0x11 Key Insights Shaping IT Operations in 2018

Research Study

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Digital Enterprise Journal

Summary

In 2017, DEJ conducted a number of surveys and interviews around IT Operations management that captured tens of thousands of data points based on insights from more than 2,500 organizations and coverage of more than 100 vendors. Based on this research, we identified 17 key areas that had the strongest impact on IT Operations in 2018 and beyond.

49% Listed Cloud management capabilities as one of the key selection criteria when evaluating IT Operations solutions

58% Reported that monitoring IT performance from user perspective as a strategic goal for IT transformation

71% Reported that their IT performance data is not actionable

3.1x Increase in speed of replacement of IT Operations solutions over the last 4 years

37% Of outages require 6 or more IT FTEs to resolve

	0x11 Key Insights Shaping IT Operations in 2018
1	Context is king
2	Intelligent automation at scale
3	New technologies changing the market landscape
4	User experience as the key focal point
5	Building a business case is key for new market growth
6	Proactive approach is not optional
7	Beyond monitoring
8	Automation, AI and Machine Learning – beyond marketing
9	Connecting the dots to digital transformation
10	Service-centric, centralized approach can't be optional
11	Enabling security initiatives
12	Cloud management – from a "use case" to key requirement
13	Power shift in the competitive landscape
14	Containers and microservices changing the game
15	The need for new incident management strategies
16	Getting the most out of network monitoring data
17	IT Operations market will significantly grow in 2018 - but not as a whole

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Research demographics and methodology

Research demographics

The study includes insights from more than 2500 organizations worldwide.

- Geography – 54% North America; 26% EMEA
- Company size – 39% large; 37% medium
- Job roles – Mix of IT and business users

Research approach

DEJ's unique research collection approach is based on three key attributes

1. **Depth & analytics**
   More than 500 variables per topic collected
2. **Personalization**
   Built-in logic allows participants to create their own path through the questions
3. **Ongoing data collection**
   Ability to append the data on ongoing basis while keeping integrity of current data pool

Top Performing Organizations (TPO) Framework

DEJ identified a class of top performing organizations (TPO) which represents the top 20% of the survey pool based on three key performance indicators, Our analysis is centered around highlighting capabilities that are enabling these organizations to outperform their peers and industry averages

	Top Performing Organizations (20%)	All Others
Percent of performance issues that are proactively detected	76%	52%
Average Mean Time to Resolution (MTTR) per incident	46 minutes	252 minutes (4.2 hours)
Percent of IT budget available for growth and innovation	53%	21%

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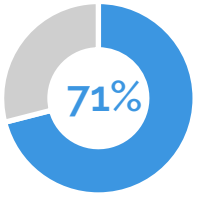
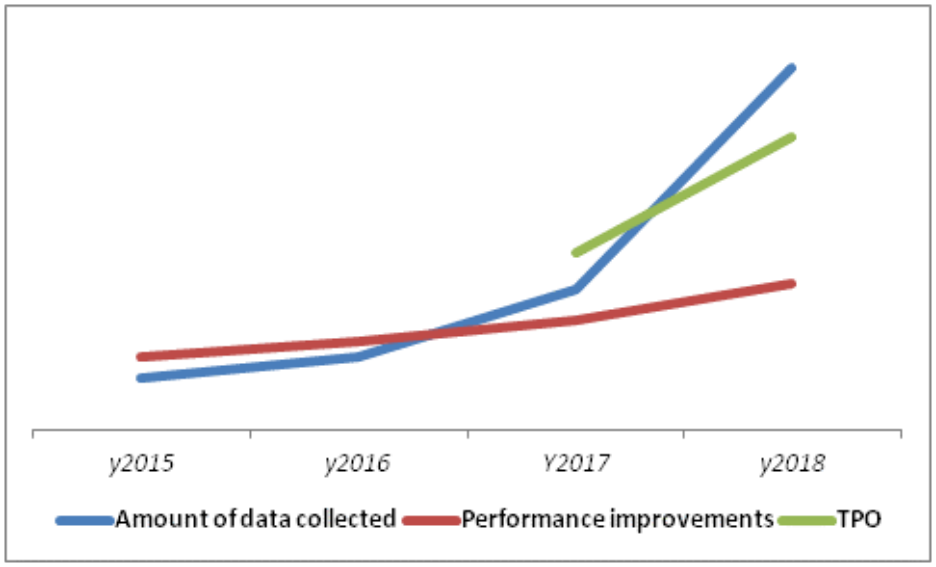
Context is king

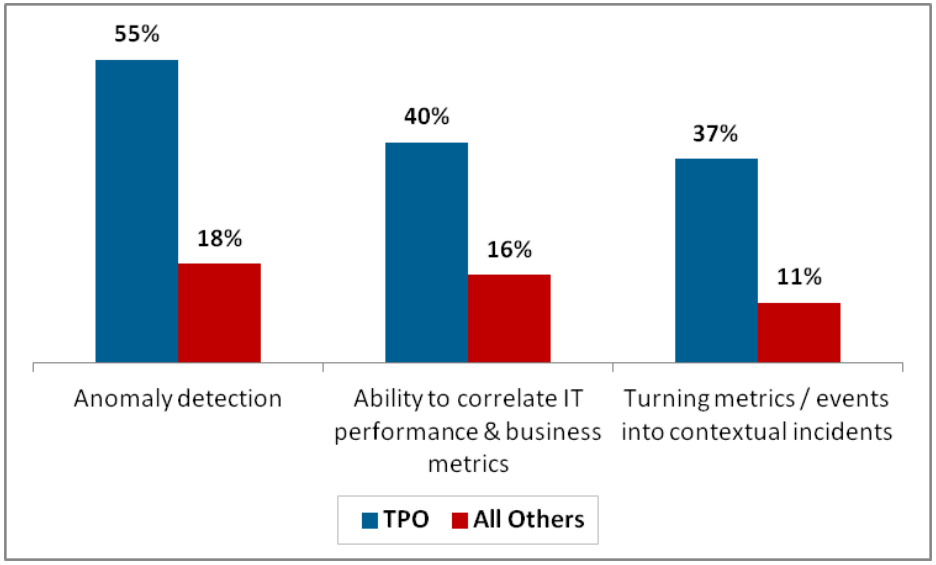


Reported that their IT performance data is not actionable

Historically, the value proposition of IT Operations management has been mostly around monitoring capabilities and gaining better visibility to achieve performance improvements. That is no longer the case. Even though improving monitoring capabilities is still critical for IT Operations strategies, the sole fact that organizations have more monitoring data on hand doesn't necessarily translate to performance improvements.

With increasing IT complexity, more data can actually have a negative impact on the performance - unless this data is delivered in a context that is actionable and relevant. Capabilities that top performing organizations (TPOs) are deploying should be used as a guideline for achieving this goal.





TPO Performance

206 Minutes less spent for Mean Time to Resolution (MTTR) per incident as compared to all other organizations

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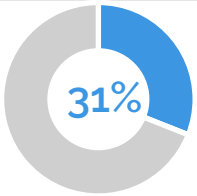
Intelligent automation at scale

