

Impact of information technology on the efficiency of Employees

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Abstract

The main objectives of this study were to examine how IT affects the efficiency of employees. Computer relay works in minimizing the work burden, bring efficiency in work and achieve goals effectively in shorter time by investing limited resources and limited financing. This study has been conducted in civil secretariat Peshawar, where most of the work was done manually rather than using the advanced computer infrastructure and information system. The research adopted a descriptive survey method. The study surveyed 150 employees of the civil secretariats Peshawar of both junior and senior level. The study used stratified random sampling technique creating strata's for both junior and senior level employees. The research instrument for the collection of data was 15-item structured questionnaire used tested for validity and reliability. The results found that both type of employees have been benefited from the application and use of computer and information system. The results revealed that computer and information system has positive impact on the employees of efficiency in this particular organization employees. The results suggest that computer has same impact on both level employees.

Keywords: information technology, human resources, information system, efficiency, internet, infrastructure, architecture, computer

Introduction

The emergence and advancement in IT, advance technology and internetworking infrastructure and architecture has caused dramatic revolution in all aspect of human endeavor. The technological advancing, IT applications and technological elements have changed the demonisms and dynamics of businesses and organizations. The IT and IS advancement and internetworking has really changed and shifted human being from industrial age to computer and information age (Digital age) and world become digital world in which every activities strictly done over IT and different IS are interlinking by communicational network internet and internet is live oxygen though which the whole world is connected). The role of computer globally cannot be over-emphasized because it has been the major vehicle of change in the transition from the industrial age to the information age. Computer has made sending of information from one source to the other easier and simple. The awareness and use of computer system can be found in almost every office due to the high standard of the communication network. IT applications and strong internetworking infrastructure has caused sources of opportunities in business and organizations. The technological advancement and computer modernization has made the transformation of information easy, speedy anytime and anywhere. IT and IS based system applications and internetworking infrastructure has improved the efficiency functionality and flexibility of the organizations and business. Through IT based strategy have perhaps even changed the business models of the organizations and has made them much diversified organizations. Computer applications and internetworking infrastructures have become the more indispensable vehicles of the vital development, improvement

and have made the actualization of resources.

Debela (2009) ^[5] stress that IT automata have really affected the performance of blue color workers. He argued that computer applications has made them more efficient workers than before. Computer technology is very vital for both public and private organization as it helps in org planning, controlling, directing, budgeting and reporting.

The computer technology applications and internet has key contribution and usefulness in the society. Its importance has been witnessed in health, military, judiciary, business, education and other parts of the country society. Computer technology has caused improvement in service delivery, operation execution, transformation and finishing of the products. Pakistan is a developing country in transition phases of computer technology and internetworking infrastructure. Most of government t organization have adopted the application of computer, internet and web based information system in their operations and decision making process. This research is aimed is public secret rerate employee of Peshawar.

Problem statement

Pakistan is a developing country in which most of the organizations process data and services delivery manually. Public secretrate Peshawar is among the public sector organization which has adopted the application of IT and IS practice. As to know how to much the organization has succeeded in covering the improper and poor means of information and processing. This research investigate the impact of computer and information system on the efficiency of employees.

Objective of the study

The main objectives of conducting this research study are the following

1. To investigate the impact of computer technology, internet and information system in the efficiency of Peshawar secretariat employees.
2. To find the contribution of IT and information system in the organization planning, controlling, coordination, budgeting and reporting.
3. To know the importance of computer technology applications, internetworking (internet) and web based information computerized system as compared to the manual information (Traditional information system).
4. To suggest measures on the bases of findings of this research.

Literature Review

The IT (information Technology) and IS (information system) based strategy bring positive revolution in the performance of the organization such as business firms, health care centers, battle field management, traffic control system in area of critical operational management and decision making in complex situation for the operational managers and executive managers. The IT & IS strategic planning having greater opportunities such as improved employees performance, standardization of services, strong collaboration various activities, strong and sustainable consumers relationship from the services and from employee of the organization and real time communication to consumers and organization achieved their goals effectively in shorter time by investing limited resources and limited financing.

Through the implementation of IT & IS based strategic planning the organization become intelligent and due to intelligence the administration and operation of organization will be effective so the organization become smart and smart organization achieved their objectives successfully.

Different IT techniques like data base management system for data management of the organization, data warehouse, data mining, cloud computing, virtualization, remote computing, data grading, mobile computing, crowd sourcing, GSM, GPS, ubiquitous computing techniques and information system centralized, distributed and web based information system similarly the modern infrastructure and architecture of IT also play an important contribution in smart organization.

Debela (2009) ^[5] stress that IT automata have really affected the performance of blue color workers. He argued that IT applications have made them more efficient workers than before. Computer technology is very vital for both public and private organization as it helps in org planning, controlling, directing, budgeting and reporting. IT implementation and IS support and improves the delivery of services at very excellent pedestal due to high processing and better quality of management and the performance in both private and public organization definitely increased the technology based strategy in the organization help in operations like transaction, controlling the transaction, other offices automation daily customers recording, employees attendance record, security concerned issue, budgeting, reporting and IT & IS based strategy also support critical decision which are taken by the organization managers, operation managers and executive managers of in shorter time with accurate analysis design best decision making in complex situation, IS is the

strategic engineering of IT infrastructure and architecture disciplined to combine people, software technologies, hardware technologies, telecommunication network technology and data base technologies that accept data from external environment, process data, stored the information/data and produces output reports to external environment for various sort decision maker of the organization.

