Business Systems INTERNATIONAL

The Way Forward

with Business Systems International

A white paper discussing the challenges facing our customers, and the technologist's view of our industry.

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Author: Henry Jacobs, Business Systems International

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Challenges

Digital Disruption

Business leaders agree that digital transformation is critical to their future success. Furthermore, a survey conducted in Europe reveals that most companies lack strategy and legacy systems upgrade commitment to achieve this goal. New businesses need a platform to provide them with the quickest route to market, where success and fast development can be met with easily scalable servicing points.

"Digital business is shifting from strategic vision by IT leaders, to providing real competitive edge today." Gartner

Business Strategy

Wherever your company is positioned, it is most likely using IT and compute analysis to make most, if not all of its business decisions. However, such decisions are often made with difficulty and hesitance.

When it comes to running a company, there are many daunting IT scenarios and statistics out there, especially for C-level decision makers. Nearly 30 % of IT projects fail and the average cost overrun on IT projects is 27%, with one out of six IT projects having costs over running by 200%

So it's no surprise that most businesses tend to be exceptionally risk averse. There's a general reluctance to adopt new technology because the priority, understandably, is to be able to maintain productivity. The avoidance of adopting a new systems or technology is risky however. Many banking organisations and large corporations have suffered from bad decisions and delaying for example.

Systems Upgrades

Server upgrades and consolidation constitute the greatest need for enterprises, where improvements in speed, storage capacity and unlock the benefits of modern applications are needed. High-Performance, Extra Dense Blade servers and next-gen virtualisation for various cloud adoptions to consolidate resources, to simplify data centre management and reduce server footprint, are driving forward modernisation.

Security

Security concerns are hindering, not helping, positive progress. IT leaders should take a proactive role in de-risking important technologies. Many infrastructure solutions – such as open-source software – enable significant competitive advantage, and IT should look to embrace them rather than waiting for others to overcome the risks.

Data & Storage

The data we produce and share every day reflects our identities and market trends. This data offers a massive opportunity for businesses that understand it. Companies embarking on Big Data analytics can find themselves with highly valuable digital assets, giving indication to buying cycles, trends and habits, enabling them to create a new edge to their company's sword. Unlocking the value in business data will derive greater business intelligence and move the company in the right direction.

This type of innovation has meant traditional financial organisations are faced with a growing number of disruptive technologies and small but powerful new competitors. Currently, most financial organisations are working to stay competitive by monetising the vast quantity of data available to them, all the while with the industry under greater regulatory scrutiny from the Competition & Markets Authority (CMA) and various Data Protection directives. In the case of highly sensitive customer data, companies must stay compliant of DPA law and conscious of where their data is stored and who can access it.

Managing valuable company data can prove to be challenging, especially when it has been stored in a variety of places and formats. Prioritising the data, establishing what's important and what's not and safe guarding it through better protection management are vital first steps. Choosing a suitable platform to harness and consolidate, and to simplify duplication and other data management processes will lead to greater operating efficiencies and alignment to a "privacy by design" strategy.

A Technologist's view of Brexit

The decision to leave the EU has created much political and economic uncertainty, both within the UK, Europe and abroad. Policymakers should continue to monitor carefully until more post-vote data is provided. The economic scene will continue to be directed by the countries politicians and Department for Exiting the European Union (DEEU). Their capacity to negotiate best trade terms will be essential in safe-guarding decent levels of external market access.

Despite this and fall in currency value, the UK economy has remained resilient, along with consumer confidence being unphased. Concern also that tech companies would hold back on investing in the UK have settled somewhat after a poll commissioned by the London mayor, still ranking London above other European cities as a top location for investment in technology and for setting up European operations, citing London's access to finance, talent pool, favourable time zones and lack of language barriers. Further analysis of the poll also revealed how London's reputation as a financial hub is unwavering, with 57% viewing London as Europe's leading financial services centre.

Data

Despite various repercussions, companies will have to continue to strategize and make plans. Key areas for consideration are that UK companies will have to continue to adhere to EU data regulations, whichever way they align and mature, until new national and international agreements have been drawn-up. Businesses will need to proactively adapt to the increasing complexities and be prepared to provide data at quick notice.

