Complete Guide to IT Infrastructure Management

All the technology used by your company requires some kind of management to be truly effective, which is where IT infrastructure management comes in. That's where you're in charge of administering and managing the key components of your IT operations. Those budding entrepreneurs with plans of [starting a business](#) can consider this article as a crash course on the subject. Worry not; you don't have to be a tech genius to keep up with the discussion.

The 3 Main Categories of IT Infrastructure Management

When talking about IT infrastructure management, it mainly focuses on physical components (computer and networking hardware) that enable an organization's IT operations. The subject is divided into 3 main categories. Let's do a breakdown of each one and see how they fit in the grand scheme of IT infrastructure.

Network Management

Security networks need looking after too. Network management's main priority is to make sure your company's network is free of errors. For this category, both security and operations analysis have the task of configuring networks. This ensures proper allocation of resources for the necessary services and applications, all the while keeping up its quality and availability. It's a fact that costly data breaches are now more common than ever. That fact alone makes a company's IT operators all the more important. If you're planning to set up your own business, consider adding network management into your list of worthy investments.

Storage Management

Businesses, especially those in the IT sectors, know how valuable asset data storage space is. Unfortunately, such space isn't as abundant as they wish it is. Since they take in a lot of data every day, businesses need a ton of storage space to save them. It's up to IT departments to oversee the usage of their data storage space. Storage management is a broad concept that relies on multiple techniques, processes, and tools to assure that storage space is in mint condition. Your IT services personnel should be well-versed in proper storage management strategies to save you and your company a lot of time and money.

Systems Management

This last category acts as a shield for your organization's IT assets. Every single one of those assets is covered here. Much like storage management, there are a lot of tasks that need to be done here for the overall monitoring of IT assets. The tasks that fall under the systems management umbrella include hardware asset inventory, workload automation, and configuration management. As businesses continue to rely on technology, the need for systems management increases. Regardless of your company's size, there should at least be a safeguard for your IT assets. Not only does systems management keep them safe, but it also helps everyone work better too.

Components of IT Infrastructure

Now that you know the definition and categories, let's move on to the infrastructure itself. For this article, let's list down five primary components and describe each one in detail.

Hardware

You can't run your IT operations without this first item of this mini checklist. You may have the latest software in your hands, but it's useless without a device that can run it. Your company's laptops, computers, routers, and server machines are prime examples of this component.

Software

This goes hand in hand with your hardware. If hardware and software were to be a person, the former would serve as the body while the latter would function as the brains. Although IT infrastructure management is primarily concerned with the physical components, software shouldn't be overlooked. Make sure that the necessary software applications are installed on your hardware to ensure efficient operations.

Network

Imagine running your IT operations without a network. Impossible, right? Your network allows you to exchange information within your workplace in a quick amount of time. This covers your internet connection, [security](#), firewalls, and network enablement.

Liveware

If you're wondering what this is, liveware refers to the people using the infrastructure. This term was used in 1966 in a humorous context.

From the International Investment Trust Limited's (IITL) standpoint, people aren't considered as part of IT infrastructure. However, your infrastructure will just be left sitting and collecting dust if there aren't any competent people using and maintaining them. IT personnel aren't employed by a company without reason, and they don't tinker around with the infrastructure for anything either.

Difference Between IT Infrastructure Management and IT Operations

The lines between IT operations and IT infrastructure management are a little blurry. Let's set these two straight and see how they're different from one another. IT operations are the activities that involve the design, setup, deployment, configuration, and maintenance of an organization's IT infrastructure. IT infrastructure management, as defined earlier, pertains to managing IT operations. Despite being two different things, your IT operations and IT infrastructure management need to be harmonious. Imagine the possible chaos if one or both fails to be up to standards.

Benefits of IT Infrastructure Management

IT infrastructure management may seem like a tedious undertaking, but all your time, effort, and sweat drops will be worth it. That said, it should be a part of your [business plan](). Below are some of the benefits it can reap:

Early Problem Detection

Regular [risk management]() goes a long way for your IT infrastructure. You'll be able to detect major problems and issues before they reach your system. Don't wait until the 11th hour to monitor problems.

Smarter Decisions

Since technology is an ever-evolving world, you can't be too sure if your infrastructure is up to standard. If you think you need some upgrades, chances are, you're probably correct. By monitoring your infrastructures, you'll be able to craft sound strategies and make logical decisions.

Downtime and Business Losses Reduction

[Productivity]() isn't the only thing that's affected by downtime. If you want to cut your losses, keep tabs on your infrastructure's health. This will allow you to pick up any trends and patterns which can bring costly disruptions.

As long as the world of business prospers, so does the IT and software industry, especially software development trends. The marriage between these two won't break up anytime soon, so it's best to dive into effective IT infrastructure management if you want to grow your business. As long as your IT assets are in tip-top shape, your business will be just fine.