



The Data Center Trends and How to Mitigate Risks and Guarantee Business Continuity- International Standards

Presented by:

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Global Data Centre Trends



The world, and our world is changing fast...



- Digital disruption is all around us
- What do these companies have in common?



The world, and our world is changing fast...



Largest accommodation provider owns no property



U B E R

Largest taxi service provider owns no cars



One of the largest software application vendor doesn't write the applications (99%)



One of the largest retailer owns no inventory



Largest movie provider owns no movie or cinema



One of the largest content provider doesn't write content



One of the fastest growing bank has no physical money



Demographics and attitudes are changing

- 43% of the current workforce will retire in the next 8 years
- New work force is (going to be) very different placing more demand on IT/Data centres
 - More demanding yet less loyal
 - More technical/digital/social media savvy
 - Expect anything, anytime, anywhere....



Open data centre architectures



- Two “competing” standards have entered the market
 - OCP - Open Compute Project
 - Based on 21” inch wide racks
 - Open19
 - Based on standard 19” inch wide racks
- OCP started in 2011 but has not gained the traction/adoption which was expected
- OCP is expected a faster adoption due to the usage of standard components/equipment



ePORTALS



**Bring Together The Applications & Cloud Services Your Customers
Want To Buy With The Brand They Want To Buy It From!**

DATA CENTER TRENDS

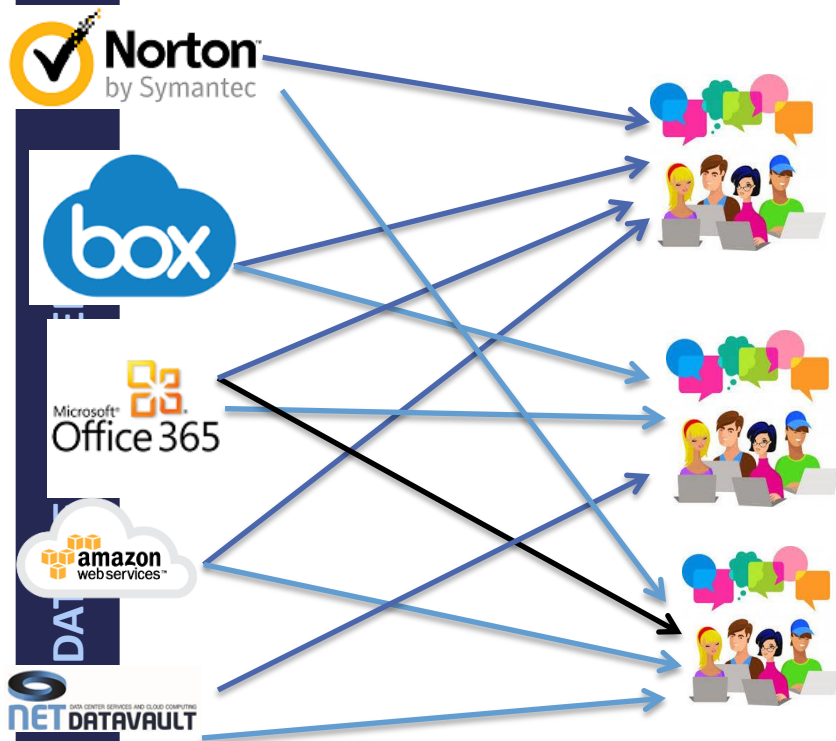


Sage CRM

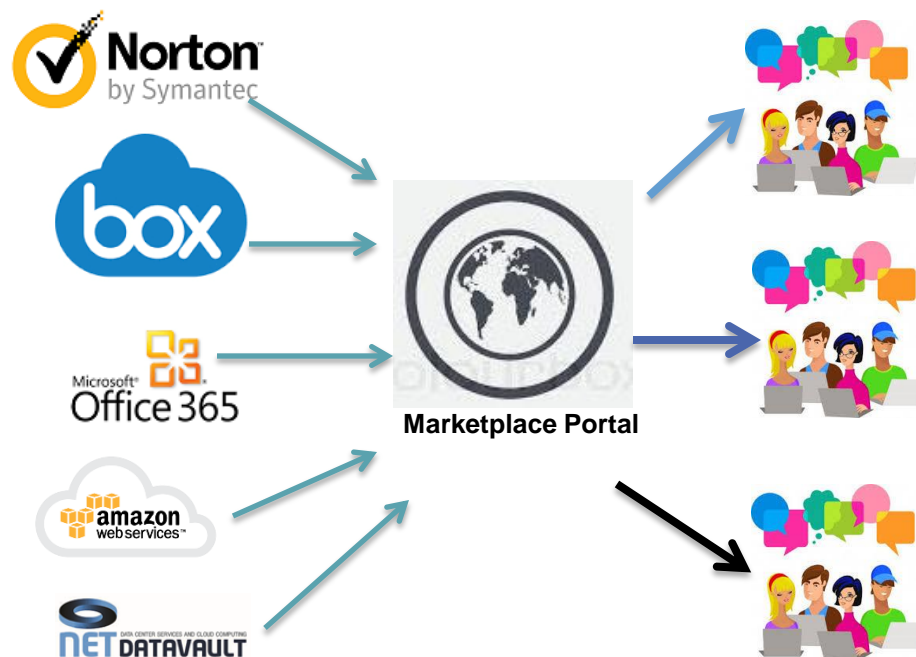


