ServiceNav

an EasyVista Solution

Operations managers, anticipate the IT and Cloud supervision challenges of tomorrow !

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Introduction

For several years now, working methods have constantly been evolving, with the growth of digital technology, the advent of remote work, the proliferation of data, etc. These changes directly affect IT supervision: it is necessary to adapt and move from technical supervision to user experience supervision.

Many obstacles often stand in the way of IT and cloud operations managers: incidents, breakdowns, shadow IT, lack of knowledge of business processes, etc. They directly impede the performance of equipment and applications, and therefore the activity of the business.

This is why expectations of the IT supervision service are changing: all employees have a daily need for business-oriented key performance indicators, to have a clear view of the state of the IT system, and to be able to access their applications at any time, anywhere.

Companies are looking for increasingly efficient monitoring tools while limiting the related costs to cope with the abundance of data. This includes monitoring the state of the IS: having a clear, concise, and real-time view of the operating status of all the company's equipment.

This white paper aims to help IT operations managers and CIOs continuously adjust their IT and cloud monitoring strategies to the changes in their company. The report is divided into four key challenges:

Challenge #1:
Adapting to New Internal Uses
Challenge #2:
Cloud, IoT, Big Data… The New Technological Paradigms to Follow
Challenge #3:
Provide IT Performance KPIs Useful to the Company's Different Activities
Challenge #4:
Optimize IT Costs Without Compromising Performance

Challenge #1

Adapting to new internal uses

The digital transformation that companies have been undergoing for several years, and which has been accelerated by the Covid-19 pandemic, is shaking up IT supervision. As an IT operations manager, your role is no longer limited to guaranteeing the performance of the IT tool but rather to meet the expectations of users: **to have digital applications available 24/7 and performing correctly at the office as well as at home!** We now talk about Digital Experience Monitoring (DEM): optimizing the use of digital technology for each employee.

So how do we adapt to this new challenge? What are the new uses of employees? How can you make your practices evolve?

Teleworking, mobility, shadow IT... how do you supervise the information system?

The Covid-19 pandemic has revolutionized the way companies work. While many companies had already started a digital transformation process, this process accelerated with the health crisis. This has resulted in the massive development of teleworking, the implementation of digital tools to facilitate collaboration, the digitization of new business processes...

Beyond the economic situation and teleworking, employees use many applications in their daily life. They expect to find these uses in the context of their work tasks. If the company doesn't provide the tools they need or if the software in place is too complex, they will search for them themselves. This is the shadow IT phenomenon. It is estimated that **only 61% of an organization's IS is supervised**[1]. This presents a risk insofar as the applications or equipment can bypass the security systems in place, are not maintained, and the data generated is not considered by the supervision teams.

Still in daily use, mobility, the evolution of processes implies the use of tablets or smartphones. Employees, therefore, need to have access to their applications from these mobile terminals. Otherwise, their performance is hampered.

Finally, employees are no longer used to waiting. The IS must therefore be operational at all times and without delay. If it is not, users must be notified and can organize themselves accordingly. **The user experience is key today.** It's an essential element in your daily life as an IT operations manager.

[1] IT Monitoring Barometer, Vanson Bourne, 2021

IT supervision: give your teams the means to work in all circumstances

To overcome this challenge, it is essential to think about supervision not from an infrastructure point of view but in terms of user experience. How to improve the working comfort of the teams? How to manage priorities? IT is no longer solely reserved for IT specialists. The performance of the IT system determines the performance of all employees and businesses.

A monitoring tool is essential, as information systems are becoming increasingly complex. However, not all solutions are equal. The monitoring tool must be deployed across the company for all departments to have a **single, unified reference system.** This makes it easier to monitor the performance of all applications, which can be quickly integrated, analyzed, and optimized, regardless of which department in the company.

The objective is, of course, to prevent unavailability, to manage intervention priorities, or to be able to react quickly in case of a problem. For example, if all the teams have to switch to teleworking in three days - which happened during the first lockdown - it will be essential to ensure the availability of remote applications as a priority.

Your monitoring software must also allow you to **simulate the user journey** and evaluate the performance of the IS from his point of view. Thus, your

IT supervision teams detect a problem before the concerned employee and solve it quickly or alert the user. The whole point is to have as little impact as possible on the company's employees in their daily lives. **Reactivity is a significant advantage, which facilitates communication and trust between IT and the rest of the company,** thus improving the performance of the whole while enhancing the value of the IT department.

