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The Impact of Management Information System on the Overall Performance and Efficiency of the Workforce of the Accountant General (Peshawar): A Research Base Study

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Abstract

The purpose of this research paper is to demonstrate the impact of MIS training on the performance of the AG office Peshawar (kpk) employees, specially this paper accentuates on the core know-how of SAP(system application product), and the employees performance are measured with the help of SAP. The data have collected through primary and secondary data, conclusion has been drawn from questionnaire which have been tabulated and presented through diagrams. The recommendations and conclusions form the last part of this paper.

Keywords: MIS, SAP, Performance, Training, Employees

Introduction

The foundation of the Organization was led down on 1st April in the year 1929. The organization is basically controlled and manages by Federal government. The main function and responsibilities of the organization is to maintain the federal as well as the provincial government accounts and audit. Most of the activities in the accountant general were fist performed manually, which was cumbersome and headache job for all of the employees with in the organization by keeping this problem the organization was first redesigned in the year 1970. In the era of new digital age the government decided to launch a new computerized system in all the organization for maintaining

and recording all of the accounts and audit transactions, management information system was first introduced in the year 1980. And in the year 2003 a new system, system application program was started to facilitate and accelerate all of the financial and accounting reporting activities which are an indispensable step of the government. The system application program is link with various department of the organization and all the departments are able to generate reports regarding Human resource, financial, funds, budgets employee's records and pay slips of as well.

They pointed out in their article that the organization science such as marketing, accounting, and information system playing a very dominant role in the organization development and growth from last 30 years, on the basis of which organization can easily find and identify the future direction of research (Martin J. Eppler and Jeans Ming's, 2004). They stated in their paper that organization performance increase with the investment in technology by the organization (Summit Sircar and Joe L.Turnbow, 2000). Its impact also on its sale, employee's performance, market share and value, more computer capital brings more change in sale, assets and equity.

They collected data from 575 small business firm in Hong Kong tested that data with different factors, the result suggest that those organization using perception base model technology approach are comparatively useful in decision making (Kevin k y kuan, and Patrick, 2001). The adopter firm benefits also include the low financial cost and technical competence than those of non adopter firms.

Scope and Significance of Research

The reason of this research study is to know about the impact of management information system in the performance and efficiency of the employees. As in today's modern world every one know that the importance of MIS for organization. This system has increased the overall departments performance of the organization as the system link with other accounts offices i.e. treasury offices where all the record of Funds, balance sheet, history services certificates, pay slips, employees separate records can easily now traced by the comptroller of accounts and assistant account officer and other sub accountants and senior auditors. But the main hindrance in the way is the old staff because the old staff are apposed this new system they did not know the basic know how and they are not familiar to this new system they are using that traditionally old manual system of recording and posting of transactions, but government now providing training to all old staff and new ones to cope the situation but it still need young and talented people to come and play dominant role by utilizing this new technology.

Aims and objectives of the research study

Aims

The main aim of the study is to provide the MIS training to all the workforce of the AG office with apparition that it can be the most computerized and technical sound organization.

Objectives

The main objectives of the research is 1) To provide Management information system training to all of the employees of the AG office 2) To link all the Federal, provincial, Agencies and district accounts offices with Accountant General 3) To provide assistant in any problem arise in the concern department and 4) To computerized all the departments record and 5) To familiarize all the

employees with the new technology SAP which than improve the overall performance of the employees as well as the organization.

Literature Review

Management information system used in organization for its business operation (Manish Kumar, 2011). It provides strong advancement in the field of information technology through which an organization can easily achieved the strategic objectives. It helps in decision support, venture management, resource and people management and data base retrieval application. The use of management information system in business organization support business processes, competitive strategies and business operation which result and impact the performance of the work force of the specific organization. MIS plays the life blood role for an organization as no human can survive with out it. Investment in MIS by the organization support it in core competencies, it also help in production process, human resources records, financial records and controlling and monitoring of the various activities which in turn impact the organization growth and development and also provide sound basis for strategic decision making process.

Proper implementation of the technology in the organization can help in three dimensions one is Management information system, employee's act, payroll structure or systems, control and monitoring of the employees and over all organization activities (Aral, 2010). The overall management can be best managed and controlled and by the appropriate execution of the MIS tools. Each and every departments work with full strength. He further says that the overall activities of the organization largely depends on main three things the proper use of equipped machinery, trained men power and good organization structure which in turn should be supported by best and sound supervision and control system all these bustles can only be best organized and managed when there is more conscious Management information system implemented, not only that but also trained IT specialist employees play an important role in the financial and payroll system of the organization where all the activities carrying on with best possible monitoring system.

Large productivity premium totally depends on the management information system of the organization. And also training and employees management is related with great extent to its. Employee's motivation not enough for the complementarities but it should be explained through talent selection of employees (Olsson, 2010).

He says that all the managers and executives afraid from different hazard analysis. It may be firm low yields, low out put, time prediction errors (Jagolinzer, 2006). All these things can only be controlled when trained employees with Technology that is Management information system so they can best exercise times which have effects on financial reporting and also improve the estimates and forecasting decisions.