ePORTALS

Traditional Delivery Model



ePORTAL Delivery Model



Security



- Security stays high on the agenda
- IT Security becomes more challenging
 - CLOUD
 - IoT – Internet of Things
 - DDoS – Distributed Denial of Service
 - Ransomware
- Security of supporting infrastructure
 - BMS / Control Systems
 - Public/utility services





Resilience

- Traditional resilient infrastructure will change or be complemented due to new technologies and ever increasing demand for availability
 - More sharing
 - More active
 - More replication
 - More intelligent and software driven
 - More distributed

Shift in Enterprise Data Centres

- Less, or smaller, on premise data centers
- Many smaller and regional facilities consolidate into centralized 'premium' sites
- Capacity outsourcing to public cloud data centers, enterprises will increasingly turn to colocation and hosting providers
- SaaS/Cloud attracts customers with a need for driving down cost and increase speed of innovation
- IoT will lead to many regional aggregation data centres to support hyper scale data centres



AI – Artificial Intelligence

- AI is going to be disruptive once the technology has been proven
- Google is experimenting (Deepmind project)
- University of Lancaster's Data Science Institute developed data centre AI software (REX)
- Intel® released programs for AI



GPU (Graphics Processing Units) vs CPU



How GPU Acceleration Works



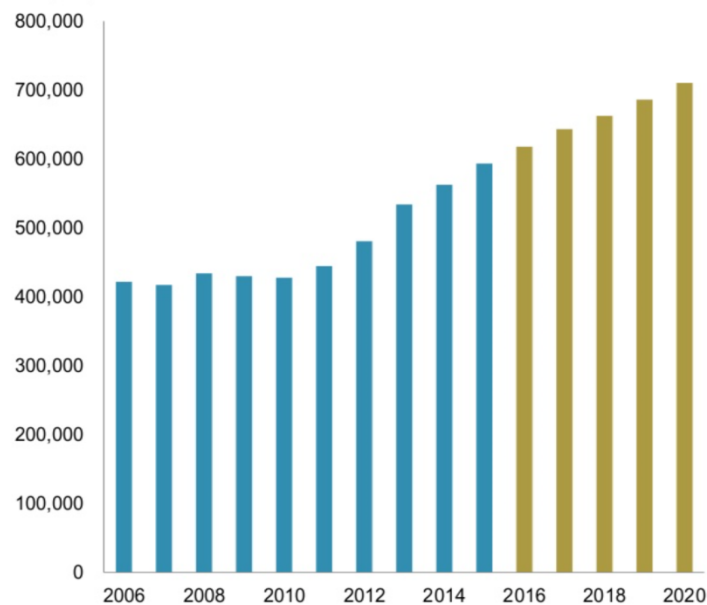
Blockchain

- Cryptographic currency – is the future?
- Mining (GPU)
- Recording of events, medical records and other records management activities, such as identity management, transaction processing, documenting provenance, food traceability or voting.

