

Whitepaper

Accelerating business success with optimised IT

Find out how your organisation can improve service, reduce cost and manage risk with a Dynamic IT Infrastructure

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Introduction

Businesses are walking a constant tightrope between service, cost and risk. To maintain the right balance, organisations need to ensure every area of their infrastructure is optimised, integrated and fully aligned to business needs.

IBM's Dynamic Infrastructure strategy provides businesses with the processes and tools needed to achieve these goals. Encompassing IT and business assets, IBM's strategy enables organisations to rethink their approach to infrastructure management, resulting in higher service levels, lower costs and reduced risk.

This briefing paper explores the best practice processes and technologies needed to establish a Dynamic IT Infrastructure. From virtualisation and automated management to energy efficiency and business resilience, this paper will help you optimise IT to deliver greater business value.

What is a Dynamic Infrastructure?

Organisations' infrastructures are becoming increasingly instrumented, interconnected and intelligent. IBM's Dynamic Infrastructure framework provides organisations with the framework they need to align key business and IT infrastructure assets to strategic goals.

Despite the enabling role that technology plays, IBM's strategy stretches well beyond the datacentre and desktop to encompass facilities, production, communications and logistics infrastructures as well as IT.

Improving visibility, control and automation across all these infrastructures is fundamental to realising the business benefits of improved performance, reduced cost and managed risk.

What does a Dynamic Infrastructure mean for the datacentre?

A Dynamic Infrastructure draws on existing industry best practices and proven technologies to enable organisations to develop shared, integrated and highly available datacentres that can address today's challenges and tomorrow's opportunities. Managed and optimised in real-time according to business service rules, a Dynamic Infrastructure enables organisations to flex their IT resources in response to fluctuations in demand.

Virtualisation and consolidation are fundamental to a Dynamic Infrastructure, which is one of several vendor-backed approaches that organisations can adopt as part of their journey towards a virtual datacentre (VDC).

With a VDC, virtualisation is extended beyond the server and storage racks to networking and security components as well as applications. This end-to-end approach to virtualisation is increasingly being adopted by organisations in every industry sector.

By establishing a Dynamic Infrastructure within the datacentre, organisations can also ensure that the employment of facilities systems, such as cooling and ventilation, is adjusted according to heat output and system utilisation levels. This is a radical departure from the 'always-on' approach used in many of today's datacentres.

With a Dynamic Infrastructure intrinsically linked to company-wide benefits, such as greater energy efficiency and business resilience, organisations need to take a more integrated and automated approach to management not only within the datacentre but across the entire IT operation.

IT fact file:

Virtual Datacentre

- Computacenter's Virtual Datacentre (VDC) solutions help customers simplify and optimise their IT infrastructures providing demonstrable cost benefit, reduced total cost of ownership and increased business agility. Utilising existing infrastructure, VDC will provide the platform for outsourcing (full managed service) and/or out-tasking (application and data container mobility to a service provider) as well as private 'cloud readiness'
- VDC solutions encompass both strategic methodologies, such as IBM's Dynamic Infrastructure, and pre-packed technology offerings from vendor coalitions
- Standard VDC technology components include virtualised processing power, connectivity, grid storage as well as management and datacentre automation software
- Computacenter's VDC approach converges, controls and contains datacentre systems and costs, so you can focus more resources on making your business sharper
- Organisations can make savings of up to 50 percent by adopting a VDC solution; savings that Computacenter will often underwrite as part of its commitment to customers

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Why is the management approach so important?

A streamlined approach to IT management will help maximise your investment in new and existing infrastructure assets, and remove cost and complexity from day-to-day operations.

For example in the datacentre, embracing server and storage virtualisation is just the first step towards a Dynamic Infrastructure; these assets also need to be provisioned, configured, discovered and monitored efficiently to provide a responsive and cost-effective service to the business.

IBM's Dynamic Infrastructure strategy is specifically designed to automate, integrate and standardise such common IT management tasks. One of the key enablers for this approach is the IBM Tivoli software suite. By leveraging this extensive range of integrated service management products, IT departments can automate at a task, process and even business service level.

From discovering IT assets within a Dynamic Infrastructure and mapping their interdependencies to correlating system alerts and tracking energy consumption, IBM Tivoli products enable IT departments to overcome day-to-day management challenges that could result in service degradation and higher operational costs.

IBM Tivoli Service Automation Manager is particularly key, and helps organisations move away from managing the performance of individual devices and standalone IT processes to managing the end-to-end availability of individual business services.

The benefits of the IBM Tivoli software suite, its role as a Manager of Manager, and its interoperability with existing management tools and infrastructure assets can be validated using Computacenter's Solutions Centre. This multi-vendor testing facility enables organisations to validate IT investment decisions in a risk-free environment.

