

How To Prepare For An IT Audit

Introduction

Digital assets are among the most essential resources for any business in the 21st century. The rapid proliferation of computer technology, together with increasing reliance on the data infrastructure has enabled organizations to create an ecosystem where transactions take place literally at the speed of light. Deals that earlier used to be finalized at the table are settled virtually, meetings are held via video and money has been reduced to mere bits on storage media, sitting protected behind layers of encryption.

As businesses continue to migrate to the digital world, most organizations find themselves dealing everyday with an increasing number of Information Technology (IT) related issues. And this does not merely constitute that laptop computer sitting on your desk.

IT is an umbrella term that incorporates a large number of technological innovations that enable information dissemination and storage. These range from the (now) humble smartphone in your pocket to the humongous data centers crunching petabytes every moment. Communication networks, telephone lines, associated peripherals, all fall under the ambit of information technology.

Naturally, in any organization of scope, the total number of IT resources is bound to be considerable. Every day these resources are used for a large amount of information storage, retrieval and manipulation. As a result, this IT infrastructure has become the fulcrum on which the world business machinery turns.

This has created greater opportunities in the business world; newer business models and revenue systems are being invented that challenge the status quo of the market. Entrepreneurs, with the help of disruptive digital technology, have successfully turned age old ideas on their heads, creating a synergistic environment of inventive collaboration that transcends traditional concepts of doing business.

But with every silver lining there is a cloud, and IT too is not entirely devoid of problems. In fact, the very fact that IT systems have come to be the backbone of the business world itself lends to certain weaknesses.

The growing reliance of business processes on IT demands a greater understanding and control of the organization's digital assets. A thorough evaluation of the IT assets that are being used in the daily operations of any business is of paramount importance to the smooth functioning of the same.

IT is a complex web of devices and services that must work together in perfect harmony for an organization to effectively carry out its everyday operations. In order to keep this machinery running, it is imperative that regular checks and balances should be kept in place.

Apart from the question of operational efficiency there also looms the threat of digital delinquency. Cybercrime is currently one of the biggest dangers that seek to upend the existing foundations of information technology. And as most business data is nowadays

shared, exchanged and stored in digital format, a solid understanding of any organization's IT assets is essential for successful operation.

Herein lies the utility of an IT Audit. Related yet separate from the regular financial auditing process, and IT audit enables an organization to gain an expert-level view of their IT system. This not only helps in documenting and maintaining an organization's IT setup, but also enables protection from external as well as internal security breaches.

But what exactly is an IT audit? What purpose does it serve, and how do you prepare for one in your organization? We are going to answer this, and more, in this book. The purpose of this document is to clearly define and explain the IT audit process, what it entails, how you should prepare for it and what results you can expect from a well conducted audit. So if you are looking to get an IT systems audit done in your company, or wondering about how to prepare before one to pass with flying colors, this resource is going to answer all your questions.

But first thing's first. Let's begin by gaining a clear understanding of what an IT audit is, and how it works.

What Is An IT Audit

Let's begin by first defining what an IT audit is. Formally put, an IT audit is essentially a thorough examination of the entire IT infrastructure of an organization, with the aim of gaining a clear understanding of whether the existing IT resources, policies and practices are working efficiently together to protect all data items and progressing towards attainment of the organization's objectives and business goals.

Further an IT audit also looks at whether the existing security measures that are in place to safeguard the organization's digital assets are adequate or not. Based on the results of the security audit, an organization can take the necessary steps required to bring about any corrective measures that are required; this helps to improve the IT system of the business, which naturally leads to better performance and enhanced security.

It should be kept in mind that IT audit is distinct from a financial audit, which aims to discern the financial status of the business; though, both may be carried out simultaneously for better synchronization. In fact, financial and IT audits can often have significant bearing on each other. The data from a financial audit can augment the findings from the IT audit, and vice-versa.

The concept of an IT audit is nearly six decades old, having begun in the mid-1960's to assess the operational efficiencies of information systems. Since then IT audits have come a long way; this is partly due to the advancements made in the fields of technology and science, and partly due to the rapid adoption of IT into various business processes. All this has coupled together to create a new medley in which the IT audit finds itself indispensable for the operation of new-age economies.

Purpose Of An IT Audit

Before delving deeper into the what's and how's of an IT audit, let's first discuss the why. Why exactly do you need to get periodic IT audits done? What purpose is served by them? And why on earth do you need to pay someone to create a report on assets that *you* own and use?