The most important mechanisms to achieve the employees performance in any organization is the technology development (Kumar, 2006). It is a thing through which one organization not only motivates the employees but also try to achieve its stated goals and objectives. Through technological improvement organization committed to achieved its long term objectives and to decide about future course of action.

Michael C. Jensen, (2006) stated his research paper that the organization performance always correlates with budget and system. If employees are well trained and budget system is computerized then there may be possible change in the behavior of the staff. Employees can get help from these

new technological budgeting system and they can execute all the activities of the organization if there is possible training to employees.

Managers, researchers and strategy makers play very important role in the development of an organization but despite of all these the role of information technology for an organization is indispensable one (Ville, 2004). Because information technology make link between all the departments and make inter relationship between the departments which integrates all into single framework. The organization performance with great extent associated with information technology. Information technology is valuable for organization but the extent of dimension depends on various factors that is internal and external. He concluded that the use of extensive technology is crucial for the performance of employees and also for organization.

In his paper analyzed different things such as job performance, job satisfaction and employees training in job work place, he applied different tool to measure the job satisfaction and which things increase the employees performance, last he found that training is the only element in the work place through which employees can be motivated and its impact on the performance of the employees (Jones, 2004).

He find out from his study through questionnaires which he was taken by selecting 26 countries round the world, he tried to find out that how much investment can be contributed in training, what things concludes the employee training, what is the impact of training in the overall performance of the organization, what can get from training and what is the major benefits of training to employees economically as well as business benefits (Bo- Hanson, 2003). He concluded that the proper investment in MIS and technology can increase the performance and output of the organization.

They have presented in their research paper the relationship of investment in of technology and the organization performance, for research purpose they taken hospital to see the impact (Devaraj and Kohi, 2003). They posited that the actual usage of the technology directly associated with the hospital revenues and quality.

Dennis wrote his paper that the organization growth and success is a two way relations one is cause and other is effect, more training in the field of MIS to employees will result more efficient performance of the workers (Dennis Campbell, 2002). Because he further point out in his paper that these thing is directly associated with the organization long tem strategies. The management information system can easily measure the employee's performance and can be best supervised and controlled with the help of this computer technology and the firm can easily revise the strategy. The cause effect relationship can not be possible by proper implementation and use of computer technology in the organization.

The value of IT for business is much more than its concept because the scope of It business research includes the theoretical, logical, conceptual, and experimental studies (Dehning, 2002). More investment in information technology makes a good role in competitive environment of the organization.

The use of information technology in business impact the cost reduction and product differentiation and also its application is useful for competition (Belleflamme, 2001). The value of IT is also to business is less but not less application to data modeling and reproduction.

Kauffman, (1996) has pointed up that all the managements level executives should be motivated for the investment in technology and to promote the IT program in the organization which in turn improve the overall performance of the employees and the organization will be able to do all the activities in splendid ways. Robert accomplished that uncover that proper MIS training to

employees may not only create value of the organization but also it set and clear the unmeasured directions and dimension. He emphasized on the more investment in the field of technology that is Management information system.

The organization when it invests in the information technology or management information system not only investment but it also create different type of opportunities with in the organization which has direct impact on the employees performance and efficiency as well as on the profitability of the organization (Duliba, 1996). Further more various scholars and researchers have found that from their researches that the impact of the technology or management information system not only brings possible changes in the profitability and performance but also in productivity, organization process, economy levels and industry.

Information technology that is management information system enables organization to improve performance and efficiency and also make unique in competitive impacts to yield more profit through effective production (Barney, 1991)

The management information system very useful for business decision making not only for long term success but also for achieving short term objectives (Martin and Man, 1988). The human resource performance with great extent accelerates through MIS. But often this system does not meet the desirable expectation of the management. The main reason behind that is not proper implementation the system and they do not balance the cognitive and management hierarchies in the organization. To get favorable result from the system must be explicitly assimilate with information needs and cognitive hope of the management.

From the above review we can sum up that the impact of the management information system on the organization function, and performance not only but also on the productivity. It support all the department management which performs their functions more effectively, it also link all the departments under one roof and enable the employees to work. It also increase boundary spanning, helps in forecasting, long-term planning and ability to store and retrieve information.

Research Methodology

Research design and Theoretical Frame work

This research study is consisted on two main variables that are MIS training program and its impact employees' performance; these variables play the role of Independent and dependent variables. The employees' performance are supposed to be measured with the implementation of MIS training program which will give the indication that dependent variable is employees' performance and MIS training program will play the role of independent variable. Thus these two variables will be in direct relationship of each others, the moderating variable is supposed to be the remuneration of employees by the government in this study. The relationship discussed on the basis of data collection. Theoretical framework (figure 1) of the study is:

