RE-INVENTING THE DATA CENTRE

Building a compact, resilient and more affordable data centre could revolutionise enterprise computing -- but only if IT leaders steer the technology toward open solutions with ongoing expandability. Working with the right technology and implementation partner, in particular will help ease this journey for CIOs. Computer News Middle East brought CIOs together to discuss data centre transformation in an exclusive forum sponsored by Cisco Systems and its key partner EMITAC.

Integrating the enterprise

In the modern business climate, there is increasing pressure on IT to increase efficiency, increase flexibility, improve scalability, improve service levels, increase availability, reduce costs and complexity through technology consolidation. Data centre consolidation is seen as a way to reduce or minimise complexity.

Facilities constraints and fast paced growth is also putting pressure on enterprises who find that their traditional IT applications and infrastructure are slow to respond.

According to Cisco Systems MEA, Director Data Centre and Application, Cherif Sleiman, this will lead to companies effectively losing 20% of their IT budget to fight infrastructure challenges.

"Server growth was 15% in 2005 and is expected to increase to 30% in the next 2 years. Energy bills will grow from 10% of IT budget to over 30% and over the next three years 50% of large organisations will face an annual energy bill higher than their annual server budget," Sleiman added.

According to industry statistics, 43% of IT departments are regularly unable to make requested changes, 70% of cost is running operations while only 30% is for new projects. Business, applications and infrastructure operate as silos and tend to be integrated via multiple complex proprietary interfaces. More servers and storage are purchased than are needed, more space, heat, power and cooling used than necessary.

This has mandated the need for the industry to embrace transformation through the data centre, in the process doing:

- Do more with less
- Driving employee productivity with IT
- Using IT to grow the business
- Using IT to anticipate and respond to new market and customer requirements

Consolidation initiatives typically tend to be in four areas - physical consolidation, equipment standardisation, server and storage consolidation and application consolidation. During consolidation, it's also important to consider associated risks, which include Information Risk, Asset Risk, Access Risk and Audit Risk.

Planning strategy

There's a sweet spot where technology meets strategy and IT needs to be sitting right in the middle. According to Jitendra Kapoor, Head Network and Security Practice at Emitac, by 2008, nearly 50% of data centers worldwide will lack the necessary power and cooling capacity to support high density equipment.

With higher densities of processors proliferating, problems in this area continue to grow. Although the power and cooling challenge of high-density computer equipment will persist in the short term, a convergence of innovative technologies will begin to mitigate the problem by 2010.

"A data center is a centralised repository, either physical or virtual, for the storage, management, and dissemination of data and information. The data centre strategy should look at effectively tackling system inefficiencies like utilisation, availability, security, manageability and optimisation," Kappor added.

With a view to highlight the role of strategy and technology integration to power next generation data centres, the forum brought together key end users in a unique that facilitated CIO-led driven workshops.

The agenda included a mix of presentations that were strategy focused and two specific technology sessions. The key topics included, Integrating the enterprise – benefiting from data centre consolidation, presented by Ahmad Almulla, CIO, Dubal, Data Centre Strategy, presented by Jitendra Kapoor, Head of Network and Security Practice, Emitac, Ways to build a better, cleaner data centre presented by David J Watt, Group IT Director, MKM Commercial Holdings, who shared the Wafi Group experience.

Tariq Elsadik, the CIO, IT shared services at Al Fahim Group presented the session on Planning for Capacity, Cherif Sleiman, Director Data Centre and Application, Cisco Systems MEA presented on technology transformation, MN Chaturvedi, Director IT, Al Shirawi Group of Companies focused on arming the CIOs with education on the skills sets they need to develop to staff their data centre requirements, while Abdallah El Kadi, CIO of AW Rostamani looked at managing transformation. Faizal Eledath, Head of IT, Dubai Bank presented on driving Data Centre Efficiency and shared Dubai's Bank's initiative on Disaster Recovery and IT strategy with the audience.

WHAT'S DRIVING CONSOLIDATION?

