



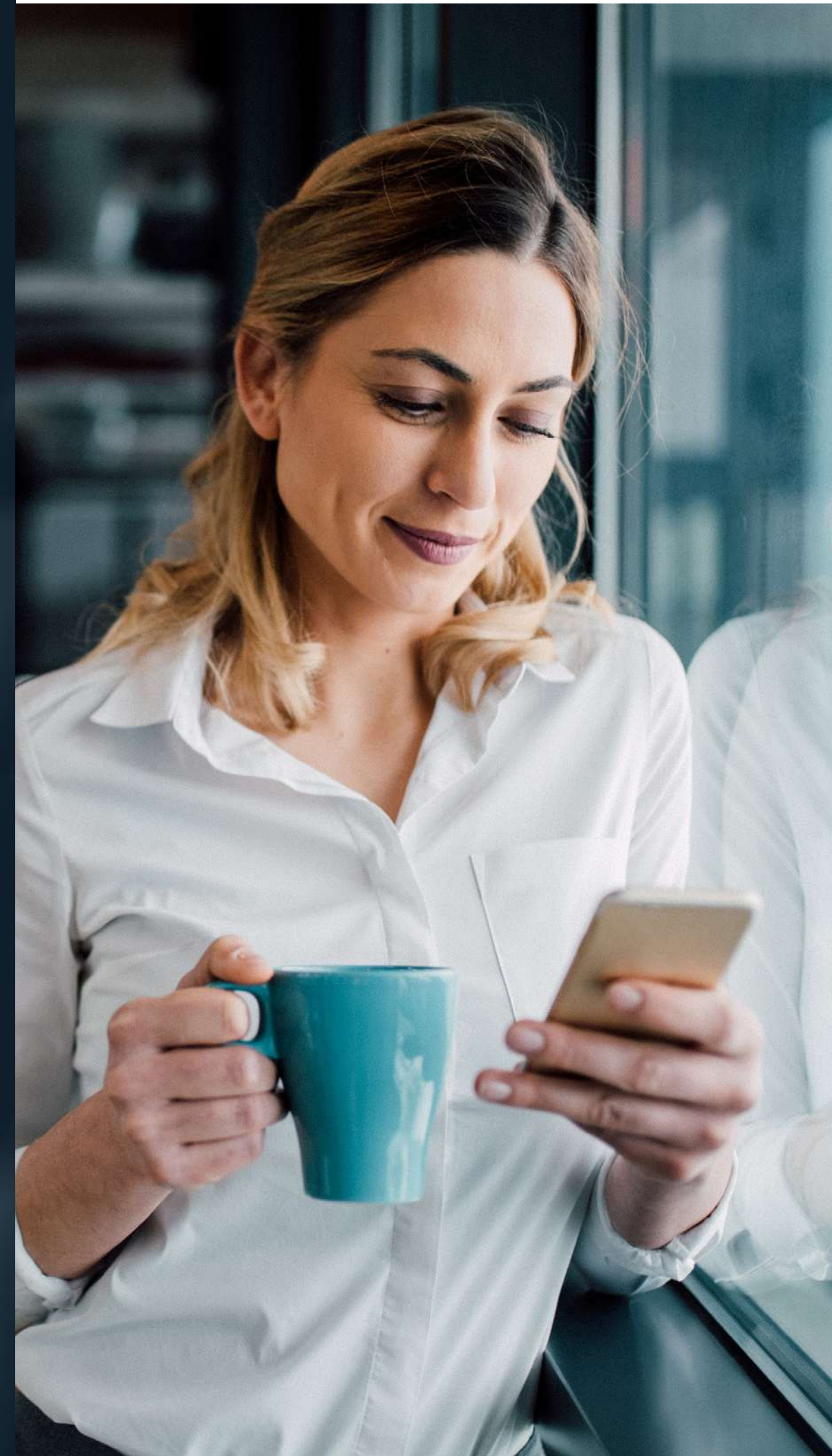
AN ESSENTIAL GUIDE FOR THE INDISPENSABLE CIO

# At the Center of Digital Transformation

What CIOs can do to transform their role and  
become a critical advisor to the business



# The working landscape is changing For IT leaders



“Business unit IT spending will increase to 50% of enterprise IT spending for individual enterprises, with a strong focus on, or aspiration for, digital business transformation.”<sup>1</sup>

Half of organizations’ spend on IT will soon be controlled directly by business owners rather than the dedicated IT function. This is, in part, due to the ease of selection and implementation of new technologies such as SaaS applications, mobile applications and IaaS platforms. IT is increasingly being cut out of the decision-making and budgeting processes and its relationship with the rest of the business has changed irreversibly.

