

# HIGH PERFORMANCE 3.0 -

High Performance Technology

***nebula***<sup>®</sup>  
SIMPLIFYING HIGH PERFORMANCE



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Intro by the

CEO

High Performance 3.0

*"In this paper we will be looking at the next evolution high performance, taking it away from a strictly telecoms focus and showing how high performance thinking can be applied to all business technology."*

# Intro by the CEO

## High Performance

### 3.0

Nebula first came up with the 'High Performance' business concept in 2016 to discuss how to create the ideal telecoms environment out of an increasingly complex ecosystem.


HPT 1.0 looked at how advancements in telecoms technology and the increased speed of innovation, coupled with the fast-paced digital world was driving the necessity for a high performance telecoms environment that could track, measure and manage the complex environment.

In HPT 2.0 we looked at how the drivers for high performance were evolving to keep pace with the changing needs of businesses and how to implement and maintain a high performance environment. In this paper we will be looking at the next evolution high performance, taking it away from a strictly telecoms focus and showing how high performance thinking can be applied to all business technology.

New technology has created a shift in large businesses. The telecoms environment is no longer a distinct ecosystem within a company, but has become one of the many components of the larger ICT ecosystem. This has not negated the need for high performance, but rather expanded it.

Technology has become one of the core business pillars driving modern day enterprise performance and the high performance principles that we discussed in our previous papers are now increasingly applicable to all aspects of business technology.

*"In this paper we will be looking at the next evolution high performance, taking it away from a strictly telecoms focus and showing how high performance thinking can be applied to all business technology."*



Many companies are migrating from old legacy systems and architecture in order to keep up with rapidly increasing pace of technological advancements.

This is giving them greater flexibility, increased agility, and faster speed to market – the better to compete with emerging digital first solutions. It also however means greater complexity at every level of business, and an increased need for digital skills to implement, manage and maintain new digital systems, in addition to maintaining legacy systems.

This new reality creates increasing pressure and complexity in the business environment. There is also a growing reliance on technology solutions to create and drive business performance. These factors have led to a new performance world where technology can be used in business to track and measure every single second and every single action.

A pro-active technology management system will help companies to manage this complexity, and give the company more control over the performance of its technology services.

This will give the business real time visibility across business units and service providers.

A high performance technology environment means a company will have greater insight into its technology, particularly around:



### Usage

How is the technology being used? Who is using it? How is the access and identity of the users managed?



### Service providers

Which service providers are being used for what services? Is it the best provider for the service? Is there an opportunity to consolidate or improve services?



### Supply chain

Who are the various parties involved in the technology supply chain? Is there an opportunity to improve or consolidate any of the steps in the supply chain?



### Skills

What technology skills are available in-house? What skills are supplied by the various service providers?



### Efficiency

Are the various technology systems operating efficiently? Are there areas which can be improved? Are business processes being hindered in any way?



### Wastage

is the company paying for services that it does not use? Is there overbilling? Can better deals be negotiated with service providers? Are inefficient technology solutions causing wastage in other areas?

In a new performance world where it is possible to track and measure every aspect of technology driven business processes, companies have greater access to data than ever before, and if this data is not leveraged then it is wasted.

To drive success in this new reality it is essential to move forward and prepare for the future. If you are staying in the same place you are already falling behind, and the longer you hold out, the more difficult it will be to catch up in the future. There is no reason not to move forward into the new world of technology.



# The Evolution of High Performance

*“A high performance business will get the most out of its technology, so that it can work at optimum performance levels.”*

# The Evolution of High Performance

High Performance is a business mind-set that requires an ongoing commitment to a process of continuous improvement. A high performance business will get the most out of its technology, so that it can work at optimum performance levels. A high performance approach gives companies their best chance at success in the new world of business.

Opposing factors to high performance include:



## Increased complexity

The constant innovation in business technology has created an extremely complex environment, requiring the management of a vast array of products and services which enable every aspect of the business.



## Constrained thinking

It is becoming increasingly difficult to ensure that the required level of skill is available within a company to manage the complex technology ecosystem. This decrease in skills capability also decreases the company's ability to implement and manage new and innovative solutions or systems.



## Diminishing marginal return

The constant innovation in business technology has created an extremely complex environment, requiring the management of a vast array of products and services which enable every aspect of the business.

These forces work together to decrease the performance of a technology driven business environment. If these forces are not managed and planned for, it will have a negative impact on business performance and inhibit future company growth and evolution.

