

# Beyond boundaries

## Limitless innovation

Accelerate your Hybrid Cloud strategy to create value throughout your organisation.



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In business, as in life, change is the only constant. The smartest organisations embrace this; the most cursory glance at the business landscape is enough to establish that only the most adaptive survive. And that means the most innovative.

When it comes to innovation, technology is the great enabler. For businesses, technology has become intrinsic because it enables them to use new business models and processes to meet the changing demands of the marketplace. The importance of technological innovation is such that the IT team is no longer tasked merely with keeping the lights on; they now play a key role in achieving strategic priorities.

But what role should technology play in your business? What is its place on your board? And how can you leverage technological innovation to enable real business value throughout your organisation?

This report sets out to assist organisations in empowering their IT teams with the insights and tools they need to truly fulfil their new, innovatory roles. Backed by extensive research of data trends, it provides a preface to the strategic, technical and commercial planning needed to support your next business objectives - with a focus on IT leadership and Hybrid Cloud.

## WHAT YOU WILL GET FROM READING THIS REPORT

01. Gain insights into how to enable innovation in all areas of your business
02. Identify top technology considerations for your business and IT Transformation strategy
03. Gauge how 'Cloud-ready' your business is and shape your future Cloud strategy

*93% of CIOs at top-performing organisations lead adaptable and open-to-change IT organisations, to better enable new digital business models.*

Gartner CIO Agenda Survey 2018<sup>1</sup>.



## THE BOUNDARIES AND LIMITATIONS OF TRADITIONAL IT

As IT teams look to assume the innovative role now expected of them, major challenges are being thrown up by changes in the business landscape.

An emerging, digital-first generation of customers expects a higher level of user experience than ever before. Advancing cyber security threats are increasing the pressure to protect sensitive data with better governance and compliance. Human processes and data analytics are being automated, demanding service orchestration.

Meanwhile, the day-to-day operational challenges of managing legacy applications and maintaining service availability remain obstacles to innovation.

Fortunately for these embattled IT teams, a technology has emerged to make things easier - Cloud, which has firmly staked its claim in a technology industry where performance and time-to-market is key.

81% of business leaders agree that if they don't embrace IT Transformation, then their companies won't be competitive.

ESG Research Insights: IT Transformation<sup>2</sup>

## THE GROWING INFLUENCE OF CLOUD

The most significant technology to influence your business over the last decade has undoubtedly been Cloud computing. Whether you are considered to be a leading pioneer, gaining traction, or if you are just getting started, Cloud has affected your business and is influencing your strategic decisions.

Cloud is now a top investment priority for leading organisations, and it's easy to see why. It increases their flexibility, enabling them to run application workloads on the most efficient, most appropriate virtual infrastructure available to them. And from an operational standpoint, Cloud makes things easier. Performance and availability can be fully managed by the business's Cloud Service Providers (CSPs). What's

more, the Cloud is 'always on', and requires less man-hours to manage and maintain than legacy hardware.

Last year, 451 Research predicted that, in 2019, 60% of IT workloads will run in the Cloud. For IT departments, this could perhaps be a tall order. Cloud is a double-edged sword. It has increasingly freed up resources to innovate by reducing the complexity and costs of building and maintaining IT infrastructure. But by the same token, Cloud has driven digital innovation to such an extent that there is added pressure on IT teams to both continue to be business-enablers and deliver on their strategic objectives.

