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CAST NEW LIGHT ON SHADOW-IT

Shadow IT has come to stay, and it can even provide useful pointers for making optimal tools available to every unit of the business.

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GAIN INSIGHT AND IMPROVE THE DIALOG ABOUT SHADOW IT

It's a challenge when employees and business units purchase technology and IT services without involving the IT department. You easily lose perspective of finances, agreements, and where important information is located – and if you're not able to name who's responsible for support from day one, a service outage risks being interpreted as internal trouble, even though the IT department has nothing to do with it.

Shadow IT has come to stay, and it can even provide useful pointers for making optimal tools available to every unit of the business. With the right tools the IT department can easily gain insight into the extent of the phenomenon — which benefits operations, productivity, cooperation, finances and the business as a whole

"anything that can go wrong,
will go wrong,"

Murphy's law, "anything that can go wrong, will go wrong," has long been a dogma of the IT sector. Even to the extent where it can explain IT departments' traditional desire to trim, streamline and control hardware, infrastructure and application portfolios in order to limit sources of error and ensure stability.

The ability to control and streamline, however, is diminishing,

because business units and individual employees are increasingly using IT tools and services without involving the IT department. According to Gartner, more than 28% of the IT budget of the average business in 2015 lay outside of the control of the IT department. The soaring number of cloud services has been an important catalyst for the rapid advance of shadow IT. According to Gartner, it is expected that by 2026, 45% of all corporate IT budgets will be spent on cloud solutions. And we are on the right track - according to Finans.dk, 37% of businesses use cloud solutions today.

Even though nearly all CIOs admit that employees and departments use apps and services that have not been aligned with the IT department, the extent of the phenomenon surprises most people.

In mid-2015 Cisco finalized two and a half years of collection of user data from a wide range of enterprises in the US, Canada, Europe, and Australia, and the result was sensational. Where the average enterprise CIO estimated that their business used around 50 cloud services, the real number was 730. And this figure has only accelerated over the past year, not least due to Covid-19, as companies have responded to entirely new business and social dynamics.

The tendency was similar across industries and geographies, which indicates that shadow IT has not only come to stay—but also that its extent is rapidly growing. This white paper outlines the pros and cons of shadow IT and provides advice on how CIOs best handle the situation in a way that will help the business, its employees, and in the end also the IT department.

Risk of data loss, information silos, and expensive agreements

Shadow IT is best defined as services and software or — to a lesser extent—hardware that is purchased outside of the IT department. It covers a wide range of scenarios; from the employee who stores accounting data on his private Dropbox or iCloud in order to more easily be able to work from home to the Marketing department that subscribes to a cloud-based CRM system.

Naturally, many IT bosses are skeptical when it comes to shadow IT. If you look beyond mere selfish reasons, such as loss of influence and prestige, there are good reasons for being vigilant:

🤔 Risk of losing perspective: When data is stored across a large number of services, the business in reality loses control of which data is stored where.

🔒 Loss of data security: Who has access to data? Is sensitive data transferred via secure connections or not?

✳️ Information silos and duplication of effort: Lack of cohesion with the business' remaining infrastructure increases the risk of productivity losses, administrative duplication of effort and isolation of data that should ideally be shared across the organization.

💼 Suboptimization and bad contracts: A large part of the IT department's work is to ensure that agreements and pricing structures are sound, and that, when required, it is possible for the business to get out of agreements—and still own its data. Without this discipline the risk of financial losses is increased along with the risk of losing critical information.

📈 Lack of capacity: Large and unexpected amounts of data can overload the network to the extent where it impairs the operation of other services.

💰 Reactive support and integration: The IT department is forced to have to support, and in the future possibly also integrate, services and software that has come into the business through the backdoor. That puts extra pressure on resources, and that pressure is difficult to estimate up front for budgets.

Shadow IT gets the job done

From the perspective of the IT department it's easy to get the impression that shadow IT is downright inconvenient. That, however, is by no means the whole truth. Very often the rest of the organization sees the increasingly advanced cloud services available on the market as a welcome opportunity to have a say in tool purchase decisions—and to get jobs done faster and more efficiently

IT departments view budgetary discipline, respect for standards, prior analysis, clear legal demarcation lines and careful circumspection as inevitable elements of any purchasing process. Others in the organization see this approach as unnecessary foot-dragging, a sign that some people take great pleasure in being able to say no, and as an excuse for rejecting any suggestion with reference to technical, system- or budget-related limitations.