Time to find out.

Just consider the following scenario:

You are feeling a bit seedy. You can't really put a finger on it, but for some reason, you don't feel like working today. What can be the reason? After much deliberation you decide that something must be wrong with you; health-wise that is. So what do you do?

Unless you are a registered medical practitioner, you straight away need to go to a doctor and get yourself checked out! Even though it's your body, you can't always tell what is wrong with it, can you? And even if you are not feeling bad you should always get yourself periodically checked out to ensure that you remain healthy.

The same is true for IT systems.

The primary purpose of an IT audit is to perform a systematic evaluation of the systems, policies and protocols that are in place to safeguard the organization's IT assets. Put succinctly, IT audits are meant to analyze and report on the capacity of an organization to protect its information and to successfully and safely share and disseminate the information among the parties concerned.

And this is exactly where an IT audit is similar to, but also different from a financial one. The purpose of a financial audit is to ensure fair representation of the financial statements of a business; this helps to determine conformity, ensure legal practices and perform an evaluation of the financial position of the organization.

Likewise the purpose of an IT audit is to perform a comprehensive evaluation of the IT systems of a business. This includes examination of the system's internal control design, operating protocols, data analysis and much much more.

But another question remains unanswered:

Why can't you do the audit yourself?

Well, the answer is, actually you can. If you are qualified and trained to perform the IT audit in a fair and unbiased manner, then you can easily take the help of your in-house IT team and conduct the audit yourself. But often, internal biases are difficult to overcome, and these can have unwanted effects on the results of the audit.

So, for best results, ensure that the audit is performed by independent and unbiased professionals who are experienced in readying your organization for compliance and IT audits.

These examiners, known as auditors, are specially trained to carry out audits on information technology systems. IT auditors are experienced professionals who can conduct an unbiased review of your digital assets and provide you with the correct analytical reports that'll help you to put in place the right corrections and avoid financial penalties.

The auditors work closely with you and your staff to determine any weaknesses in your information technology setup, and also guide you towards the right IT policy. With the right products and services your organization stands to gain a better visibility of security and compliance risks.

A successful IT audit can allow you to enforce effective security policies; from the instant audit report you get access to valuable insights that provide you with information regarding the operating costs, security loopholes and future requirements in your IT infrastructure.

This enables you to gain a better visibility of your security and compliance risks. It also allows you to implement built-in policies for security controls and also helps to streamline work processes.

Types Of IT Audits

While talking about IT audits, it would be wise to mention the fact that all IT audits are not created equal. Different flavors of audits may be carried out with the aim of focusing on different facets of the IT infrastructure. The following details some of the various varieties in which IT audits can be conducted:

General Controls Audit

This type of IT audit involves the analysis and review of multiple control points across the entire IT system structure. This may involve, among other things, OS review, Data Center review, testing of compliance with established security protocols and overall maintenance of the systems.

Forensic Audit

This is a highly specialized form of the IT audit. It is usually carried out in response to any unusual or suspicious activity that has been detected on the IT systems of the organization. The purpose of a forensic audit is to detect the source of this unwarranted activity and take the required steps to identify and stop the perpetrator.

Application Audit

This form of the IT audit revolves around the evaluation of a particular application. The auditor is required to monitor, document and assess all issues related to the application such as data flow to and from the software, integrity of output and processing efficiency.

Data Center Audit

This type of IT audit deals specifically with the security, processing and associated metrics of data centers i.e. repositories for vast amounts of business critical data.

Risk Profile Audit

In this form of IT audit, systems are examined from the vulnerability point of view. A bird's eye view of the IT setup is taken to identify weak points in the information security system. The purpose is to create a risk profile that clearly states from which quarters the IT systems are at risk, and how to protect the resources from any potential threats. The audit report can also be used to set up guidelines or best practices that those engaging with the organization's IT systems can use as operating principles.

Comparative Audit

This IT audit compares the IT systems of an organization together with that of its competitors. By carrying out this exercise, your business can understand how your IT systems compare when put next to the best in your industry. You can then take steps to improve the areas where you find yourself behind, and take care to maintain what advantage you already have over your peers.

IT audits can be further classified under the following two heads based on the agency carrying out the audit:

Internal Audit, in which the IT audit is carried out by auditors who are themselves a part of the organization where the audit is taking place. In this case, the auditors are liable to report their findings to the management of the company.