This is being exacerbated by a plethora of digital transformation projects where business leaders, in an effort to drive competitive advantage and achieve innovation, no longer feel reliant on IT and believe they can act faster and with greater effect on their own.

This shift in technology availability and attitude to self-determination is driving a divide between the business and IT. A divide we call the Disruption Gap.

CIOs and IT Leaders that fail to bridge this Disruption Gap will find themselves marginalized and increasingly unable to demonstrate their value to the business. Failure to respond will also hurt the CIO’s relationship with the CEO and CFO.

**“CIOs have a window of opportunity to lead the enterprise’s digital transformation. If CIOs step up to this challenge, they will prepare themselves for bigger business roles.”<sup>2</sup>**

This eBook explores the causes of the Disruption Gap and what CIOs can do to transform their role to become an indispensable adviser to the business.

<sup>1</sup> Gartner, Top Challenges and Must Do’s for Technology Sourcing, Procurement and Vendor Management Leaders in 2017, 06 December 2016.  
<sup>2</sup> Gartner, Fire Yourself as CIO and Hire Yourself as a Digital Business Leader, Ivar M Berntz, Graham P. Waller, 9 May 2017.



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## THE OPPORTUNITY FOR CIOs

In the rush to bring to market new services and products, business units are understandably attracted by technologies that promise better agility and closer alignment with customer and market needs. After all, the demands on these business units are high.

The more people that initiate IT spend the more opportunity there is for overspend through duplication, missed opportunities for volume purchasing and shelfware.

It is essential that CIOs have a handle on how the IT budget is being used and have clear projections for future demand, in order to capitalize on the potential to optimize spend and reduce wastage. By 2020, enterprises with an effective SAM (Software Asset Management) practice will reclaim 25% to 30% of their total software spending, compared to enterprises that do not.<sup>3</sup>

Ultimately, the CIO and business units can't be at odds when procuring software. If CFOs don't have accurate information on the current spending and planned expenditure, they are at constant risk of overspending before the CEO and wider business units' new transformation projects get a look in. The first step to solving any problem is to understand it. It's time for

the CFO to wake up to the new challenges that CIOs are currently facing and support them in implementing the processes that, in turn, will enable the company to effectively manage business transformation spending.

The CIO is arguably best placed to help the organization avoid IT overspend as well as drive efficiencies in coordinating efforts between individual business units considering the same technologies, even if for different aims. Even though the IT function is increasingly omitted from the technology selection and budgeting process at the business unit level, it is still required by the business to support the wider computing environment and provide important inputs to the executive team.

Increasingly, the CIO is required not just to define and lead individual projects, but to instead provide the CFO and the executive team with an understanding of technology budgeting, aggregation of spending plans across the organization (regardless of owner) and assurances that money is being spent wisely. A set of responsibilities that are impossible to deliver without insight into technology consumption. This requires mature processes and best-in-class analytics.







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## “This lack of contractual expertise too often results in ugly budgetary and compliance surprises.”<sup>4</sup>

According to Gartner, “We are seeing a growing trend of business-centric IT buyers bypassing technology procurement altogether, and negotiating and executing their own software and cloud service contracts. Too often, they fail to incorporate critical financial and risk-related terms, resulting in increased exposure to costly noncompliance settlements following software audits, or in the case of SaaS, costs for unforeseen overage fees. Or, worse still, they do not fully appreciate the implications of their deployment plan in the context of the arcane terms with which they are unfamiliar.”<sup>4</sup>

To fulfil this new role, the CIO needs one thing above all else: Vision. Or in this context, the ability to make everything visible. In a business sense, we often talk of a leader who has vision as being able to see some kind of perfect future state. Someone with a vision that we buy into and choose to follow.

