Untitled Essay, Research Paper

In accounting systems, certain controls are needed to ensure that employees

are doing their jobs properly and ensure that the system runs properly. These

checks are in the best interest of the organization. These controls come

in the form of internal and external controls for the system. The internal

controls are the checks that are placed in the system my the company’s

own management and directors. Today more and more companies are moving from

the manual accounting systems to computerized accounting information systems.

The advantages of a computerized system are increases in the speed and accuracy

of processing accounting information.

However, as systems become computerized, the internal controls for that system

has to be adapted accordingly. This is because computerized systems bring

with them certain unique problems that can only be removed or minimized by

adapting the present controls and adding new controls. These problems are

· In a manual system there is a paper trail for the internal auditor

to follow. All records and transactions are kept on paper and so an auditor

has clear and documented proof of what has transpired. Computerized systems

rarely have a clear paper trail to follow. Since computers do all of the

sorting of the information the company rarely sorts the source documents.

Also the computer does most of the calculations and processing so there would

not be the amount of documentation that there would be in a manual system.

· Another problem of computer systems is the fact that there can be

difficulty in determining who entered the data. In a manual system the identity

of the person entering the data can be identified possibly by the person’s

handwriting. This cannot be done in a computerized system. This makes it

very difficult to determine who is responsible for errors or fraud.

· Since the computers do all calculations and processing errors can

occur due to bad design of the program. This can be difficult to detect

especially if the error does not occur frequently and only does so under

particular conditions.

· Computer systems also offer new opportunities for fraud. If a computerized

system is not set up properly and certain checks not put in then the computer

system can be used to defraud the company. The fact that it is difficult

to trace who enters the data only adds to the magnitude of this. In order to minimize the risks of errors or fraud occurring

in the computer system certain controls have to be put into place. These

controls can be broken up into three different categories. They are

1. Administrative Controls

2. Systems Development Controls

3. Procedural ControlsAdministrative Controls

Administrative controls are those controls are those controls

that are placed on the system to ensure the proper organization and processing

of data. These administrative controls are

Division of duties.

Duties are assigned to different individuals in the

organization. This is done in such a way that no one person can have full

control over a transaction. This ensures that an individual cannot have full

control over the creation and operating of the system. One reason for this

division is having one person controlling the system can result in fraud

if that person is not completely trustworthy. Another reason for the division

of duties is to prevent the organization from becoming totally dependent

on the person controlling the computer system. If this person were to leave

then the organization would have no one to run the system. The division of

duties ensures that employees can leave without having any major effect on

the system.Operation Controls

Operation controls are necessary controls since they since

they determine what the computer systems and the employees using the system

have been doing. These controls can come in the form of

· rotation of shifts

· duty logs

· a manual of operating instructions

· attendance controls

· computer logs

These controls can allow an auditor to track the exact

actions of the computer systems and employees. This documentation allows

the to easily spot any errors or improper actions that have occurred.Files Controls

These controls are put in place to minimize the number

of errors and omission that occur in the file system. Good file controls

are

· Availability of a skilled technician

· Proper procedures for issuing and returning files

· proper labeling and indexing of files

· protection of storage media from dust, humidity, fire etc.

· Procedures for returning files for certain minimum periods

· Facilities for recovering files that have been damaged or corrupted.

· Facilities for creating backup copies of files.

The placement of these controls have very serious implications. These controls

that information that is vital to the organization is safe. The data in these

files must be protected from errors or tampering whether intentional or

accidental.Hardware Security

The computer hardware is not only important to the processing

of the information but is also a valuable fixed asset for the company. Therefore

controls for the protection of the hardware must be put into place. Computer

hardware must be placed in a secure area where the access to it is limited

only to those who need to use it. Certain levels of security must me maintained

e.g. only the systems administrator can have access to the CPU and storage

systems. The computer system must also be placed in a control environment

to protect it from environmental hazards e.g. dust and humidity. Arrangements

should be made to protect the computer against fires and power fluctuations.

There should also be some controls in place to recover the system in case

the hardware fails. These controls would ensure that the breakdown of the

hardware would not have a serious effect on the company.