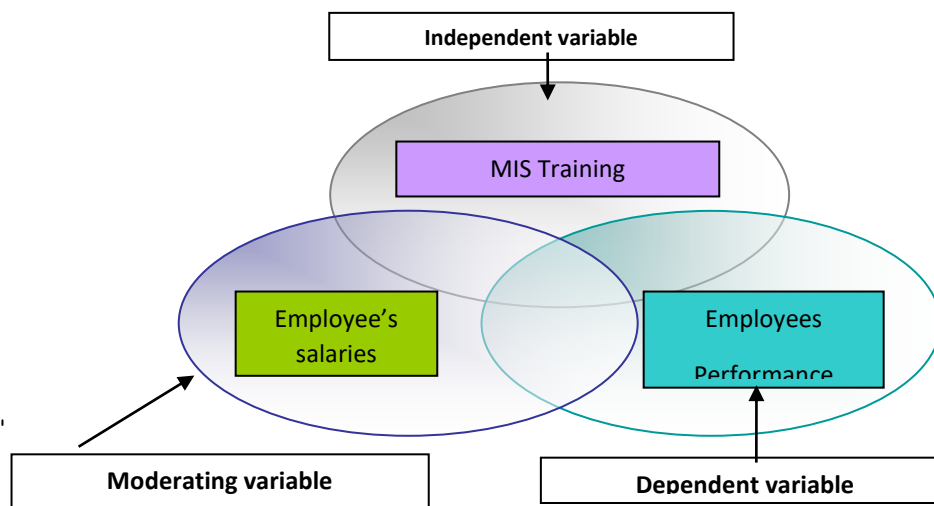


Figure 1. Theoretical framework

Data Collection Methods

In the research study two basics methods are used to collect data, in this research study both primary and secondary data sources have used to collect the required information for data analysis and interpretation.

Secondary Data Collection

The secondary data sources are the AG office official website, the local student internship reports and thesis, PIFRA website, majority data can be access online through net, in addition the manual ledgers and manual book of AG office can also be used to interpret the result in light of the above mentioned variables and their relationship. But as the location proximity can create problem the available resources help in great extent such as published papers and reports, online data, and websites.

Primary Data Collection

Majority employees of AG office are working in headquarter which is located in Peshawar, Pakistan. Primary data has collected through questionnaire from all employees working in different section in AG office, but in this research we have focused on computer department employees, for the purpose a comprehensive questionnaire has distributed among sampled employees.

Research Instruments

Questionnaire

The main instrument to collect the primary data in this study is questionnaire. This Questionnaire consist the following question and objectives.

- How management information system impacts the efficiency and performance of the workforce of the AG office?
- Can MIS training program improve the employee's performance?

- What will be the contribution of MIS for AG office?
- What will be the impact of MIS program on decision making process?
- What will be the time duration of MIS training for employees?
- What will be the usefulness of training program in central office?
- The impact of MIS on employees' performance.
- The effectiveness of training program in main office.
- Are tools and equipment are up to date
- Is SAP the best software which improves performance?
- Technology enhances work performance?

Strength of the Methodology

Primary data which is collected through questionnaire give real and true picture of situation. The researchers have gone either by them or have contacted the respondent telephonically, this questionnaire which has been collected in research study schedule, and has contacted the target population and required samples to avoid the bias and doubt in interpretation and analysis of study.

Other Instruments

This research study is concerned with employees' performance by installation of MIS program with the case study of AG office; the questionnaire the primary data source supports the study in interpretation and analysis. In addition data is supported by Annual reports of AG office, Business Reviews, Articles, Financial reports, Published Books, Company's websites, Related and relevant financial data.

Reliability, Validity and Ethical Considerations

Data which is required for this paper has collected though reliable and valid resources such as the AG and PIFRA official website, internal record of AG office manual books prepared by AG office employees and reliable reports published in local universities and colleges, and from the research papers published in journals. This report will support financial system flow and decision making process. The study has tried to improve the employee's performance not to harm any party involve in this study.

Research Outcomes

Now we will see that how the data can interpret the result that either the MIS training program will enhance the efficiency of the workforce or not. Data have been collected through questionnaire from the staff of AG office Peshawar especially from the computer department employees.

AG office faculty is busy in providing training program to its employees to shift all operation from manual system to MIS, to evaluate or measure the employees' performance in AG office questionnaire, the data shows the following result regarding MIS training program improved employees performance the AG employees responses 26 with "Yes" and 1 with "No" out of 27 respondents that shows 96 % employees were agreed that MIS training program improved employees performance and 4% employees were not agree, the result for MIS training program improved employees performance can be concluded that respondents respond with yes and the overall result is to be considered in favor that MIS training program improved employees performance, the data result is also postulate with the help of tables and diagram as follow:

Table 1

| 1. Do you agree that MIS training program has improved the employee performance? | |
|--|----|
| Yes | No |
| 26 | 1 |

