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Your Outsourced CIO

CASE STUDY 1





FROM CHAOS AND CRISIS, TO CALM AND COHESIVE

Transforming a company's IT Infrastructure to make it cutting-edge, reliable, and profitable

When companies grow, their IT needs grow along with them. However, businesses often typically approach this critical IT infrastructure expansion haphazardly, organically and without any strategy, architecture, or governance.


This inevitably leads to a company's IT becoming unreliable, not fit for purpose and hugely expensive.

As a result, the responsibility of keeping the IT boat afloat, and on course, often sits with the company accountant or someone nominated because of their interest in or minimal knowledge of IT. The maintenance, optimisation and continued updating and safeguarding of their IT systems become an “afterthought”, whereas in fact, it should be treated as an invaluable cornerstone of the business's success and ability to thrive.

Tanglin Consultancy is often asked to audit companies who have lost control of their IT. In other words, the boat's veered dangerously off course and is at serious risk of capsizing!

One such company asked Tanglin to audit and advise on the state of their IT infrastructure.

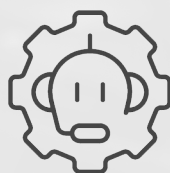
The findings were beyond alarming for such a large company. This company's employees were predominantly engineers dealing with massive data sets and producing complicated Computer-Aided Design drawings.