IT fact file:

Integrated Service Management

- The IBM Tivoli software suite supports Dynamic IT Infrastructures by providing an integrated platform for asset, business service, storage, security and network management
- Access service and process information on your infrastructure via real-time and customisable dashboards in Tivoli Business Service Manager
- Automate how users request, deploy, monitor and manage cloud computing services with Tivoli Service Automation Manager
- From patching to configuration, Tivoli Provisioning Manager enables organisations to simplify lifecycle management of Dynamic IT Infrastructure resources
- Cut power costs and consumption and carbon emissions across your Dynamic IT Infrastructure with Tivoli Monitoring for Energy Management

www.ibm.com/software/tivoli

What are the obstacles to developing a Dynamic IT Infrastructure?

Business alignment is fundamental to this approach, which means business stakeholders need to be involved in any Dynamic IT Infrastructure initiatives from the outset.

Defining and prioritising these initiatives can be a challenge without expert help. Although a Dynamic IT Infrastructure is founded on common components, there is no 'one size fits all' approach, which means it's essential that you understand the maturity of your current infrastructure and how IBM's strategy can be best applied to your organisation.

Governance and management can also be particularly challenging within continuously evolving virtualised environments. Organisations therefore need to ensure they have the right integrated service management processes and tools in place as part of any Dynamic IT Infrastructure.

The ability to visualise which parts of the infrastructure are managing which services will enable organisations to make more informed decisions about how to manage the lifecycle of the service in a dynamically changing environment. Security, provisioning, and the monitoring of performance, availability and the end user experience are also fundamental considerations for any organisation establishing a Dynamic IT Infrastructure.

Working with a partner that understands these challenges as well as IBM technologies and other core datacentre systems and strategies, will help ensure you maximise your investment in existing assets and minimise any transformational risks.

With 25 years' experience of implementing, transforming and managing organisations' IT environments, Computacenter can help simplify your adoption of a Dynamic Infrastructure. From asset discovery and application acceleration to orchestration and optimisation, we can help you implement the new technologies and processes needed to underpin a virtual datacentre and Dynamic Infrastructure.

Partnership fact file: Computacenter and IBM

- Computacenter is certified in three IBM Dynamic Infrastructure solution areas: Energy Efficiency, Business Resilience and Virtualisation & Consolidation
- We were the first UK-based IBM Business Partner to achieve Speciality Elite accreditation in more than one solution area
- The strategic partnership has been in place since 1983 and has helped hundreds of organisations achieve their IT and business goals
- Computacenter is an IBM Premier Business Partner and the largest value added reseller in Europe
- We hold accreditations for a range of IBM solutions, including storage, software and enterprise servers, such as System x and System p

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How will a Dynamic IT Infrastructure benefit the business?

A Dynamic IT Infrastructure enables organisations to achieve more for less and an optimal balance between service, cost and risk.

Establishing a Dynamic Infrastructure will help your organisation:



Cost Reduction

Reduce cost:

By making greater use of virtualisation and automation, a Dynamic IT infrastructure will be more cost-effective to support and require less capital investment in the long-term. Computacenter has developed vendor-independent ROI modelling tools that will help you determine the cost benefits of a Dynamic Infrastructure approach as well as individual projects, so you can guarantee measurable savings.



Environmentally
Conscious

Minimise its environmental impact:

A Dynamic IT Infrastructure has lower cooling and power requirements, which means your datacentre will have a smaller carbon footprint. Energy efficiency can be further enhanced by introducing power monitoring and capping capabilities via solutions such as Tivoli Monitoring for Energy Management.



Risk Avoidance

Mitigate risk:

Based on shared resources and automated management processes, a Dynamic IT Infrastructure is more predictable and reliable with service delivery becoming self-healing, self-managing and driven according to business rules. IT issues can be identified and resolved more quickly, limiting business downtime and risk. In a disaster situation, virtual resources can be quickly provisioned to replace any impacted production environments and safeguard IT service quality.



Growth /
Business Change

Accelerate business growth:

Launching a new product, integrating an acquired company and responding to customer demand all require additional IT resources. Founded on pools of flexible IT resources, a Dynamic IT Infrastructure provides businesses with the agility they need to drive profitable growth and innovation. A Dynamic Infrastructure and a virtual datacentre also provides the foundations needed to establish private clouds, which can offer even greater flexibility.

What is the first step towards a Dynamic IT Infrastructure?

Many organisations will have already deployed some of the technology building blocks needed to create a Dynamic Infrastructure. The IBM strategy provides IT departments with the cohesive framework they need to bring these disparate elements together to achieve greater business alignment and IT optimisation.

A Dynamic Infrastructure Innovation Workshop will help identify what stage your organisation has reached on this journey. The one-day workshop offered jointly by Computacenter and IBM looks at IT from a business perspective and provides organisations with a roadmap for creating a fully aligned Dynamic IT Infrastructure.

Current and future IT initiatives are mapped to business strategies to verify alignment and to identify and prioritise any gaps. To help close these infrastructure gaps, roadmaps are developed for both short-term transformational projects and long-term continuous improvement programmes.

Encompassing IT processes, resources and finance models, the workshop is a unique opportunity to validate if your organisation's IT systems and services can meet current and future business needs.

To start your journey towards a Dynamic IT Infrastructure, contact Computacenter at:

optimised.environment@computacenter.com