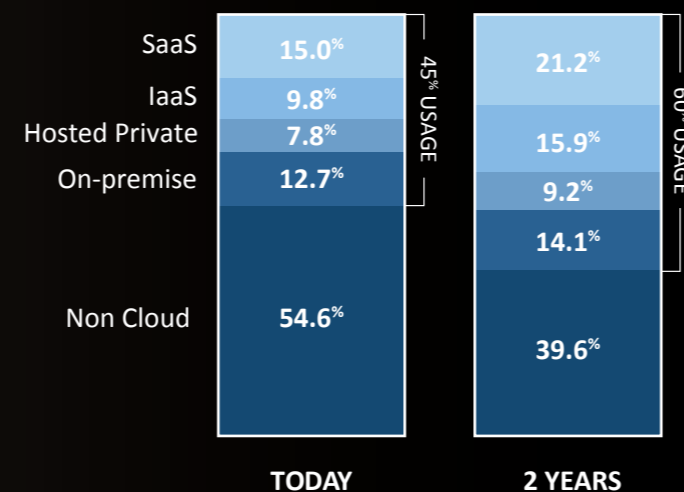


Figure 01: 451 Research Voice of the Enterprise<sup>3</sup>

The leading businesses, however, aren't being controlled by Cloud - they're controlling it. But how?

## THE GROWTH OF PUBLIC CLOUD

Public Cloud adoption and growth has seen the largest momentum in the modern technology industry, with the UK leading spending in Europe. Public Cloud offers organisations a pay-as-you-go, high-utilisation model: this enables them to use Cloud resources as and when needed - for even the shortest periods of time.

Hyperscale providers such as Amazon Web Services, Microsoft Azure and Google Cloud Platform are defining innovative high standards in virtualised multi-tenant architecture to offer huge economies of scale. Public Cloud therefore gives businesses access to ever more elastic scalability and cost savings.

As Gartner reports, Public Cloud continues to see strong growth across all areas of BPaaS, PaaS, SaaS, IaaS and Cloud Management and Security, and a continued 25-30% growth per annum is expected across these core service lines.

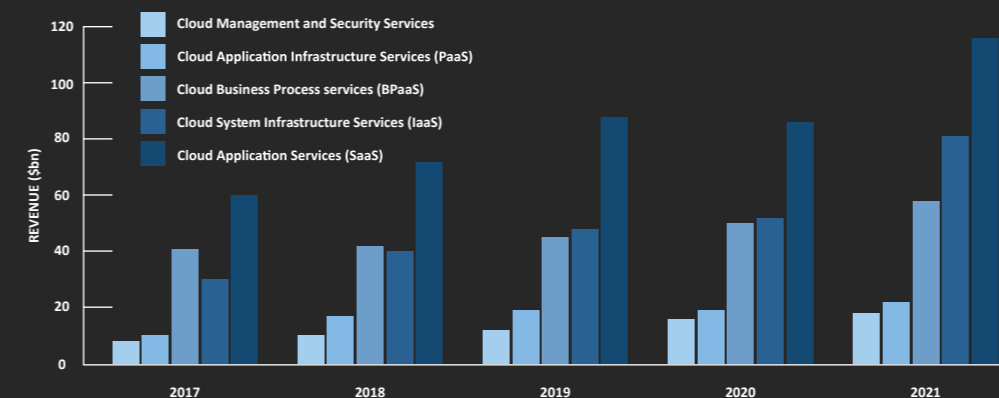


Figure 02: Gartner Public Cloud Forecast, 2018<sup>4</sup>

Being quick to deploy and easily scalable, Public Cloud as a platform commonly plays a critical part in innovation strategies. However, many who would like to use the Public Cloud to innovate are obstructed by the specific operational demands defined by their business, its customers or regulators - demands which the Public Cloud isn't always able to meet.

## THE CONTINUING NECESSITY OF PRIVATE CLOUD

Private Cloud can deliver on these operational demands, offering more control and performance than Public Cloud. Although historically Private Cloud has been the favoured option for IT spending, it has also always been more costly and complex to deploy. Now, private and on-premise models are moving from traditional buy-and-build programmes to simple as-a-Service solutions. Private Cloud, therefore, is growing and will continue to grow by forming a crucial component of Hybrid Cloud strategies.

*"On-premise and hosted Private Cloud will establish itself as the deployment model for your most critical and valuable technology services. Many leading organisations use a partner to control governance and maximise value. Exponential-e is well positioned to enable IT teams to lead in innovation"*

**William Fellows**, Co-Founder and Research VP Cloud Transformation, 451 Research.

## PUBLIC VS PRIVATE

This debate has been going since Cloud emerged over a decade ago, and has become more heated as the search for greater efficiencies and control intensifies. It might be time to let the debate die.