Data centre market growth



EMPLOYMENT



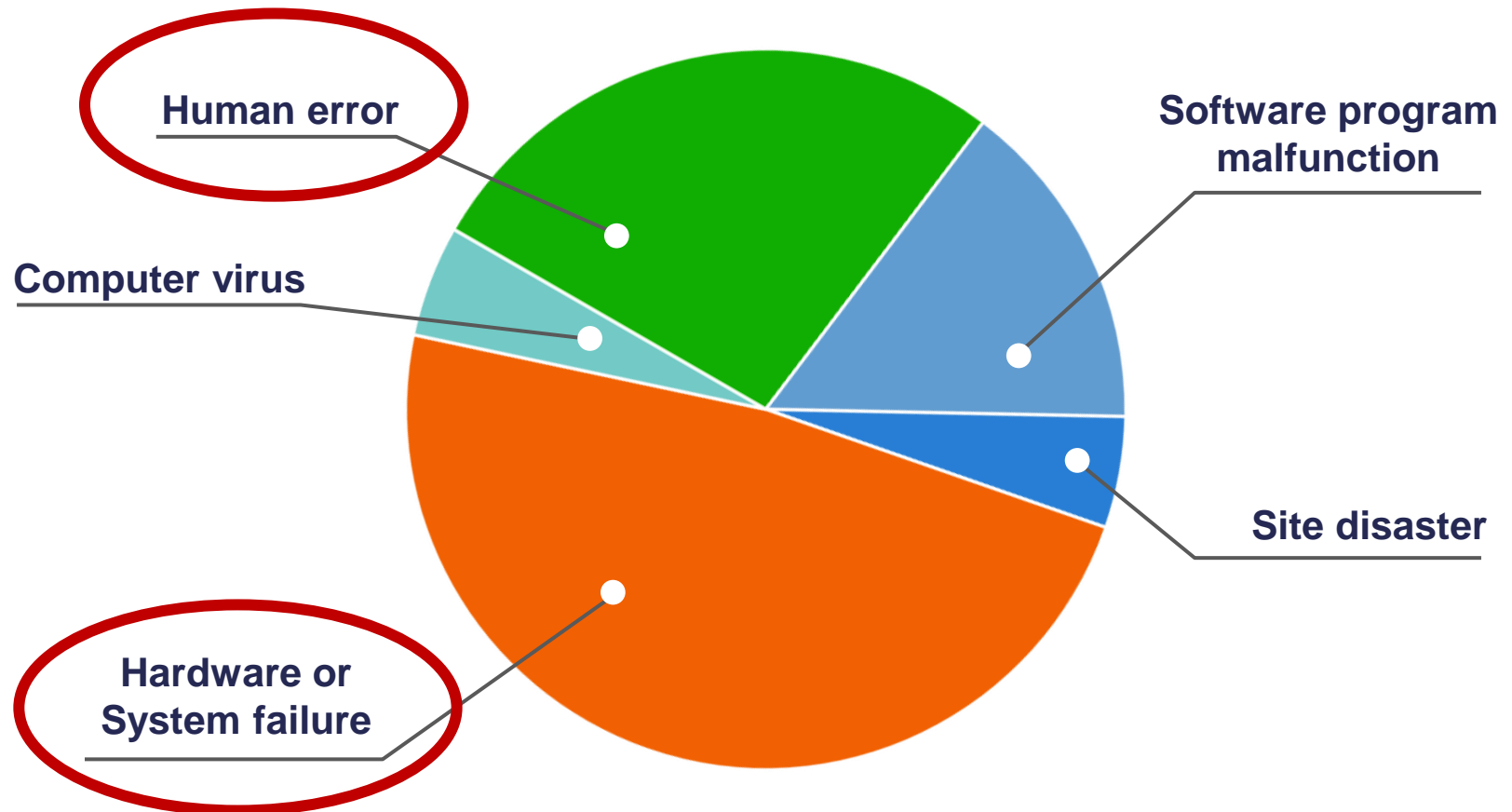
Source: IBISWorld, June 2015



Data Centres



Causes of downtime



Causes of downtime and data loss
(Source: ZDNet by ADIC)



Airline Safety – a 5 Year Overview

- Airline accidents have dropped against an increase in number of flights

Description	2009	2014	Change %
# of flights (in Millions)	33.2 (2.5b)	38 (3.3b)	+15% (35%)
Total accidents	90	73	-19%
Fatal accidents	18	12	-33%

Source: IATA

- Pre- and inflight check lists are one of the reasons...