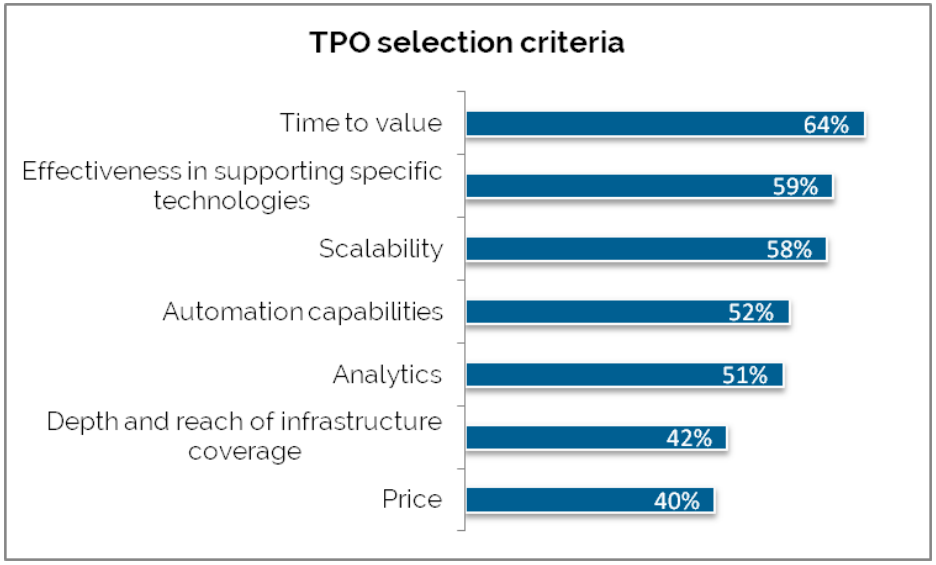


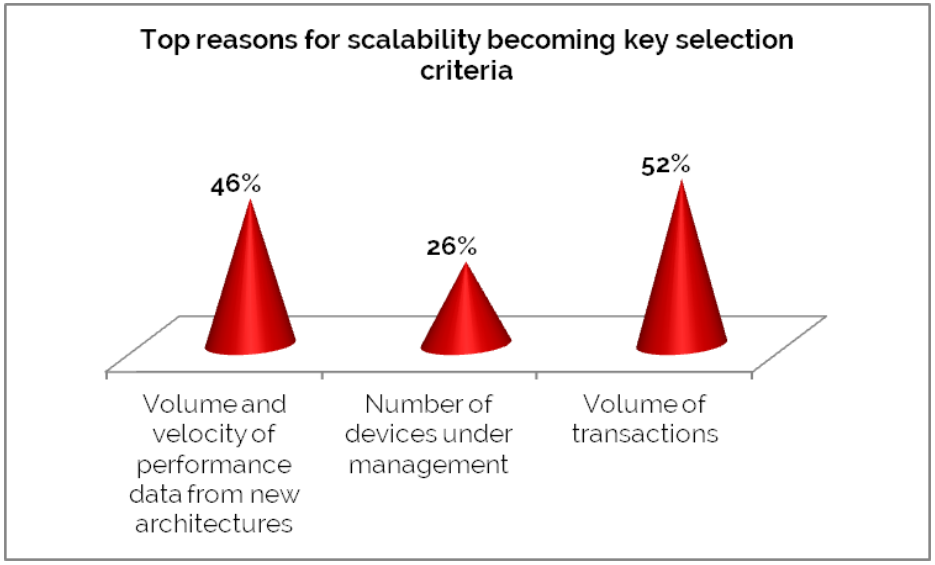
increase in scalability as the key selection criteria since 2016

In order to modernize their IT Operations for digital economy, organizations need to build management strategies that include the right combination of data collection competencies, advanced analytics, automation, real time insight and scalability. New challenges of managing IT operations are making scalability one of the top selection criteria - for SMBs and large enterprise and service providers alike.

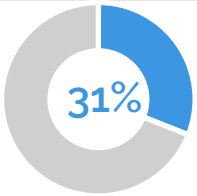
Scalability as the requirement is no longer driven by the size of organizations and infrastructure managed (number of devices, nodes, etc.), but by technologies and infrastructure types that are being used and real time data processing power that they need.

48% Of SMBs reported scalability as the key selection criteria for IT Operations management – mostly due to increase in volume and velocity of performance data and transactions processed





New technologies changing the market landscape



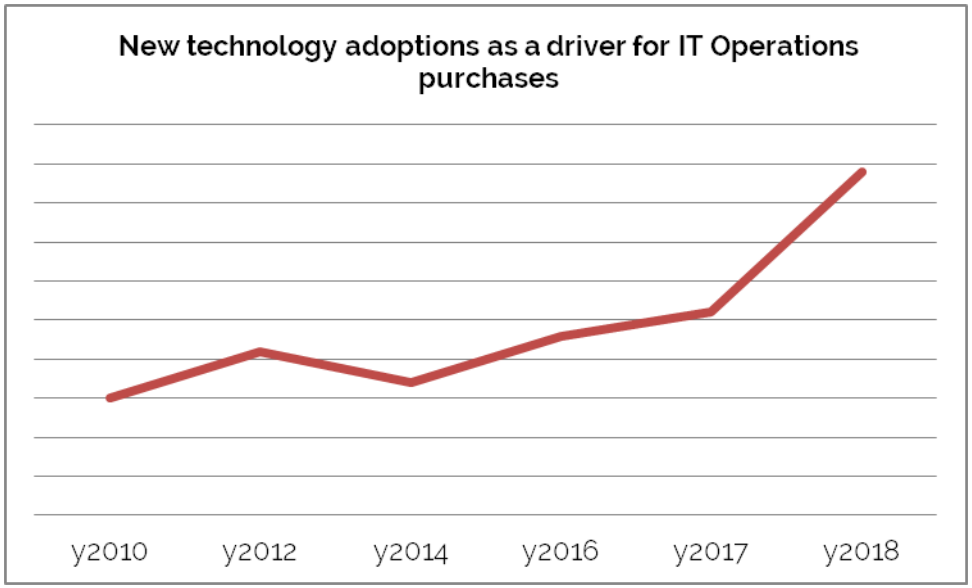
looking to replace their IT Operations solutions to be able to support new technologies in 2018

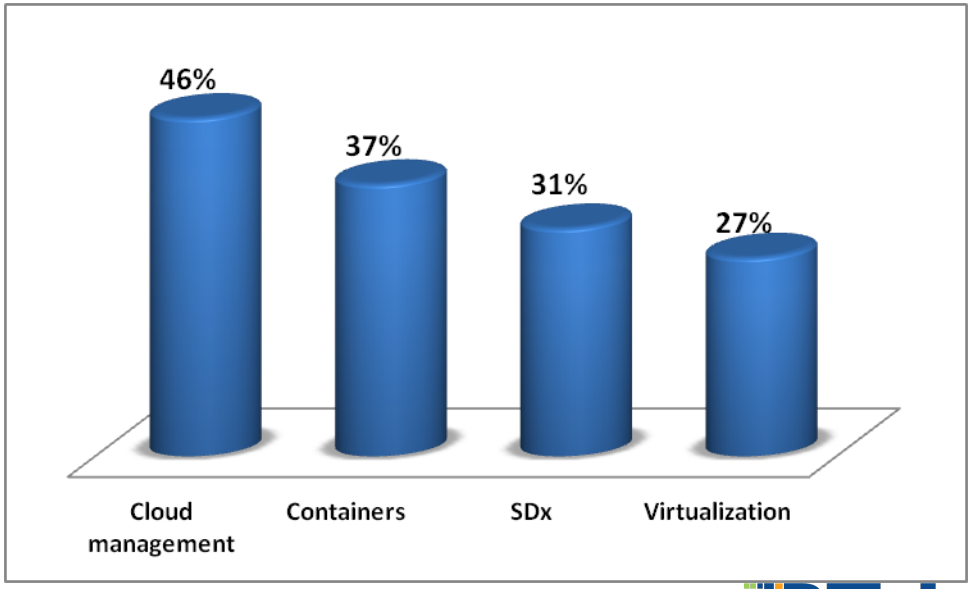
With the adoption of new technologies, IT and digital transformation is creating a new set of management challenges for IT Operations and organizations are realizing that these issues cannot be addressed by using tools that were designed many years ago to deal with different types of IT environments.

Managing hybrid and dynamic environments requires a modern set of capabilities that range from dependency discovery, correlation and visualization to problem prevention, detection and resolution. This is causing a power shift in the competitive landscape, as it provides an opportunity for new innovative solutions to disrupt the market and grow their presence.

32%

Redefined their IT monitoring strategies for 2018 due to adoption of new infrastructure and architecture types





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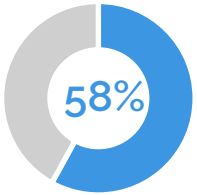
User experience as the key focal point



reported that monitoring IT performance from user perspective as a strategic goal for IT transformation

Organizations are increasingly understanding that true success of their IT initiatives is measured by the impact on: 1) internal and external customers; 2) business results. User experience monitoring (UEM) technologies have been around for a long time, but in 2017 we have seen an uptake in interest for: 1) modern versions of these technologies where organizations are taking an outside-in approach for monitoring their IT initiatives; 2) new capabilities that are agnostic of the type of IT infrastructure or technologies that users are leveraging (devices, applications, OSs, etc.); and 3) a new set of business-centric metrics that go beyond traditional IT KPIs.

With one of the key focus areas of digital transformation being customer focus and experience, digital experience monitoring technologies are well positioned to play a critical role in enabling IT departments to fuel a business growth.