The truth is, in most cases you should only have to decide between Public and Private Cloud in relation to specific projects and workloads. Both have strengths and weaknesses, and so deciding - as many organisations are - to make your full infrastructure strategy both Cloud-first and 100% Public could be a mistake.

For those who have built their business over the past decade or further back, there are a multitude of factors to consider before going all-in on Public Cloud, few or none of which will trouble a newly formed, Cloud-native company.

### Examples of such considerations include:

- Existing investment in licences (e.g. Enterprise Licence Agreements)
- Legacy applications, modernisation and internal resource skillsets
- Integration of customised applications with process workflows and performance requirements
- Investment in data centres, whether on-premise or hosted service provider contracts
- Security requirements based on customer expectations or contractual obligations
- Control of maintenance windows, which could cause issues for business-critical systems

Many organisations are reluctant to use Public Cloud based on the nature of these considerations and the need to control change. The fact is that the current business landscape is so competitive and agile that making your Cloud strategy 100% Public or Private is highly inadvisable. It's frankly critical to have a technology strategy that leverages the best of Private and Public Cloud services: in other words, a Hybrid Cloud strategy.

## PUTTING HYBRID CLOUD AT THE HEART OF YOUR STRATEGY

Over the last decade, we have seen disruptive market entrants with Cloud-native strategies rapidly building market share. Organisations need to be mindful of this disruption, and build a strategy that positions the business to react to change, delivering technology innovation.

By leveraging a Hybrid Cloud strategy, organisations can build an integrated Public and Private infrastructure, taking advantage of existing investment as well as the core capabilities in the Public Cloud that drive business advantage.

*"The future of IT is multi-Cloud (over two thirds of enterprises will have multi-Cloud/Hybrid IT environments by 2019<sup>5</sup>). Dell EMC is a technology infrastructure choice to enable Private Cloud and Hyperconverged will be key to this objective. The remaining goal is how to make the most of multi-Cloud, and this requires high performance architecture, cloud management platforms and a trusted partner to support transformation."*

**William Fellows**, Co-Founder and Research VP - Cloud Transformation, 451 Research

To maximise the benefits of Cloud, multi-Cloud and specifically Hybrid Cloud is the preferred strategy among enterprises. While there are operational benefits for the IT team and the business, from a CIO's perspective there are also strategic gains that can play an instrumental role in helping them to achieve their business objectives.

So what does Hybrid Cloud mean for the CIO?

## AGILITY AND INNOVATION ARE KEY BENEFITS FOR THE CIO

Ultimately, the aim of a CIO should be to respond to the latest needs of the business while maximising customer experience. Optimised use of Hybrid Cloud caters to both demands by creating a more agile and cost-effective IT environment. This approach has core benefits across the business.

IDG analysts found that organisations with Hybrid Cloud are 3x more likely to reach digital business goals.<sup>6</sup>

When asked to identify the drivers behind their digital technology investments, 87% of the respondents called improving the customer experience a critical or very important goal.<sup>6</sup>

For the CIO, Hybrid Cloud provides both operational efficiencies to free budget for innovation, and the focus for IT to regain its status as the innovation-enabler underpinning the organisation's Digital Transformation strategy. Hybrid

Cloud puts the tools, services and capabilities in place to deliver agility and choice in service placement. For the CFO, a Hybrid Cloud strategy ensures that the value of existing assets is maximised and that cost reduction can be managed effectively. Many projects utilise the Public Cloud only to find that ROI is not as

## THE EMERGENCE OF HYPERCONVERGED

When building out a Hybrid Cloud delivery model, decisions on the Private Cloud service elements often fall into a model of refreshing existing infrastructure, with the latest and greatest compute, storage and SAN vendors being considered independently.

Hyperconverged infrastructure simplifies these complex technology projects by integrating these service components into a single, high-density system. The combination into one solution simplifies on-premise Private Cloud architecture, while less hardware space is required in the data centre.