Fountain (2007) ^[6] suggest that government organization require to distribute the work of organization because work distribution bring great revolution in services and management and the administration will be effective by decomposing /splitting the structure of organization so performance will be improved. this only possible by implement IT based strategic planning for administration and services distribution and the cost, time and resources will be better managed.

Zambran (2008) ^[8] recommend that IT based strategy planning the services of the organization improved instead of manual information system in organization. He suggested that IS is reliable and cost effective and computerized based system eliminate the problem redundancy of data in the organization, bring accuracy, sharing of information in the organization and their consumers, reliable backup facilities, up gradation and maintenance facilities, integration and integrity, free infrastructure data advisability, security and privacy so all these are IT based planning through which the performance of the organization

Aribisala (2008) ^[3] asserted that IT infrastructure is absolutely important for better and effectively managing and coordinating the health care organizations, battle field are very necessary for for day world. in health center the patient monitoring effectively computerized based system is important and similarly when army deployed in battle field the proper coordination is necessary for real time operation so without IT based techniques it obviously difficult in this age of technology, similarly industrial processing system the different activities monitoring at real time is important like product designing industries temperature and cooling condition detection is so critical important and IT based strategy is necessary for communication in organization because traditional communication are costly and IT based calling system are reliable for communication

Harthony (1990) ^[7] stated that heterogeneous infrastructure and different architecture are available for communication of text, audio, video, image, voice data and now web based system carry strong GPRS in reliable manners different companies manufactured and designing the communication network equipments like hub, switch, router, terminal devices like laptop, desktop, mobile devices and wireless and wire media and speed of internet bring effective communication infrastructure and communication become chippers and reliable.

Olorunsola and Ekong (2006) stressed that e mail is reliable and cost effective and secure method of data transferred in the organization this also a great contribution of IT in organization

Ajayi and Ayodele (2002) ^[1] stated that IT bring excellent changed in GDP of country and the economy become emerging economy so puts vital importance in economy development

According to Bhuiyan (2011) ^[4] the web based computerized

information system the for business firm assist the business and all the business activities are linked to web so the business become e business and e business all the activities are strictly done over the web so its also called web based business all supported activities or subcategories like e marketing commerce, e banking mailing shopping purchasing, e trade, e knowledge learning, e ordering all activities defiantly support business. if IT based strategic planning are deployed for business today then business can achieved the objectives in shorter time with limited resources. IT based business has various benefits for the firm and consumers. e business, customer satisfaction is high and strong and sustainable relation build with customer, IT based business will be globalized because internet based marketing worldwide customer are created so customers purchased ratio to sale will be high and ultimately business firm getting high revenues which is main goal of every business firm in shorter interval of time, price reduction, standardization of services, customers feedback, compativative advantage, 24 hours engagement of customers, and free services and employee services performance is vision of IT based tactic of business.

Methodology

This is a descriptive research. The data of this research was collected from 150 employees of civil secretariat Peshawar. The employees of the civil secretariat Peshawar were

segregated in different strata's. The employees were distributed in junior and senior levels. So the stratified random sampling technique was adopted in this research study.

The questionnaire of this research was comprised of 15 items. The research questionnaires was self-administrated, the questionnaire was validated and cheeked for reliability. T-Test has been applied to conclude the results.

Data Analysis

The below tables shows the results of the impact of computer and information system on the efficiency of civil secretariat employees. In the below table 1 represent junior level employee and 2 represent senior level employees. The results suggest that there is no difference in the efficiency of junior level employees and senior level employees. The levene,s test suggest that the impact of computer and information system has an impact on the efficiency of the civil secretariat employees and there is no difference in the efficiency of both junior and senior level employees. As the Levins, test value is insignificant at 5% probability. Both employees level showing similar responses to computer and information system on the employee's efficiency. So all classes of employees are benefited from the use of computer application and information system.

Table 1: Group Statistics

	Employees	N	Mean	Std. Deviation	Std. Error Mean
Computer and information system	1.00	120	3.8319	.13564	.01086
	2.00	30	3.7302	.17730	.02997

Table 2: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
				F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
		Lower	Upper							
Computer and information system	Equal variances assumed	2.757	.098	3.777	189	.000	.10175	.02694	.04861	.15489
	Equal variances not assumed			3.192	43.351	.003	.10175	.03188	.03748	.16602

Conclusion

The IT (information Technology) and IS(information system) based strategy bring positive revolution in the performance of the organization such are business firms, health care centers, battle field management, traffic control system in area of critical operational management and decision making in complex situation for the operational managers and executive managers. The IT & IS strategic planning having greater opportunities such are improved employees performance, standardization of services, strong collaboration various activities, strong and sustainable consumers relationship from the services and from employee of the organization and real time communication to consumers and organization achieved their goals effectively in shorter time by investing limited resources and limited financing.

This research was aimed at knowing the impact of computer and information system on the efficiency of the employee in civil secreteriate Peshawar. The research was conducted using self administered questionnaire analyzing 150 junior and

senior level employees for the purpose. The results revealed that computer and information system has positive impact on the employees of efficiency in this particular organization employees. The results suggest that computer has same impact on both level employees.

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