Organizations that deployed three capabilities shown below reported significant improvements in some of the key performance indicators (KPIs)

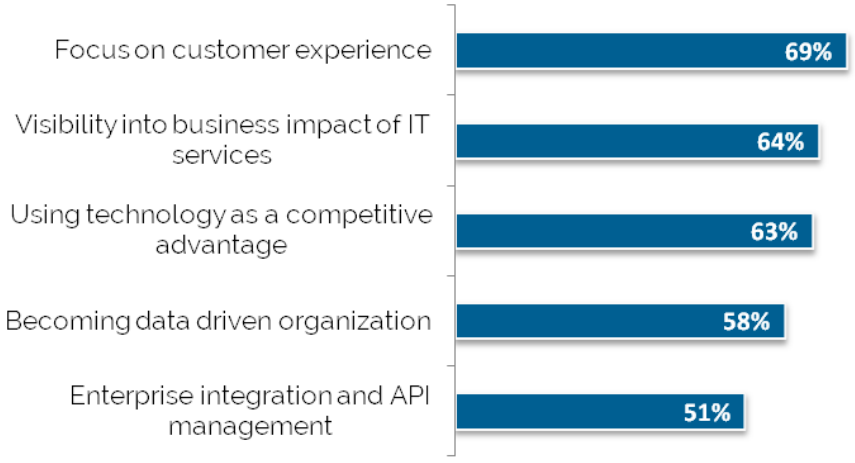
1. Ability to monitor IT services from user perspective
2. Ability to monitor IT performance in business context
3. Ability to create an end-user feedback loop

47% Improved their ability to use technology as a source of competitive advantage

55% Improved value of IT to the business

41% Improved success rate in preventing performance issues before users are impacted

Key IT transformation initiatives



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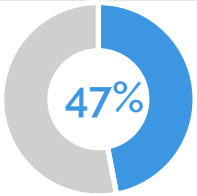
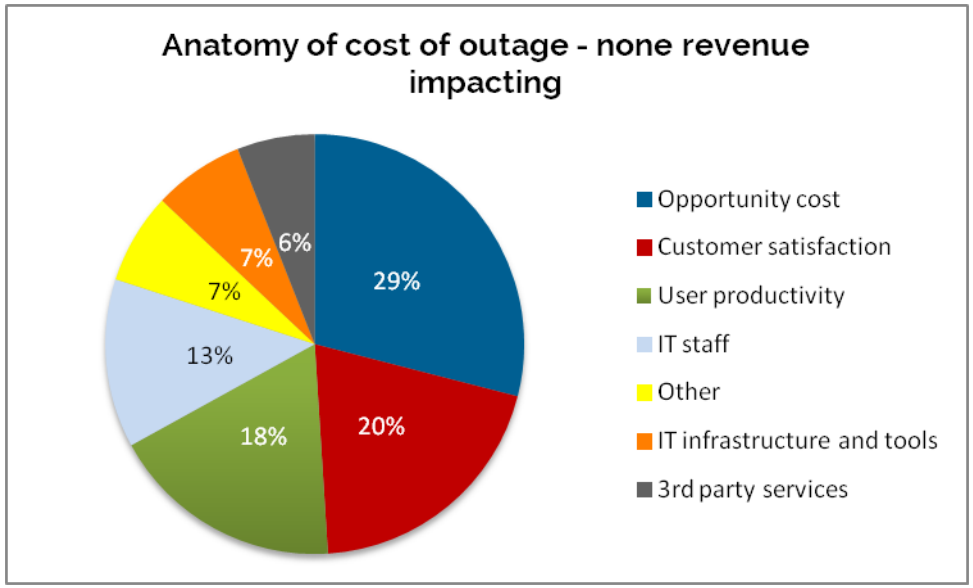
Building a business case is key for new market growth



reported that inability to build a business case is the key obstacle for investing in IT Operations solutions

One of the key attributes of organizations that are having the most success in digital transformation is that they are more focused on business outcomes than metrics and KPIs. This has also translated to the area of IT Operations, as more organizations are looking for hard numbers in terms of business benefits before they commit to the purchases of these solutions. Historically, the business value of IT monitoring solutions, in general, has been around improving areas such as IT productivity or continuity of business processes that are hard to quantify.

In 2018, organizations are looking to become more savvy in calculating the benefits of deploying IT Operations solutions which, in return, would allow them to justify investments in modern, advanced capabilities and improve their performance.



56% TPO organizations reported that their key IT Operations solution "paid for it self in 6 months or less

37% Of outages require 6 or more IT FTEs to resolve

2.7x TPOs are more likely to be creating ROI calculation when investing in IT Operations solutions as compared to all others

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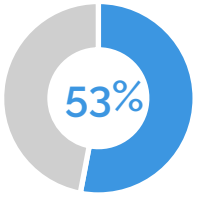
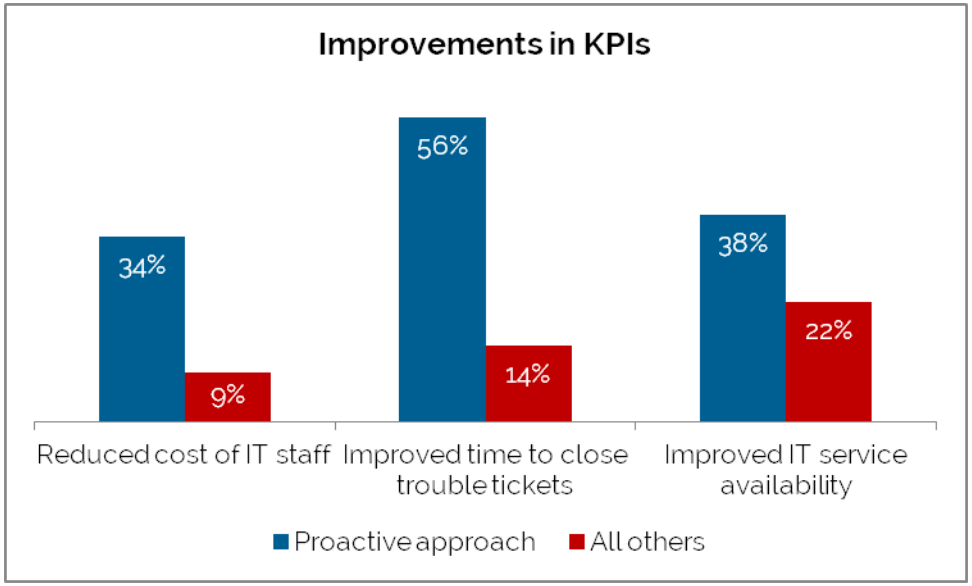
Proactive approach is not optional



increase in deploying capabilities for proactive approach since 2014

For many years, we have been seeing a significant interest from organizations in having the ability to see the potential problems before users are impacted and act on it. However, we have also seen mixed results when it comes to executing on achieving this goal and investing in the right tools that can make organizations more successful in this area.

Going into 2018, we are seeing a significant increase in the number of organizations that are realizing that a proactive approach is a critical part of successful IT Operations strategies. Additionally, organizations are becoming more aware of specific technology capabilities that can enable this approach, as well as the benefits that they can expect from being more proactive.



TPOs are more likely to be deploying:
- Predictive analytics
- Contextual analytics
- Machine learning capabilities

Percent of performance issues that are proactively detected:
- 76% - TPO
- 52% - All others

TPOs are managing **84% more users** per IT FTE

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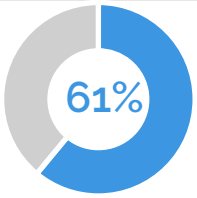
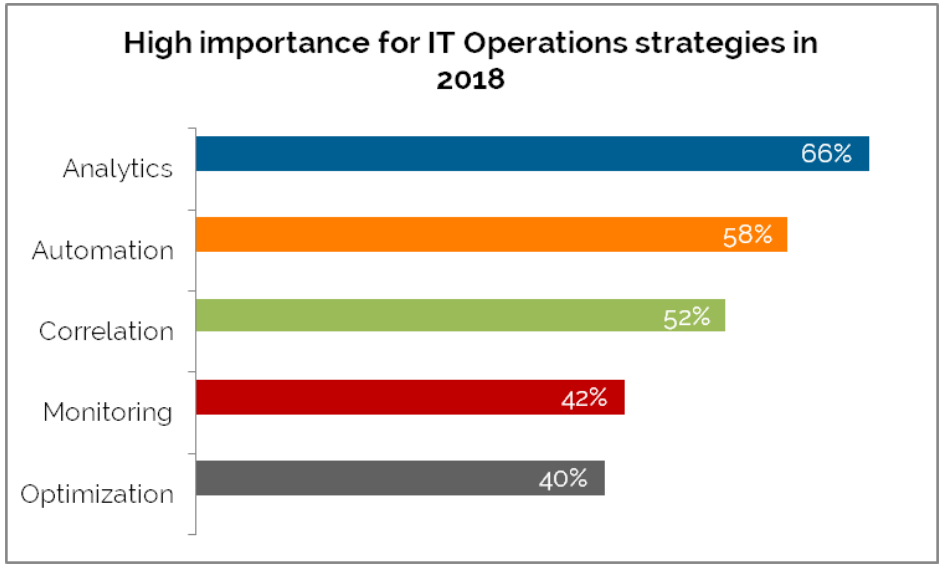
Beyond monitoring



increase in plans for deploying non-monitoring capabilities for IT Operations in 2018

Going into 2018, we are seeing that some of the emerging solutions for modern IT operations management do not even include monitoring capabilities. With organizations looking to reduce the complexity and noise of traditional IT monitoring tools, they are becoming increasingly interested in solutions that are focused on areas like optimization, automation, correlation or knowledge management. This shows that creating winning IT Operations strategies is becoming more complex and requires a multi pronged approach that is taking into consideration all of the keys of IT goals.