Constrained thinking and performance are both characterised by a lack of digital skills. If a company does not invest in new skills and training, they will not be equipped to implement and manage new technology innovations. A digital-focused culture within the company is also needed in order to provide the support and nurturing these digital skills need to flourish. Without a digital culture within the company that prioritises and encourages digital solutions, digital skills will be stifled and underused.

To counteract these constraining forces, companies must build digital skills, embrace a digital mind-set, and keep pace with technological change by applying the right digitalisation tools. It is also essential to create a digital culture within the company that will encourage and grow these digital skills and optimise the use of digital tools. Technology essentially has to become rooted in the company's culture.





High Performance  
In Action

# Areas of High Performance

*"This will give the business real time visibility across business units  
and service providers."*

# High Performance in Action

## Areas of High Performance

High performance is a business digitalisation mindset that can be applied to many areas of business. Nebula has identified four steps necessary to implement high performance in a technology environment:



### 1. Automation

Create technology based systems that can automate complex tasks.



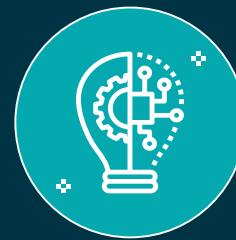
### 2. Integration

Reduce complexity with seamless integration with 3rd party service providers through an API integration layer



### 3. Data Enrichment

Enable real-time data processing, enrichment and purification to create more intelligent, uninterrupted data to use in real-time decision making



### 4. Systems Knowledge base

Create technology based systems that can automate complex tasks.

When creating a high performance technology environment, there are a few of key business areas where the changes will happen. These are areas that will see increasing complexity as businesses embrace digitalisation and grow their technological capabilities. As such they are the trends shaping the new performance world that will become key business technology pillars.

# A Cloud First Mindset

With the increasing pace of cloud migration, many companies are moving towards a 'cloud first' mindset. As the focus of high performance has shifted from telecoms management to full technology management, cloud based technology has become essential for enabling a high performance environment. At the same time however, high performance thinking must be applied to managing the cloud environment.

Companies can no longer afford to ignore the cloud as a core business tool. The idea of a 'no-cloud' policy is becoming as unlikely as a 'no-internet' policy in business as cloud technology becomes increasingly central to many business technologies.

With a cloud-first strategy, companies move all possible applications, information and workloads to the cloud. A cloud-first strategy centres on using cloud technology to its maximum benefit, and implementing cloud solutions to run key business functions.

This also allows companies to take advantage of the shared cloud infrastructure, and only pay for the services and resources that are used.

As businesses processes are increasingly moved into the cloud, companies will have to deal with the increasing complexity of the cloud environment. If not managed properly this complexity will cause constraints on the company's performance and unnecessary wastage on underutilised cloud products and services.

To combat this companies need to take a high performance technology approach to their cloud ecosystem, implementing innovative solutions that can simplify the cloud environment. By tracking cloud expenditure and performance within a company it is possible to improve the performance of the cloud systems and enable higher levels of efficiency.

## Cloud migration



## Cloud as a core business tool



## high performance technology





## A Cloud First Mindset

In HPT 1.0, we discussed how companies with a large distributed footprint would benefit from a high performance environment. A company with a complex network of points-of-presence spread across many different cities or countries has a high reliance on technology solutions for efficient and effective communication and the smooth operation of business processes.

While this is still true today, it has become even more relevant in another sense. In addition to a widespread physical footprint, large companies now also have vast and complex digital footprints, covering the various networks, technologies, solutions, and devices that are all integrating into their central system.

These digital footprints are not bound by any physical location and can exist entirely virtually or roam from place to place alongside its user. In many cases companies have assets that are outside their walls, in the cloud, or behind third party APIs with users accessing their networks and systems from around the globe. With the addition of IoT implementations, it is possible for a company to have literally millions of connected devices.

*“These digital footprints are not bound by any physical location and can exist entirely virtually or roam from place to place alongside its user.”*

They also have multiple other stakeholders such as clients, customers, and partners that must be able to seamlessly integrate and interface with the various aspects of this footprint.

Businesses therefore increasingly need to take a high performance approach to managing this vast digital footprint. This will enable the proper mapping of the ecosystem, usage tracking of the various components, and identification of gaps or wastage in the system.

