# Scalability

- Cloud Computing provides businesses with the ability to regulate the service in accordance with their current requirements:

- Scale capacity up and down as needed

- Infinite computing capacity on demand

- Flexibility through cloud bursting

# Business Agility

- Ability to handle expected or unexpected changes in load

- Reduced time to deploy an application into production

# Cost Efficiency

- The customer pays just for what they need, resulting in directly proportional costs.

- The customer avoids provisioning (and paying) for the peak as a permanent fixture

- Move from a large upfront CapEx cost to a comparatively small monthly OpEx cost

- ICT costs are more transparent to the business

# Cost Efficiency (Cont.)

- The customer does not have depreciable hardware assets

- Technology refresh is the responsibility of the Cloud Provider

- The provider passes hardware maintenance costs onto the customer as part of the predictable monthly fee, there are no unexpected costs

# Competitive Advantage

- Organisations can respond quickly to evolving market trends and focus on growing their core business

- Reducing capital spent on infrastructure releases funds to invest in innovation or other priority areas

# Productivity

- IT staff can focus more on strategic decisions and developing and improving core applications rather than maintaining or troubleshooting in-house ICT

# Availability and Reliability

- All major Cloud Provider's facilities are located in hardened data centers with redundant power, no single points of failure and onsite security

- The service will be certified to the relevant industry standards such as ISO 9001 (Quality) and 27001 (Security)

- The data center is built by facilities, server, networking and storage qualified specialists according to best practice

- Check the Service Level Agreement to see what is guaranteed and the compensation if the SLA is not met

# Cost

- The advantages are all great to have, but a decision to deploy Cloud Computing usually comes down to the overall long-term cost

- The TCO of maintaining an On Premises solution should be compared to the TCO of maintaining a Cloud equivalent, and the advantages and disadvantages of each factored in when making the final decision

- It is not an either/or decision. The majority of companies who use Cloud services will have a mix of On Premise and Cloud solutions

# Data Center Costs

- CapEx Cost:

  - Hardware procurement

- OpEx Cost:

  - Rack space

  - Power and cooling

  - On-going management

# Costing Example

| On Premises Solution | | | | IaaS Cloud Solution | |
|---|---|---|---|---|---|
| Cost of each server | $6,000 | | Monthly | $6,000 |
| Server refresh cycle | 5 Years | | Yearly | $72,000 |
| Cost of running servers per year (power, cooling, rack space, maintenance) | $3,000 | | Installation Fee | $0 |
| Number of servers | 12 | | | |
| Cost of IT support per year for hardware and backups | $50,000 | | | |
| Tape library and backup software (one off cost) | $20,000 | | | |
| | | | | |
| CapEx (No. servers x Cost per server + Tape library and backup software) | $92,000 | | | |
| OpEx (No. of servers x Cost of running servers x 5 years + IT support x 5 years) | $430,000 | | | |
| | | | | |
| Total CapEx plus OpEx over 5 Years | $522,000 | | | $360,000 |
| | | | | |
| | | | Cost Saving | $162,000 |