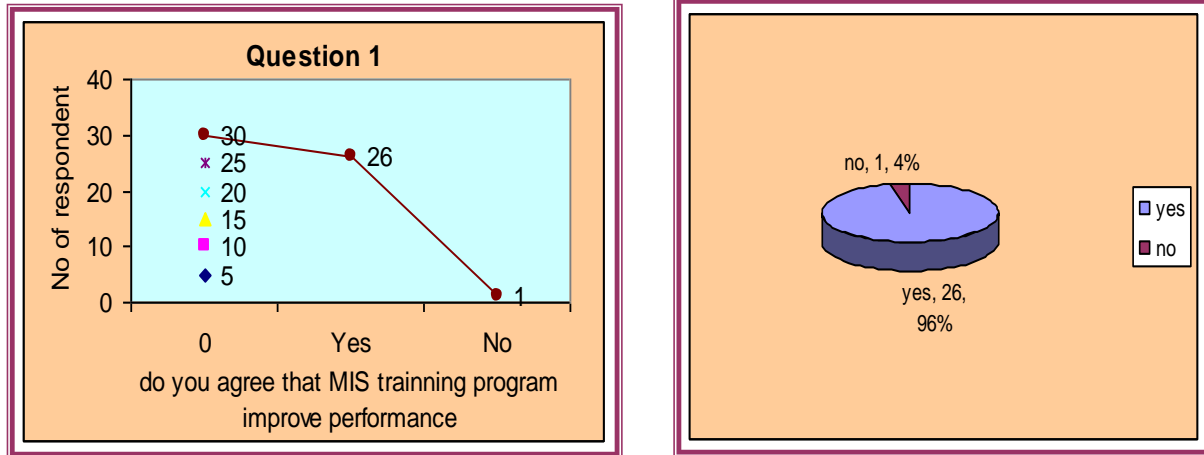


Figure 1

The two variables i.e. dependent and independent variables which are involved in this studies, have focused in the above figure, and the is positive impact of MIS training program on employees performance, the majority of respondents are agreed only one respondent which is ignorable impact on the relationship of these two variables, employees expressed their views, that the manual work in big registers and ledgers, the was high probability of mistakes in casting, carry forwarding the balances to next pages and next ledgers, transferring the balances of funds from one district to another, one agency to another agency, calculation of GP fund balance and interest thereon, basic salaries, allowances and deduction etc are cumbersome task. MIS with the help of computer software improve the quality of work, such type of embezzlement or the chances of such type of fraud are eliminated, the performance of employees is also improve in this sense that any information regarding employees can easily be traced by SAP.

Regarding MIS training to employees the AG employees responded 11 with “Yes” and 16 with “No” out of 27 respondents that shows 41 % employees were agreed that Training to employees and 59% employees were not agree, the result for Training to employees can be concluded that respondents respond with no that means respondents/employees of AG office are not agree and the overall result is negative about Training to employees, these employees are randomly trained in different session annually, training program is slow because of training is only possible by Master trainee of SAP who render their services in the head quarter, and employees for the purpose of training have to depot to head quarter, where employees claim TA/DA in term of finance, which is another head of expense for AG, the employee training impact can be evaluate with the help of the following table and figure.

Table 2

| 2. Does AG office provide MIS training to all employees? | |
|--|----|
| Yes | No |
| 11 | 16 |

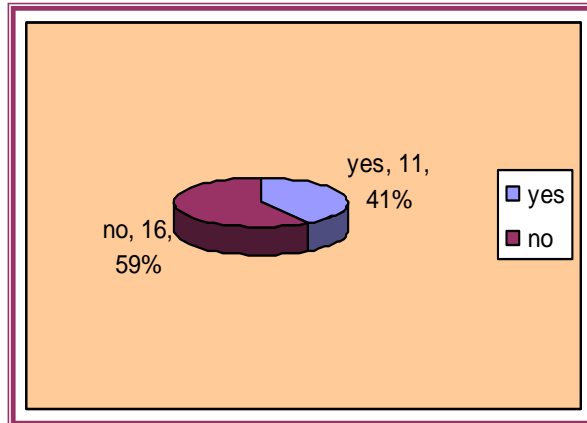
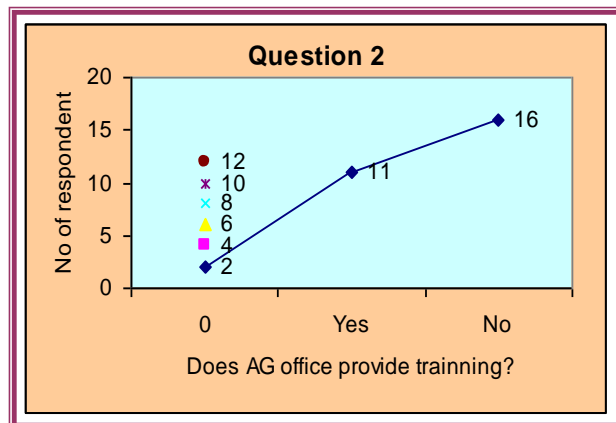


Figure 2

Most of the equipments and technology using by various account offices is not up to date and modern.