When Marketing single-handedly decides to subscribe to a cloud-based CRM system—as in our prior example—it's typically a sign of wanting to quickly meet a business need and of neither having the time nor the energy to bother with the IT department first.

When the Research department needs to have a large amount of data analyzed, their boss—possibly led by prior experiences—bypasses a number of procedural steps and single-handedly authorizes the hiring of analysis capacity from a cloud service. That way they get the job done faster and in a more agile way than by following established procedures; asking the IT department for permission and waiting for the decision, which could turn out to be a rejection.

Also, younger employees from the "digital generation" are used to using whichever tools are available on the market; they're not willing to limit their options because of a restrictive IT policy. If the IT department doesn't provide the services that enable them to do their jobs efficiently, they go directly to their immediate manager and ask for permission to buy the services themselves.

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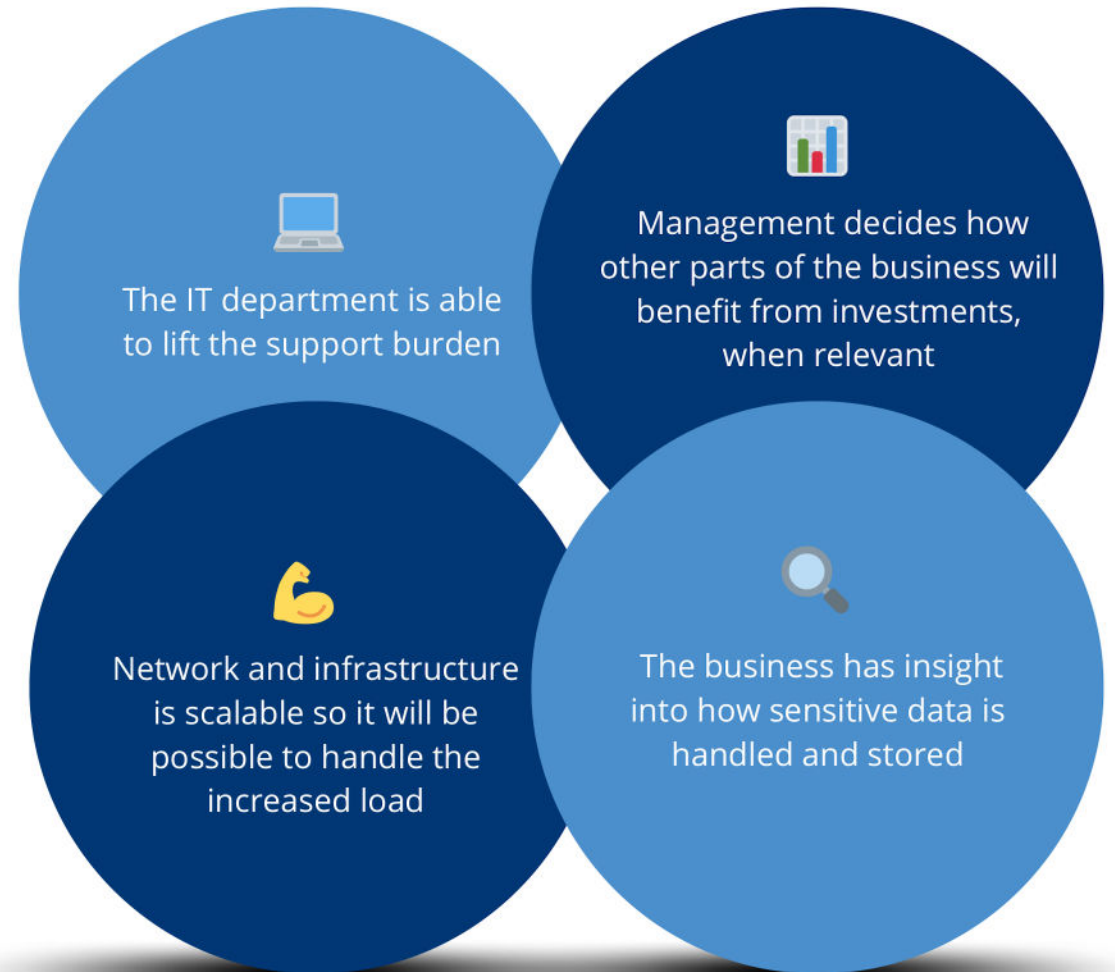
Reap the benefits of shadow IT

Even if IT departments find that shadow IT has a number of shortcomings, the independent access to digital tools does increase innovation, productivity and use of the newest technology across the business, which in turn offers an enormous potential advantage.