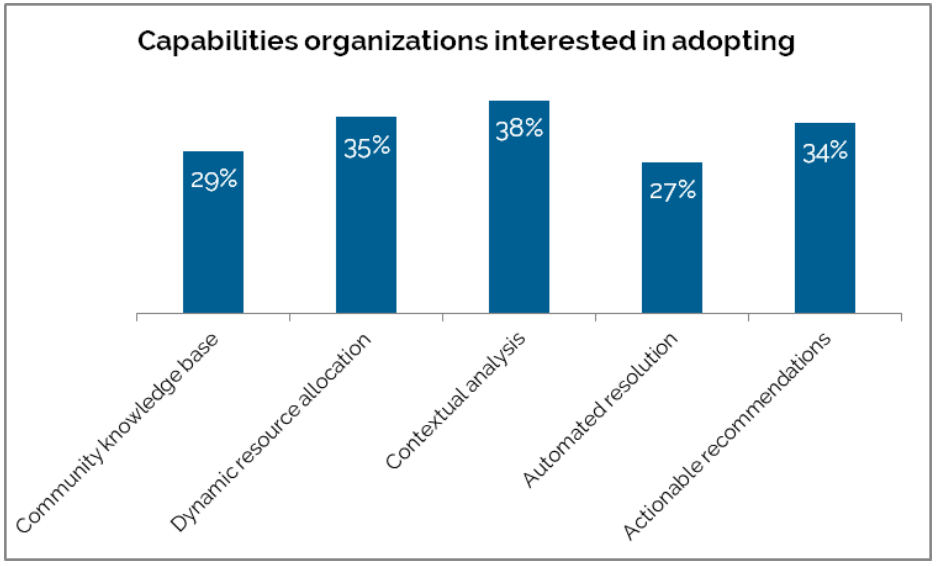


62%

Of capabilities that have the strongest impact on TPO performance are not related to monitoring

32%

Organizations reported that consolidation of monitoring tools is one of the key goals for IT Operations management in 2018



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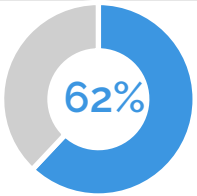
Automation, AI and Machine Learning - beyond marketing



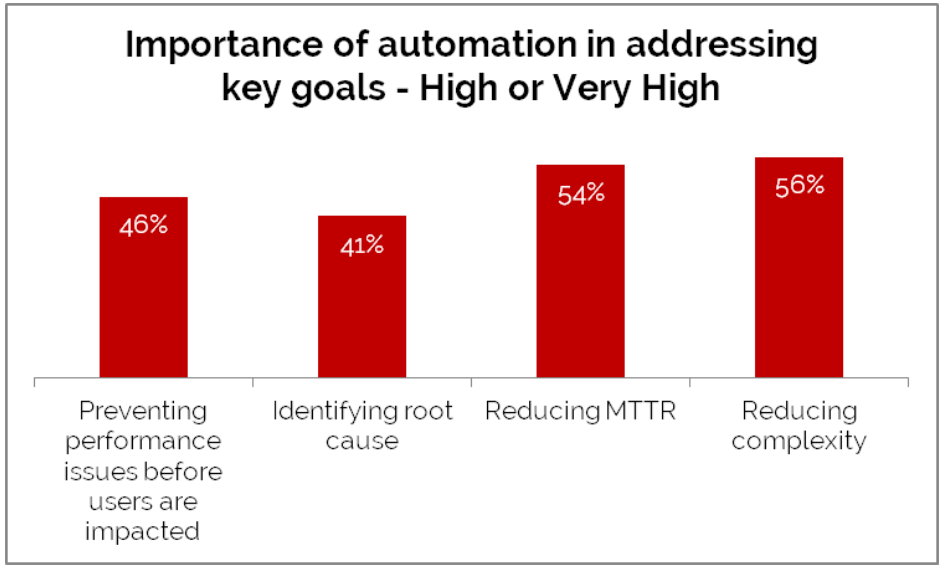
reported that it is difficult to identify differentiators between different AI or ML based solutions

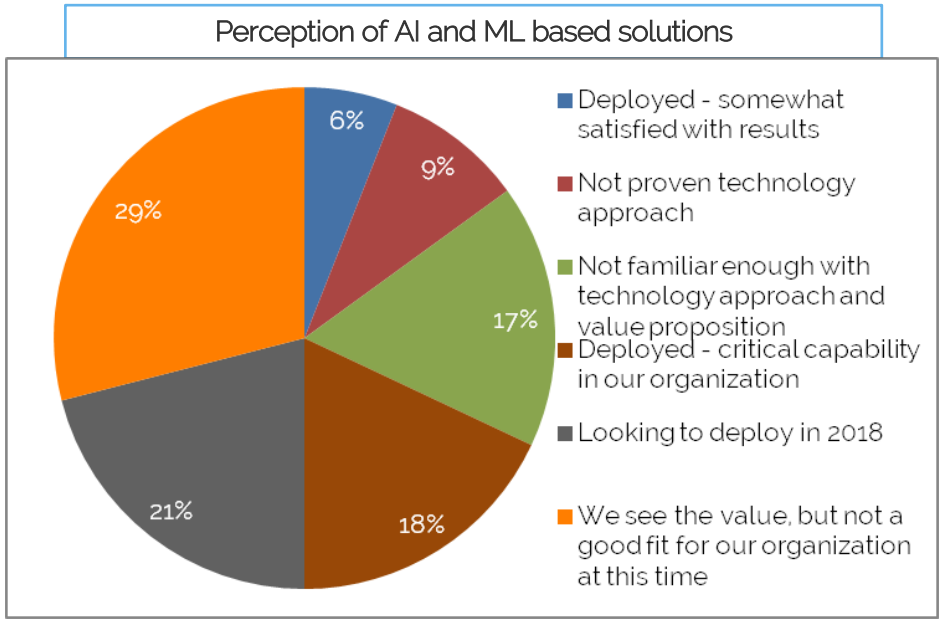
With the increased complexity of management, velocity and volume of data, the automation of IT processes went from being a capability that organizations are considering (and many of them being skeptical about value and results) to a necessity, in a span of less than 12 months. The value of automation touches almost every single pain point that organizations are experiencing and it cuts across each of the key areas that organizations are looking to execute on. With that the case, automation and AI became key parts of messaging most of the vendors in this space and some of the "hottest" marketing terms in the market.

With that in mind, organizations should be aware of the following: 1) not all the solutions are created equal (algorithms, people involvement, etc.) when it comes to automation; 2) automation is not a silver bullet and only becomes effective if its benefits are well understood and aligned with the key goals; 3) vendor messaging around automation is starting to cause market confusion, which makes it more difficult for organizations to make the right purchasing decisions.

39%

Reported that they need to improve their monitoring strategy to be able to benefit from AI and ML based solutions





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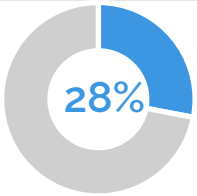
Connecting the dots to digital transformation



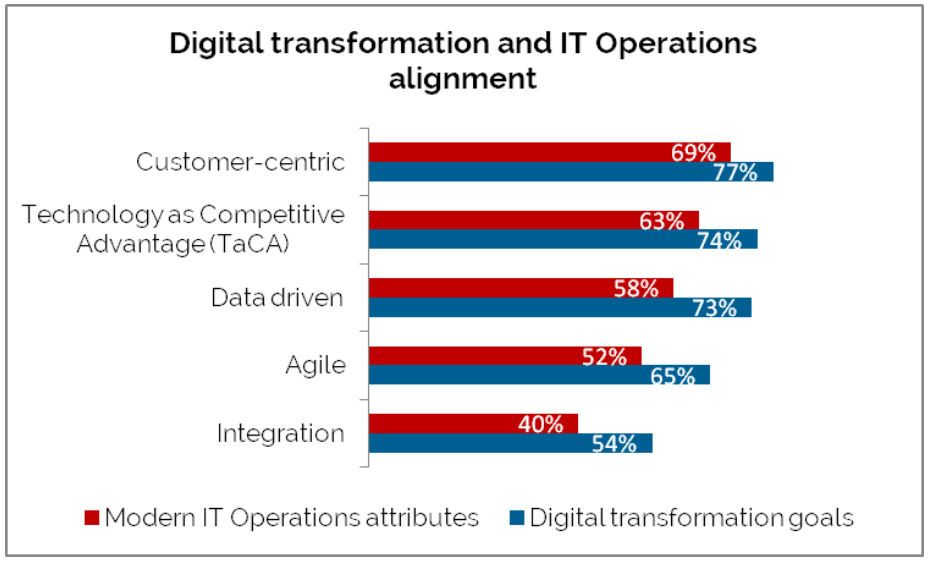
Increase in number of organizations that include modernizing IT Operations in their digital transformation strategies since 2016