As the underlying infrastructure for many new transformation programmes, Hyperconverged technology has evolved into one of the fastest growing areas in IT and Private Cloud.

Most applications today remain static and predictable in their nature with little need for rapid scale. Private Cloud often proves to be the most cost-effective model

expected, due to the unpredictable on-demand nature of Public Cloud IaaS. With a Hybrid approach, costs can be better controlled. A balance can be struck between CapEx and OpEx to allow greater management of budgets and avoid huge spikes in operational costs.

for these services, while it is further important for control and security compliance.

Private Cloud is now being greatly enhanced by Hyperconverged platforms in order to maintain control as well as increase performance. Due to the need for increased service integration to support Hybrid Cloud strategy, Private Cloud is shifting from Infrastructure as a Service (IaaS) to a Platform as a Service (PaaS) delivery model. This enables automatic integration of pre-configured solutions.

Organisations with a Hybrid approach are using Hyperconverged private platforms to gain operational efficiencies and drive innovation. Using these platforms to run both legacy and static applications frees up resources and budgets to focus on innovation projects, such as using Public Cloud services to improve agility in response to changes and developments.

## THE BUSINESS VALUE OF HYPERCONVERGED

Hyperconverged delivers value to your organisation by both modernising IT operations and accelerating strategic business initiatives.

The following provides stats from extensive research from IDC, ESG and 451 Research.



Source: ESG Research: IT Transformation<sup>7</sup>

## BENEFITS OF HYPERCONVERGED IN A HYBRID CLOUD STRATEGY

Moving from a traditional model of independent component evaluation to delivery of a Hyperconverged architecture provides significant benefits to the business in the following core areas:

### RAPID DEPLOYMENT

Move from days to hours to get platforms up and running, based on the fully integrated architecture stack and automated build scripts. Ship to your data centre, branch or remote site and rapidly operationalise the service to reduce time-to-value.

### OPERATIONAL SAVINGS

Simplify pre-testing of all patches. Bundled patch releases means that you no longer need to assess compatibility matrices across Hypervisor, Compute, Storage, SAN, etc. Pre-validated releases provide assurances on interoperability and increased automation for in life BAU operations.

### CLOUD-NATIVE SERVICE DELIVERY

Be ready to modernise and transform applications. Hyperconverged architecture is Cloud-ready and able to deploy PaaS blueprints, which speeds development of the applications underpinning your transformation initiatives (e.g. refactoring software using Pivotal is simplified).

### LOWER TOTAL COST OF OWNERSHIP

Hyperconverged infrastructure provides enhanced ROI over traditional architectures. Rapid deployment, simplified management and higher performance enhance ROI not only across hardware platforms, but also in hosting and management.

### SCALE OUT, NOT SCALE UP

Remove traditional scale up barriers and enable scale out, with modular upgrade nodes allowing where needed for storage or compute-intensive modules.

## A SUCCESSFUL TRANSFORMATION STRATEGY YIELDS THE BEST OF BOTH WORLDS

In summary, a Hybrid Cloud approach is the best way for organisations to make strategic gains by empowering their IT teams as internal service providers. Empowered IT will push the boundaries of current operations, which is vital for CIOs, for whom enabling innovation through Digital Transformation is top of the agenda.

A successful Hybrid Cloud strategy makes use of both Public and Private Cloud to deal with different workloads. Many leading CIOs are already using Hyperconverged infrastructure to make their Private Cloud platforms more agile to change and development. From a technical, operational and commercial perspective, this will give your organisation a big boost in agility.

As you build out your Hybrid Cloud strategy, it's of paramount importance to manage and optimise workload delivery across your Cloud services. A key success criteria for delivering value at board level is cost control. 451 Research has studied the costs associated with Cloud, and identifies that Cloud optimisation - including cost, governance and control - is key to ensuring project success.<sup>8</sup>

A great way to manage and optimise your workload distribution is through the use of a Cloud Management Platform (CMP). API integrations provide the service orchestration needed to control and analyse consumption of a wide ecosystem of services. Services are pre-configured ready to support new applications and business projects - in addition to central reporting, role based access management and billing. Your CMP will provide a single-service interface to access an extensive reach of services, all governed and optimised through a tailorable set of controls.