There is thus nothing shadowy about shadow IT or for that matter anything wrong with business units or leading members of staff investing in IT services on their own. Still, the business will be well advised to discuss the phenomenon internally and make decisions in principle about how to handle it. In short, there is every reason to cast light on shadow IT and to clearly signal that the IT department will be happy to assist, even if purchases have not been agreed with the IT department beforehand.

At the same time, however, it is necessary to establish a common understanding of the need to consult the IT department if decentralized purchases of services are expected to be able to integrate with the business' other infrastructure. Also, sensitive data and information that can be traced back to individuals must be secured in accordance with the business' IT policies. In practice, it's neither possible nor desirable to stop the expansion of shadow IT; the services offered as well as the potential benefits are simply too manifold.

Reaping the benefits of shadow IT, or decentralized IT investments if you like, requires that:

The IT department is able to lift the support burden

Management decides how other parts of the business will benefit from investments, when relevant

Network and infrastructure is scalable so it will be possible to handle the increased load

The business has insight into how sensitive data is handled and stored

Shadow IT offers IT departments exceptional insight into business needs

When business units decide to purchase new tools, it's because of specific business needs, for example for analyzing, accessing, managing or disseminating information more efficiently.

If the IT department is able to gain an overview of all the tools and services that are used in the organization, it not only makes it possible to open up the discussion about how the tools and services are best used and supported. The IT department also gets unique insight into the exact business needs of the individual business units, so that in the future it will be easier to offer services and tools that best match those needs.

The challenge lies in establishing the transparency required for gaining the overview of decentralized purchases of tool and services. There's a simple solution to this.
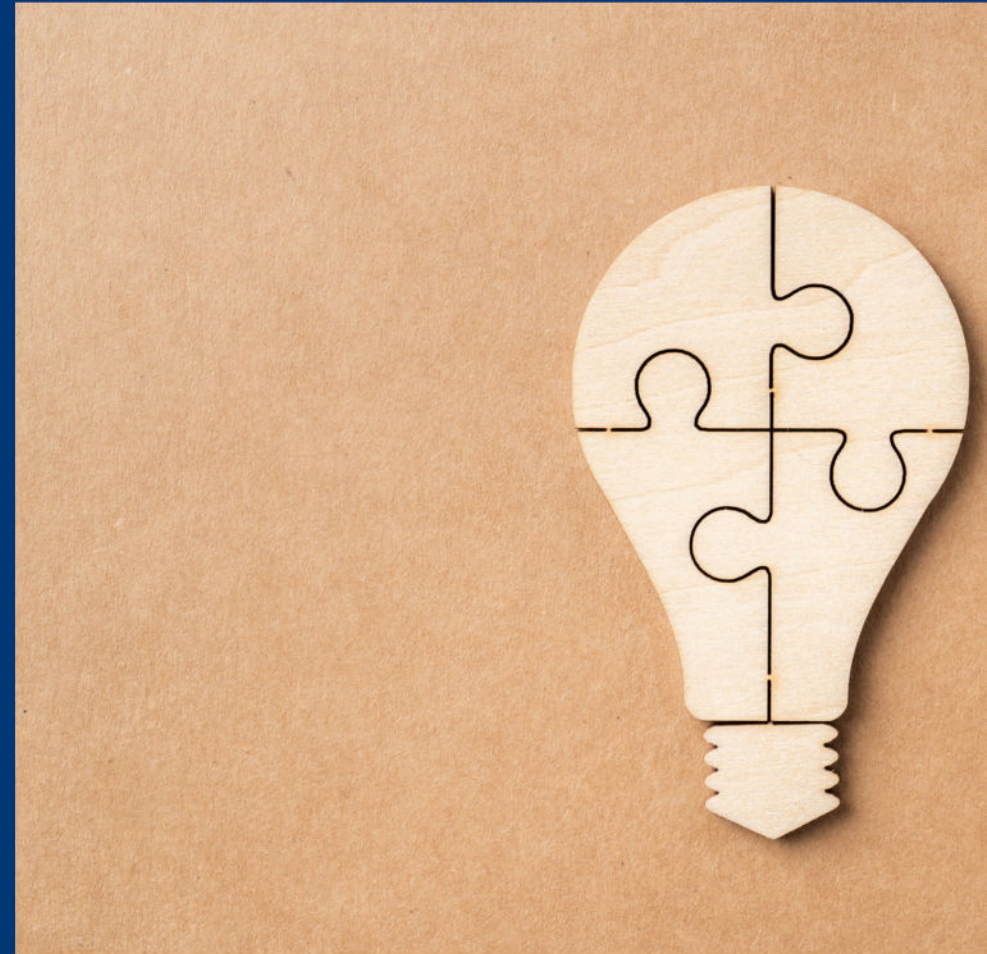
User-oriented tools provide broad as well as detailed insight

The easiest way to achieve full overview of the extent and nature of shadow IT in the organization is with an end-user-oriented performance analytics solution like PerformanceGuard from CapaSystems.