A situation most are all too familiar with, yet strategically choosing best options, practice and capable platforms will mitigate increasing long-term costs and being prepared to meet the yet to be defined data regulations.

Industry & Trade

New trade negotiations will take a number of years to define and yet business will have to carry on, all-the-while with digitalisation of the workplace and industry continuing at pace. CFO's will have to navigate changing procurement and data security frameworks, whilst continuing to optimise capex.

Today IT communications are the lifeline of a business. Managing the continued implementation of an operation correctly, will allow for closer accountability and ownership of the business model, whichever environment it may find itself in.

Decisions IT leaders should be prepared to make.

Whatever level you are in a corporation, bad decisions can cause big problems. Good decisions, although sometimes taking longer to become apparent, can reap dividends later. If problems have been identified, they need to be addressed, as there is little chance that they will disappear altogether.

If businesses don't change, they will get left behind. Not only should your company not be frightened of risk, but your company should actively be embracing it. This kind of philosophy turns risk aversion on its head but your company has to win the race to reach the customer first… and to keep up with them, thereafter.

Today, CIOs are grappling with a wave of new technologies that can bolster business, but there's hardly enough time to evaluate them. They are being engulfed by digitisation and must form partnerships across the enterprise to ensure that they're putting needed tools and data in the right hands. On top of this, it is an up-hill struggle to convince both colleagues and customers that perfection can be the enemy of progress and that an agile mind-set is the way to go. Even when they think they've considered every possible bottleneck, risk aversion brought on by 'Murphy's Law', and the 'power to say no' lurks around every IT corner.

Putting in place the roles required to interact with business partners in a more commercial way - including product managers who can define standard offerings and solutions architects who can help developers combine the right mixture of standard offerings to meet a business need.

Digital disruption is pushing technology to the heart of organisational success. IT must adapt, contributing more to business strategy and engaging other business departments to ensure the company benefits from new technology without taking unnecessary risks. These trends can potentially give businesses a competitive edge and with this opportunity comes pressure for IT leaders to implement these technologies as quickly as possible. While IT has made good progress on the strategy front, there's still a lot of work to be done to improve integration with other departments.

While IT leaders should accommodate where they can, it's important that barriers to faster technology implementation are overcome and not just ignored. Technologies that are implemented too quickly, too late, risk failing to deliver ROI.

IT infrastructure managers must simultaneously capture the next rounds of efficiencies, accelerate the transition to next-generation infrastructure, reduce risks, and improve organisational execution. Another challenge for businesses and IT decision makers is meeting today's growing infrastructure needs while avoiding investments that are incompatible with future cloud migrations. Hedging your bets by virtualising and creating test environments on legacy equipment with incorrect licensing will only delay eventual build requirements.

"We wish we had consulted a correct on-premise test" - Eric Hards, Lockheed Martin – talking about RFP process.

With infrastructure design and industry experience, a suitable platform can be chosen that delivers the performance and flexibility that your company requires, and enablement for easy migration to private, hybrid or public cloud.

Strategy for when choosing the right systems deployment and development plan.

The already mentioned reluctance to change is understandable, both financially and reputationally. However the cost of not changing can end up being greater.

Given how crucial IT infrastructure is to successful digital technology adoption, IT leaders should ensure they aren't solely focused on existing solutions. Upcoming technologies, such as Software Defined Infrastructure, Object Storage, Low latency Servers, have just as much potential to be disruptive and must, therefore, be priority considered. There is however a good chance that much of your IT infrastructure can be updated and migrated with little issue other than just actually having to do it.

Technology ideas don't just come from the technology team. As a leader, you have to establish what the priorities are, how to honour those ideas and deliver for the users that require them. Retail and financial institutions in particular have been moving towards a customer-centric business model and away from a product-centric model, all being made possible by integrated IT platforms.

Determine how to create a roadmap for existing and future apps, including development, migrating, modernising, re-hosting, defining application strategy and enablement for more scalable and efficient infrastructure.

IT decision makers should put in place a commercial-style interaction model with business partners, defining all possible potential customer touch-points to the business and ultimately making a transition to a plan-build-run organisational model. Having the support of company board members all the way through to your digital team will be essential. Proactively creating the next generation of infrastructure business leaders will help drive performance management to the digital front line.