Table 3

| 3. Are the Equipments and technology used for training program updated and modern? | |
|--|----|
| Yes | No |
| 20 | 7 |

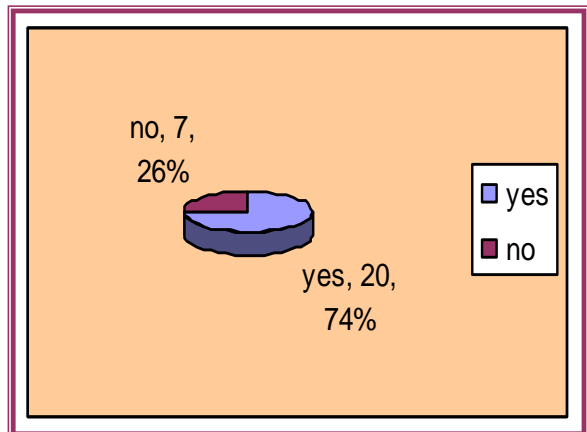
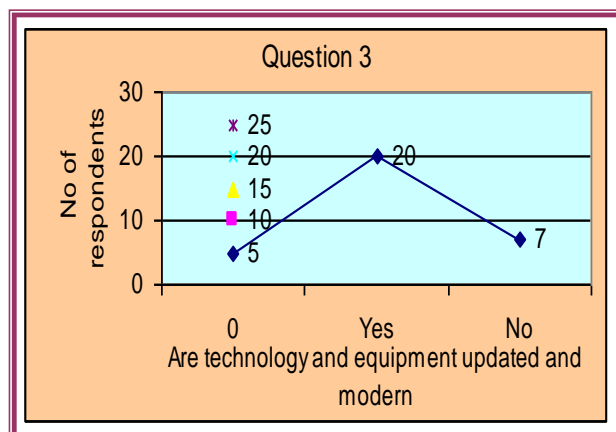


Figure 3

Employees showed their consent with the Updating of technology because they have been shifted from manual work to computerize system, but modern technology is found only in head

office, the other districts’ employees of KPK are still deprived from such facilities especially the agency account offices of KPK. The main districts are connected through network, and much of operations are in these agency and far long districts are not computerized. And recently flood have been destroyed various accounts offices but still there is no construction form the side of high authority.

PIFRA plans to connect all department working under federal and provincial government, and especially all sections inside the AG office are connected through The data collected in this study show regarding Connection of department through technology the AG employees responses 9 with “Yes” and 18 with “No” out of 27 respondents that shows 33 % employees were agreed that Connection of department through technology and 67% employees were not agree, the result for Connection of department through technology can be concluded that respondents respond with no that means respondents/employees of AG office are not agree and the overall result is negative Connection of department through technology, the data is also exhibit as follow:

Table 4

| 4. All department rendering services with Government of KPK are connected through technology? | |
|---|----|
| Yes | No |
| 9 | 18 |

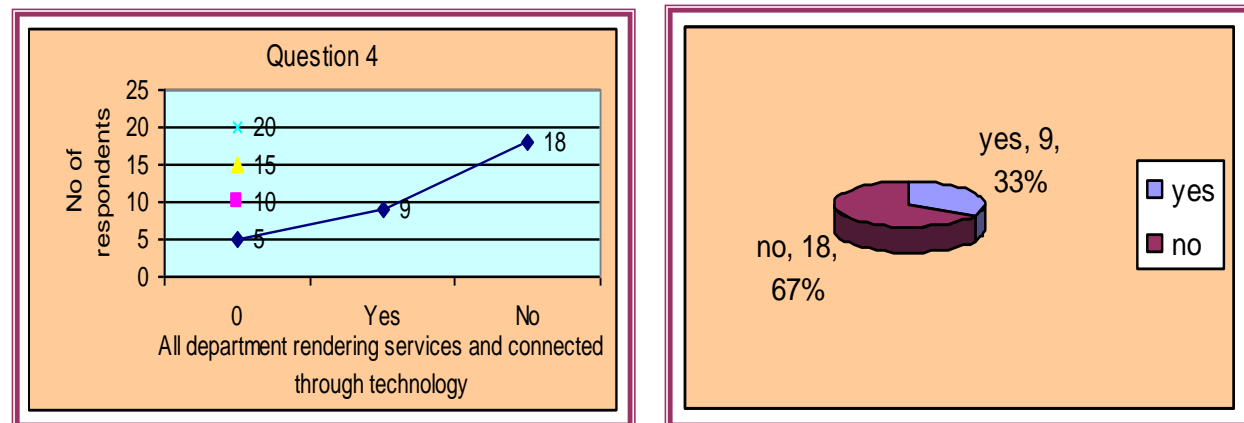


Figure 4

The remuneration to trained employees is in ambiguity, SAP allowance is only paid to those trained employees who got Master training certificate in 2003-04, after that the employees who are getting training in head quarter or other districts, are deprived from such type of allowance, it has been practiced as duty of employees so such remuneration is not paid to them, and employees AG office also shows the same tendency in their response of questionnaire, regarding Remuneration to trained employees the AG employees responses 5 with “Yes” and 22 with “No” out of 27 respondents that shows 19 % employees were agreed that Remuneration to trained employees and 81% employees were not agree, ,the data is also exhibit as follow:

Table 5

| 5. Is there sufficient remuneration package to all MIS trained employees? | |
|---|----|
| Yes | No |
| 5 | 22 |