But what about the leader who sees things as they truly are today and uses that vision to build a plan for where

they want to be tomorrow? With vision of this kind, the CIO puts themselves in the central position of being the one who can see the full big picture. And that’s the key prerequisite for the evolution that must occur if the CIO is to thrive and transform from IT leader to business influencer of Digital Transformation.

This is what your organization really needs – someone to influence the individual business units; to help them reach the right decisions and to ensure that the organization’s best interests are always safeguarded. The CIO that resists Digital Transformation and argues for IT’s control of technology spend is fighting a losing battle. The CIO that accepts their role as influencer or broker can redefine the IT function and bring real value to the evolving business.

With vision, the CIO and their IT team become the go-to people for business units looking to fast-track new technology adoption, to drive great deals with new or existing vendors and to create links between the efforts of different business units. All the while providing the executive team with a single point of reference for spend, risk and technology availability.

<sup>4</sup> Gartner, Negotiating Software and Cloud Contracts Primer for 2017, Rob Schafer, 20 July 2017.



## With visibility comes influence

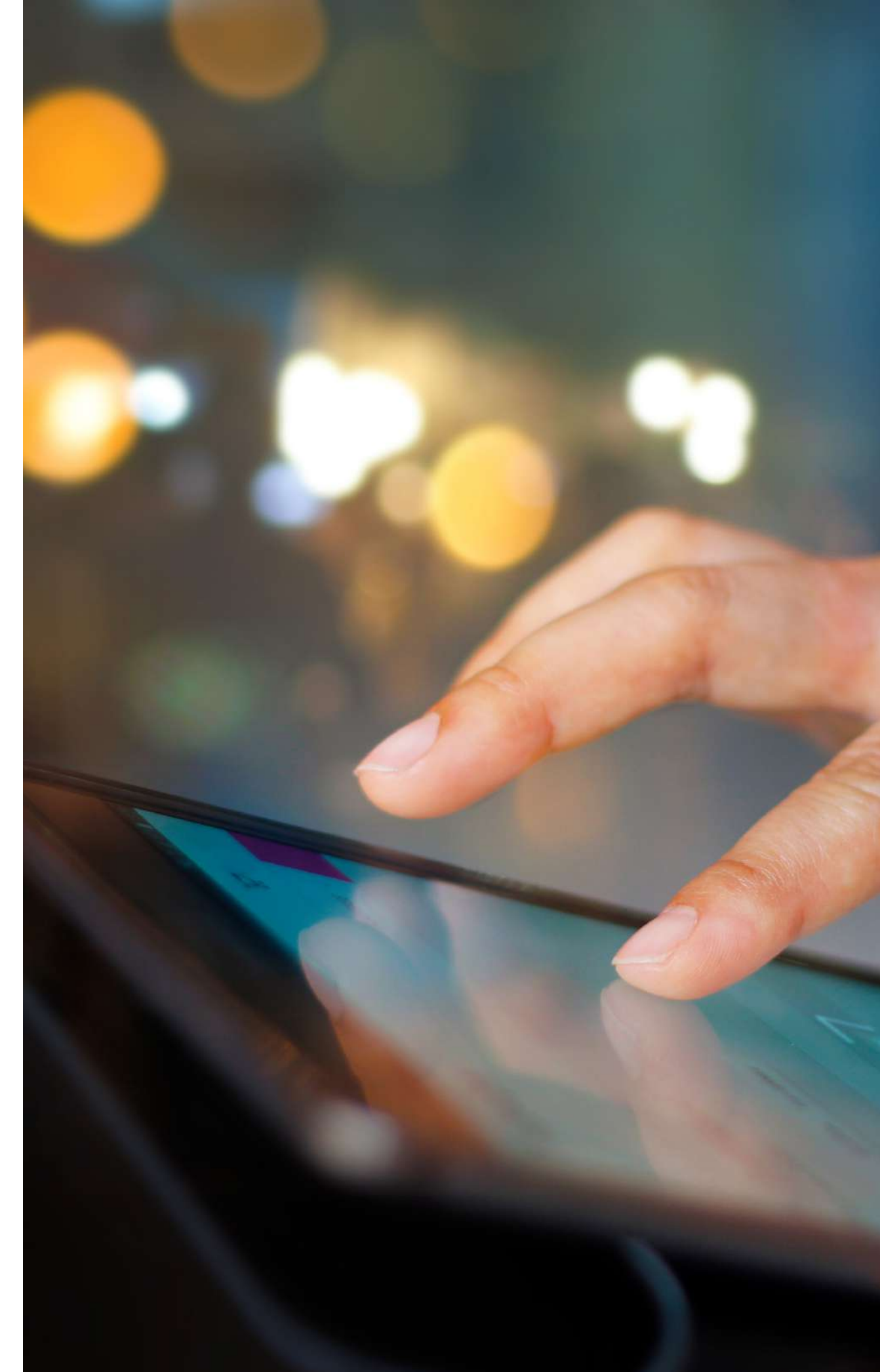
With visibility, the CIO puts themselves in prime position of being the one who can see the big picture. With insight into IT use across all areas of the business, the CIO can redefine his/her role from one of command and control to chief influencer. The influencer strategy is needed as nothing is going to change or reverse the trend of increased business unit IT and decreased IT centralization. The CIO shouldn't waste time fighting it.