Build the case for legacy transformation and fitting/suitable data centre

The aversion of big businesses to changing something that's not broken is understandable. Fixing a dead system is one thing, but replacing something that works just fine with something a bit unknown can be daunting.

For large enterprises, running on traditional legacy systems, their data centre cannot simply fade into the background. Many various options are available to consolidate and migrate mission critical and cross-functional workloads.

Build engagements with the business stakeholders, to define the incremental business opportunities and where the identified savings will be reinvested. Furthermore, consult to establish a cross-functional governance office and define a roadmap with key milestones and ROI.

Establish a workload-centric IT consumption model which satisfies economic, trust, and functionality requirements whilst providing easily deployable work environments and future platform virtualisations.

Legacy Modernisation

IT infrastructure has to adapt to the world of mega-trends and high performance solutions. Migrating from complex legacy structures to increasingly flexible and easy to use systems will help organisations make the most of new technologies. Moving from bespoke solutions to plug-and-play or quick-to-deploy options is one way of making this transition.

> *"A lack of standardisation and fully-scalable systems are hindering the ability for companies to deploy scalable application platforms and new ideas ahead of the competition."*

IT departments are constantly needing to find a way to bridge their legacy systems that have worked for decades to better cope with ever increasing data amounts, performance assurance and integration with an array of platforms, brought about by digitalisation and cloud services.

Although some firms are bravely undertaking core modernisation initiatives, legacy systems aren't going away tomorrow. Many banks are now modernising their core banking software

But as these systems get older, IT architects at these institutions have to find novel ways of maintaining them cost effectively while rolling out new products and services, all without making the entire structure crash.

In short, it's a question of successfully overcoming the problem of legacy modernisation and hitting the sweet-spot balance point provision of CAPEX, alongside OPEX that will allow the longest utilisation and complete reliability.

The assurance of modernised core systems is that using a modern architecture, including components that can quickly configure, will make it easier to design and deliver new products and services. Advances in enabling technologies such as service-oriented architectures are making transformations more manageable and affordable.

Choosing between Critical Systems, Converged, Private and Hybrid Cloud.

IT must find new ways to manage a diverse range of applications, accelerate app development and delivery while maintaining existing systems. Legacy environments must adapt to meet business demands and opportunity. Data centres can be full of inconsistencies, where they turn out not to be fully scalable and an increased chance of failure following every configuration change, giving rise to additional administrative overheads and where the software licensing has stung them in the long-run.

Transforming technology into a platform that helps a business thrive in a disruptive marketplace takes experience and an understanding of how IT systems interact with each other and the people who use them.

This transformation should not come at the expense of your existing infrastructure. Correct procedure is to enable faster time-to-value through a roadmap that includes both current environments and future product.

"The real aim is to create a highly fluid data centre architecture, with scalable and easy to integrate components."

Next-gen hardware, designed with virtualisation and software designed compute in mind, aims to solve the scalability problems that come with virtualising infrastructures towards various cloud based models.

Inefficient legacy data centres are an obvious target for virtualisation and driving out cost in the immediate term. This is either through optimising an in-house data centre, or where one is virtualised and hosted in conjunction. This is why converged infrastructure has quickly become industry's hot topic. In a virtualised infrastructure you are only using what you have anticipated using and not paying for what you may potentially be using.

Depending on enterprise needs and required service obligations, public cloud can have some drawbacks. The predictability of storage cost is one. Though public cloud appears very affordable at first glance, most providers will also charge for the movement of data to and from their cloud, which can even exceed the actual inital cost to store the data. This can be further compounded when data is needed worldwide as it may need to be copied to multiple regions for performance and redundancy purposes.

Perhaps the greatest drawback to adopting completely to public cloud is the realisation that your data might be sitting on physical compute and/or storage resources that are being shared with someone else's data. Access is restricted via OS policy and other security measures, yet there will always be a potential path for unauthorised access. Security has continued to improve however, and some companies are considering cloud for long-term archiving of non-critical data as well as some less business critical applications.

Private cloud will avoid many of these drawbacks, as it isolates the physical infrastructure – including hardware, storage and networking from all other users. While physical and network isolation reduces the security concerns, this could eliminate some flexibility and scalability potential, depending on site location.