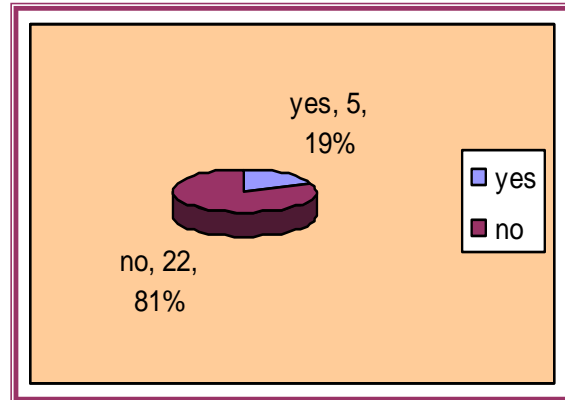
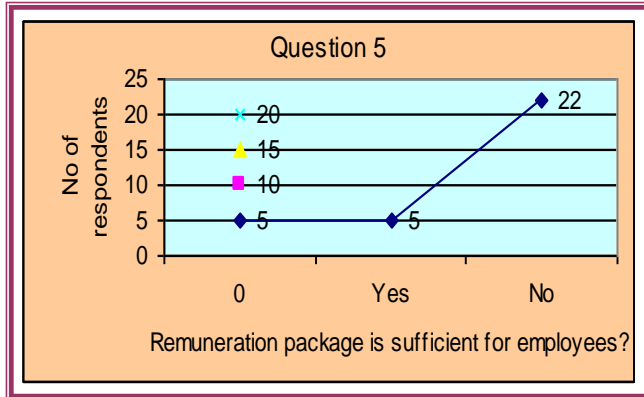


Figure 5

The flow work start from KPO, where computer is mandatory, the senior auditors and AAO of AG office are still using manual mechanism, the researchers personally visited AG office different sections and found two or three computers in each section where one AAO, 8 senior auditors and two junior auditors are working, still old ledger are maintain in payroll sections, but responding to questionnaire the staff response regarding the computerization of AG office sections the AG employees responses 20 with “Yes” and 7 with “No” out of 27 respondents that shows 74 % employees were agreed that Section of AG office computerized and 26% employees were not agree, the result for Section of AG office computerized can be concluded that respondents respond with yes and the overall result is to be considered in favor that Section of AG office computerized

Table 6

| 6. Are all sections of AG office (pension, payrolls and funds) computerized? | |
|--|----|
| Yes | No |
| 20 | 7 |

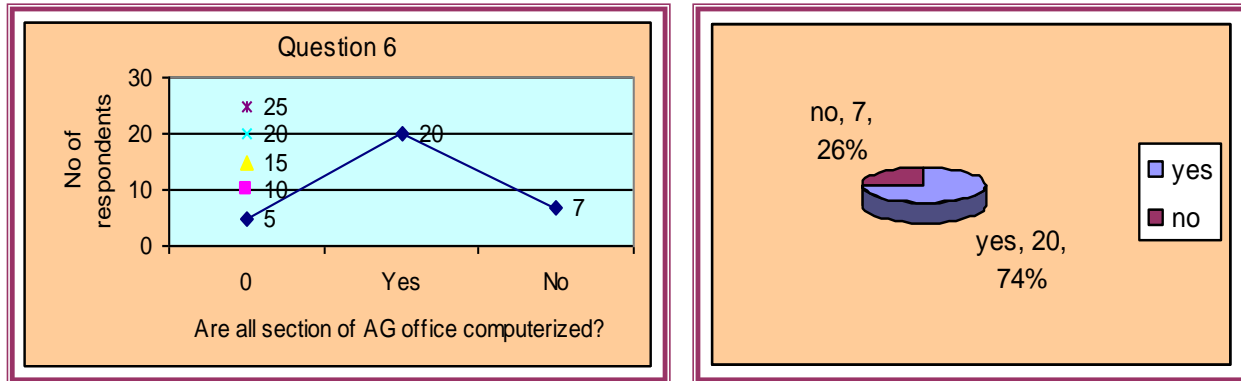


Figure 6

The researchers collected the data regarding Employees personal record access through web the AG employees responses 7 with “Yes” and 20 with “No” out of 27 respondents that shows 26 % employees were agreed that Employees personal record access through web and 74% employees were not agree, the result for Employees personal record access through web can be concluded that respondents respond with no that means respondents/employees of AG office are not agree and the overall result is negative Employees personal record access through web, the data is also exhibit as follow:

Table 7

| 7. Do all employees have access to their personal record through web? | |
|---|----|
| Yes | No |
| 7 | 20 |