With a high-performance monitoring solution, you can meet your employees' needs in terms of application availability. At the same time, you reduce the risks associated with shadow IT: why would an employee go looking for another solution if the one available to them is working or if the IT department is responding to their requests?

New Uses Challenge
What your IT monitoring tool should do

Boost the reactivity of supervision teams

Improve the end-user experience

Prioritize actions to be taken to improve the flow of the company's activity

Provide visibility into the state of the network

Detect slowness or application malfunctions

Follow the new technological paradigms: Cloud, IoT, Big Data...

Traditionally, IT systems monitoring collects technical data on IT equipment: servers, storage bays, network equipment, etc. This data provides your operations team with information on the state of the infrastructure, the level of use, and the availability of resources so that they can take appropriate action. Monitoring can be even more efficient by taking advantage of increasingly comprehensive data sources linked to the emergence of new technologies.

Bringing together cloud, IoT, AI, Edge: when traditional monitoring is no longer working

Very often, the scope of supervision struggles to keep up with IS evolution, to the point of being out of step with reality. New technologies are appearing, forcing companies to adapt and modulate their IS monitoring. This is the case with cloud development: organizations must monitor data hosted on separate servers and control physical and virtual computing resources. **The cloud has a direct impact on device control and visibility.**

Furthermore, many companies are taking a hybrid approach, some of their applications in the cloud and some on-premises on their own servers. Keeping control of all applications remains critical. As an IT operations manager, this translates into new challenges for your teams. According to a study conducted by Cisco, **77% of CIOs surveyed find the acceleration of cloud migrations to be a major contributor to technology complexity over the past 12 months.** And this is just the beginning: by 2023, cloud adoption in infrastructure will continue and is expected to increase, especially in North America and Europe.

The enterprise of tomorrow cannot be imagined without the IoT (Internet of Things). A large number of objects and sensors, generating data and information exchanges, will connect to the company's IS. Here are some examples: temperature, pressure, luminosity, etc. All of them can be useful for decision-making and for the company's business. **By 2025, it is estimated that 150 billion objects will be connected**. The other side of the coin: these objects and data flows must be monitored. Hence the importance of supervising them and ensuring their proper functioning. A poorly supervised IoT exposes your company to breakdowns, unavailability, and the associated disastrous consequences.

It is also essential to take into consideration the development of Edge Computing. With the massive expansion of the volumes of data to be monitored, Edge Computing allows to process the information as close as possible to the equipment and send only the useful information to the applications hosted in the cloud. IT supervision cannot miss out on this, at the risk of losing important data for your company's activity. **Especially since by 2024, the Edge computing market will reach an impressive 9 billion US dollars** thanks to 5G, IoT, and AI technologies.

Agility, the cornerstone of effective monitoring

You know better than anyone: IT monitoring must adapt to these new technologies to offer its users the best possible level of service. And for this, it is essential to opt for an **agile, scalable, easy-to-use solution that saves your teams time and increases efficiency.**

However, many companies do not have the proper structure to jointly manage the supervision of software applications, the IT network, the infrastructure, the cloud, etc. They then do it separately, creating a loss of information between the various departments and the complexity of tool management because only one could be used.

The solution, therefore, lies in the deployment of a single supervision software, or even a hypervision, software mixed with AI. This will help anticipate problems and to highlight information that employees might miss. For example, Gartner predicts that by 2022, **40% of large enterprises will combine big data and machine learning to augment or partially replace monitoring.** AI also helps automate certain time-consuming or non-value-added tasks (ticket generation, dashboard consolidation, etc.) for your teams, which can then focus on your core business: improving IT availability.