Hybrid IT can potentially provide a solution, which blends the best of the cloud and traditional infrastructure to give organisations the flexibility to evolve with changing business needs.

Knowing your business strategy and defining what elements will become customer-centric led, will generate a workload overview and roadmap for cloud plaftorm suitability. To this degree, deciding where you would wish you wish for your service points to be and and what distance to manage accountable teams will be crucial. Having your CTO and technology teams work alongside your CIO may lead to greater cohesion and effecient delivery of service.

Depending on the required data management solution for your enterprise, a large-scale converged integration can prove to be more cost effective than current cloud storage offerings. There are applications that are either too expensive or inappropriate to migrate to public cloud. Data centres will need to play a key role in the provisioning of IT alongside being optimised for hybrid. This means data centres need to become significantly more agile in the way they are run. It requires more orchestration, automation and consolidation of infrastructure to provision/de-provision services rapidly, in order to lower operational costs, and provide required compute flexibility.

The future of the data centre revolves around supporting an ever-evolving user. Businesses will continue to depend more and more on the underlying data centre and application capabilities.

Planning and relation to working adoptions will allow for correct platform choice.

"Keeping your infrastructure agile will help you retain your competitive edge and deliver dynamic resources to a variety of touch-points."

Moving forward with BSI

Still unsure of immediate next steps? Conduct a desired business operation with cloud model application potentials and envisage a session to share critical success factors with stakeholders and desired business objectives. Then perform a high level review of your people, processes, and technologies against this.

At BSI, we pride ourselves on our original thinking, so whatever you need to achieve with your system infrastructure, we'll make sure you have the right options to-hand and will provide insight into previously successful models.

Ensuring the continuity of the solution, from established and emerging technologies alike will help optimise the on-going management of your data. Whether from tiered storage to converged infrastructure, we will provide complete service support for peace-of-mind.

There are a range of perfectly suitable back-up and storage solutions, which deploy plug-and-play and will offer most, if not all, file compatibility and storage platform capabilities. Keeping to procurement cost allocations is made possible, where TOC for such systems can be very low and reserved requirement projections don't pose an incremental issue.

There will be reliability and application availability improvement, where we can also help meet and even exceed your given SLAs. Whether the final solution is on premise, offsite or something in between you'll know your data is secure and ready for your business to make the most of it.

Cost reduction

A number of organisations which grow by merger and acquisition focus on integrating the new and not refreshing the old. At BSI, we draw on our infrastructure heritage and industry experience to mitigate cost. We make sure that capital investment is minimised and operating costs reduced, essentially by providing the lowest TOC options and only paying for what you use.

Implementation

Accurate planning is the cornerstone of a successful roll out. We use the most experienced and skilled engineers to guarantee a perfect implementation of the chosen solution design. Many of the largest European businesses trust us to architect and implement their solutions every week of the year, on time and of course - on budget. As a proof of the confidence levels in Business Systems International, our customers are 90% repeat business.

BSI Knowledge

We take time to understand our customer's company, their industry and the challenges they're faced with. Our Solutions Architects each specialising in particular fields and solutions, depending on your enterprise needs. We have provided comprehensive solutions to various international enterprises. Working with companies within these localised areas, keeps us aligned to growing market trends and insights, of which we can utilise to enhance our new projects.

Experience

Spanning four decades, our expertise has helped deploy some of the most complex and technologically advanced solutions that the industry has seen.

We partner with top tier vendors, and hold the highest accreditation with many of them. We also partner with the more niche, high performance vendors, always aware of next generation technologies that could prove invaluable to our customers. Our expertise prevail in realising extensive solutions, where low-latency and reliability are critical factors. Our experts look after your solution from end-to-end, so their interest and responsibility rest with you for the duration of the solution life-cycle.

Commitment

Our solution architects can and will provide you with industry leading technical pre-sales expertise - making sure your turn-key solution is perfect from the moment go. You are then looked after by an 'account manager for life'. We look after our employees here at BSI, and you'll find that you won't have a new account manager very often.

We would be delighted to work with you and provide some free of charge consultancy for your systems solutions next steps. Evaluation systems available on request. We look forward to hearing from you.