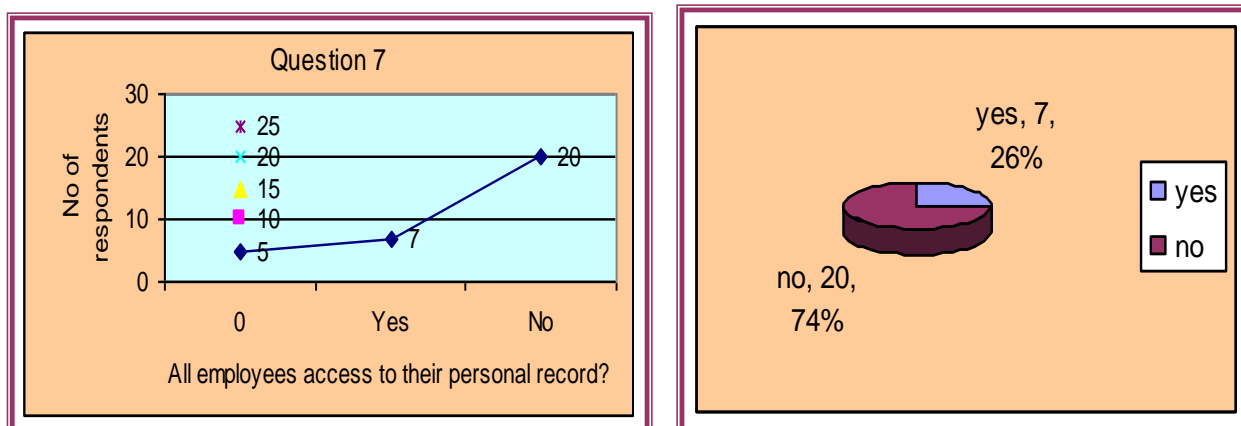


Figure 7

Finance department is supposed to prepared the government’s budget and it is connected through SAP with AG office, all department submit their proposed budget to AG office and it is forwarded to finance department for compilation purpose, the research collected the questionnaire and regarding Preparation of Budget through SAP the AG employees responses 15 with “Yes” and

12 with “No” out of 27 respondents that shows 56 % employees were agreed that Preparation of Budget through SAP and 44% employees were not agree, the result for Preparation of Budget through SAP can be concluded that respondents respond with yes and the overall result is to be considered in favor that Preparation of Budget through SAP, data collected through questionnaire is tabulated and graphical presentation is as follow:

Table 8

| 8. Is government budget prepared by SAP? | |
|--|----|
| Yes | No |
| 15 | 12 |

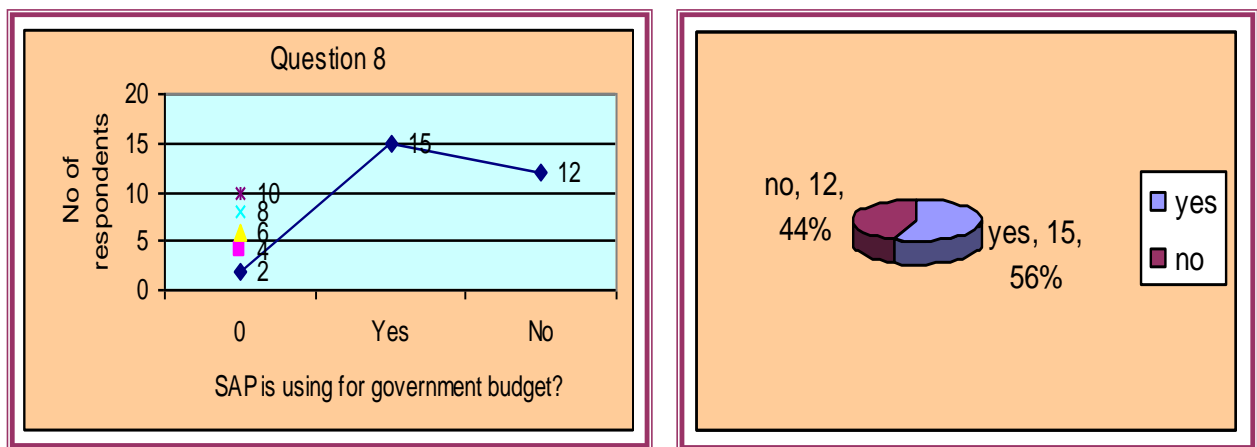


Figure 8

SAP which is the main component of MIS—People, information and technology, SAP is modern technology which enables not only to maintain the record but gives graphical and chart presentation of data, it enables the government to prepared budget with certain estimation and forecasting features. The preparation of budget is a factor of employee performance that has been enhanced with the help of this technology, and that is the reason that majority of respondent in 4.1 responded with Yes. Now employees have sufficient time to think about future budget and can analysis different scenario of different forecasting with help of this technology.

SAP program enhance the operation more quickly than operated manually before, only entry is require and verification by authorized users are acquire to process all record, KPO record and enter data, and all other reports are generate automatically, when the same was confirm with the help of questionnaire regarding quick response of operations after technology the AG employees responses 23 with “Yes” and 4 with “No” out of 27 respondents that shows 85% employees were agreed that quick response of operations after technology and 15% employees were not agree, the result for quick response of operations after technology can be concluded that respondents respond with yes and the overall result is to be considered in favor that quick response of operations after technology, data is also present as follow:

Table 9

| 9. Do you agree that the employees work flow or operation of work is quickly response by technology? | |
|--|----|
| Yes | No |
| 23 | 4 |

