A COLT TECHNOLOGY SERVICES WHITEPAPER

O LIQUID INFRASTRUCTURE

TRANSFORMING THROUGH INNOVATION

IT IS NO LONGER GUARANTEED THAT LARGE BUSINESSES OF TODAY WHO DOMINATE THEIR MARKETS ARE GOING TO BE IN THE SAME POSITION IN FIVE YEARS TIME.



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Needs and Solutions

It is no longer guaranteed that the large businesses and enterprises of today that are dominant in their markets are going to be in that same position in five years time.

In their 2015 report '2016 and Beyond' analyst firm IDC make some dramatic forecasts based on the accelerating need for Digital Transformation (DX). IDC say that globally enterprise CEO's are moving DX to the centre of their strategy in order to achieve growth, and that more than half of IT budgets will be consumed on DX by 2020.

IDC goes further by predicting that by 2020 30% of the top firms in every business sector will not exist as we know them today. They will be replaced by new firms, will have merged, will have not kept pace and declined, or will simply not be relevant any more to the business needs of the day. That's 30 percent. There are key reasons why the analyst firm is violently shaking the tree here.

Since the start of the global economic downturn in 2008 business imperatives have been re-examined. Why is that? Surely we still need to control costs, to retain customers and gain competitive advantage – don't we?

Of course we do, but the way in which we are working to achieve those goals is changing. Firms are starting to identify new and better ways of working and technology is playing a key part in enabling this change.

For example, the availability of fast, robust and affordable IP and mobile networks can readily facilitate remote and mobile working, the rapid set up of offices around the globe linked to a centralised database that can serve up data and applications from the cloud that can be consumed locally as the business needs demand.

Increasingly firms are finding that effective use of

social media applications results in a better understanding of their customers and their needs and reveals where and how to target the acquisition of more customers. Likewise users can utilise the same social media apps to identify their own list of likely suppliers.

How is this being achieved? Technology is always developing and responding to behavioural trends and users need the effective deployment of new applications to facilitate speed of response, remote working, collaboration across widening territories and social media integration. Effectively the analysis of the resultant data is delivering organisations the ability to know their customers well, service users better and get new products to them quicker. If, as IDC predicts, half of IT budgets will be on DX by 2020, then that spend will be consumed on centralised, cloud based unified communications (UCaaS) for collaboration, software defined networks (SDN) to meet the challenge of rapid deployment of the flexible bandwidths needed to meet the unpredictable demand from cloud applications and SIP trunks to provide next generation voice services.

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FOOD & BEVERAGE

Nestlé, the Swiss transnational food and beverage company and the largest food company in the world, made its decision to get serious about digital technology during 2010, following a disaster in its use of social media and made the key decision that digital was now mission critical and 'key to get it right!' This led to a series of reviews and a new digital investment strategy being developed. There was a recognition that a lot could be learnt from the best digital players and would give an opportunity not just to learn but to leapfrog competition. So links were established with the likes of Amazon, Google and Facebook and people sent out on fact-finding missions to learn how to take full advantage of developments in digital technology. A dedicated Silicon Valley team was set up to get close to these organisations and learn how to 'co-innovate'. In addition, a 'digital acceleration' team was set up at Nestlé HQ. Employees applied for a 6 to 12 month secondment for intensive training, to establish common understanding and ways of working and to bring that back out to local markets to enable faster coordination and adoption. There are now even 'satellite training centres' in China, Italy and other locations.

The overall goal was to establish new common, shared global platforms; the ability to collaborate easily and efficiently; achieve the full benefits of scale from a global brand in its manufacturing, distribution and marketing; and to implement new ways of working that incorporate digital technologies that can 'permeate' the entire company.

At the heart is a SaaS business model. But alongside that is a deep commitment to establish a single centralised data platform that will give Nestlé a single global view of its B2B - and potentially also its B2C - customer data and enable insight that could drive better end-customer engagement, find new sources to sell-in the full product portfolio and new ways to generate revenue growth. The interest in getting this universal data view, to understand it and have the analytics capability to take advantage of it, is seen as the key benefit.