Without going as far as artificial intelligence, it is essential to be able to connect your monitoring tool with the rest of your information system and your other monitoring or ITSM tools. This interfacing will give you a global overview of your equipment and your applications. This is the first step towards hypervision in order to correlate all the data from your different monitoring solutions.
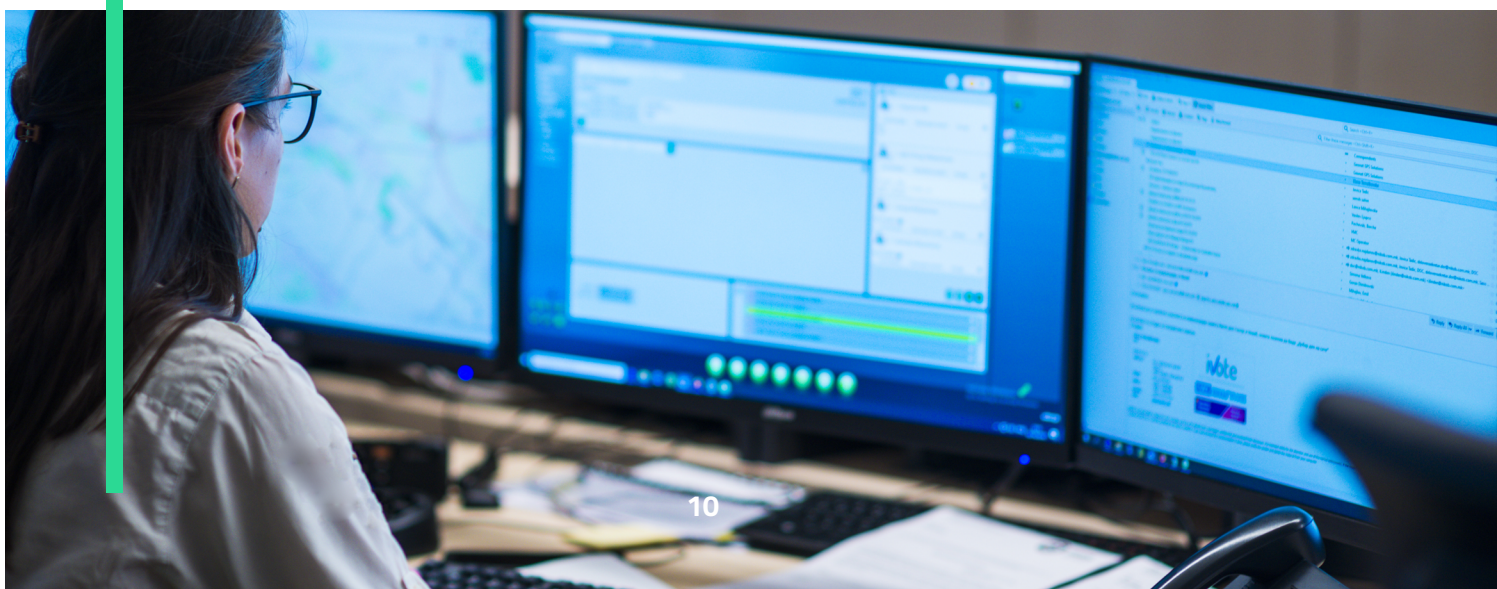
Another parameter: to adapt to the technological changes in your information system, opt for modular software with features that you can deploy as needed. Your company is unique, and your tool must adapt to your specific needs. Don't rush into a complex solution. Go step by step instead with adaptable and flexible monitoring software.

Finally, beyond the key functionalities of your supervision software, it is important to be able to count on a reactive editor. That means finding answers to your questions, benefiting from quick support in case of a problem, having confidence in the ability of a provider to develop their solution to meet the trends and needs of companies in the field. For successful IT supervision, it is necessary to **establish a real partnership with your editor.**

You will have understood that, in our opinion, agility and adaptability are key elements for efficient IT monitoring that is as close as possible to your needs. But don't underestimate the support and scalability of the solution.

Technological Challenge

What your IT monitoring tool should do

Integrate new data sources and devices in an automatic, rules-based way

Enable the use of APIs and interconnection

Adapt to Cloud or on/premise, hybrid infrastructures, Edge Computing

Integrate AI to automate, industrialize and gain productivity

Offer a single solution for all applications

Challenge #3

Provide IT performance KPIs useful to the company's different activities

According to a survey conducted by Vanson Bourne, **90% of respondents (managers) expect business-oriented key performance indicators from the IT supervision department.** This confirms that IT performance is no longer just a concern for the IT teams but rather for every company department that uses the system daily.

This is a major evolution of your job as an IT supervisor: it is your responsibility to guarantee the availability of equipment and communicate more actively with users. In this new article, we explain how.

Business KPIs: the new priority for IT operations managers

According to a survey conducted by CIO, **81% of CIOs face significant pressure to justify their technology expenditures and demonstrate ROI.** This is not always easy: when everything is working, no one is aware of the actions taken by the operations and supervision teams. On the other hand, the slightest glitch and IT is pointed at. This is why it is necessary to provide regular KPIs and to value the actions of your employees.

