Walk the Talk

Radio for Agile Minds

Shelley	**It's that time of the month when we welcome Nick Anderson to the studio.** Nick is Senior Partner for Professional Development Services – The PDS Group affiliated with ROCG Business Transition Specialists. Over the last 20 years Nick has helped many house hold names like Turner Construction, Ritchie Capital Management, Qwest Telecommunications and Royal Bank of Canada to impact bottom-line results through changing people's alignment within their organization as well as their alignment with their customer's. Each month Nick chooses a topic related to the business world in West Michigan focusing on the transitions this economy is going through Welcome….What have you chose for us this month?
Nick	Well, Shelly as you know my current focus is developing partnerships with system integrators by providing secure, reliable storage, production machine space as well as DR and BC. This is being provided by GAP, no not the clothing store – Global Access Point – a colocation provider. At its core is Union Station in South Bend which is shortly to become a Tier 4 facility i.e. top 5% in North America. I am

	working with local integrators like the Trivalent Group, Service Express and Midstate Security host their customers' servers and data in South Bend, IN. the DC is 100+ miles away, on a separate power grid and is on East West fiber rich routes that have to come round the bottom of Lake Michigan
Shelley	Why is this trend important to the West Michigan economy?
NICK	The answer is really the confluence of several trends that stem from Moore's Law. Forty years ago Moore published his law, which states that transistor density on integrated circuits doubles about every two years, Recently he said "In terms of size [of transistor] you can see that we're approaching the size of atoms which is a fundamental barrier, but it'll be two or three generations before we get that far - but that's as far out as we've ever been able to see. We have another 10 to 20 years before we reach a fundamental limit. By then they'll be able to make bigger chips and have transistor budgets in the billions." Now Technology keeps accelerating 3X – Moore's Law, and continues to outstrip our ability to provide the power needed which only growing @ 2X. U.S. energy costs are constant at $0.10/kWhr. In all likelihood this will increase over time.
SHELLY	How does the law impact small medium sized businesses?

NICK	The increase in computing power has led to a rapidly increasing reliance on processing power to run their businesses. How would like to wait 3-5 days to get a server rebuilt while you couldn't produce, deliver or invoice your customers?
	In this space, failover and DR are left too much to luck. One survey said over 50% of companies under $150 m annual revenue was not adequately covered. On the other hand, in the SMB space, failover and DR are left too much to luck. One survey said over 50% of companies under $150 m annual revenue was not adequately covered.
	So, what?
	The What is that only 6% companies survive a major loss of data within two years of the event.
Shelly	What other trends are leading to business consider off-site colocation?
Nick	1. Energy costs alone will exceed the cost of the servers in 2008.
	2. Infrastructure costs alone have already exceeded the cost of the server in 2004.
	3. The average server takes 300 watts at a cost of 10c/Kw projections indicate that this trend will continue
	4. Current estimates that for every $1000 IT

	spends you will need 125 watts
	5. The trend to blade servers and virtualization means a concentration of more assets in fewer machines and therefore the criticality of each machine to business survival is increasing.
	6. As power costs rise the C-Level is becoming more aware and asking questions which could break either way for us. There is too often a communications gap between facilities management and IT which creates problems for managing power. E.g. in one case the IT dept was ordering faster technology than they really needed ("boy's toys") and the facilities manager was pulling his hair out trying to figure out how to cope with the increasing load. This by the way is evidenced in several sources.
Shelly	So, How are businesses protecting their data while at the same time being able to afford to pay for the technology they need to compete?
Nick	Simple answer is not. People often don't want to spend money on IT but rather assets they see as more tangible – a truck, a milling machine etc.
	Let me give you an example – one company has an AS400 that runs all their inventory, ordering, etc. you get the picture. Three years ago, the IT Manager – a very overweight guy was seen running up hill and away from the facility. Why – cos the business has a lot of propane cylinders and he knew that if they went up there would only be a large hole left.

	To this day – that AS400 is still a cinder block wall away from those cylinders Or take the manufacturer whose computers are housed in a standard office with only battery backup
Shelly	What are the more enlightened companies doing?
	The increased reliance on technology for business survival and growth and the trend to concentrating such technology in data centers will continue into the foreseeable future. This has led to RTO to fall according to the Gartner Group. Define RTO One trend is answering the vexed question of OK we lost power or servers went down – How long could we survive without a significant part of our IT. They polled delegates at the Gartner Conference in Nov 2007 on their RTO objectives 1. Zero – 11% 2. Under 1 hr – 18% 3. Under 4 hrs – 39% On Critical Applications unplanned downtime they were asked to rate their performance over the last year: 1. Very Good (99.3% - 61 hrs down) – 25%

	2. Outstanding (99.7% - 26 hrs down) – 54%
	3. Best in Class (99.95 – 5 hrs down) – 20%
	4. 100% up time – 1%
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	5. Under 1 hr – 18%
	6. Under 4 hrs – 39%
	7. That's 67% under 4hours
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	Data centers are becoming more mission critical for business operations, resulting in the need for more expensive fault tolerant designs.
Shelley	Why don't companies build their own data center?
Nick	Two factors, Cost and not their business
	If you go to the Uptime Institute – uptime .org you can see typical cost estimates. For a Tier 4 – i.e. completely redundant power and cooling systems

	A 1500 sq ft data center would run around $1200 and up – that's $1.8 m! Oh by the way if will costs in excess of 8,000 pm to operate.
Nick	The other point is "What business am I in? Running a data center is something not for the faint hearted. People don't like being called out in the middle of the night…due to a server alert.
Shelley	What are types of solutions available to the SMB who doesn't need a 1500 sq ft data center but can't afford servers to fail?
Nick	The name for solutions in this area is Business Disaster Recovery and Business Continuity or Resiliency. Basically, you need some way of replicating your data fast and frequently enough that when a server goes down you have its clone waiting to fail over. Trivalent, for example, has a good service set to meet SMB needs. One of their services is a Safe Vault where one of the servers could be collocated in our data center in South Bend in our data center
Shelley	Where can listeners find out more about today's topic?
Nick	GAP details – System Integrators – GAP Contact ROCG - Etc.