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WHITE PAPER

If They Had A Clean Sheet of Paper

What Would CIOs Do To Redefine IT?

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CenturyLink challenged IT leaders to explore how they would streamline IT delivery if they had the luxury of a blank sheet of paper. Faced with the conceptual opportunity to totally throw things up in the air and redefine IT, how did CIOs react? Put everything in the cloud? Outsource all infrastructure and service delivery? Own no physical assets and buy IT as a service?

Forget The Technology, Look At What You Want To Achieve

The initial reaction to the concept of a blank sheet of paper was "but that's a pipe dream." While start-ups may have the benefit of simplicity, most CIOs have a legacy of diverse applications and infrastructure under their command — not to mention people — and each application has its own strategic value.

The key, according to IT leaders, is to put the technology aside and look at what you want to achieve. The reality is CIOs want to focus on services that differentiate their business. They are faced with several choices of how to deliver them to their constituency. The first step is to match strategic value to cost and the physical and intellectual resource needed to maintain them.

Carte Blanche To Redefine IT: Top CIO Priorities

1. If IT isn't strategic, it's a distraction
2. Control costs
3. Standardize and consolidate
4. Globalize, and watch out for data sovereignty rules
5. Be flexible and agile

If It Isn't Strategic, It's A Distraction

The accelerating pace of change in IT in recent years is both cause and effect of how far the CIO role has evolved. IT leaders are moving out of the computer room and into the boardroom, from the back office to the front office. The IT function is more top of mind — no longer a cost center with a 'do more with less' mandate, but a top line revenue generator.

Data-driven insight is fundamental to identifying niches of cost control, optimization and opportunity. However, this shift in emphasis leaves IT leaders clamoring for more hours in the day to strategize, rather than getting drawn into data center integration projects or resolving legacy issues. The once controversial sentiment behind Nicholas G. Carr's 2003 article published in the Harvard Business Review, "IT Doesn't Matter" is now coming into general acceptance. After all, having a water wheel next to your factory to produce electricity might have been a key differentiator during the industrial revolution, but certainly not today. As a result, third-party models are shaping the 'new normal'.

Start by matching strategic value to cost and the physical and intellectual resource needed to maintain them.

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As one CIO of a Software-as-a-Service (SaaS) business observed: "All of our SaaS offerings are hosted, our non-mission-critical internal IT is outsourced to a low-cost provider, and there's some colocation. As far as carte blanche is concerned; I don't particularly care about the infrastructure as long as it works."

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Businesses in niche vertical markets face an additional challenge: the applications they rely on are typically their own intellectual property rather than off-the-shelf. A head of IT for a financial services firm revealed: "We have a substantial IT complement in house — onshore and offshore. We develop, test and roll out applications that are hosted in a managed private cloud, while we maintain the operational support and security for the application layer. Our email is fully managed in a multi-tenant set-up, and we also have third party disaster recovery and colocation services, so our carte blanche means working in a hybrid fashion."

Control Cost

For many organizations with a clean sheet of paper, IT outsourcing is a means of retaining intellect within the business, while making innovation cost-effective by building tailored client services on commoditized solutions.

The pay-as-you-go nature of managed IT can help to avoid major changes in infrastructure spending in favor of more predictable monthly costs. As one Software-as-a-Service provider put it: "The SaaS model calls for significant up-front investment, and only through repeat business does the incremental cost start to decline, so a stable cost base is a must for us."

A hybrid IT model can give businesses the advantage of a single supplier: simplified vendor management and economies of scale. With common infrastructure across public and private cloud, services can be ported based on cost and risk. Where there's a cost advantage to using a public solution, enterprises need to establish whether it can meet regulatory, service level, performance and security requirements before making the move.

In the interests of efficiency and productivity, IT organizations must avoid reinventing the wheel. According to one CIO: "We're currently investing in a third-generation platform which lets us deliver fast and meet customers' needs, using cloud and standard services. We don't want to be spending money on customization."

This sentiment was echoed by the strategic solutions architect of a professional services firm: "Our clients want more service for less money. So we're dismantling our business processes — breaking them down into components and phases so we can commoditize some parts of our service. Our IT strategy is

focused on consolidating infrastructure and services to bring down cost, enabling the best and most enjoyable collaboration experience, and increasing choice and productivity for our workforce by supporting consumerization."

Standardization and modularity can help the IT function become more agile, while repeatability, reusability and reliability can help to reduce the risks inherent in any technology change. One head of technology disclosed: "Our customers tend to be quite risk-averse, so we can't afford to get decisions wrong and invest in something that won't fly. We test things rapidly to work out if they're right and if not, we change course and move on, armed with the key facts needed to drive our redirection."

IT leaders also suggested that various offerings that are not market-sensitive or customer facing could be readily commoditized and provided "as a Service" such as web security and email filtering. As one CIO pointed out: "If you're

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going to protect your perimeter, why buy the tools several times over or spend ages negotiating with a security vendor when your infrastructure provider is equipped to get a better deal than you?"

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Another Head of IT added, "We're very comfortable with SaaS — so we're open to the idea of partnering with our infrastructure provider to consume commoditized services such as CRM from their ecosystem rather than a separate SaaS vendor."