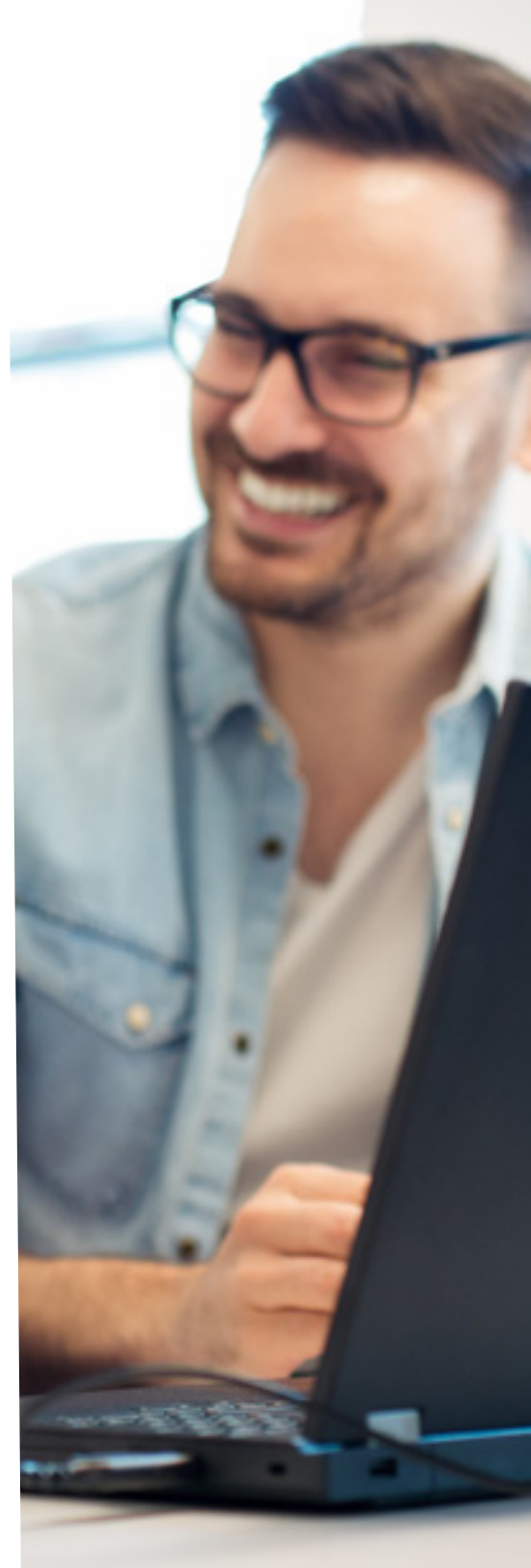
A high performance technology environment will help enterprises to monitor and track the digital footprint by focusing on eliminating complexity, and creating an environment that allows for control, speed, and accuracy.

By tracking and monitoring the company's digital footprint it is possible to improve access and identity control, reduce shadow IT, and create a centralised digital platform that will enable all business processes.

and give the company more control over the performance of its technology services.

This will give the business real time visibility across business units and service providers.

A high performance technology environment means a company will have greater insight



*“This will give the business real time visibility across business units and service providers.”*



## The Integration Layer

Over recent years application programming interfaces (APIs) have become increasingly popular as a way to make solutions and systems talk to each other. APIs are an important tool for business because they offer a set of building blocks that allow companies to use existing data in creative new ways. Companies are increasingly looking at ways to expose, manage, and control APIs.

APIs allow a company to break down applications to their simplest components. Each function can be treated as a single service with its own team responsible for maintaining the API endpoint. These can then be strung together to make larger, more complex applications. This creates applications that are lightweight, dynamically scalable, and more resilient.

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As APIs become increasingly popular, this will become a standard part of all solutions, and all systems will offer an integration layer.

It is therefore essential for high performance companies to have an open API that can link up with other systems.

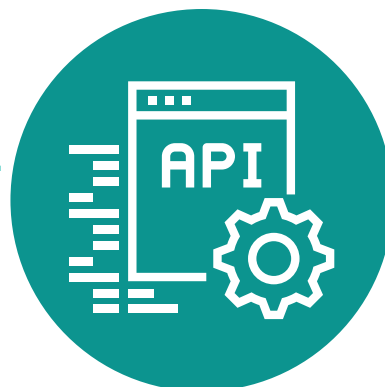
To enable high performance companies must decide what APIs will be used or made available for what business areas and processes

For example, in the banking sector APIs are increasingly being used to create an open banking infrastructure which enables third parties to access and work with certain sets of banking data, while still retaining core customer security and privacy.

### Banking Sector



### API's



### Security and Privacy





While in South Africa there is not yet legislation in place around banking APIs, as there is in regions such as Europe, many banks are already working in this space, providing APIs that allow fintech companies to offer niche services.

Absa Bank for example went live with their open API platform in 2016 allowing external parties to access certain data sets such as biometric identification, transactional capabilities and ATM locators.

