The term self-service is important here too. With self-service, the developer of an application, for example, is able to use a browser or portal interface to acquire appropriate resources needed to build or operate an application. This just-in-time model is a more efficient way to ensure that the IT organization can be responsive to business change.

Billing and metering of service usage

A cloud service has to provide a way to measure and meter a service. Consequently a cloud environment includes a built-in service that tracks how many resources a customer uses. In a public cloud, customers are charged for units of resources consumed. In a private cloud, IT management may implement a charge back mechanism for departments leveraging services.

Workload management

The cloud is a federated (distributed) environment that pools resources so they can work together. Making this happen requires that these resources be optimized to work as though they were an integrated well-tuned environment comprised of a variety of workloads. A *workload* is an independent service or collection of code that can be executed. It's important in the cloud that workloads be designed to support the right task with the right cloud services. For example, some workloads need to be placed in a private cloud because they require fast transaction management and a high level of security. Other workloads may not be so mission critical and can be placed in a public cloud.

Management services

Many management services are mandatory for ensuring that cloud computing is a well-managed platform. Security and governance are key services to ensure that your applications and data are protected. Data management is also critical because data may be moving between cloud environments. All of these services have to be managed and monitored to ensure that an organization's level of service is maintained.