- Business drivers
- View of IT by the business
- Multiple Data Centers
- Limited power, cooling or floor space.
- Effectively and economically manage multiplied servers and equipment
- Complex Applications
- Requirement for smooth communication
- Consolidate IT spending
- Organic organisation growth
- Inconsistent service quality based on best efforts service instead of well-defined Service Level Agreements

BENEFITS OF CONSOLIDATION:

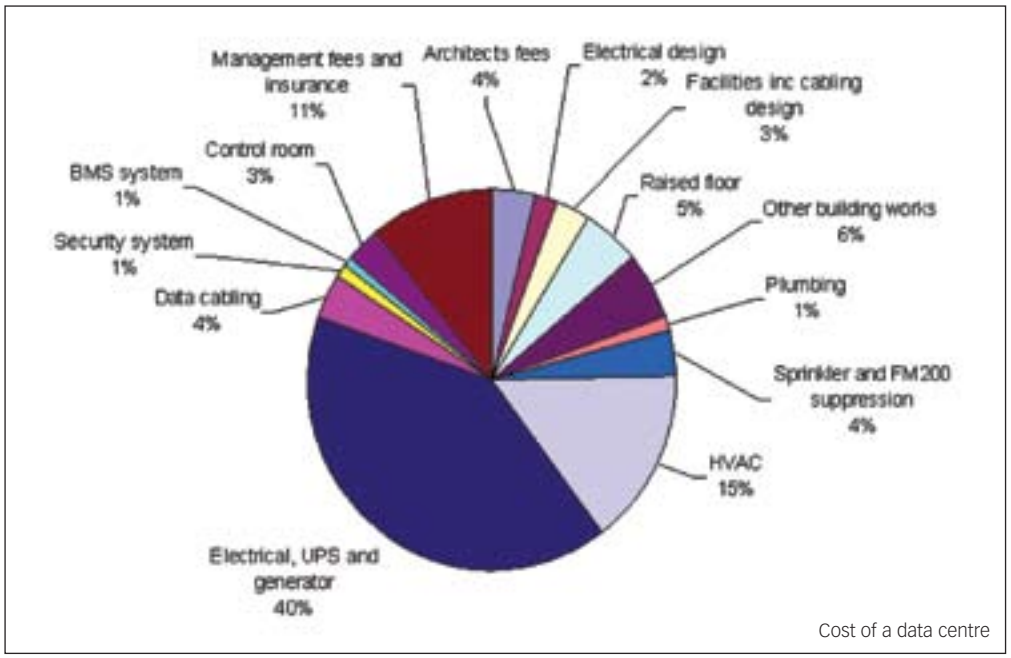
- Increased Return On Investment
- Ability to address new business challenges
- Increase IT asset utilisation
- Reduced complexity
- Eliminate IT redundancies
- Improved service levels and data availability
- Improved scalability
- Reduce management and operational costs
- Increase Agility
- Lower total cost of ownership
- Cost avoidance

(L toR) **Faizal Eledath**, Head of IT, Dubai Bank, **Tariq Elsadik**, the CIO, IT shared services at Al Fahim Group, **Abdallah El Kadi,** CIO of AW Rostamani, **Ahmad Almulla**, CIO, Dubal, **David J Watt**, Group IT Director, MKM Commercial Holdings and **MN Chaturvedi**, Director IT, Al Shirawi Group of Companies.

Listening in

Discussion time

Networking and sharing



Cost of a data centre

Planning strategy

WHY DO WE NEED TO RE-INVENT THE DATA CENTRE?

COST CONTAINMENT
- Management and control
- Utilisation
- Consolidation
- Service levels

RISK MITIGATION
- Legislation/regulation
- Regulatory compliance
- Business continuity
- Security

BUSINESS RESPONSIVENESS
- Scalability
- Speed of deployment
- Solving application performance issues


Benvir S. Padda, Director of Information Technology, Legatum Limited


Raghavan Selvamani, CTO, Noor Islamic Bank


Tom Burgess, VP Technology Services, Emirates/Mercator

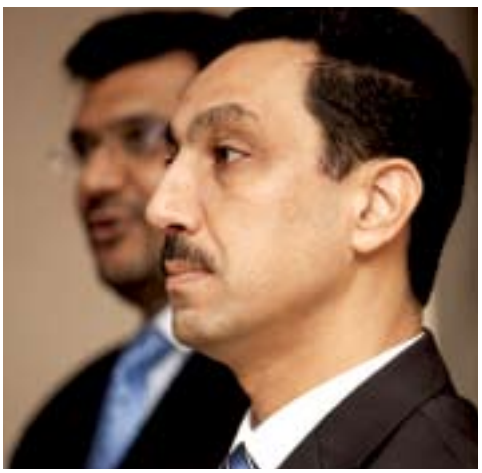

(R to L) **David Ho**, Director IT, Welcare Health Systems and **Rahul Domadia**, IT Manager Operations (Incharge of Datacenter), Welcare World Health Systems


