

# FACT SHEET

## CLOUD COMPUTING



## STANDARDIZED & SHARED RESOURCES

**The Essence:** To move data processing power, memory and storage into huge data centres where computing resources are shared and provided on-demand for significant economies of scale.

**Characteristics:** Cloud computing has existed for some time and has matured and expanded heavily in recent years. A *private cloud* exists within – and is controlled by – the enterprise, whereas a *public cloud* will have several tenants with multiple organizations and users sharing computing resources. *Hybrid cloud* is a mix of these two modalities. These public cloud resources may be distributed in several data centers globally. Cloud services cater for inherent *mobility* as they are agnostic with regard to the user's location. Any device may be used to connect to the cloud services through internet, and *reliability* is ensured through heavy *standardization* and *simplification* at all levels. *Flexibility* is provided through the ease of use and management, and *scalability* is a main characteristic due to the near instant expansion and down-sizing in resources whenever required. With redundancy at all layers, cloud services offer a great degree of *availability*, and *security* is taken care of by large-scale operation centers which do not exist in-house for most organizations. Reference the availability, organizational *Business Continuity* and *Disaster Recovery* is supported through standard Service Level Agreements. The three main offerings are represented «as-a-Service»: Infrastructure, Platform and Software.

**Business value:** Cloud computing represents an opportunity to off-load in-house resources with on-demand data processing and storage, reducing own infrastructure and save costs. It caters for agility and productivity gains.

**Concerns:** Some view public cloud services as a potential risk in terms of distribution of processing and data, the sharing of resources and the lack of infrastructure control. There may also be regulatory restrictions related to the physical location of certain data. Additionally, some cloud providers are considered having suboptimal privacy policies.

**Successful implementations:** Many – both in the professional as well as the consumable market segment. Messaging/conferencing, data storage, data analytics, ERPs, CRMs, etc.

**Hot tip:** Ensure that business processes and data are tidied up prior to transitioning to cloud services. Conduct a close review of how security measures will safeguard information assets, e.g. scrutinize encapsulation, encryption and APIs.