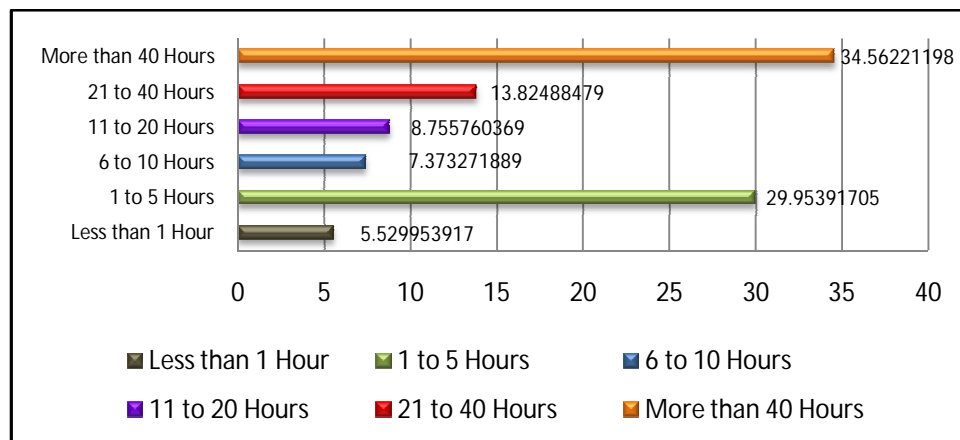
4.11. Job Duties

Figure 11: Computer Used to Perform Job Duties
Source: Author's Calculations

In the above Figure 11 it has been seen that employees give preference to the computer work and by this do their job duty efficiently in the company there are 34.56% of the total respondent who utilize computer more than 40 hours to perform their job duties where as 29.95% of the respondents spent 1 to 5 hours to perform their task, As 13.82% of the total respondents use up computer 21 to 40 hours, 8.75% of the total respondents use 11 to 20 hours to perform their duties, 7.37% of the respondents used computer 6 to 10 hours and 5.52% of the total respondents uses computer less than 1 hour.
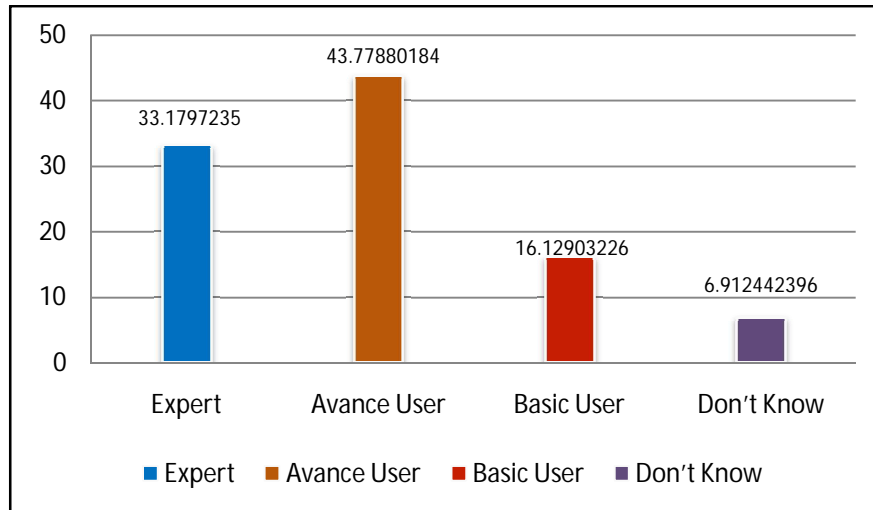
4.12. Computer Expertise

Figure 12: Rate Computer Expertise in the Organization
Source: Author's Calculations

In the above Figure 12 it has been viewed that the company having more advance user of technology the majority 43.7% of the sample respondents said they have advance knowledge of using computer expertise like they used tablets, laptops handy computers and automated phone system to obtain desired outcomes helping the company to formulate technology strategies that combine with domain expertise, whereas 33.1% of the sample respondents said they are expert user of computer mostly are from the IT department they can easily resolved any difficulty in a time and give new concepts to compete in a market, as 16.1% of the sample respondents are basic user who have less knowledge about advance software's ,they used computer for the administration purpose but not used in detailed operations and 6.9% of the sample respondent who are illiterate have no awareness about the computer and their expertise.

5. Conclusion

This exploratory research found that the impact of information technology on employees and organization performance is meaningful. The findings show that information technology has a positive impact on employee and the organization performance in UFONE; they are using upgrade technologies to cope the environmental changes. The overall results also show that information technology gives an opportunity to fulfill the commitments in time, which provides an easy way of communication and helps to groom the employees.

6. Suggestions

- ➢ Information technology should compulsory for every employee to improved their performance and enhanced their qualities regarding organization demands
- ➢ It helps to designed new applications and must learn how to tackle uncertain problem by the technological solutions
- ➢ Through technology good analysis of data can be used to identify the area of improvement, whereas Cost vs benefit can lead to Profit vs loss
- ➢ By focusing more on the innovation through technology and coming up with new trends can lead the industry, which is going through the perfect competition,
- ➢ Information technology will be a big step towards development of any country that its organizations work efficiently
- ➢ It does not always that the technology bring new software's applications or innovations sometimes through technology the way of thinking can changed and new concepts or out of the box ideas will changed the sense of doing business
- ➢ Make fruitful outcomes for the business and brilliantly participate among growing global competition.

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