CLOUD COMPUTING – RISKS & MITIGATIONS ANALYSIS

THREATS
- Force Majeure
- Terrorism / Activists
- Criminal Activity / Hacking
- Utility Service Outage
- Denial of Service Attacks
- Snooping by Government Agencies
- Requests for Data by Government Agencies
- Regulatory / Legal / Legislative Change
- Cloud Overt / Pandemic / Wide Scale Indirect Action
- Data Is Interception in Transit
- Data Centre Hardware Failures
- Bug / Vulnerability in Infrastructure
- Cloud Provider Goes Out of Business
- Contract with Cloud Provider is Terminated
- Strategic Shift by Cloud Provider
- Bug / Vulnerability in Application Code
- Uncontrolled Usage of Resources
- Spike in Use of Services
- Ensured Upgrades
- Disgruntled Employee
- Mistake by Employee

OWNERSHIP
- Controls solely the responsibility of the Cloud Provider
- Controls where there is a joint responsibility between Cloud Provider and Tenant
- Controls solely the responsibility of the Tenant
- Controls implemented independently by both the Cloud Provider and the Tenant

PHYSICAL/TECHNICAL CONTROL
- Choice of Data Centre Location
- High Security Premises
- Multiple Utility Connections (Power, Communications, Water)
- Physical Infrastructure Resilient by Design
- Geo Replication
- Spares Carried for Key Kit
- Flexible Capacity
- Logical Segregation of Tenants / Subscriptions
- Secure Deletion of Data No Longer in Use
- Metering of Use
- Monitoring Tools
- Management Tools

PROCESS CONTROL
- Preventative Maintenance of Equipment
- Secure Disposal of Physical Media
- Active Virus Scanning
- Independent Audits
- Regular Patching and Upgrades

PEOPLE/ORGANISATIONAL CONTROL
- Understanding of Cloud Economics
- Understanding of Cloud Services and How to Apply Them Successfully

BARRIERS
- Physical/Technical
- Process
- People
- Containment/Recovery

CONTAINMENT/RECOVERY CONTROL
- Local Power Generators
- Selective Shut Down of Services
- Major Incident Management Procedure

UNDESIRABLE OUTCOMES
- Information Security
  - Uncontrolled Leakage of Information
  - Breach of Data Security Law
- Commercial
  - Overspend
  - Vendor Lock In

INFORMATION SECURITY
- Uncontrolled Leakage of Information
- Breach of Data Security Law

COMMERCIAL
- Overspend
- Vendor Lock In

PERFORMANCE
- Unplanned Outages
- Poor Performance
- Insufficient Capacity

INFORMATION SECURITY
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