Gone are the days when the business and IT departments were in conflict. **Today, they work hand in hand** and must communicate. The IT department creates value for the business. Companies have become more technologically literate and are more involved in IT projects. But for this to be effective, they need support and visibility into the performance of their infrastructures and applications. Hence the need to share clear and relevant KPIs such as the equipment availability rate, the response time of applications, maintenance costs, the number of alerts, the number of connections, the number of unused software...

These KPIs not only «make the invisible visible», but they can also help managers make decisions in real-time. These indicators give a unique view of the availability of the IS and its performance, providing guidance on priorities and actions to be taken. It is a lever to justify an increase in the IT budget. For example: if the current infrastructure is holding back business performance, investments may be necessary...

Finally, the availability of indicators for business users means that your operating teams do not have to create reports or dashboards themselves. **This saves time and increases productivity, which is well appreciated** by the business teams, as they can build customized reports in real-time.

It's time to say goodbye to IT centric monitoring

You know better than anyone, IT monitoring is evolving. In fact, we no longer speak of supervision but of observability. That is to say: **having permanent access to reliable and coherent information in order to react quickly.**

Too often, the scope of supervision is far removed from the reality of the IS due to its rapid evolution. This reduces the teams' ability to observe and therefore act. However, more and more data relating to IT operations is being collected. This data must be analyzed and reported via precise and relevant KPIs in real-time:

- Service availability,
- Monitoring the performance of service providers,
- Causes of unavailability, etc.

Another difficulty: many IT supervisors send out a report in the morning with the status of the IS (the famous «morning report"). If this is a good initiative, it is not enough: **without real-time updates, this report is no longer relevant as soon as it is published.** In fact, a few minutes after publication, the state of the IS may have changed. Therefore, it is important to operate interactively, in real-time, and communicate an updated link each time users consult it. The latter are used to having information immediately via their personal use of digital technology. Their company must also provide this by giving them the ability to check the status of their digital work tools at any time.

How can we do it? That is the big question! The simplest way is to **provide a weather report of the information system**: sunshine if everything is going well, clouds in case of minor unavailability, storms if critical problems make it impossible to use the application. Users greatly appreciate this kind of feedback: it highlights the blocking points and helps to adapt the activity accordingly. At ServiceNav, all users use this feature, which has become a must.

This feedback **also improves the image and credibility of the IT department:** there is nothing worse than sharing incorrect information. Transparency and trust are essential for a good collaboration.

Your monitoring tool should also allow you to generate dashboards and reports in a few clicks, without re-entering data and with minimal effort. This improves decision-making and reduces the risk of errors. Businesses thus have all the keys they need to organize their missions and know the state of the IS at a given moment. Better still, they become aware of the work required to achieve the expected level of availability.

Finally, your monitoring tool should help you make predictions and suggest areas for improvement to your colleagues. For example, propose automation scenarios to anticipate activity peaks, reduce the number of false alarms, anticipate weak signals, etc. This leads to better IS availability and enhances the value of your work for the rest of the company.

It is no longer proven that «old-fashioned» supervision cannot meet the services expected by your company's businesses. It is necessary to rethink your field of action and to have the appropriate tools: real-time, automated KPIs, predictive... The contribution of the operations team to the business will be enhanced.

Business KPIs Challenge

What your IT monitoring tool should do

Offer graphical restitutions (data visualization)

Integrate an information system weather forecast

Generate dashboards that are updated in real-time

Guarantee the reliability of the information communicated

Encourage the communication with the departments

Dashlink: share your dashboards simply, in read-only mode, using a URL

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Optimize IT costs without compromising

IT budgets are on the rise in general. It is obviously unthinkable to remain competitive without a high-performance IT infrastructure. In 2021, **analysts expect investments to increase by 4%[1]**, and this increase should continue in 2022. However, this increase depends on the sectors and the priorities of the companies. For example, in the leisure and airline industries, IT budgets have decreased by 30%.

And this increase will be mainly dedicated to the acquisition of software or the acceleration of the digital transformation. This phenomenon has been strongly accentuated by the pandemic. However, organizations ask you to do more, but with fewer resources on the IT supervision side. And that's the challenge.

[1] IT spending measured in 2021, IT for Business

Talent shortages, centralization, predictive... what is the future of IT monitoring ?