Implemented effectively, a CMP will integrate not only with your existing on-premise estate, plus any Public Cloud services you use (such as AWS, Azure, Google Cloud Platform and Alibaba), but also with any future Private Cloud deployments as part of your ongoing transformation. A trusted technology partner can automate optimisation across multiple clouds, and advise on future strategic decisions.

Go beyond traditional boundaries in this way and you will enable the best of both worlds for the delivery of a true Hybrid Cloud strategy for business enablement.

## KEY TAKEAWAYS

Technology is firmly placed as the great strategic enabler for your organisation. IT Transformation is key to achieving a status whereby technology is driving the constant innovation required to meet objectives, and not just struggling to meet operational needs.

The key insights from this report, supported by global research, which will help you to lead your future strategy, are as follows:

01. Successful organisations are seeking modern solutions using Hybrid Cloud to achieve business goals and lead their industry.
02. Innovative new business models are made possible by increasing Private Cloud's flexibility (by using Hyperconverged infrastructure).
03. Successful Hybrid Cloud strategy requires expert leadership to control and optimise Cloud management.



## GET ENGAGED

**This report is brought to you by Exponential-e.**

As the UK's leading provider of Cloud and Network services, Exponential-e is trusted by over 3000 customers to deliver successful technology and transformation projects.

Our Cloud consultants are on hand to provide further insights to support you in making IT Transformation a reality. From business concept to in-life 24 / 7 x 365 Cloud managed services, whether you are building your strategy or have already begun Digital Transformation, we will evaluate your Hybrid Cloud service strategy highlighting the best options for you and your organisation.

Visit [exponential-e.com](http://exponential-e.com) for more insights and request a free planning session.

## REFERENCES:

1. Gartner CIO Agenda Survey, 2018.
2. ESG Research Insights: IT Transformation, March 2018.
3. 451 Research Voice of the Enterprise: Cloud Transformation, Workloads and key Projects, 2017

## IN PARTNERSHIP WITH DELL EMC

**Exponential-e is a Dell EMC Cloud Service Provider and Strategic Outsourcer Gold Partner.**

Dell EMC is the global leader for Cloud IT infrastructure products (server, storage, and switching). To enable customers to meet the demands of modern IT Transformation, Exponential-e partners with Dell EMC to rapidly operationalise flexible, fast and scalable Private Cloud architectures.

Exponential-e's Hyperconverged Private Cloud solutions are powered by Dell EMC VxRail appliances. Delivered with Exponential-e's unique Layer 2 Software-defined WAN services, this partnership results in faster project implementation using a rich range of Hybrid Cloud services, in addition to secure and seamless Cloud migration.

To find out more visit: [exponential-e.com/dell-emc](http://exponential-e.com/dell-emc)

4. Gartner Worldwide Public Cloud Service Revenue Forecast Billions of U.S. Dollars, April 2018.
5. 451 Research Voice of the Enterprise, Cloud Transformation, Vendor Evaluations, 2017.
6. IDG research report, Hybrid Cloud computing, the great enabler of digital business, January 2017.

