Marriage of Traditional IT and Managed Services

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Trip down memory lane…
...it all started in the 90’s...
...my classroom experience

Image
...my kids classroom experience

Image
What’s changed?

Then vs Now

• Technology – rudimentary to complex
• Internet – best effort to mission critical
• Security – from nicety to necessity
• Infrastructure – from coverage to capacity
• Access – from M-F 7-3 to 24x7
What’s changed?

Technology – Complex

Availability is mandated
  When users let us know there is an issue
    ... that's a problem
  • Move from reactive to proactive
  • Move from ‘cowboy up’ to methodical
  • Move from configuring to programming (70%)
What’s changed?

Internet – Mission Critical

Access is mandated
No one cares when the internet is up
...they only freak out when its down
• Move from casual to instructional
• Move from speeds and feeds to availability
• Move from boundaries to containment
What’s changed?

Security – Necessity

Enforcement is mandated
Students are the threat
... and that's a big problem

• Move from ’check box’ to defense in depth
  • Datacenter / L7 firewalls
  • Endpoint onboarding and analytics
  • Student Data
  • DDoS; DNS; DHCP
  • Ransomware
  • Botnets – Crypto currency; DDoS Zombies
What’s changed?

Infrastructure – Capacity

Openness is mandated
From insulin pumps to building automation
...you have to support it all
• Move from quantifiable to potentially countless
• Move from ignoring to adopting
  • Shadow IT
What’s changed?

Access – 24x7

Answering your phone is mandated
So you just issued those 20K 1-1 devices
  ... that's a problem
• Move from courtesy to requirement
  • Internet – access and filtering
  • End point security
  • Tax payer now integrated in
delivering technology
...next years classroom

Image
What approach do you take?

Ostrich – head in the sand
Ant – teaching approach
Tasmanian Devil – overreact
Swan – find a partner for life
What approach do you take?

Swan Approach

Evaluating consumption based models (XaaS)
- Overprovisioning is one of the key cost drivers for educational IT projects

Evaluating staff augmentation
- Read that as augment not outsource
- Focus on the proactive and complex tasks
What solutions do you use?

Technology – Complex

- Move past monitoring to synthetic application testing
- Leverage automation services
  - Ansible/Puppet/Chef
  - Testing and rollbacks
- DRaaS – DR that actually works
  - Extends LCM
What solutions do you use?

Internet – Mission Critical

- Managed Internet headend
- Border Routers
- Firewalls
- SSL decryption
- DNSSEC
- Content Filtering
- DDoS
What solutions do you use?

Security – Necessity

- Managed Security Services
- All those things mentioned on the previous slide
- Vulnerability assessments
- Device onboarding and security
- BUaaS
What solutions do you use?

Infrastructure – Capacity

- Infrastructure as a Service
- ‘pick your’ Stack
What solutions do you use?

Access – 24x7

So you just issued those 20K 1-1 devices
... that's a problem

• Managed Endpoint protection
  • Behavioral analytics
  • VPN
  • Internet – access and filtering
Food for thought…

• Understand your liabilities
  • Lack of policy
  • Personnel – skill sets are changing
• Clearly document what you are trying to achieve
  • Is this an additional or replacement service?
  • Establish KPI’s
• Pricing per student or FTE can sway Board approval
• Don’t start until you are ready to commit
• Flexibility is key
  • consume or bring your own
• Custom is ok but start small
• T&C’s are key
  • Reevaluate SLA
Questions?