Instead, with complete visibility into network assets, software spend and services, the CIO is in the perfect position to influence how the organization and individual business units consume software, driving substantial cost savings, efficiency gains and preventing security risks.

Armed with this insight, the CIO can become the chief broker of IT spend, the go-to person for business units looking to drive the best deals with vendors and the creator of virtual teams across multiple business units with common interests and goals.

**“Now we have full visibility into the software estate. Savings through cost avoidance, removing support and maintenance on decommissioned software and reporting accurately for audits will make a huge difference to the bottom line.”**

Juvi Mustonen, IT Development Manager,  
Posti





# Visibility closes the disruption gap



So how does the CIO get visibility? With true, multi-platform IT asset discovery that extends from mobile devices to desktops, from datacenters to the cloud. Wherever and however software and services are consumed, the CIO and their team needs to know about it.

Most organizations have discovery tools. The challenge is that existing tools are often inadequate. In fact, Gartner predicts that “By 2019, existing discovery tools will be useless for 90% of SAM needs.”<sup>5</sup>

Common discovery issues include:

Focus only on current knowns –

Using Active Directory or other IT-governed sources to discover assets tends to find assets you already knew existed. The real challenge lies in discovering assets that are NOT governed by IT.

Not accounting for cloud and mobile –

Two things make cloud and mobile spend difficult to track. First, spending on these platforms is often driven by business units with little or no control by IT. Second, many discovery tools haven’t adapted to changes in technology consumption and are unable to track these deployment platforms.

Not realizing virtual is quite real –

Over the past 10 years, few technologies have remade the datacenter like virtualization. Unfortunately,

many discovery tools are unable to account for the intricacies of virtualized environments.

Let’s look at some of the most common discovery challenges and get an understanding of how addressing them increases visibility and closes and the Disruption Gap.

Complete visibility requires automatic discovery of all types of assets (on-premise/cloud-base software and infrastructure, mobile devices, laptops and network devices).

**“We could be unaware of some software that’s out there that wasn’t purchased through our IT department. Snow gives us the necessary insight into what is out there that, without it, would be over the horizon and hidden from us.”**

Jeff Walters, Director of IT Support Services,  
Kroenke Sports & Entertainment (KSE)

<sup>5</sup> Gartner, Augment Your Discovery Tools for Cloud Software Asset Management Right Now, Hank Marquis, Victoria Barber, 9 February 2016 ID: G00292131.



# Getting visibility into the cloud

The huge appetite for cloud deployed software is forecast to continue to grow strongly as more vendors offer cloud-hosted options and business units demand the agility and quicker time to value that SaaS provides. Left unmanaged, however, SaaS might just as well stand for Shelfware-as-a-Service.

By their nature, cloud technologies are designed to promote consumption. Vendors make it increasingly easy to launch new platforms and consume more services. It's clear that unused cloud licenses and virtual servers left running will soon become a major cause of overspend.

Visibility into cloud investments helps reduce financial risk. For example, automatically retiring unused Azure® or AWS® instances is one way to trim bloated IaaS budgets. Another important capability is being able to track how individuals use SaaS applications which helps rightsize the allocation of user licenses. Usage data also enables fine tuning entitlement levels per user, a potentially huge cost saving when SaaS vendors employed function-based tiered pricing models.