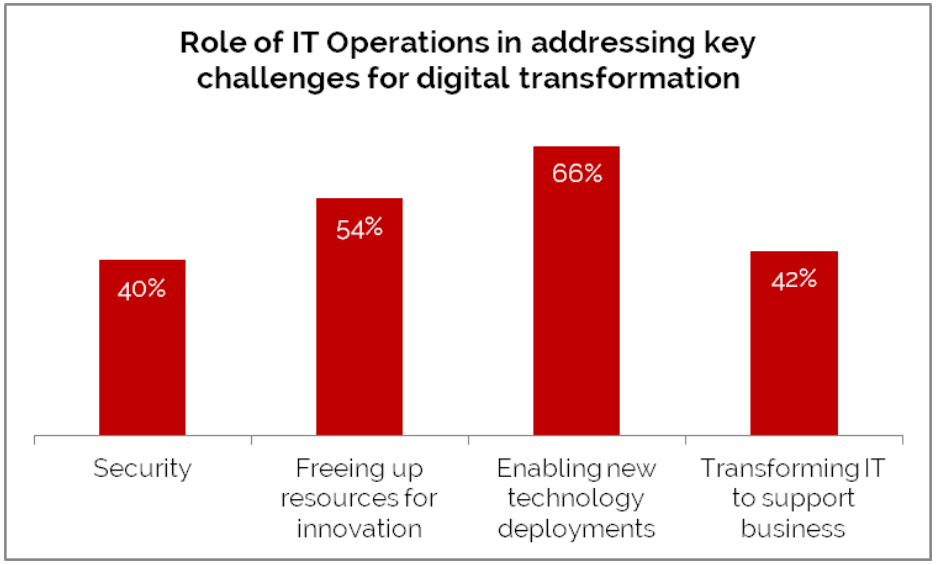
IT Operations management technologies play an important role, not only in enabling digital transformation and eliminating some of the key obstacles of becoming a digital business, but also contribute to the main business goals of digital enterprises. However, the link between the value proposition of IT Operations management and digital transformation is not easily noticeable.

In 2018, IT Operations teams are looking to gain more visibility into how they contribute to the digitization of business processes and gain a better understanding of where they fit into the overall goals for digital transformation. Modernization of IT Operations is in line with this effort as some of its key areas, such as automation, advanced analytics, security and user experience focus, are well aligned with the agendas of digital transformation leaders.

2.5x

More IT resources available for transformation, growth and innovation for top performing organizations (TPO) in IT Operations as compared to all others





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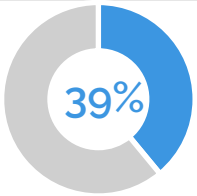
Service-centric, centralized approach can't be optional



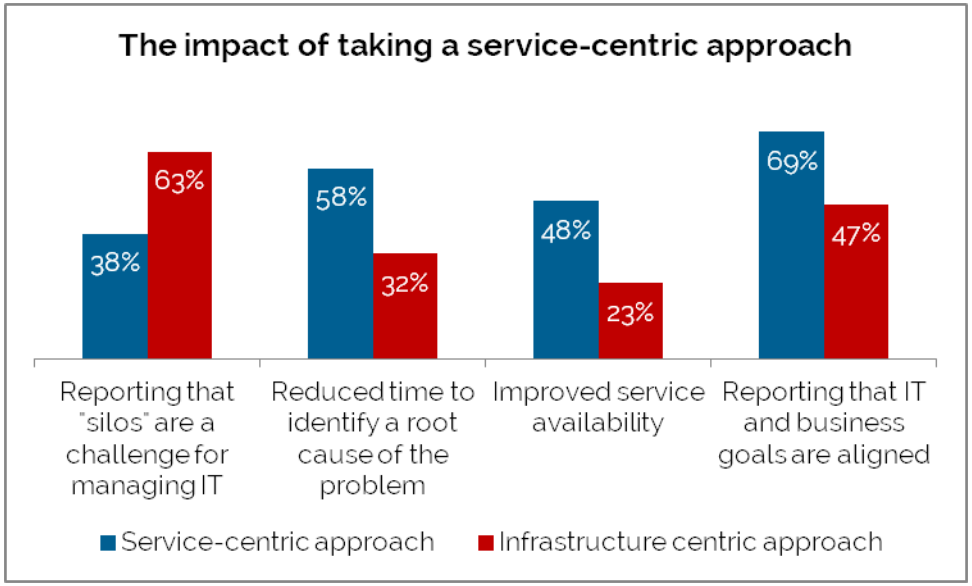
Increase in organizations looking to take a service-centric approach since 2014

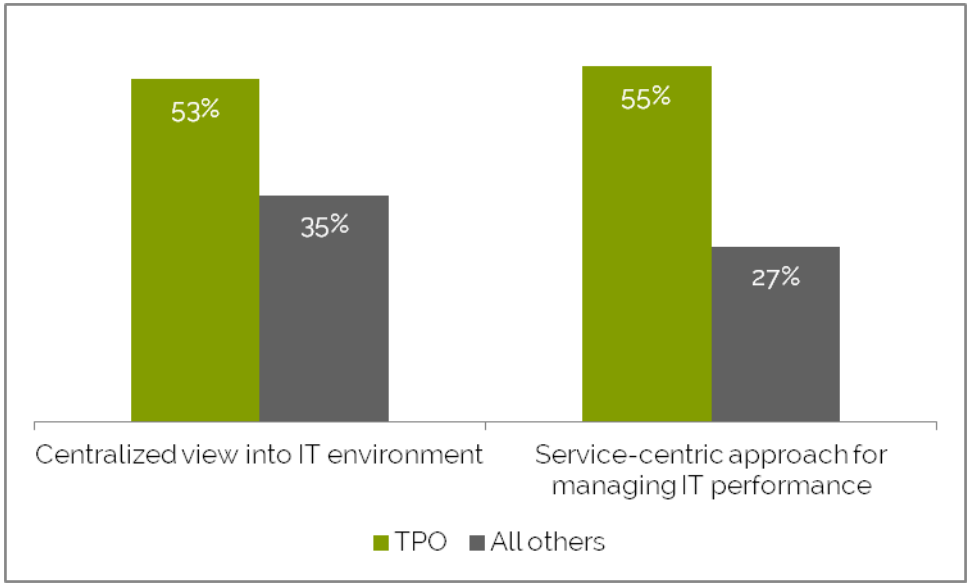
The notion of the "single pane of glass" monitoring approach and breaking down IT silos have been reported - as both the goal and challenge - for more than 10 years by user organizations. Also, we have seen a steady year-over-year growth in business services - as opposed to individual infrastructure elements - being a focal point of IT management. However, some organizations are still struggling with embracing this concept, which is increasingly leading to a variety of management issues.

Challenges of the increasing complexity and transformation of IT are making it apparent that a centralized, service-centric view into IT environments has become a "must have" capability for IT Operations.

36%

More users per IT FTE are being managed by organizations that are taking a centralized, "single pane of glass" approach for IT performance management as compared to all others





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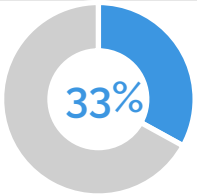
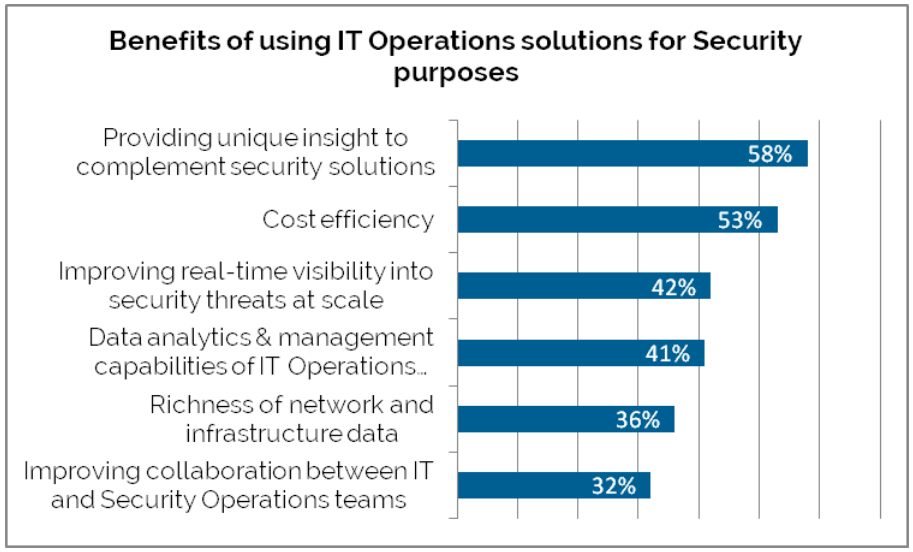
Enabling security initiatives



Increase in organizations that are using IT Operations solutions for Security purposes since 2015

With IT modern Operations becoming an automation, analytics and data management game, organizations are understanding the value of these solutions for managing security. Managing performance and security through a single platform allows organizations, not only to get the most out of their investments in IT monitoring and operations, but also to gain unique insights that their specialty security solutions are not providing.