Such solutions are most often used for ensuring that services run as they're supposed to, because the solutions analyze usage patterns and stability as experienced by the individual end users.

That's exactly what makes them highly suitable for providing the IT department with an overview of the applications as well as web and cloud services used across the organization—and insight into how every single product is actually being used.

With PerformanceGuard you're able to:

🔍 Analyze performance as well as network, application and user behavior across the entire infrastructure—internally as well as externally. This includes measuring the current network load from the end-user perspective, which can be highly useful if several hundreds of cloud services are used across an organization whose network was originally designed to cope only with IT services managed by the IT department itself.

🚀 Be proactive, for example by registering potential uptime or performance issues before they become problems. That helps proactive or reactive troubleshooting, for example when colleagues ask why a given cloud service doesn't perform as expected.

📊 Provide accurate technical data from the entire infrastructure, which makes it significantly easier for the IT department to identify root causes of problems. This includes understanding data streams and being able to identify bottlenecks.

💾 Identify exactly where on the internet that a given IT service handles and stores the business' data.

⏱ Quickly provide individual departments with information about whether specific IT services live up to SLAs or not.

In short, you get all the data and detailed information that makes it possible to identify and support the vast majority of the services used by the organization.

Cast new light on shadow IT

Decentralized IT investments are becoming increasingly popular in organizations of any kind, and IT departments need to realize that. You need to enter this reality with your eyes open and to realize that it will bring challenges as well as benefits and opportunities for the business. Your task is to gain insight, support the advancement, provide advice and limit the adverse impact that may occur when colleagues without any special IT skills suddenly embrace technology

You can do that by:

💻 Preparing the ground for an honest and open dialog about shadow IT and realizing that IT budgeting powers don't solely rest with the IT department

🔍 Gaining insight into which IT services are used by the business, and into how data is managed and stored. The dialog must be based on verified facts.

💰 Sharing knowledge of how to make the best investments in IT services, how to negotiate prices, terms and conditions, and how to formulate requirements about the storage of data, possible future migration of data, etc

🤝 Incouraging cooperation across the organization to achieve better negotiating positions, reuse of technology and know-how and avoid the creation of information silos.

🔓 Implement Privileged Access Management (CapaOne AdminOnDemand), which ensures that users do not unintentionally make changes that can have serious security consequences, as well as gaining visibility into all software installed in the company by employees themselves.

📊 Using end-user performance monitoring technology in order to more easily monitor and support solutions, no matter whether the IT department has been involved in purchase processes or not.

👍 Make reasonable demands, for example that people should only expect integration between services and the business' core infrastructure if the IT department has agreed on it up front, or if resources are made available for implementing an integration project

In short: Identify all potential benefits, minimize potential drawbacks and gain access to knowledge that will allow you to move on to the benefit of the business. At CapaSystems we know that PerformanceGuard provides the necessary overview when it comes to casting new light on shadow IT. Just as CapaOne AdminOnDemand ensures that the IT department is informed through Privileged Access Management about all software installed in the company by employees themselves.

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CapaSystems is a Danish software and consulting company that has been dedicated to creating software solutions since 1996. Our goal is to provide a better overview, lower costs, higher end-user satisfaction, and greater flexibility for our customers. We achieve this by delivering expertise and smart technology that can leverage the potential of our customers' IT systems. At CapaSystems, you are guaranteed a solution that meets your needs.

CapaSystems is behind the development of two on-premise software solutions, **CapaInstaller** and **PerformanceGuard**, as well as the cloud solution **CapaOne**, which supports all deployment tools. We are constantly developing new products for CapaOne, including **AdminOnDemand** (Privileged Access Management), **Drivers** (automatic driver updates), **Reliability** (providing a comprehensive overview and finding solutions to the company's IT challenges), **Updater** (streamlined updating of third-party programs), and **Android** (powerful Android Mobile Management), and **Security** (identifies and highlights vulnerabilities). Today, CapaSystems employs over 30 employees located in Taastrup and Skanderborg. CapaSystems' solutions are used by a wide range of Danish and international companies, with over 25% of Danish municipalities choosing to use CapaSystems software.