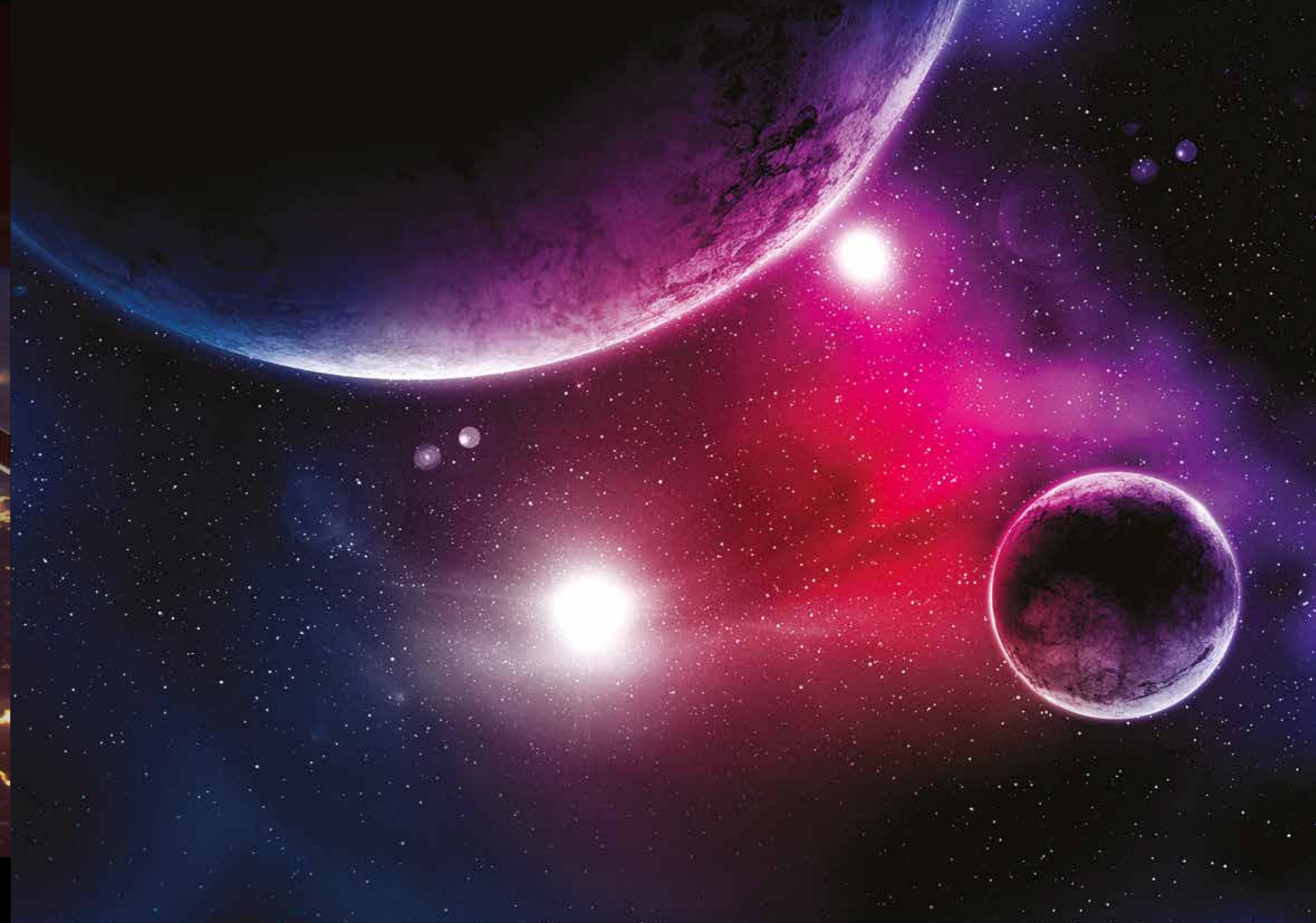
## VIEW THE 451 RESEARCH PAPER

Read the analyst report which credits Exponential-e with offering its customers with more options when it comes to Cloud management.

Exponential-e is marrying its network expertise with leading Cloud infrastructure to deliver an improved transformation experience for customers, complemented by value-added managed services.

To find out more visit [exponential-e.com/cmp](http://exponential-e.com/cmp)

7. ESG Research paper, "Research Proves IT Transformation's Persistent Link to Agility, Innovation, and Business Value," March 2018.
8. 451 Research Report: 200 words on cloud economics, today and tomorrow. 2018





Find out more about Exponential-e's  
Cloud Management Platform by visiting:

[www.exponential-e.com/cmp](http://www.exponential-e.com/cmp)

Alternatively, you can contact one of our  
Cloud experts on 0845 470 4001