Emerging Needs

The drivers for change are many and compelling. In order to retain customers and gain competitive advantage, organisations today must display the nimbleness and flexibility that characterises a responsive company. And they must be capable of demonstrating these characteristics in each and every territory in which they operate.

This flexibility has many aspects. Firstly, you must consider casting aside the management ethos of working in silos in favour of developing a multi and cross functional collaborative working culture, irrespective of where people are located, to produce the ideas and approach required for innovative new products, applications and services.

Secondly you need flexibility in the deployment of the new tools. If you have a new team being set up in a remote location then they need support immediately. If you add 20 employees to an existing team, they need common tools straight away and not in weeks. And if you need fewer team members on a project vou must be able to reduce the number of tools vou use without penalty. Only the cloud based deployment model can deliver that flexibility. Consider too the networking requirements between sites. You need to be able to flex up the bandwidth when you add those 20 employees and perhaps reduce it when they are moved elsewhere. You don't need that extra bandwidth in six weeks time, you need it on day one and you don't want a penalty from your supplier when the requirement is throttled back. Only the flexibility of a Software Defined Network (SDN), Network Functions Virtualisation (NFV), SIP trunks and a professional services provider can

provide, support and manage this consumption model. A service provider must be able to provide a enterprise grade environment that you can plug in to and just consume as the business need demands. Apart from the additional functionality, such as increased bandwidth requirements and better traffic management it will add to your company's network, SDN holds another major appeal. Since its standards are open, your enterprise is not beholden to or dependent on any one vendor, and open source SDN application program interfaces (APIs) can be written by service providers to increase capabilities as needs and technology evolves.

So, whether you want to have a BYOD (bring your own device) policy and then implement a mobile device management (MDM) plan to manage resources and security or have a virtual desktop infrastructure (VDI) you need a service provider capable of delivering whatever you decide 'to throw' at your network in the future.

And the other major consideration is security. Not only is there a legal obligation in most countries to protect customer data but also to protect a valuable company asset.

Security has become increasingly significant in an environment where employees are working from absolutely any location and often in a wider, borderless ecosystem where BYOD and home working limits the ability to separate the enterprise from the rest of the world.



Financial results announced recently from a global clothing retailer showed operating profits were up 7% on the year 2014/15 and that this rise was largely attributed to investments the company had previously made on their digital transformation. The company operates across five continents with offices in 30 European countries including France, Italy, Germany and the UK. The web site is the brand's largest store in terms of traffic and sales, servicing 44 countries in 11 languages. Online and in-store offerings worked together to create a seamless experience wherever customers encountered the brand.

Digital sales, an area that 'outperformed' during the year, were cited as a key result of this investment. Mobile commerce doubled its share of sales during the year, after an upgraded mobile platform was launched in the second half.

Overall the company CEO, who also drove investment in customer data and analytics, as it looked to get to know its core luxury customer better, noted that a digital-focused strategy of providing brand inspiration across channels including online, stores and social media underpinned the group's performance.

Business as a Service

The adoption of cloud based services throughout Europe and the rest of the world is growing exponentially and this growth is revealing an equally rapid and unpredictable change in bandwidth requirements from both sites and data centres.

One trigger for this increased demand is that new applications are emerging constantly and are then consumed from these data centres. This signals a significant trend that enterprises must consider.

Fast, effective and flexible connectivity is key to success for the growing and ambitious enterprise of today. Deploying an Ethernet delivery with Network Functions Virtualisation (NFV) and Software Defined Networking (SDN) is fast becoming the de facto means of supplying this critical and constituent component in the overall communications mix. The result is that enterprise IT will deliver both a national and global set of services for the business at a lower cost while being able to focus on a growing number of emerging opportunities such as virtual desktop integration (VDI), data analytics, social media management, consumerisation of IT such as brought about by BYOD and mobile device management (MDM) that will further drive employee productivity and grow the business.