Additionally, due to the increased importance of security in digital transformation efforts, organizations are finding it easier to justify investments in IT Operations solutions if they are also secure of their IT environments as a part of the same process.



Organizations using a single platform for managing IT performance and security

46%

Reported that lack of collaboration between IT and Security Operations as one of the key challenges for security breach prevention

$438K Reported average annual cost savings

41% Organizations improved investigation of security threats

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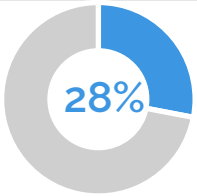
Cloud management - from a "use case" to key requirement



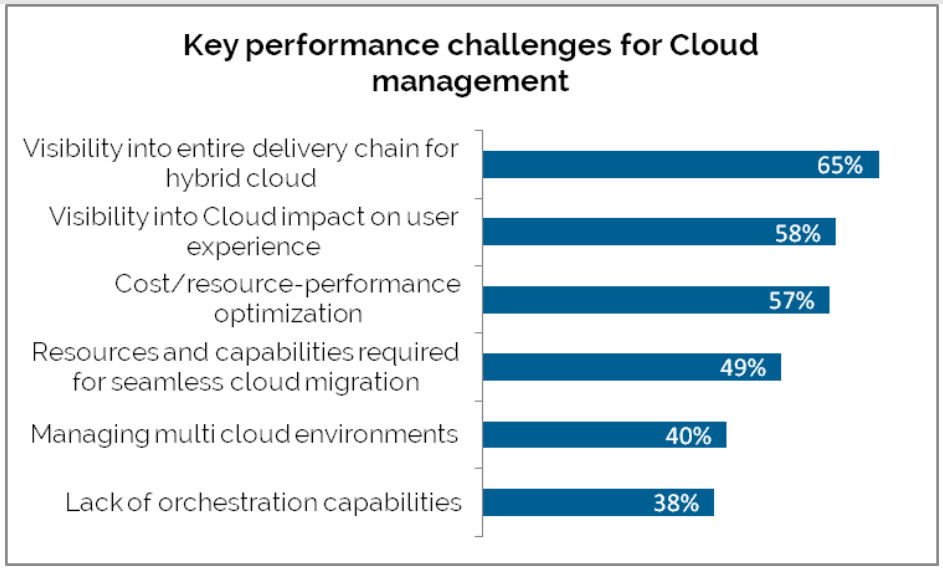
Increase in deployment of Cloud management capabilities over last 12 months

Capabilities for cloud management are no longer critical only for organizations that are "born in the cloud" or some specific industry verticals, but they are becoming increasingly important even for industries that were more hesitant to adopt Cloud (such as financial services) in the past. Additionally, for IT Operations and DevOps managing, building and ensuring the performance of IT services in the Cloud is a completely different game from the management perspective, as it requires a new set of capabilities and a different approach.

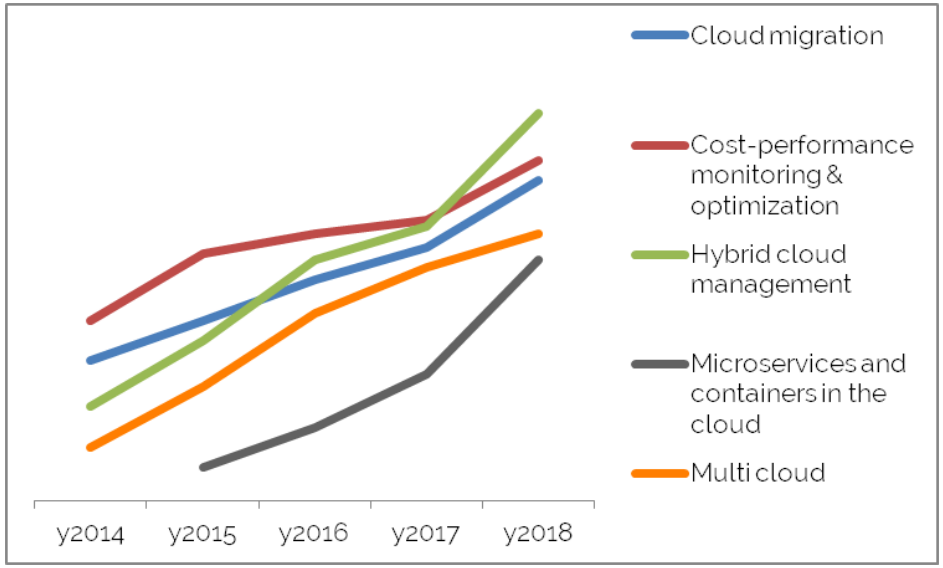
In 2018, Cloud management will continue to change from being just one of the IT Operations use cases to a key requirement for successful IT operations management.

49%

Listed Cloud management capabilities as one of the key selection criteria when evaluating IT Operations solutions



Use cases



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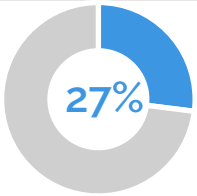
Power shift in the competitive landscape



considering purchasing solutions in 2018 they were not aware of 12 months ago

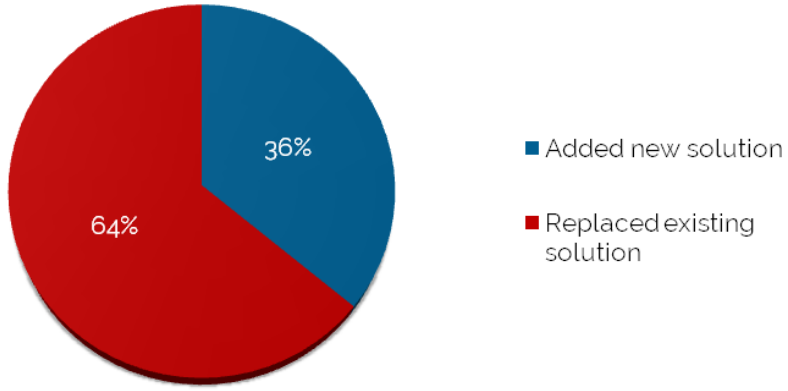
Challenges of managing modern hybrid and dynamic environments calls for the next generation of IT Operations solutions and in 2017 we witnessed a number of emerging vendors successfully entering the market or expanding their market share. One of the key advantages that these solutions have is that they are built for dealing with present challenges that are becoming more and more important. This often gives them an edge over solutions that were designed in the past to address pain points that were experienced in different types of environments.

One of the best examples of this trend is managing microservices and contain-based architectures, as organizations are starting to realize that solutions they deployed in the past are not as effective when monitoring these new dynamic environments.

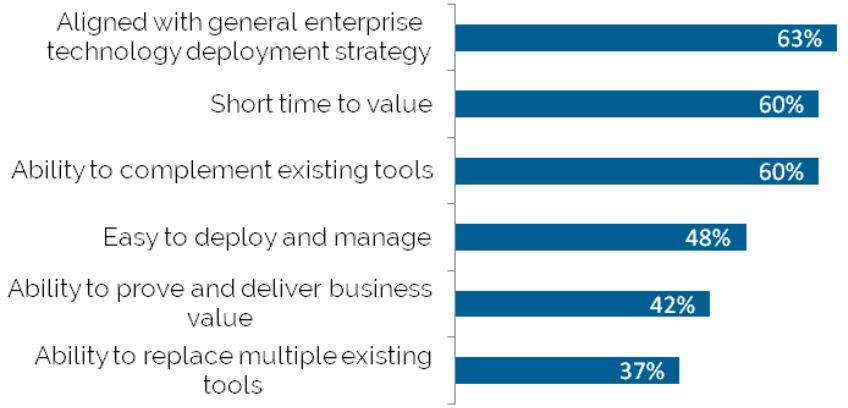
3.1x

Increase in speed of replacement of IT Operations solutions over the last 4 years

IT Operations new technology purchases over last 12 months



Key attributes of IT Operations solutions with highest market growth



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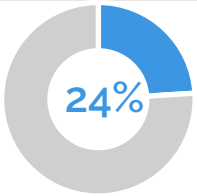
Containers and microservices changing the game