Whether your organization is planning to increase its investment in cloud technologies or maintain current spending levels, the risk of wasting money is high. Total visibility of software and hardware consumption, including cloud deployments, ensure every penny spent on IT across the organization delivers value.

**A key step is to ensure discovery for any new system, on-premise or virtual. This ensures that even instances which run for only a few hours or a couple of days – instances that are typically not picked up by scheduled inventory scans – are tracked.**





# Mobile visibility drives cost containment and enhances security

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Mobile is the new workplace: today's users regularly access data and consume software on multiple devices from wherever they are.

Organizations have had to respond to user expectations of being able to instantly consume data by delivering applications that provide access to secure corporate information and giving users a consistent experience whether using a PC or mobile device.

Mobile usage and spend, however, can be difficult to track as it is often purchased and consumed by business units without centralized IT accounting and control. In addition, many vendors of IT ecosystem solutions such as ITSM, IAM and SAM do not provide the ability to adequately track mobile usage. It is critical to ensure all IT applications have kept up with the rapidly changing nature of the workplace.

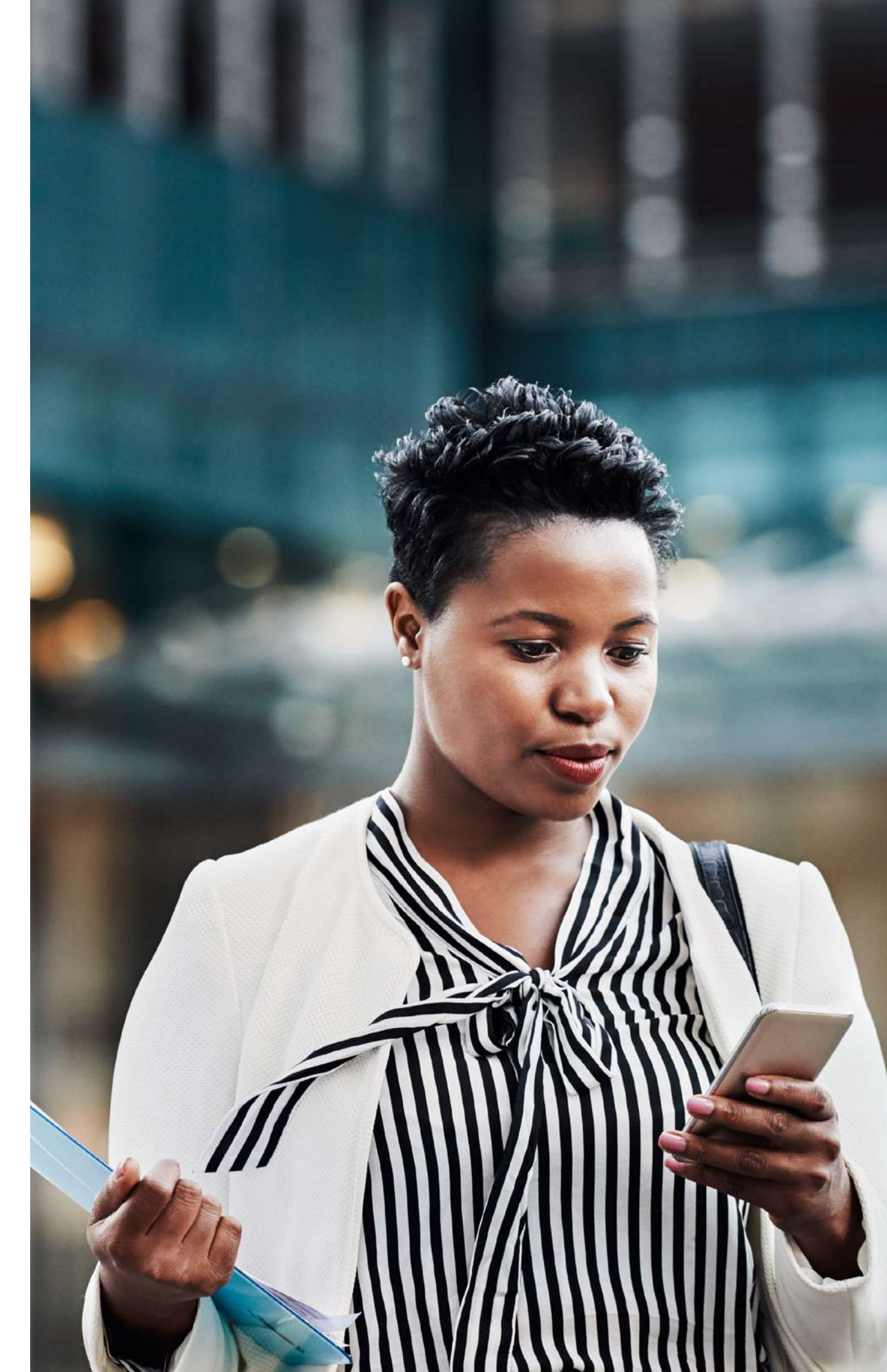
Bring-your-own-device (BYOD) means that employees are effectively self-deploying devices and applications, making full visibility of mobile usage especially important. Visibility supported by an enterprise mobility management (EMM) solution allows IT administrators to monitor all devices connected to the network and employ controls separating corporate from personal data.