Historically, IT monitoring software is mainly managed and used by IT specialists, who deploy the functionalities adapted to the specificities of the company's IS. However, with the acceleration of digitalization, the advent of new languages, the multiplication of IT projects... these profiles are increasingly in demand, more volatile, and are therefore becoming rare. This is a real problem for IT departments that find themselves handicapped by this talent shortage. **This is why IT supervision software is evolving to be more and more accessible to more versatile profiles.**

Five IT Profiles in Demand

Focus on the most sought-after jobs in 2021: the scarcity of certain skills is impacting IT services and operations teams.

- **Data Analyst / Data Scientist** for data analysis.
- **Developer** for software development.
- **Support Technician** for network maintenance.
- **ISSM** (Information Systems Security Manager) to ensure the security of the IS.
- **System and Network Administrator** to maintain a quality computer network.

With the evolution of digitalization, your IS oscillates between cloud, containers, microservices, business applications... It is more and more complete and complex, therefore **more difficult to monitor without the evolution of the supervision.** The following problems arise: your visibility is fragmented, indicators lack reliability, alerts do not go up, issues are not detected, all equipment and applications are not monitored...

Therefore, it is necessary to find the right tools to interconnect the various components to ensure the overall security of the IS to maintain the level of service expected by the company. This implies centralizing the supervision of all applications and equipment. This makes it much easier to set up alerts, manage and define priorities and emergencies, and **give your supervision teams the means to be effective.**

The trend is towards predictive intelligence, especially with the advent of AI or self-learning technologies based on large volumes of data! And IT supervision is no exception to the rule. To guarantee business continuity, being able to predict breakdowns or bugs is a precious help. It allows you to anticipate downtime and implement solutions so that teams can work despite everything. A real performance lever for organizations

IT Supervision: the arguments to defend your budget

IT supervision is essential to support the digital transformation of companies. Without a well-functioning IT system, employee performance is directly impacted. This is the first argument to put forward. Furthermore, modular monitoring solutions allow you to plan your budget and adapt it according to your actual and concrete needs. A significant advantage.

Monitoring tools also help to reduce costs and optimize IT budgets. Having visibility on the state of the IS, receiving alerts and indicators in real-time, planning interventions, setting up alternatives in case of unavailability... **allows you to maintain activity, optimize the supervision processes and define the priorities of your operational teams** for better efficiency.

To convince your management to invest in a monitoring tool, it must cover the following needs:

- **Automate certain processes** to save time for your employees (creation of tickets on system alerts, for example)
- **Alert** in case of breakdown, bug, incidental maintenance intervention... to gain in reactivity
- **Bring up** indicators in real-time and make them available to the business
- **Anticipate** activity peaks, unavailability... to maintain the company's activity
- **Generate reliable dashboards to help in decision making**
- **Provide** visibility on the state of the IS in real-time
- **Cover** all equipment and applications, including those supervised by other solutions already in place (hypervision)

It is also essential to manage false positives. These are alerts that turn out to be false. For example, an alert concerning a malfunction on a piece of equipment, even though the element complies with expectations. This is a waste of time and performance for the teams. To limit this, it is essential to adapt the alert thresholds, implement additional controls, and analyze the equipment most prone to false negatives or positives thanks to precise reports.

Traditional, non-centralized, off-line monitoring slows down your digital transformation. As a result, it does not contribute to the overall performance and competitiveness of the organization (employee experience, customer experience...). It is time to be proactive, have the software that allows you to have a centralized vision, and exploit all the technologies deployed in your company.

IT environments are increasingly hybrid, with an explosion of data generated and collected. **Supervision must work hand in hand with the business** to satisfy their needs and meet the challenges of tomorrow.

Cost/Performance Challenge

What your IT monitoring tool should do

Limit false positives and false negatives

Allow the automation of certain time-consuming actions (e.g., ticket generation)

Connect to the various tools of your IT system, for example, a VM provisioning solution

Anticipate actions to be taken (capacity adjustments) to reduce rushes

Prioritize alerts and interventions

Prioritize the importance and criticality of services and alerts at a given time

Conclusion

The changes create opportunities for your job as an IT supervisor: your scope of action is increasing, your role and that of your teams is evolving towards more centralization and is increasingly important in the company, with improved communication of KPIs from the IT department to enhance your work and create value. With an efficient IT monitoring strategy, you optimize your time: less time wasted on peripheral actions that can be automated to focus on your core business.

Do you have an IT monitoring project? Contact us!

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Next generation monitoring platform.