Another example is the Root bank account. This is a lightweight bank account designed for developers, to give them a platform where they can experiment and build fintech products. With the regulatory framework and underlying banking infrastructure provided by Standard Bank, it comes with a programmable credit card, online banking interface, mobile app, and APIs. Using “RootCode” it allows a user to write code that interacts with transactions in real-time, giving developers the ability to build fintech solutions for themselves and others.

By investing in this new technology, large businesses are able to move with the agility of much smaller players. This allows them to preserve and exploit the value of their legacy systems while still creating a leaner more agile environment.

APIs are also at the heart of many key business partnerships as they create pathways for companies to share data and services with partners. The correct use of APIs can deliver offerings, projects, or capabilities to market quicker, and with lower risk. It can also ease interactions between businesses in a way that drives value for both participants. By creating an API driven integration layer, it is possible to facilitate easy integration with service providers and third parties, and companies are increasingly seeing the value of APIs as a way to reuse and monetise their data through these collaborations. This is known as the ‘Open API Economy’.

This open system will also enable and encourage access to and sharing of data which can be used to create a system generated knowledge base. This knowledge base can be used to solve complex problems and will become increasingly important for advancements in AI, machine learning, and data enrichment.



A group of people are gathered around a table in a meeting. They are looking at various documents, charts, and sticky notes. One person is pointing at a document. The scene is brightly lit, and the overall atmosphere is professional and collaborative. A teal-colored rectangular overlay is positioned in the upper left quadrant of the image.

## High Performance Thinking

# Preparing For High Performance

*"Before this transformation is possible the company must plan out the technology roadmap for the business going forward. It is important to identify the business areas that can benefit from new technologies and set out the proposed structure and costing for the transition."*

# High Performance Thinking

## Preparing for High Performance

Implementing a high performance technology environment within a business gives an organisation the enhanced capability to highlight problem areas, and the knowledge and skills to correct, improve and sustain those changes.

In order to enable high performance within a business there are key business areas that must first be addressed.

### High Performance Skills

One of the key aspects of creating a high performance environment is recruiting and nurturing the right high performance skills within the workforce. Traditional job roles as we have always known them are changing. As technology levels the playing field for a lot of businesses there must be a new approach to how companies work, grow, and compete.

A high performance environment will require a specialised workforce with new roles and responsibilities and a new breed of skills. In order to achieve this, companies must recruit and grow a digitally skilled workforce.





As technology becomes increasingly integrated into every aspect of business processes there will be a greatly reduced need for administration skills as tasks and processes become increasingly automated.

Companies will also have to start designing roles jobs for digitally augmented environments and must essentially start seeing machines and technology as part of the workforce talent pool, that must be sourced and integrated into the workforce.

As the need for low skilled workers decreases, so the need for highly skilled and specialised workers will increase. Companies therefore need to look at how they will re-train and up-skill their existing workforce to meet the demands of a high performance future.

By taking responsibility for skills development and growth internally, a company can ensure that the existing workforce has the skills it needs to operate in a new technology driven environment.

Companies must consider how new digital technology will fit in to their overall business strategy, what job roles they will need in the not to distant future which may not even exist now, and how they are going to create, attract, recruit, and retain a digitally skilled workforce. As the business environment changes and evolves it is important for companies to future proof themselves, so as not to be left behind.



## Hybrid System Strategy

To create a high performance business environment, companies need to transition from old legacy systems to new technology. The pace of cloud migration will continue to increase, and for many businesses it is a factor of 'when' rather than 'if' they will transition. For the near future many organisations will be in a hybrid world of partial cloud migration and will need to update systems, strategies, and processes to manage this accordingly.

Companies that do not make the move towards new technology often fall into the trap of constrained thinking and will begin to see diminishing returns on their efforts. However, completely shifting all business processes onto a new digital system is not often a feasible solution for large businesses. A hybrid system is therefore often advisable, as it allow the business to run old and new systems in parallel.

Before this migration is possible the company must plan out the technology roadmap for the business going forward. It is important to identify the business areas that can benefit from new technologies and set out the proposed structure and costing for the transition.

When creating a roadmap, it is important to not only look at which systems to migrate, but also how process can be changed and updated to increase business performance. Rather than simply migrating business tasks onto a new technology system, it can be useful to completely re-examine how it is done and what aspects of it could be optimised through the use of technology.

*"The pace of cloud migration will continue to increase, and for many businesses it is a factor of 'when' rather than 'if' they will transition.."*



OneView

# Nebula's High Performance Solution

*"OneView Cloud Expense Management gives the enterprise full visibility over their cloud environment and Azure spend."*

# Oneview Nebula's High Performance Solution

In order to enable a High Performance Environment within enterprise businesses, Nebula has developed OneView, the next generation, cloud-based Technology Lifecycle Management system that provides real-time visibility and control of enterprise technology usage and service provider performance.