External Audits, in which the auditing is carried out by external agents such as government agencies, in order to determine compliance with rules and regulations. External auditors are in no way beholden to the company management.

Apart from the above classifications, IT audits can be classified into multiple different types based on the resource being audited, or the cause behind the audit. This primarily relates to the purpose of the IT audit (more on that later).

Importance Of Preparation

As with everything, preparation is the key to success for any IT audit. Once you decide that your organization is in the need for an IT audit, then it's time to take the necessary steps that will ensure that the auditing process goes smoothly, and final objectives are achieved in time.

One of the chief hurdles that organizations have to overcome to prepare for an IT audit is to navigate through a maze of compliance requirements. It's best to seek professional help in this regard.

Once you have a clear idea of the documents and data that you need to keep ready for your IT audit, you can be sure that this will greatly improve the efficacy of your review.

Not only that, but the preparation itself will give you a clear idea about what the audit process will entail, and how you can improve the performance of your IT infrastructure.

But how exactly do you prepare for an IT audit? Read on to find out.

Steps To Prepare

The following lists some steps that you can follow in order to ensure that your IT audit gets conducted without running into any significant roadblocks.

Step 1: Inform All Stakeholders

Once you have finalized the decision to get an audit done, it's time to inform your business partners about it. This is essential so that no one is caught unawares and all involved parties are on the same page for the auditing process.

However, the task doesn't end only with letting your business partners know about the upcoming audit. Along with your business associates, your entire staff should be prepared to handle any issues that crop up.

This involves informing all departments about the audit, and ensuring that all tasks are geared to enable smooth functioning of the same. One of the best ways to do this is to create a list of the management and IT individuals who can be relied upon to deliver in times of need. Inform them beforehand that you may need their help during the audit process.

Further, you can also conduct a survey to find out the common IT related issues faced by your staff, and how much time is spent on resolving them. Knowing all this will help you to uncover wasted resources and save on hidden expenditure that may be secretly sapping your business.

Step 2: Get Your Documentation Right

One of the essentials of a smooth audit is proper documentation, and you and your business partners must be ready to provide the auditors with all updated paperwork as

and when they require the same. So before the auditing begins, it would be prudent to gather all essential information in one place so that you can present it to the auditors as soon as they need them.

This can entail creating a list of all your contracts with third party providers and external vendors. Also of importance are warranty documents about your IT infrastructure. Knowing how old your equipment is can be essential to the auditors.

As is evident from common knowledge, out-of-date hardware can be a serious liability due to lack of spare parts in the market. Based on how old your systems are, the auditors can decide which parts of your infrastructure need to be replaced, and which can still be used for further operations.

Step 3: Make An Inventory Assessment

Since an IT audit is all about your IT assets, it's best if you perform an in-depth analysis of your IT inventory. Take stock of what IT assets your organization owns. This can and should include both hardware and software assets that play an integral role in the day to day operations of your organization. Also of importance to security is a complete list of which assets are remotely accessed by employees or other associates.

Along with the IT inventory you need to keep in mind another factor, and that is the access list for your organization. The audit process can be greatly facilitated if the auditors can have immediate access to your essential systems.

To enable this, make a list of the login credentials for all software applications and hardware resources that need to be involved in the audit process. Also be certain that your auditors have the necessary permission to access the various parts of your property that they may need to visit in order to carry out the audit.

Be advised that you should reset all your log-in credentials once the audit is complete to ensure continued security of your infrastructure.

Step 4: Get A Checklist

Ask your auditor about any specific requirements they may have in order to carry out the auditing process. Better yet, request them to prepare a checklist of items that you need to provide them with. This will make the entire journey of the audit all the more simpler and smoother.

From your end, prepare a list of the IT issues that your organization frequently faces. Ask your consultant/auditor to focus on these key issues. Frequent service outages, potential and past security issues and network connectivity problems are just some of the pieces of the puzzle that you can gather together for the audit.

Further, by yourself, you might not be aware of all the issues that plague your IT system. Conduct sessions with your staff to identify frequent problems faced by them and make your list accordingly.

Step 5: Prepare A Financial Statement

One of the primary objectives of your IT audit will be to reduce the operating cost of your IT infrastructure. In order to achieve this, create a financial statement of all expenditures related to your IT setup.