Renato Farina, IT Manager, Danzas

TAKING A HOLISTIC VIEW

It's not just the servers that matter. Consider the following factors carefully when building a data centre:

- Physical location/ sizing of the data centre
- Electrical systems to and within the data centre
- Fire minimisation, detection, alarm and suppression
- Heating, Ventilation and Air Conditioning (HVAC)
- Communications Cabling within and to the data centre
- Cabling containment within the data centre (including raised floors)
- Equipment racks and cabinets
- Information Technology equipment
- Security, Access and CCTV
- Project management
- Ongoing maintenance



Aiman Abu-Maizar, Project Manager Advanced, Injazat Data Systems

Saeem Ur Rehman, Private Sector Manager – Emitac

SKILL SOURCING MATRIX

You have to staff your data centre with the right skill sets and sourcing partners. Here are some things you should consider:

Group	Skills	In House	Outsource
A	Hardware Storage etc	**Pros:** Direct Control, Physical Access **Cons:** High initial cost	**Pros:** Specialised support **Cons:** Expensive
B	Networking Firewall/IPS/IDS Security	**Pros:** Internal team understands n/w **Cons:** You can't be an expert in everything!	**Pros:** Specialists **Cons:** Expensive
C	Application delivery Load Balancing WAN Acceleration	**Pros:** Complete Control by business **Cons:** Too many variables	**Pros:** SLAs on throughput etc **Cons:** Expensive
D	Business Continuity	**Pros:** Business Understands best **Cons:** Business knowledge not exhaustive	**Pros:** Experts in Domain **Cons:** Expensive
E	Facility	**Pros:** Impossible to build full knowledge **Pros:** Too many specialists needed	Expensive

ESSENTIALS FOR PLANNING

- Plan network design in detail
- Flexibility and Contingency planning is essential
- Plan for sufficient power for all racks
- Dedicated servers are best distributed throughout the network
- On construction projects, manage the subcontractors carefully

Ahmad Mourad, Senior Manager, IT Service Management, Du

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Varuna Gunawardena, Head of Data Centre and Support, Sharjah Islamic Bank

Cherif Sleiman, Director Data Centre and Application, Cisco Systems MEA

(L to R) **Ahmad Almulla**, CIO, Dubai and **Abdulrahim Almudhareb**, ITD Director, Dubai Courts

(L to R) **Jitendra Kapoor**, Head of Network and Security Practice, Emitac, **Malcolm Taylor,** Presenter and **Miti Agarwa**l, Marketing Manager, CPI

Naimish N Shah, Head – IT Operations and Services, Dubai Bank

PLANNING FOR CAPACITY:

- **Plan and Organise** - Create IT agility and optimise the IT infrastructure, resources and capabilities.
  Steps to take:
  - Define the information architecture
  - Determine technological direction
  - Manage IT human resources

- **Acquire & Maintain** - An integrated and standardised IT infrastructure.
  Steps to take:
  - Acquire and maintain technology infrastructure
  - Procure IT resources
  - Manage changes

- **Deliver and Support** - Optimise the IT infrastructure, resources and capabilities and make sure that IT services are available as required ensuring minimum business impact in the event of an IT service disruption or change.
  Steps to take:
  - Manage performance and capacity
  - Ensure continuous service
  - Ensure systems security
  - Manage service desk and incidents
  - Manage operations
  - Manage the physical environment

- **Monitor and Evaluate** - IT demonstrates cost-efficient service quality, continuous improvement and readiness for future change ensuring compliance with laws and regulations.
  Steps to take:
  - Monitor and evaluate IT performance
  - Monitor and evaluate internal control
  - Ensure regulatory compliance
  - Provide IT governance

(L to R) **Krikor Tengerian**, IT Infrastructure Manager, RAK Free Trade Zone and **Ashok Khera**, GM –IT, Liberty Investment Company