OneView will assist in optimising operations and connectivity, and enables high level visibility as well as in-depth analysis of your entire environment, empowering you to make pro-active decisions and reduce wastage.

In addition to improving efficiencies and reducing unnecessary expenditure, the system supports governance, compliance and risk management, mobile workforce management, infrastructure management, and contract optimisation.

## OneView features include:



**OneView is a multi-vendor system:** OneView collects and verifies data directly from multiple service providers.



**OneView offers seamless service provider integration:** It integrates with all service providers and vendors to automate complex tasks and give you more power.



**OneView provides an independent view:** Having extensive technology experience Nebula ensures you are using the most cost efficient solutions to optimise your environment.



**Speed is a priority:** Using OneView, we can provide you with an assessment of your entire telecoms environment within 40 hours.



**Sustainable product built with the future in mind:** Nebula OneView has been certified a Microsoft Gold Partner.



**Dynamically integrated with market trends:** OneView is a step ahead by seamlessly adapting to market trends and integrating it into the system.

The OneView Platform also has a number of unique features that can assist your business in its high performance goals. Some of the OneView Features include:

# Oneview Nebula's High Performance Solution

The OneView Lite Mobile Application is a companion to the main web interface and allows for monitoring of usage and spend on employee level.

With the OneView mobile app it is possible for employees to view all company owned devices assigned to them, making it easier for them to monitor and control their own usage and expenditure.

Features of the OneView App:



**1. A single view of all assigned devices and SIMs** - Users can monitor all of their company owned devices onto the OneView app, including mobile phones, tablets, and 3G cards. This enables the employee to view a list of all the devices or SIMs that are assigned to them in a single interface.



**2. Easy personalisation** - users are able to give 'friendly' names and icons to all their devices to more easily distinguish between them and track and manage the different accounts.



**3. Spend tracking and management** - users are given a real summary of usage and expenditure per device or SIM.



**4. BYOD Directory** - users can view BYOD Directory Categories for Business, Personal and Unknown



**5. Categorise BYOD Contacts** - users can categorise contacts as Business or Personal

By empowering employees to manage and monitor their own device usage, the OneView app provides greater awareness across all levels around reducing and controlling mobile spend.



# OneView Number Verification

The OneView Number verification system enables companies to reduce the unnecessary costs that are incurred by call centres because of invalid numbers.

When a business has no process or application to verify mobile numbers provided by new clients, or have no way of verifying existing clients' mobile numbers, it can cause a loss in productivity for call centres.

The number verification tool improves agents productivity by validating numbers and reducing the volume of invalid calls.



**1.** Verify the validity of a single number or a batch of numbers by importing a bulk list and receiving a report as output to specify whether a number is active or inactive



**2.** Report to a Dashboard to make previous analytics available



**3.** Provide extensive verification to ensure accurate results



**4.** Provide auditing of all user and reporting activity



# OneView Cloud Expense Management

In addition to telecoms management Nebula's OneView platform also offers Cloud Expense Management (CEM), enabling you to track and optimise your Azure cloud environment through OneView.

OneView Cloud Expense Management gives the enterprise full visibility over their cloud environment and Azure spend. With integrated baseline reporting, a detailed live dashboard and full tagging and recharge functionality, cost-related challenges associated with cloud technology can be managed and optimised.

OneView Cloud Expense Management assists with:



**Cost saving** - identify environment optimisations and cost efficiencies to leverage the benefits of cloud without financial risk, and always have full, detailed insight into your cloud expenditure.



**Cost allocation** - the OneView platform gives you a full overview of your cloud environment components and its spend allocation. It also compares the budget with actual spend per month, and gives a detailed analysis of cloud spend per cost centre and resource group to enable the accurate allocation of cloud spend per billing period.



**Cost Centre Tagging** - the ability to tag specific cost centres, resource groups or projects allows the enterprise to see exactly where cloud resources are being spent, and recharging to these cost centres accordingly. These recharge reports are also completely configurable according to the business's recharge model.



**OneView is a multi-vendor system:** OneView collects and verifies data directly from multiple service providers.



For More  
Information

To find out more about [OneView™](#), please send an email to [ContactUs@Nebula.co.za](mailto:ContactUs@Nebula.co.za) with “OneView” in the subject line, and a Nebula staff member will contact you.

You can also visit any of these platforms for more information and latest company news.



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