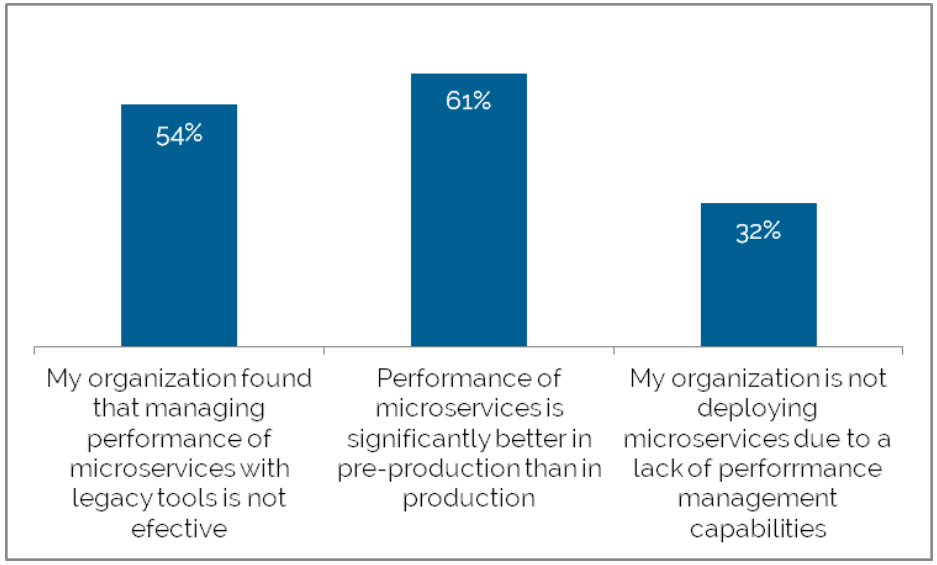
Are looking invest in new IT Operations solutions in next 12 months to be able to manage microservices and containers

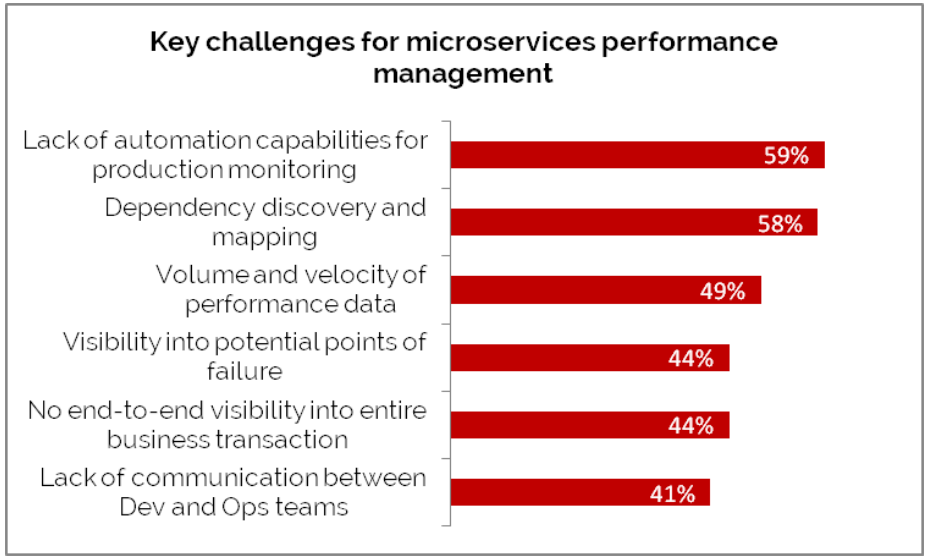
The emergence of containers and microservices is changing IT Operations management in a variety of ways. Not only is it that 31% of organizations are reporting that they are investing in new tools to be more effective in managing microservices, but also more vendors are using containers to deliver their management solutions. Managing performance of containers and microservices in production calls for new approaches to data collection, dependency mapping, service impact measurements, data processing and analytics capabilities at scale, application performance monitoring and a new set of KPIs.

More importantly, managing these types of environments requires a mind shift when it comes to the design of the IT service delivery chain.

18x

more data collected, on average, from monitoring components and dependencies in container-based vs. more traditional monolith environments





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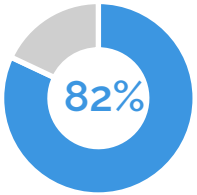
The need for new incident management strategies



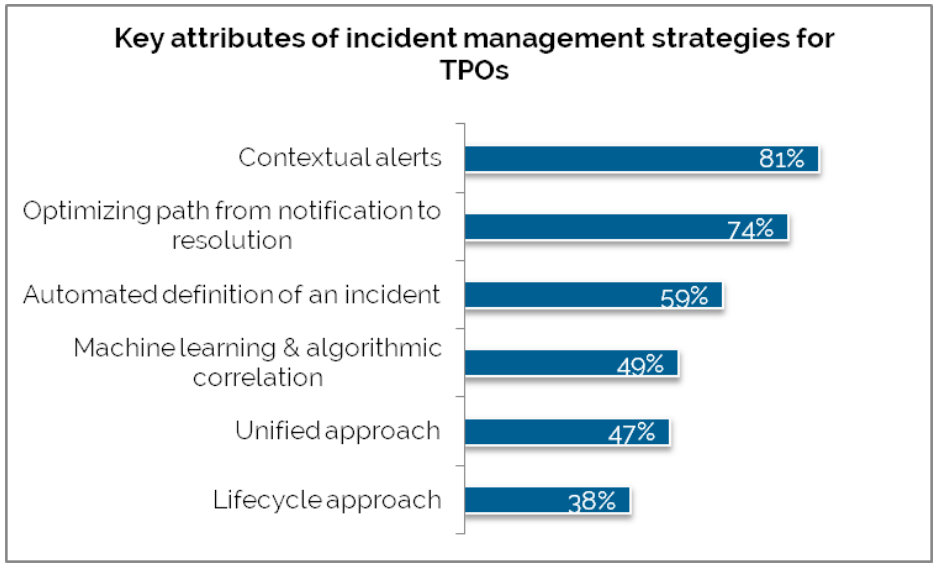
Of IT help desk tickets are not actionable

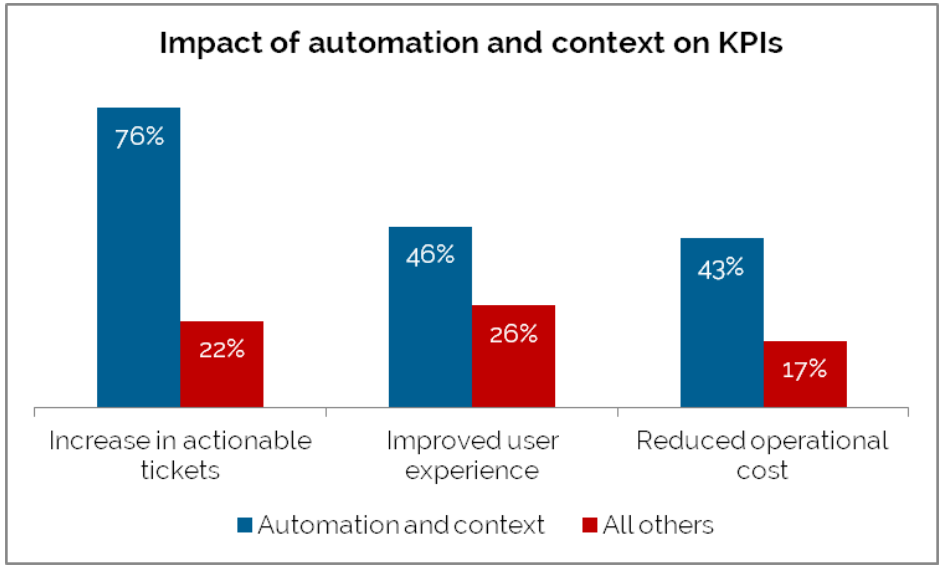
One of the areas of IT Operations that has become "on top of the mind" for IT decision makers going into 2018 is reducing noise created by events, alerts and metrics and instead use them to define relevant incidents with actionable context. Organizations are starting to understand that managing this process by using legacy solutions is no longer humanly possible and increasingly expensive, so they are turning to innovative technologies to help them reduce risk, cost and complexity.