Once you present a complete picture of your IT expenditure to the auditors, they can suggest methods to bring down your operating costs and improve profitability. This not only helps to curtail unnecessary spendings but also eliminates the existence of unnecessary IT equipment.

Step 6: Written Policies And Procedures

Make sure that your IT policies and procedures are clearly documented in one place for the auditors to review. Having a physical copy of your IT best practices is of paramount importance to the success of the IT audit.

This not only saves you from having to scramble together a slipshod policy document during the audit, but also enables you to implement any changes in a concrete manner. A written policy also enables your employees to get acquainted with IT best practices and stick to them.

Step 7: Information Security Plan

Apart from written policies and procedures you also need to make sure that your firm has a concrete information security plan in place to handle any risks and untoward situations arising from lapses in cybersecurity best practices. It also helps to fulfill any regulatory requirements that the auditing agency may need you to meet.

However, this is where many organizations trip over as they don't have a clear idea regarding where exactly they need to start from. This leads to unnecessary work that is time consuming and cumbersome. Automated tools and processes should instead be applied to make the process effortless.

Step 8: Controls And Safeguards

In any IT infrastructure one of the most important aspects remain the establishment of proper controls and safeguards at strategic checkpoints. This enables the security and protection of application softwares and services.

Before your IT audit is to take place make sure that you have a ready list of all controls and safeguards that are in place for your IT system. This will enable the auditors to carry out their tasks more efficiently and effectively.

Step 9: Gap Assessment

Once you've made a survey of the controls and safeguards you have in place, now it's time to take a look at the possible gaps in your security. This is essential as no system

can be entirely foolproof, and you are in the best position to know where possible lapses may be lurking. Keeping a list of these security gaps handy can assist your auditors to carry out their functions properly.

Step 10: Evaluate Yourself

Your auditors are certainly the best people to assess your IT system. But before they take up the task, be sure to complete a self-assessment of your firm's IT setup. Doing this will give you confidence about your business' performance in the audit. Further, it will help you to identify and plug any loopholes that you may find well ahead of the actual audit. This way, you are doubly sure about your IT performance.

Step 11: Address Issues From Previous Audits

In case there are any issues from your previous IT audit that you have not yet addressed, be sure to look into them before your upcoming one. Mitigate the risks that were found and resolve any serious issues. In case you don't have enough time to do so before the audit, at least have an action plan in place that you can show to your auditors. This will help them understand that you are sincere with the results of your audit and take steps to remedy any lapses.

Step 12: Pre-Schedule Tests And Deliverables

Take care that at least some tests and deliverables are scheduled and completed before the audit. This way you will have available deliverables for specific action items in advance. This helps to show that you are prompt and take your firm's IT performance seriously.

Step 13: Be Ready To Hear What You Don't Like

It's not always that the results of the audit are going to be all in your favor. Be prepared for negative news and steel yourself to address any serious issues that may arise in the course of the audit. Starting the process with an open mind can often be the best way to get the most out of the audit.

Step 14: Keep Help At Hand

Don't wait till after the audit results to start preparing for the remediation task. Be sure to have relations with partners and IT service providers who can help you to resolve any issues that may come to light during the audit. This way, you will be several steps ahead when the report comes in.

Step 15: Select And Dissect

Once you've received the audit report your job doesn't end there, obviously. Not every finding in the audit report may be of relevance to your particular business requirements and goals. So keep in place a proper documented framework to ensure that the report

you get handed is properly analyzed and the relevant issues are quickly identified and dealt with.

An IT audit is one of the most important tasks that can be undertaken to ensure the continued success of a business. Preparing well for the job helps not only the auditors but also your employees and stakeholders to guarantee that the entire process is executed without any hitches. Also, a well prepared audit ensures that you get the most out of the process. So take all the steps seriously and prepare well in advance.

Objectives Of An IT Audit

Now that you have a clear idea regarding how you should prepare for your upcoming audit, it's time to take a look at the various objectives that an IT audit is expected to achieve. These are as follows:

Improve The Cost-Benefit Ratio

Your IT systems are part of your assets. But they can quickly become a liability in case they are not maintained properly. In that case, the cost of maintaining the infrastructure can become prohibitive. To ensure that it doesn't happen, IT audits clearly delineate the cost of every asset that is under the ambit of your IT system, and also give you a clear picture of the amount of revenue that comes from its proper utilization. This in turn helps to improve the cost-benefit ratio of your organization.

