**WHAT IS CLOUD GOVERNANCE?**

Cloud Governance refers to the structures, policies, and systems for the direction, control, and activity monitoring of the company.  It is the system that defines the roles and responsibilities of all the level of management, considers the regulatory framework and risk management.

Cloud governance is the system directed towards controlling business activities by providing data security, data management, and authorized access and modification of the data to avoid operational and financial loss. It also assists in risk management associated with cloud computing.

Cloud governance provides the set of principles to the management for the effective and efficient functioning of the system. It enables the achievement of the objectives of the organization. The efficient utilization of resources helps in the reduction of the cost.

**2. IMPORTANCE OF CLOUD GOVERNANCE**

**1) More optimal utilization of Cloud resources:**

Cloud governance framework provides a set of rules and regulations that collaborate with the cloud resources. Cloud computing governance enables to use of cloud services optimally. The enterprise can outsource the cloud services. However, external servers should need governing to avoid any embarrassment by data stealing.

**2) Improved compliances:**

It is crucial for compliance with relevant laws, regulations, and policies. The Cloud Governance model should be established in the system so that there can be early detection of any deviation from the rules and regulations.

**3) Interoperability:**

The outsourcing or creation of an application with a cloud computing vendor by the enterprise will create difficulty in changing to another computing vendor that has Proprietary Application Programming Interfaces (APIs). It will create problems in achieving interoperability of applications between two cloud computing vendors.

Therefore, the Cloud Governance framework provides for reorganizing data or changing the logic in applications. It has standards for the successful implementation of interoperability.

**4) Threshold Policy:**

Cloud Governance refers to the policy for the testing of how the program is working, developing, improving, and implementing in the organization. It is a policy that provides for the scalability of a sudden increase in demand that results in additional instances to fill in the market demand.

**5) Improved agility in supporting business needs:**

Cloud governance provides agility by providing the latest technology. It is available whenever it is required. This assists in meeting the stakeholders and business needs. It improves transparency and understanding of the contribution to the business. All these factors explain Cloud Governance.

**3. GOVERNANCE POLICY IN CLOUD**

**What is governance in cloud computing?**

The cloud is vulnerable to various risks developed in the technological environment. There is a need to control these risks. The governance policy provides a regulatory framework to the enterprise, controls, and monitors any deviation from the organizational goals.

The governance policy facilitates risk management. It guides to achieve the business objectives without compromising the shareholders’ needs. It enables the optimum utilization of the cloud infrastructure.

Governance policy ensures that the management is accountable, effective, and compliant with the framework.

Regulatory requirements and Standards generally address various levels of compliance being subject to assurance. The policy refers to the standards of operating platforms, applications, activities on the operating platform, operating systems, and cloud computing basic service models.

**4. PRINCIPLES OF CLOUD GOVERNANCE**

**1) Operational Alignment Optimization.**

It is necessary to align initiatives with business strategy. It reduces dependencies on technologies. It improves the organizational skills and capabilities. It also helps to meet the scalability in demand. It optimizes the data and service security and availability.

**2) Performance Management.**

Discovering new avenues and increase in profits are the relevant aspects of Business objectives. The addition of streams, production, and manufacturing of new products will serve the business goals. Cloud governance helps to retain the customers by giving them satisfactory services.

**3) Customers Relationship Management.**

The cloud governance model improves the responsiveness to customer grievances. It also improves customer experiences. It helps in the improvisation of quality and availability of service. It enhances the collaboration with customers’ demands and shortens the lead time. It contributes to automated delivery and testing.

**4) Effective Cost Management.**

Cloud governance increases the efficient utilization of resources. It requires capital expenditure at the initialization of the infrastructure but then it shifts to operating expenses for routine maintenance to avoid any disruption. It has lead to increase data protection.

**5) Security and Incident management.**

It helps in access controls that control unauthorized access and modification to data. Cloud governance provides the administration of audit trails to locate the initialization of transactions. It also addresses various issues like encryption, application access rules, and suspicious activities.

**5. CHALLENGES OF CLOUD GOVERNANCE**

**1) The complexity of numerous issues:**

There is a combination of various issues that create complexities leading to inconsistencies. These issues get incorporate with the further conflicts in different regulatory interests and approaches.

**2) Law enforcement:**

The unimpeded access to the cloud is required by various sectors like military, security, and intelligence agencies to give protection against malicious threats, surveillance, and conduct cyber operations. However, this may conflict with standards and requirements implemented for security to cloud operations.

The above challenges are easily tackled by cloud governance.

**3) Accountability:**

The lack of control over employees and services creates problems relating to design, implementation, testing, and deployment. The organization gains computational resources as capital expenditures. These actions require monitoring by the organization under cloud governance.

**6. CLOUD GOVERNANCE BEST PRACTICES**

The cloud governance best practice gets differentiated based on the nature of the industry. Some of them are:

* Clear assignment of responsibilities and decision making authorities,
* Mechanism for establishing a security policy,
* Financial and Managerial incentives to act appropriately,
* Appropriate information flows internally and to the public,
* Authorized access to the cloud resources,
* Special monitoring of risk exposures due to external threats.