Systems Development controls These are the controls that are put over the design and

implementation of the system. These controls ensure that the system is developed

with a minimum number of errors.Standardization

One important control is standardization. These consist

of various standards that are laid down by management for the design and

development of the system. These standards include the complete documentation

of the development of the system. These standards would not only benefit

in the correcting of problems and updating of the system, the documentation

would allow the auditor to get a better idea of how the system works. This

would help the auditor in spotting possible problems in the system.Involvement of Management

The involvement of the organizations management in the

development of the system is an important control. With these controls,

management must have documentation such as feasibility studies, budgets and

performance evaluations. These documents would allow management to decide

if the system being developed would be viable and cost effective. Without

such controls, expensive projects can be started and never finished, costing

the organization a great deal in time and money. These managerial controls

force the development team to do a thorough job since they are accountable

to management..Testing

Testing and trials are important controls and require

that systems are thoroughly tested before they become operational. The extensive

testing of programs will minimize or even eliminate the errors in the computer

system. The tests will show exactly what type of problems occur in the system

in the processing of certain data and would also indicate any problems in

the response time of the systems. Also, the benchmarks that are calculated

in testing can be compared with benchmarks taken later on to see if the program

has been tampered with.Training

The training of the data processing staff is a very important

control. Proper training of staff would reduce the number of errors that

would occur in the system due to inadequate knowledge of the system. The

trained staff would be less likely to make mistakes.Concurrent Running of old and new systems.

Running the old and new systems concurrently is also an

important control. This control would allow the organization to compare the

results of the two systems when they do different tasks. These results would

allow them to find any problems in the new system by validating the results

of the new system with the results of the old oneProcedural Controls.

Procedural controls are one of the most important set

of controls as they are the ones that are placed on the day to day running

of the system. Procedural controls are particularly effective in detecting

whether a system has been tampered with and so are effective in detecting

fraud. Procedural controls are divided into those controls placed on input,

output, processing and storage.Input Controls

These are procedural controls that are placed on the input

of data into the system. These controls are

· Serial numbering of documents

· Validation checks on documents

· Batching documents and checking of batch totals

· authorization proceduresThese controls are carried out by the user department. The Data processing

depart also then gets the data and put carry out their own controls. These

are

· Vetting of batches to ensure that they are correct

· checks on data conversion methodsThese checks are made so that the data that is entered is as accurate and

as error free as possible.Processing Controls

Once that data has been entered into the system and is being processed, the

processing controls are used to ensure that the data is processed properly.

Processing controls are divided into two categories. These are

1. Validation tests

2. File checksThe validation checks are made on the data when it is being processed. These

checks ensure that the data is processed correctly. Validation checks include

· Check digit verification

· Checks in the size of file and records

· check on mode of the file

· Check on consistency of fields in files

· Range tests on numbers and values

· Hash totals

· Control record checks

· Sequence checks to ensure that records are entered in the right

order

· Error logs which contain a record of all errors that have occurred

during the processing of the data.

· Transaction logs which contain a record of each transaction that has

been made. This provides an audit trail for the auditor. The transaction

log would contain where a particular transaction originated and who initiated

it.

File checks are the controls to ensure that the integrity of the files that

hold the data for the organization remain intact during processing. Some

file checks are

· Use of header tables to identify files

· Use of trailer labels to ensure that the record is completely read.

· Arithmetic proof of the validation of certain fields by checking them

with other fields in the recordOutput controls

The outputting of processed data also has certain controls.

These output controls are used to ensure the completeness, accuracy and

timeliness of the output on screen, printed form as well as on storage media.

Some output control procedures are

· Initial screening of the output to detect obvious errors

· Output should only be distributed by authorized persons to authorized

persons.

· Controls totals on the output should be checked against the control

totals of the input to ensure the consistency of data.

· All the documents produced should be numbered and accounted for

· Highly sensitive materials should not be seen by the general data

processing staff but should be outputted to a secure location.

· A feedback system must be developed between the users and the data

processing department so that any errors that occur would be reported and

subsequently corrected.

Storage Controls

When data is stored additional controls must be put into

place to ensure that the data is stored properly and that the data is to

tampered with in any way. These controls ensure that no unauthorized persons

would be able to tamper with or destroy the data whether it be intentionally

or deliberately. Some of these controls are

· Authorization controls to ensure that only authorized personnel is

allowed to make amendments and deletions to the files.

· Controls to ensure that amendments and deletions are to be thoroughly

documented so that the person who made the amendments can be made accountable

for the changes they made.

· Controls to ensure that there are proper facilities for the backup

of files. These include ensuring that files are backed up regularly, multiple

backup files are kept and that these files are kept at a secure location

and are easily retrievable in case of an emergency.

· Controls that would ensure that the data can be recovered in case

of disaster. This includes transaction logs of complete system dumps which

will make periodic backups of all the transactions that occur within the

system.

Computerized accounting systems bring with then a set of new and unique problems.

The internal controls that have been put into place for a manual system to

help the internal auditor cannot fully prevent or minimize the possibility

of errors or fraud that come with the computerized systems. Therefore the

old controls must be modified for the new system and new controls must be

put in. Only then can the internal auditor ensure that the number of errors

that occur within the system be minimized or even eliminated..

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