SDN delivers speed and agility when deploying new applications and business services. Flexibility, policy, and programmability are the hallmarks of SDN solutions, with a platform capable of handling the most demanding and unpredictable networking needs of today and tomorrow. NFV describes the process of virtualising the network services that are now being carried out by proprietary, dedicated hardware. NFV will decrease the amount of proprietary hardware that's needed to launch and operate network services and therefore further reduces the costs. So, imagine a network where you only do gross capacity planning and network disruption never impacts users. Where security is a design benefit rather than a cost factor and you can experience management based on fact and not assumption. A network built to run the applications you want that can be deployed when and wherever you want. In this world, SIP trunks, offering upscale and downscale flexibility and enhanced service everywhere, deliver voice connectivity whilst the support for VoIP is facilitated by the flexibility and capacity of the bandwidth available.

Financially the benefits of an XaaS deployment really stack up quickly.

Instead of a CAPEX purchase of a set of legacy hardware with third party bolt on enhancements, a centralised UCaaS solution implemented over single and multiple sites provides present and future collaborative communications applications in an OPEX model based on the number of users and applications 'consumed' each month.

A predictable cost that is scaled up and down according to changing business needs.

And by outsourcing the implementation, development and on-going management of the overall solution to a service provider, the business will gain even more in the form of in built security, application integration, regulatory compliance management and control, and data privacy.

For organisations with an existing or planned international footprint such a deployment and management can be similarly extended through an ecosystem of connected data centres across Europe and Asia.

Colt services make it easy to interconnect to any other data centre or office location providing the choice of where you place your services and with whom you connect. Colt services - whether high speed on demand networks, VoIP services via SIP trunking or cloud UIC services were designed to embrace cloud computing, DR/BCP, digital customer experience and application agility.

According to a recent survey in Q3 2015, the average European organisation uses 987 cloud services, an impressive growth of 61% over the same quarter a year ago, casting aside doubt that cloud use is mainstream throughout Europe. *Source: Skyhigh 2015*

PROFESSIONAL Services

In 2009 a global recruitment company that operates from 240 offices in 33 countries including France, Germany, Italy, Japan and the USA, embarked upon a full-scale technology transformation programme to utilise new advances in tools to establish a flexible, scalable and adaptable platform is now successfully focusing on the user experience and does not have to worry about the 'plumbing and infrastructure' that is now all in place. The company set about replacing its entire IT stack, with support from open standards being a key priority in software selection and, for example, deployment of cloud-based solutions. Search is at the heart of company activity, it's the core process and critical to get that right and continue to adapt it as technology evolves. Digital leadership is a joint exercise involving all functions and departments. It's been an especially strong collaboration between IT and Marketing. The company undertook digital transformation to gain one advantage: that is the ability to globally engage customers using common applications and a central database - they deployed Oracle Business Intelligence Enterprise Edition (OBIEE) as a data warehouse for reporting and analytics. As the CEO says, "For me, digital leadership has to come from a marketing leverage point, and a technology leverage point. I am working with a colleague who brings the marketing experience, but I am ultimately accountable for the whole programme.

The result is that now we worry more about the user experience than the plumbing. The infrastructure to present the data and interact with our corporate systems is all there."

Summary

The changing needs of the enterprise – centralisation of databases and applications, advanced collaboration, flexible bandwidth schemes and a rapid, dynamic deployment capability are revealing a number of challenges caused by the consequent explosion of mobile devices and content, virtualisation, and advent of cloud based voice and data services.

Advanced technologies are delivering the business benefits of remote and distance working. But trying to accommodate these new ways of working using old methods will inevitably generate more cost and complexity. Challenges such as end-to-end monitoring of the network; the need to support new collaborative features and the deployment of more cloud applications and infrastructure will put added pressure on an already maxed-out IT department. By transforming the network itself, incorporating both voice and data, and exploiting the changing and increasing bandwidth needs of the business, IT and network professionals can now take advantage of flexible, hosted solutions employing SDN, NFV, SIP trunks and UCaaS from an innovative and trusted service provider to deliver real business transformation.

TO FIND OUT MORE ABOUT HOW YOU CAN TRANSFORM YOUR BUSINESS THROUGH NETWORKING <u>CLICK HERE</u>

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