

Benefits for an organization by migrating to Cloud

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## **Introduction:**

The IT industry is in a big transformation phase and the organizations are trying hard to update their IT infrastructure to thrive in this competitive market. By analyzing the valuable data that the organization generates, provides market trends and forecasts the predictions of the direction where the business is heading towards, will help the organization to take risks which will be beneficial for its growth. Due to the globalization, the organization has great opportunities to expand its business, globally. In order to achieve these, more computing power is required and as a result the On-Premise investments on the IT infrastructure, maintaining them and time to market their products will exponentially increase. This can be avoided if the firm carefully researches and moves its IT infrastructure to Cloud Platform, so that they can benefit monetarily along with getting more value and quality on its applications in return. This paper describes the benefit an organization can get by migrating to Cloud, in detail.

**Agility:** On-premise model requires upgrades in datacenters and new software procurements in case the new product development requires them. The time taken and labor involved to achieve that will be huge with respect to On-premise model, whereas, in cloud getting the infrastructure and software can be achieved in minutes and the product development can happen right away. Similarly, Continuous integration (CI) and Continuous deployment (CD) is possible in cloud, so that the time to market will be reduced drastically. Also, time taken to set up datacenters globally to launch the product worldwide can be avoided completely in cloud platform.

**Availability:** The maintenance downtime of the application and SLA violation as a result will end up in more expenses and it is viable in On-premise. In cloud, data replication and disaster recovery can be done seamlessly as the cloud storage comes with the option of replication and the applications can be deployed in distant datacenters to effectively manage the downtime and maintenance. The virtual machine instances can be copied and deployed in any datacenter which is a nice feature in cloud.

**Scalability:** In cloud, the resources can be scaled up and down based on the peak traffic and no capital expenditures are involved in procuring the infrastructure and the performance and quality of the applications will not be compromised. On-premise model does not have this capability and to manage the peak traffic the investments on infrastructure will be huge and resources will be sitting idle for the rest of the times.

**Flexibility:** Cloud applications can be accessed from any device which has internet connectivity and hence it is flexible to access anywhere anytime. For example, the office 365 suite email application from Microsoft is a cloud-based application which can be accessed by any device connected to internet from anywhere.

**Interoperability:** The ability to share data between different cloud systems thru interfaces is termed as interoperability. The cloud platform provides different standards and APIs to interface private/public and hybrid clouds to seamlessly interface with each other and share data. There are standards to enhance Interoperability in cloud and can be found in the below link (Reference: [https://www.slideshare.net/thomas\\_lee/hkcs-cloud-interop-26523295/12](https://www.slideshare.net/thomas_lee/hkcs-cloud-interop-26523295/12))

[https://www.slideshare.net/SanthoshkumarThiruma/clipboards/my-clips?rftp=success\\_toast](https://www.slideshare.net/SanthoshkumarThiruma/clipboards/my-clips?rftp=success_toast)

**Productivity:** Since infrastructure, network, storage and system maintenance are taken care by cloud service providers, the organizations resources can concentrate on applications development and innovation which increases the productivity of the work force.

**Digital platforms:** The data generated by the business can be stored, analyzed and can be used for Machine learning and other AI developments thru cloud since it provides more computing power and the organizations can make wise decisions based on data trends and ML suggestions.

**CAPEX and OPEX:** The expenses on setting up a datacenter on-premise which includes real estate, cooling systems, rack spaces, network equipment, servers, licensing, maintenance and downtime will be completely avoided by moving the IT infrastructure to Cloud platform. The cloud model works on “pay per-use” utility model and hence the firm will pay for the resources what they use. Similarly, the applications can be scaled up and down as needed without spending on the resources which may sit idle during non-peak hours, in the on-premise model.

**IT Staffing:** The staffing associated to maintaining the datacenter, network operations center and storage management on-premise, can be eliminated.

**Implementation costs:** In order to launch new products, the enterprise needs to setup the hardware and software required for the new application and the time/cost incurs to get that setup. All these will be avoided in cloud platform.

**Conclusion:** Migrating to cloud has benefits related to cost savings as well as benefits which includes rapid application deployment, maintaining the quality, applications availability and performance. Similarly, it provides APIs and standards to interface with various heterogenous systems and enhance data sharing.

#### **References:**

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