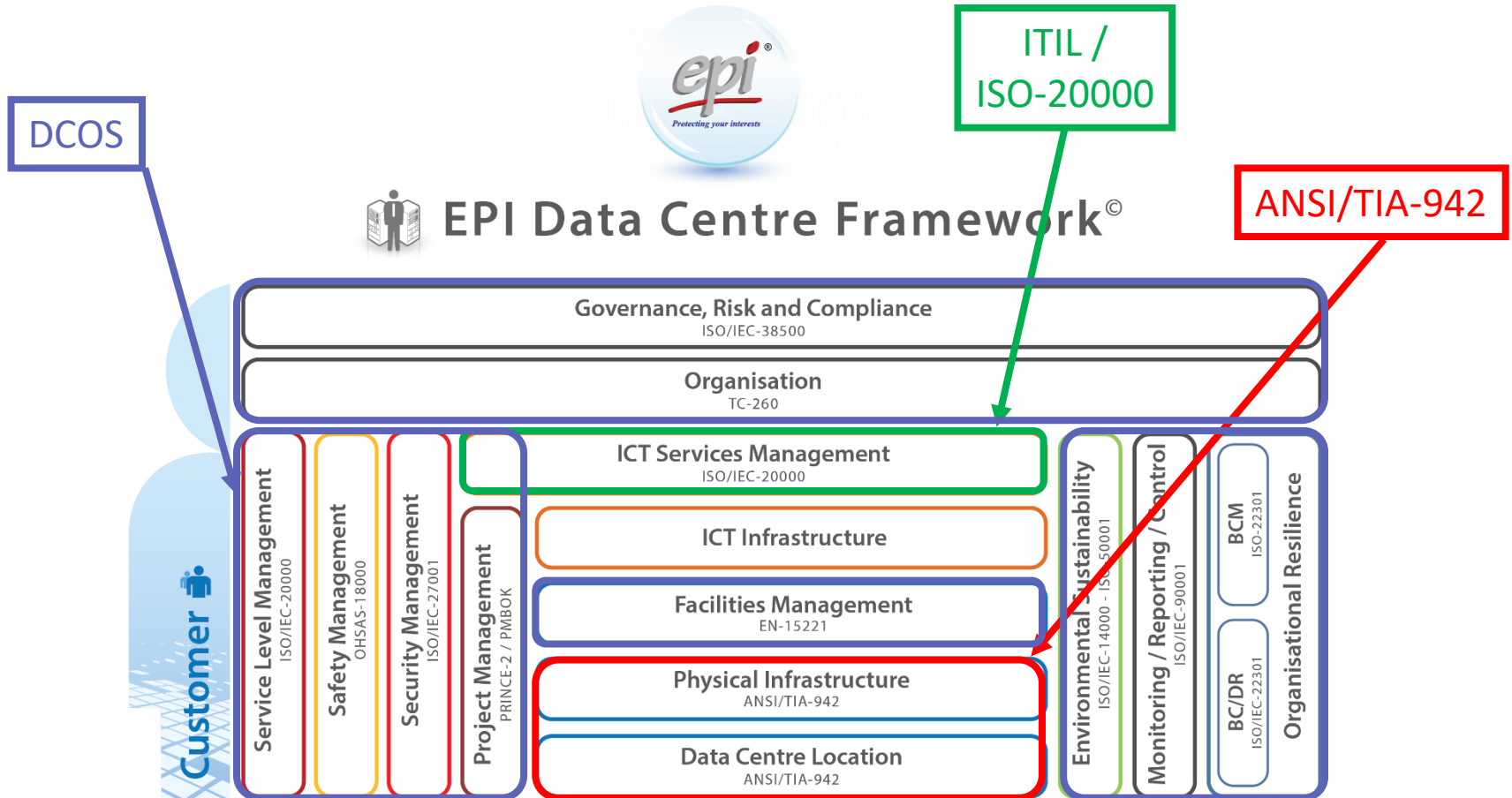
Operational Excellence



- RELIABLE service



Data centre Framework



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Trust?



– Maybe Certified according Standards?

- Physical Data Center (Architectural, Electrical, Mechanical, Security, Telecommunications)
- Operations
- Trained and Skilled Staff
- Green Data Center,...



ANSI/TIA-942:2014

Certificate of Conformance

This is to certify that the data center of
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TSTT's
DATA
Centre is
the only
TIA-942
certified
centre
in Latin
America.



TSTT receives full certification as a Data Centre Service Provider



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Joseba Calvo, Managing Partner of EPI LATAM presents TSTT's TIA certificate to Rolph Young, Senior Manager Enterprise Marketing at TSTT.

Key Takeaways

- The WORLD needs DATA, Communication,...Downtime is KEY and its COST impacts in the business
- CLOUD, Data, IoT, Blockchain, AI, Communication depend on Data Centers
- Certified Data Centers are able to guarantee a **RELIABLE SERVICE**







Thank you!



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