He continued, "I want to avoid my user community having to use fifteen different systems with fifteen different log-ins and service desks, so consolidation is the key."

Globalize — And Watch Out For Data Jurisdiction

The cross-border movement of people, goods, services and information has never been more intense. One of the biggest challenges for multinationals lies in supporting a globally distributed, mobile workforce, as latency becomes a key consideration.

Organizations need to keep people connected and productive wherever business takes them, on all manner of devices and operating systems. As one head of IT pointed out, "consumerization is rife among high net worth employees, who are buying devices that outshine most company-issued tools. Due to strict stipulations around the physical location of data, businesses with an international footprint are increasingly looking to solutions that offer shared data center economics across multiple countries, to provide local storage and global "everything else".

As one IT leader from a market research firm noted: "We have a presence in over eighty countries worldwide and we spend

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more time battling data protection and residency issues than anything else. So where data is held is very important for us, to the point where it drives most of our architectural thinking." While attitudes about security ranged from a basic exercise to make-or-break audits, the consensus was that the globe is becoming increasingly segmented in terms of firewalls, as legislation simply can't keep pace with the evolutionary process of technology.

Another participant observed: "From an infrastructure point of view, we try to operate as one firm. A lot of our work is multi-jurisdictional, so while we might aspire to have all our data and infrastructure in one place, we need to operate locally as well as globally to offer a consistently high standard of service everywhere."

Be Flexible And Agile

Agile IT — the ability to turn on a dime and scrap or change direction quickly — is now inextricably linked to

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the responsiveness of any business. There is no shortage of managed IT vendors that can provide the elastic infrastructure and middleware, but to really accelerate development, enterprises need to look for simplicity and a standards-based approach.

One head of architecture explained the challenge of managing peak and seasonal demand in-house: "We need a low level of infrastructure for event websites for most of the year, then a significant ramp-up around the event itself, after which we return to our baseline."

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In certain sectors, such as media, in which businesses tend to be driven by applications, the need to respond to unpredictable demand on a daily or hourly basis is becoming

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more commonplace. One participant raised the prospect of software-defined environments: "We see waves of resource usage, for example at 1pm when everyone in London hits our website at lunchtime and the US simultaneously wakes up. Trying to resource it is a nightmare, but we're not keen on mass-market cloud providers' SLAs. Could software- defined environments provide the answer?"

One proven solution for such cases draws on a combination of a virtual private data center and policy-defined provisioning. Using the building blocks of templating, cloning, scripting and APIs, once a certain usage threshold is approached, additional servers can be triggered to meet burgeoning demand. This affords the common capabilities of a software-defined cloud with an enterprise-class service and Service Level Agreement (SLA).

More Smorgasbord Than Carte Blanche

You could be forgiven for expecting the utopian ideal for many CIOs would be to start with a blank sheet of paper. But forward-thinking CIOs are already planning — and implementing — their own carte blanche. These are the leaders who acknowledge IT as a strategic differentiator. They're using IT outsourcing to retain intellect within the business while making innovation cost-effective. These are the leaders who are using and advocating hybrid IT — a combination of on-premise, managed hosting, colocation and cloud solutions. At the epicenter of changing the way IT is delivered and consumed, the hybrid model enables and accelerates a natural flow of workloads from physical, virtual and cloud services, allowing IT leaders to choose how, when and where applications and data are managed and stored.

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Finding the right partner is clearly important and, as one IT leader put it: "You might think the challenges of a single provider would mean putting all your eggs in one basket, but in reality the risk is not substantially different to spreading it across multiple providers. Working with our partner, we're far more excited about the opportunities it brings us; than worried about the risks."

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A hybrid model can give businesses the pay-as-you-grow flexibility to keep pace with changing requirements, without costly step-changes in resource. Another CIO explained: "Enterprises have to start with something they're comfortable with and proceed at their own pace. Design is vital — you don't want to end up with as much complexity as you had in house. And it's important to keep an eye on your business goals — it's very easy to get mired in the technical details."

There's clearly no such thing as one size fits all. It's incumbent on service providers to offer repeatable, scalable, modular solutions from which enterprises can select their optimum combination, rather than simply relieve IT functions of "their mess for less". Decade-long agreements are a thing of the past and businesses have real choice from best of breed providers.

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Find Your Solution With Centurylink

Enterprises and Government organizations around the world have turned to CenturyLink to help them achieve the IT infrastructure and networking services they require to excel in today's constantly changing business environment.

CenturyLink will help you make the right decisions about how and where to house your data, applications and infrastructure.

Using a blend of colocation, managed hosting, public and private cloud services as well as the networking to connect all your services, we can ensure you achieve the efficiencies you're looking for, the agility your business demands, and the focus on what adds true value to your organization.

About CenturyLink Business

CenturyLink Business delivers innovative managed services for global businesses on virtual, dedicated and colocation platforms. It is a global leader in cloud infrastructure and hosted IT solutions for enterprise customers. Parent company CenturyLink, Inc. is the third largest telecommunications company in the United States, and empowers CenturyLink Business with its high-quality advanced fiber optic network. Headquartered in Monroe, LA, CenturyLink is an S&P 500 company and is included among the Fortune 500 list of America's largest corporations.

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