User Satisfaction And Security

This is yet another objective that is fulfilled through the course of an IT audit. One of the main factors in the success of any business is satisfaction of the employees working in the company. As they form the bulk of the people who use your IT systems on a daily basis, ensuring a satisfactory and smooth user experience for the users is of paramount importance.

In case you are an IT service provider, the proper functioning of your IT system is directly linked to the customer experience and satisfaction. In both cases, frequent malfunctions, disruptions and service outages can create a sense of frustration among the users, thus leading to falling levels of productivity and profitability. IT audits can help prevent, correct and overcome these problems.

Another aspect that IT audits look into is the security and safety of the users of your IT infrastructure. Ensuring data security and information safety is essential to maintaining the flawless operation of any information system. By ensuring the safe operation of your IT system through an IT audit, you stand to guarantee the safety of your employees and external users.

Placement Of Professional Security And Control Systems

An IT audit is the best method to ensure that your systems are under professional security and control measures. This guarantees the confidentiality of your business data, along with maintaining the integrity of your digital communication.

Risk Minimization

Systematic and regular IT audits enable an organization to minimize risks from both internal as well as external sources. In the case of internal threats, IT audits help by providing a clear security framework, along with a complete best-practices protocol that the users of your IT system should follow. This can include data and credential sharing protocols, email guidelines and instructions regarding the use of personal devices on office premises.

In the case of external threats, IT audits help by identifying existing as well as potential loopholes in your IT security plan. By protecting your systems from malicious elements such as viruses, malware and attacks by hackers, IT audits act as an additional safeguard that helps to determine whether your IT elements are safe and secured with the best possible safeguards available at the time.

Enabling Smooth Decision Making

IT audit reports help the company management to make clear decisions and take appropriate action regarding the information systems of an organization. This optimizes the time taken for reaching critical decisions and has a direct impact on the performance of the business. Streamlined and prohibition-free decision making is one of the prerequisites of a successful business, and IT audits can contribute significantly to this goal.

Educate Employees

This is one of the direct benefits of IT audits. Successful audits involve the employees at all levels of the organization. This fosters education about the IT systems among the employees which naturally leads to better utilization of information and improved performance.

Apart from the above, IT audits can have several indirect benefits which can vary depending upon the business and its goals. Ask your auditor for a complete list of the goals that your audit aims to reach.

How IT Audits Work

Now that you know why and how you should prepare for your next IT audit, it's time to take a quick look at the IT audit process itself. While it is evident that IT auditing is a large topic in itself that warrants a separate discussion, the following is intended to give you a glimpse into how IT audits actually proceed. The following are the main steps in the IT audit process:

Planning

In this first and most important step, the auditors determine the type of audit to be undertaken. This can be according to the client's requirements, or even as per government regulations. Based on the type of audit to be conducted, the goals and objectives of the audit process are set up. Also clarified are the reporting authority, the time required for the audit, and the parameters against which the systems are going to be tested.

Assessment

Here the auditing process begins in earnest as the auditors take the field to assess the IT infrastructure. This process requires cooperation from the employees and management of the organization to make sure that every aspect of the information system under inspection is properly examined. Also, all findings are documented formally.

Reporting

Once the audit is done, now it's time to report to the proper authorities. As mentioned before, in case of an internal audit by the company's own staff, the management is the reporting authority. For external audits the reporting authority can be the government or the agency responsible for carrying out the auditing process.

Follow-Up

The final step in the process, this involves following up the report of the audit to make sure that the recommendations put forward by the auditors are properly implemented.

The above was a brief coverage of the IT audit process. Audits can involve multiple intermediate steps as per the specifications of the auditors and reporting authorities.

Conclusion

IT audits can prove to be indispensable tools for your business. A well planned, properly carried out audit can reveal reams of insights that may have been previously hidden from your view. Using the data uncovered during the audit, your business can work towards creating a solid IT maintenance plan that guarantees improved performance.

However you need to be clear about the objectives you want to achieve through your auditing. Based on this the type of audit should be selected. Be sure to include every

level of the organization in the process, and ensure that the auditors get all the help that they need.

Finally, audits need not be a scary proposition. True, you may come face to face with certain truths that may seem to be unpalatable at first. But it is far better to feel the pain and treat the wound than allow it to fester. Just be sure to seek professional help where required so that you are prepared well in advance for the audit, and you will be on your way to IT success.

As they say, well prepared is half done!