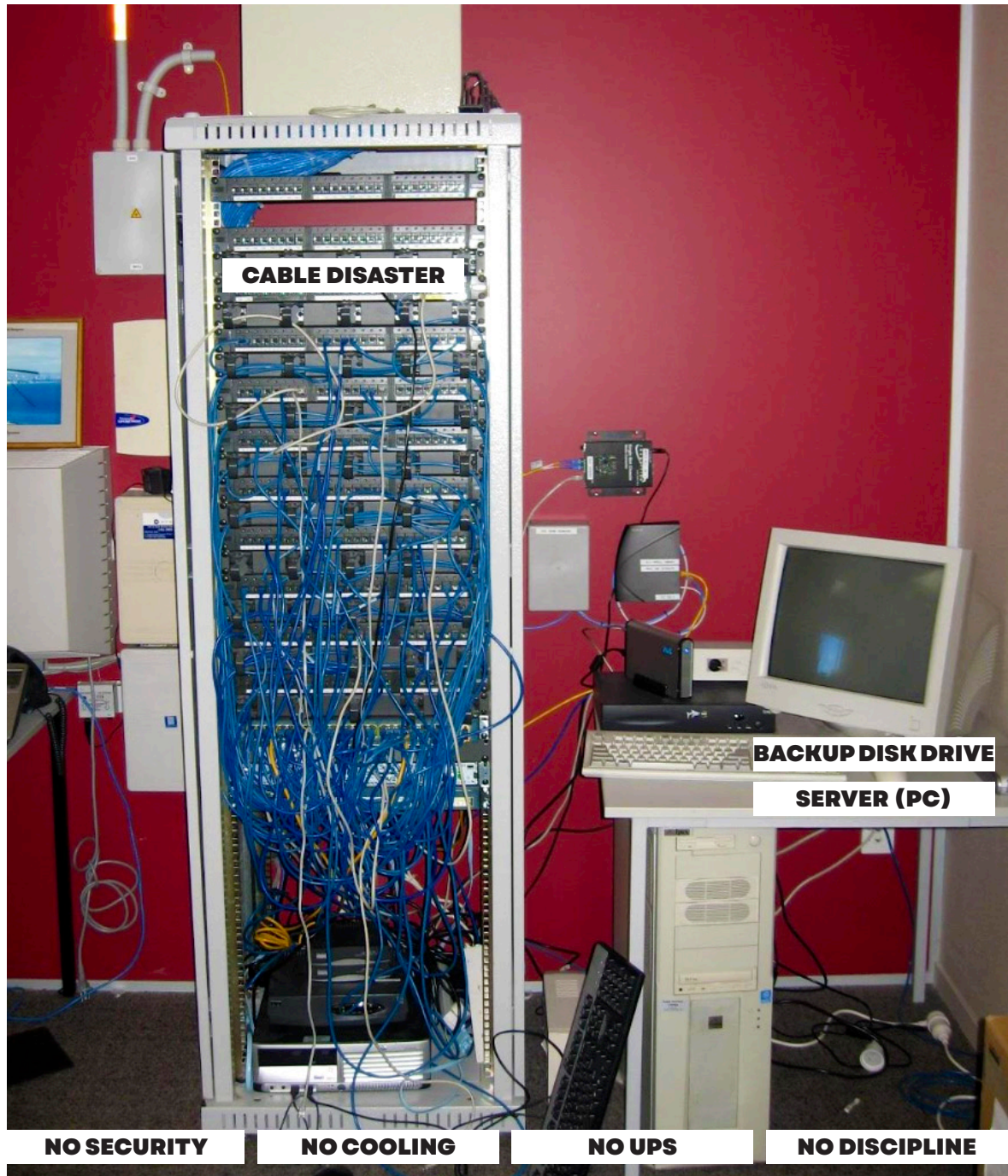


THE PROBLEM

The following is a sample of those findings (but not exhaustive):

1. Two staff members each thought the other was responsible for the company's backups. In reality, neither were performing the backups.
2. Even if the backups were performed, the source data and backup devices were in the same room, effectively rendering the backups useless.
3. Pirated movies predominantly consumed the company's file server's storage. The staff member responsible for the IT infrastructure was maintaining these.
4. All the desktops deployed were unique custom-built PCs sourced from a local cut-price supplier of PCs. If a PC failed, there was no recourse for repair.
5. Most Windows Operating System and Office Suite installations were based on pirated licenses.
6. The Server's hardware was operating at excessive temperatures and would have imminently failed. The Server was a PC with a large amount of storage, however it had none of the facilities you would expect with a Server e.g., Dual Power supplies.
7. The company's switches were old, unmanaged, and operating at minimal speeds.
8. There were multiple office locations, but the lack of suitable infrastructure between the locations meant the company was maintaining isolated silos of data.





This is what we were confronted with:

After the company's Directors had absorbed and recovered from the shock, they requested Tanglin Consultancy to remedy the infrastructure and make it fit for purpose, scalable and reliable.

THE SOLUTION

The following are some of the initiatives Tanglin deployed for the company:

1. A secure machine room was built with two 42U racks, new Cat6 cabling and dual air-conditioners. In addition, the equipment was environmentally monitored, video monitored and supported by Dual Uninterruptible Power supplies (UPS).
2. The company's old Server was decommissioned and replaced with two IBM Servers operating VMware in fail-over mode. If one Server were to develop a fault or fail, the company's workload would automatically and seamlessly move to the remaining Server.
3. Tanglin deployed off-site backups and the use of Data Domain backup appliances. These allowed for considerable amounts of data to be backed up, with deduplication and compression at levels significantly more than when using backup software alone.
4. The switching fabric was replaced with Cisco switches. These increased the company's network speeds by a factor of 10. They were also configured to provide separate Virtual Local Area Networks (VLAN) to minimise any potential malicious threats from spreading, as well as maximise backup traffic speeds, voice traffic and secure sensitive traffic.

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INITIATIVES, CONTINUED


5. The different office locations were each provided with Riverbed appliances. These devices optimised the traffic speeds across the Wide Area Network. The increase in network speeds was so dramatic that the company could centralise its data at head-office and remove the previously increasing silos of data. Centralised data and a single source of truth ensure data is more accurate and easier to maintain.

6. The newly provided Desktops and Laptops were consistent with specifications developed to meet the needs of the staff. All PCs were sourced from major vendors, HP, Dell etc. Any need to repair a PC was easily managed with standard 5-year warranties and trained service technicians from the major vendors.

7. All software was licensed and delivered to the desktops via “Softtricity” This software streams applications to desktop computers. It was subsequently purchased by Microsoft to deliver Office365 applications to subscribers’ PCs. This software automated the installation of applications, upgrading applications, and removing applications. In addition, a PC could be configured from scratch across the network for a specific staff member.

8. Tanglin deployed monitoring of the Servers, PCs, and other network equipment. This proactive monitoring allowed Tanglin to action potential issues before they might impact the production environment.

9. As the company grew further Tanglin deployed a full-time staff member onsite to support the minor issues staff may encounter on a day-to-day basis.



Positive feedback from the Company

The company was hugely impressed by the transformation of their IT infrastructure and the significant efficiencies the new and improved IT system delivered to the staff, as well as the considerable impact these changes were ultimately having on the company's bottom line.

After a few years, the client sought an independent review by one of the major consultancy firms. The review endorsed the infrastructure and was unable to fault it.

The results of the improvements, modifications and upgrades Tanglin's IT Infrastructure team deployed appears as follows:





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