

Why sustainable IT equates to sustainable business

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Although South African business leaders may feel somewhat besieged by bad news and murmurs of 'unbearable' Eskom tariff hikes, tech-fuelled innovation is providing business with new options to lower energy consumption.



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Such innovation and technological developments are becoming increasingly critical in an environment that faces the ever-present threat of load shedding, power outages and crippling electricity bills. And for savvy business leaders, harnessing more energy efficient IT solutions not only reduces costs but also brings them into line with the global shift towards environmental sustainability.

Indeed, with new regulations on the horizon, environmental sustainability is fast becoming a 'must have' for any forward-looking business. With this in mind, we explore three key ways in which local businesses can embrace greener, more cost-effective IT...

1. Rethink 'traditional' hardware

Both in South Africa and abroad, prohibitive electricity costs coupled with fragile supply are driving innovation around more agile, resilient and energy efficient hardware. For organisations looking to become both more operationally efficient and anti-fragile, it is important to explore new hardware options that fall outside the traditional realm.

The CloudGate X, for example, is a locally developed computer that uses less than 10% of the electricity that a typical desktop requires. By switching to this palm-sized device, businesses can immediately reduce their energy footprint by a substantial amount.

And with the spectre of load shedding looming large, this type of energy savvy device also enables businesses to continue operating for a longer time on UPS's. With much of the processing power and storage capabilities that traditional computers offer. Smaller and more affordable computing devices such as the CloudGate X can also complement enterprise mobility strategies – whereby more businesses are adopting a mobile first, or mobile only, approach.

2. Harness cutting-edge cloud solutions

Given all the media hype around cloud computing, it may sound like old news to propose a shift to cloud-based enterprise IT. Yet for businesses looking to simultaneously cut costs and become more environmentally sustainable, cloud computing is almost a no-brainer.

To begin with, migrating to the cloud means fewer machines and less hardware, which ultimately equates to lower cooling and space requirements for individual businesses. Tellingly, a study conducted by Accenture for Microsoft referred to in Data Center Efficiency, Renewable Energy and Carbon Offset Investment Best Practices compared the environmental impacts of providing three of Microsoft's business applications through customer data centres and Microsoft Cloud data centres.

The study revealed that Microsoft Cloud-based operations reduced carbon emissions by an average of 90% or more for small operations, 60% to 90% for medium-sized operations and 30% to 60% for large operations.

3. Embrace 'Energy-Aware' software

While this is still an emerging concept, it is important that business leaders explore every means of streamlining both costs and environmental impact. Despite the move towards more energy efficient devices and virtualised environments, some analysts are positing that overall ICT electricity consumption is growing at a faster pace than general electricity consumption.

According to a report released by the Network of Excellence in Internet Science, close to 4.7% of the world's electrical energy was consumed by ICT in 2012, releasing into the atmosphere roughly 1.7% of the total CO2 emissions.

To combat emissions, some innovators are looking beyond hardware to realise savings: in Amsterdam, for example, the Cluster Green Software project is exploring ways to develop more energy-efficient software. The core premise behind the initiative is that software should be written in such a way that the hardware consumes much less electricity at the outset.

According to NetworkWorld, one of the first case studies in this project has illustrated that 'more intelligent and efficient usage of software' can lead to huge potential savings for 'greener' software: depending on the scenario, between 30% to 90% reductions in energy consumption.

Looking ahead, while certain power-saving initiatives will be more accessible and suitable than others, every business should undoubtedly be implementing some version of more sustainable, 'green' IT. Fortunately, tech innovation is making it a more and more attractive proposition...

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