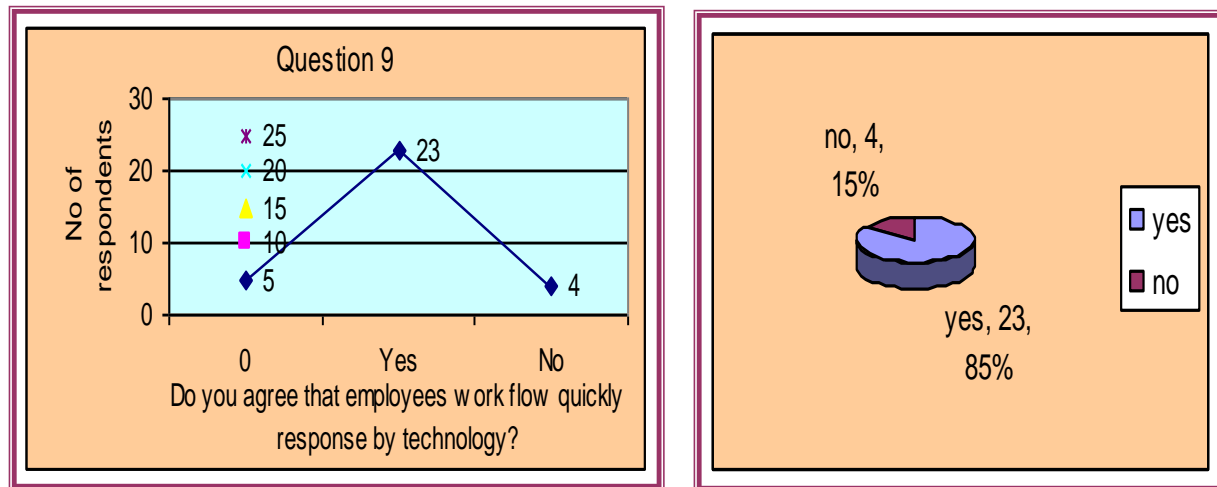


Figure 9

SAP was purchase from German company and government of Pakistan has invested million dollar on the same software, it compile all section data including Payroll section, fund section and pension, it also compile finance data and HR data separately, the questionnaire regarding SAP is the best alternative to enhance the MIS operation, the AG employees responses 24 with “Yes” and 3 with “No” out of 27 respondents that shows 89 % employees were agreed that SAP is best alternative and 11% employees were not agree, the result for SAP is best alternative can be concluded that respondents responded with yes and the overall result is to be considered in favor that SAP is best alternative, the data is also demonstrate as follow:

Table 10

| s SAP software the best alternative to improve the employee performance in AG office? | |
|---|----|
| Yes | No |
| 24 | 3 |

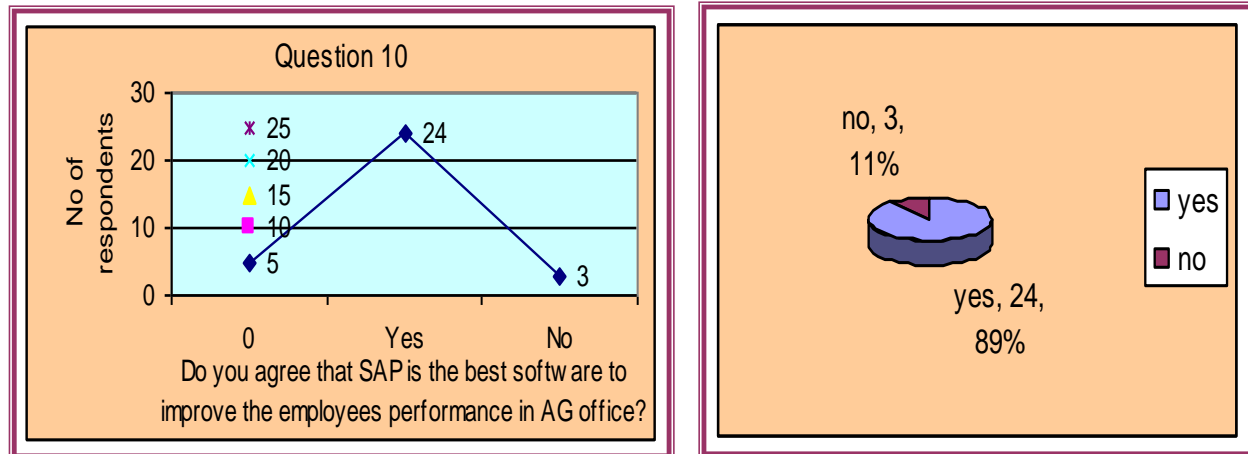


Figure 10

Recommendation

- i) The government should give importance to provide more training program on SAP. And provide more budgets to extend the program to other departments.
- ii) The manual work should be banned further. And motivate other colleagues to use computer frequently. SAP should be used for preparing budgets and other important reports. SAP facility should be extended to other departments such as pension and funds sections.
- iii) The official should remove the existence of nepotism while selecting employees for SAP training, selection should be on merit basis, and further the trained employees should assist other staff of the same department to pave ways for motivation to learn such advance programs.
- iv) The personal access for data (record) of each employee should be ensured.
- v) The employees should be provided with latest technology and tools and equipments. Out of date systems may become a hindrance on their way.
- vi) The government should appreciate such advance software's, and give remuneration and allowances to those employees who are professional in this field to encourage them for further growth and development

Conclusions

No doubt technology play an imperative role for development, and when it is used to improve employee's performance such as MIS (SAP) it will definite give the result. As we have discussed in our paper above. Now most of the AG office sections using SAP and tremendous changes have been occurred, there is a consistent flow of work activities and functions have been observed since 2005. SAP has been proved advance software which certainly improves performance if proper training and motivation provided.

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