As users add their own apps, the organization gets continuous visibility on usage and non-compliance. When authorization expires, downloaded content or apps are remotely wiped and company data erased from the device.

**With full insight into app usage and the approval process, organizations save money on licensing and assure compliance.**

With the ability to track application installs across all common mobile platforms, including iOS®, Windows Phone® and Android™ devices it's easier to optimize mobile app investments such as Apple's® Volume Purchase Program, Google Apps for Business™, or Google Apps for Education™.

Complete user and usage visibility is a prerequisite for role-based access to managed apps in which users only see the apps that they are eligible to download and workflow management enables them to request apps and be approved for access.





# Virtualization complexity- simplified



Enterprise software reflects one of the largest expenses for an organization. With the intricacies of licensing virtual assets and physical hosts, getting visibility into datacenter applications is a resource and time consuming task.

In most cases, enterprise software running in the datacenter or on IaaS platforms is licensed based on the physical capacity of the host system or a subset thereof (such as IBM's® Sub Capacity or Oracle's® Hard Partitioning). To understand what capacity needs to be licensed to run specific software, you need to understand the topology of the datacenter. Typically, the datacenter is an aggregation of physical host servers grouped into clusters with virtualized layers.

To build visibility you need to connect to both physical hardware and deployed virtualization technologies. This lets you build a comprehensive picture of both host and guest devices, determine the relationship between the two and identify the physical resources allocated to virtual machines. This complete picture is critical to accurate software licensing.

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**It's an impossible task to manage enterprise software without full visibility of all datacenter components and their relationships.**

With this kind of visibility, you can apply virtual machine usage rights—to ensure maximum coverage from existing licenses—and calculate minimum license assignment rules, making it clear exactly how many cores and processors should be licensed.



# Case Studies

Read how organizations around the world rely on Snow to drive business value from their software investments.



# The biggest single benefit Snow has brought is visibility

“IT should be an enabler, an influencer. IT doesn’t want to be seen as a roadblock or as a stifler of initiative. We’re trying to be a dynamic, agile organization. If there are delays, or roadblocks, or things that might affect our ability to deliver for our customers, then that’s not acceptable.”

**Sean Magner, SAM Consultant, Datacom**

Datacom’s rapid pace of expansion had created a sprawling software estate of some 10,000 applications provided by 3,500 vendors. Datacom employs 1,500 developers – a dynamic and fluid environment that is notoriously difficult to manage. Instead of having to query different systems, and talk to different people, and build up a profile of usage and a profile of deployment, Datacom get that from Snow instantaneously. A process that had taken probably three months previously was done in two weeks with Snow.

Sean Magner, SAM Consultant, Datacom says, “We’ve got multiple Adobe agreements. We’ve got some Creative Cloud. We’ve got some perpetual. We’ve got off-the-shelf stuff.” Snow is collecting that data and consolidating it to start delivering the cost savings of bulk purchasing.