Organizations are also realizing that effective IT incident management goes beyond technology deployments and requires a strategic approach that captures an entire lifecycle of dealing with this issue - from being more proactive and having centralized visibility to ongoing learning from previous incidents

79% reported that adding more IT staff to address IT incident management is not an effective strategy

88% increase in processed metrics, events and alerts over the last 12 months





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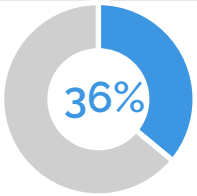
Getting the most out of network monitoring data



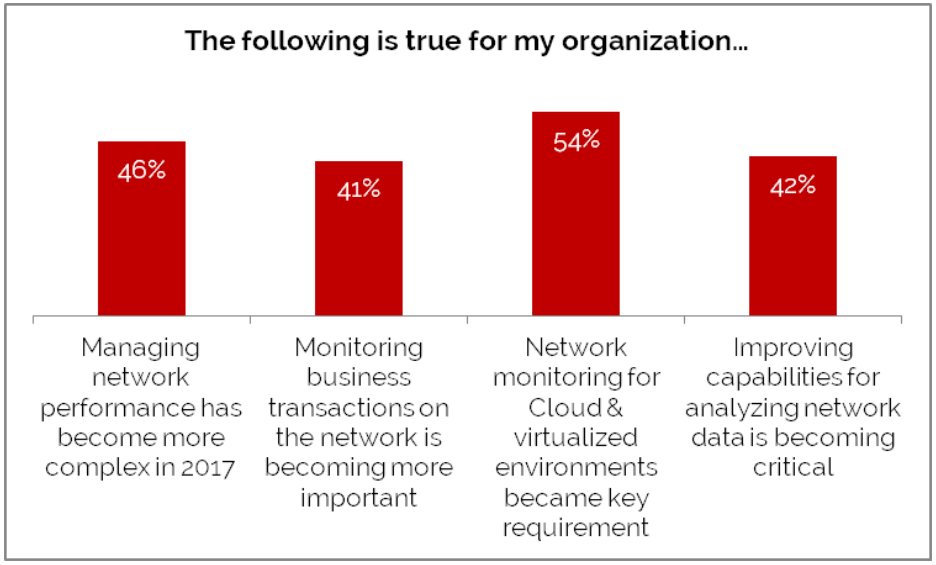
looking to expand the use of network monitoring data to new use cases

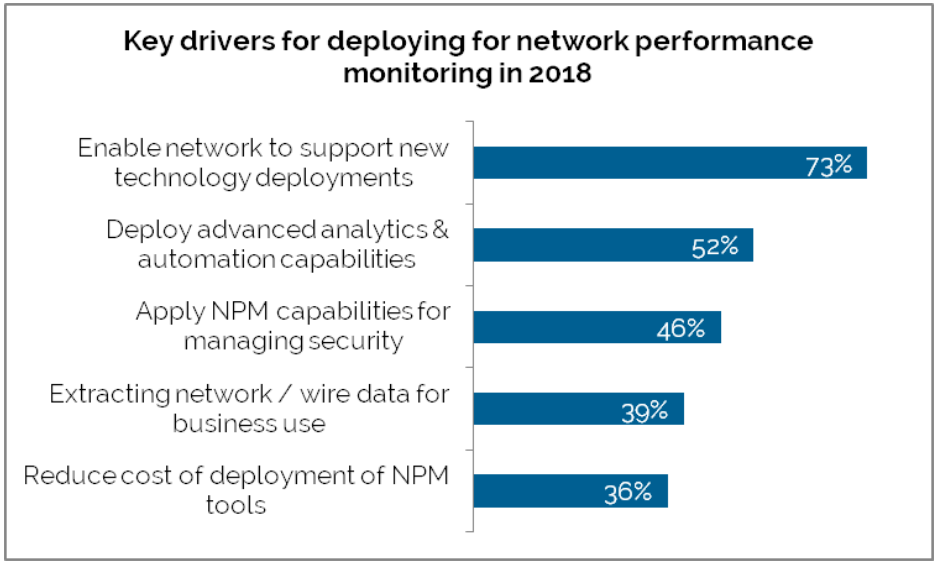
Traditionally, network monitoring, as a class of technology, was centered around the health of network devices, visibility into network traffic and capabilities for troubleshooting and preventing performance issues. That lead to network monitoring capabilities becoming almost a commodity while most of the key challenges remained unsolved.

In 2018, organizations are looking to make better use of the richness of network monitoring data by applying strong analytics and automation capabilities, expanding the use of network performance monitoring (NPM) solutions to new, more business centric use cases and focusing their NPM efforts to support emerging technologies such as Cloud and SD-WAN.

28%

Reported that use of network monitoring data goes beyond network management job roles and IT Operations departments





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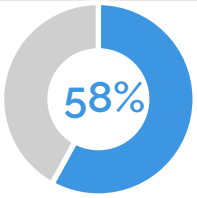
IT Operations market will significantly grow in 2018 - but not as a whole



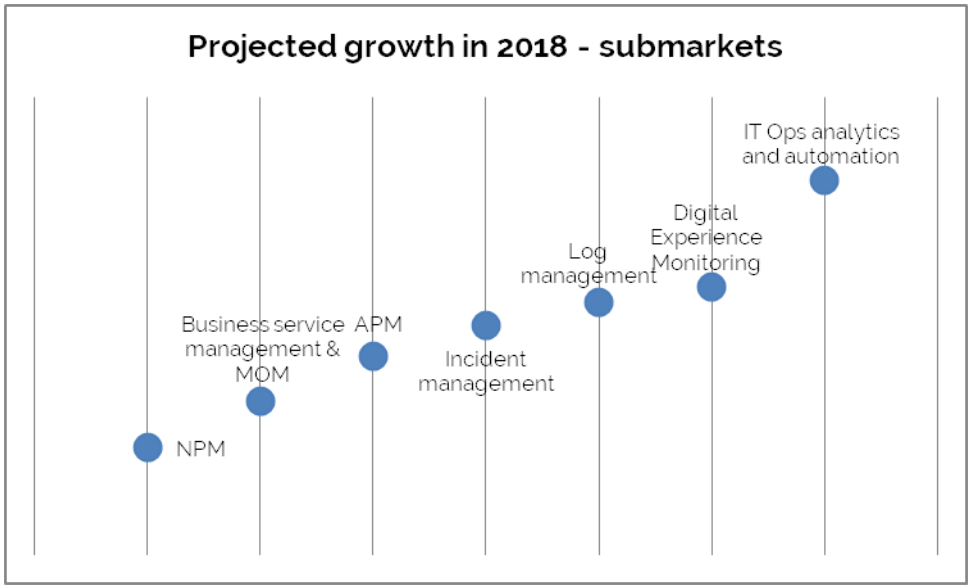
Of organizations are evaluating vendors from more than one technology class for 2018 purchases

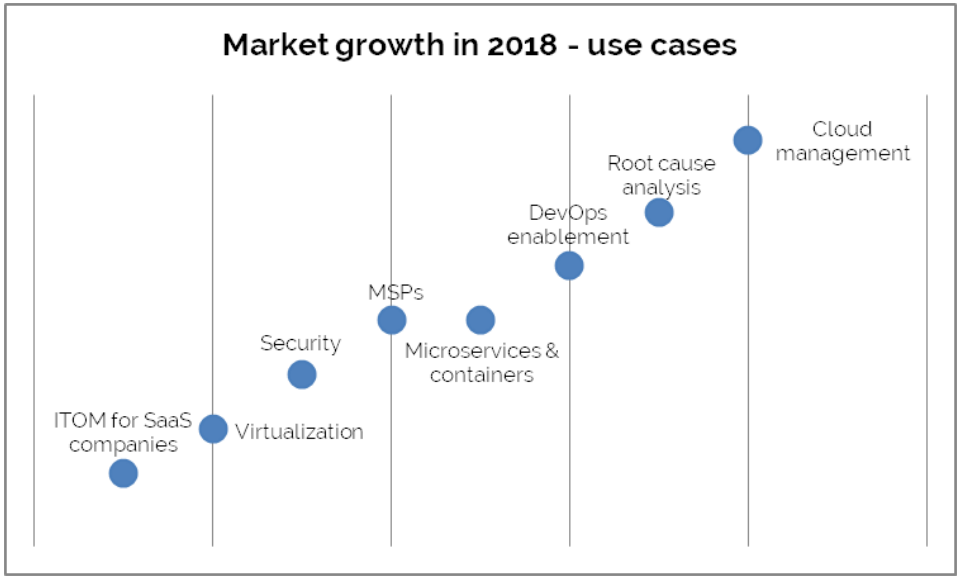
IT Operations management is not a single technology market, but a combination of different submarkets with value propositions that often complement each other. In 2018, the demand for IT Operations management solutions is expected to grow by a fairly significant margin and that growth is predominantly being driven by specific pain points and use cases.

It should be noted that this market significantly changed in 2017 and, with the broader adoption of new technologies and IT transformation, it is expected the same trend to even further accelerate in 2018. Therefore, user organizations should be aware of the ongoing innovation that is happening in this space when creating their purchasing plans for IT Operations management solutions so that they will remain competitive.

51%

Of organizations listed "a lack of executive buy-in " as the key obstacle for adopting more IT Operations technologies





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