

Challenges in IT infrastructure activities

Most of the global tech analysts understand that there are several challenges related to IT infrastructure that the companies face. The main challenges are regarding computing platforms, data acquisition, compute provisioning and management, data storage architectures, data analytics, and networks and communication. Here are some of the top infrastructure management challenges that an organization may face in the future –

Lack of Powerful Computing Platforms

The major challenge in growing processing power of computers has been the lack of energy and space to power supercomputers. IT managers have always been on the lookout for better and faster systems which will help in the faster processing of the large amounts of data available today.

Data Acquisition Problems

Firewalls which protect emails, applications and web browsing can cause important packet losses in the TCP/IP networks. This can result in important data loss and reduce the network speeds considerably, making the online collaboration impossible. Similar losses can occur due to the switches and routers which do not have the required high-speed memory.

Compute Management and Provisioning

One of the biggest challenges for IT managers is the humongous amounts of data that is available today. High-performance computing of these large data sets will require virtualization and automation to avoid adding more people to these processes. The major challenge for IT managers is to simplify these tasks and speed up the processing.

Lack of Efficient Data Storage Architectures

Cloud storage has taken over in most of the cases in the modern world. Though it is a cost-effective and scalable alternative for data storage for IT managers, it does not provide the required data storage architectures which can accommodate a variety of applications. The IT community needs something more flexible which is beyond space and cost in cloud storage options.

Lack of Ways to Improve Data Analytics

Currently there are not many methods in place which can be used by IT managers to separate quality data from the humongous data sets. It is important to identify patterns in the data and correctly analyze it and use it to take business decisions in infrastructure management.

Improper Networks and Connectivity

For any organization to work smoothly, it is important that there is a good and reliable network in place. Without a reliable network connection, IT infrastructure management can be a difficult task for any IT manager of the organization. New software-based methods and network architecture design are required for the optimization of data.

Many Technologies

An IT infrastructure consists of hardware, software and people managing it. When all these components work together as a coherent whole, they form the very backbone on which the operations of the company rely. When the regulatory environment changes, it puts pressure on the business to meet the guidelines which may mean have extended storage capacities, so making the right choice from many technology options is imperative.

Mobile Workforce

The businesses that are present across many states and countries have a highly mobile workforce. To equip them with technology many kinds of devices become a part of the IT infrastructure. This proliferation of mobile devices can pose a significant challenge to the IT infrastructure of the organization. The situation gets complicated with the concepts such as BYOD (bring your device) to increase the employee productivity.

Cloud Computing

With the emergence of cloud technology, more and more companies are moving to cloud to find a long-term solution to their storage and computing needs. The companies having cloud as well as traditional IT infrastructure will require a lot of expertise in the hardware and the software. So the IT infrastructure solutions and service provider must be capable enough to tackle this need of the companies as well.