Datacom is a privately-owned IT services provider employing 4,880 people with head office in Wellington, New Zealand, and offices in Australia, Malaysia and the Philippines. The company eclipses the New Zealand businesses of IBM and Hewlett-Packard combined. The company delivers software management services and global revenues for the last financial year stood at \$NZ1.16 bn.

“We can see if there are five products doing the same thing. For example, with PDF writers or something like that. And we can go, ‘We will standardize on Acrobat.’ Even within Acrobat there may be six versions. ‘Right, we will go to DC.’ Visibility enables you to inform such decisions.”

[Read the full Datacom case study](#)

**DATACOM**





# Snow gives us valuable insight and intelligence

“Snow gives me the visibility to spot rogue software before accidents happen.”

**Jeff Walters, Director of IT Support Services, KSE**

KSE has been expanding rapidly: the employee headcount has more than doubled between 2009 and 2017. The business needed to have insight into the legacy software of its acquisitions. KSE now has almost 100% reach into the companies it recently acquired. Hard cost savings through Snow have come from renegotiating Enterprise Agreements and optimizing SQL servers. The solution has brought intangible savings as the data from Snow gives Kroenke the necessary data to maintain compliance with software licensing requirements.

“Thanks to Snow we can see not only what software is on a device but what version. For some specialized software that may not be an off-the-shelf type of package that’s normally reported, we can see which version of the executable that is installed. Savings are made through rooting out rogue software, for example, when a co-worker who, on his own initiative, purchases and installs nonapproved software. But then it’s costing our service department time to troubleshoot why it’s not working for them.”

Jeff Walters, Director of IT Support Services, KSE.

Denver-based Kroenke Sports & Entertainment (KSE) is one of the world’s leading ownership, entertainment and management groups. As owners and operators of Pepsi Center, the Paramount Theatre, Dick’s Sporting Goods Park, the Colorado Avalanche (NHL), Denver Nuggets (NBA), Colorado Mammoth (NLL) and Colorado Rapids (MLS), KSE’s sports and entertainment assets are extensive.

[Read the full KSE Case Study.](#)





# After discovery, build a consolidated, normalized inventory



Having discovered all your assets, it's time to build an inventory. While discovery tells you what's there it doesn't indicate how, or if, an asset is being used. Nor can discovery answer such questions as which virtual machines are running in which cluster, or which applications are part of which bundle. Fully closing the Disruption Gap requires a solution which provides detailed insight into installations and configurations across your estate.

Many organizations rely on more than one hardware and software inventory source to ensure complete network coverage. Business unit IT spend associated with the Disruption Gap only makes this issue worse as new sources of software and infrastructure are established. Consolidating the data from these sources requires integration connectors that collect and import data from third-party systems such as Microsoft® SCCM, Dell KACE™ 100, BMC ADDM, LANDesk™, and Altiris™ and IBM™ software inventory products.

If multiple inventories are used, it is critical the solution provides a single pane-of-glass view of all inventory data.

**Without normalization, organizations are likely to miss opportunities for software rationalization and license optimization. Normalized data also mitigates risk by identifying and removing duplicates.**

Inventory, whether extracted from one source or many, starts with a list of raw executable data and other metrics. Deciphering the software title, vendor, version and release date is burdensome if not impossible. Normalizing inventory data starts by reconciling it against commercial software titles (vendor, suites, bundles, etc.) and then identifying major and minor release, version and edition.





**Snow Software has developed a range of solutions providing the visibility and insight necessary to help CIOs bridge the Disruption Gap and support their role evolution from one of command and control to Chief influencer and Indispensable CIO.**

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#### THE FUTURE IS NOW

Ask many CIOs to imagine a world of business unit IT and you'd forgive them for seeing a world of chaos, risk and overspend. But with full visibility of IT use across all areas of the organization, the trend towards business unit IT and digital transformation doesn't have to be dark and gloomy.

Visibility enables the creation of a single source of truth for all IT assets on all platforms. With visibility, it is possible to optimize all technology spend, regardless of origin and to create realistic budgets based on actual usage and need. Redundant software can be reclaimed, compliance positions can be calculated, risk minimized and costs reduced.

#### WANT TO CLOSE YOUR DISRUPTION GAP, REDUCE COSTS, MITIGATE RISK?

Why not experience first-hand what it's like to get full visibility of your estate. The future is Snow.





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