

MILESTONE 360[°] MAGAZINE

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Innovation Starts with Intelligence.

FOREWORD

For 20 years, Milestone Technologies Inc. has been revolutionizing the way IT is deployed and supported worldwide. As a Managed Service Provider (MSP), we've partnered with some of the largest global enterprises to develop innovative solutions that help business grow, and our experiences have equipped us with valuable knowledge about the important issues and trends dominating the tech industry. As an MSP, we are passionate about using our knowledge and expertise to bridge the gap between people and technology, enabling our customers to become more connected, scalable, and efficient.

As a biannual collection of articles written for business and technology leaders, Milestone360 magazine offers readers a comprehensive perspective on IT methodologies, capabilities, and advancements. In our previous issues, we examined best practices for surmounting common IT challenges and discussed how IT leaders can drive business value with strategic decision making and data-driven operations. In this issue, we will explore several dominant tech trends taking off in 2018 and consider how IT leaders can capitalize on emerging technologies to develop more agile and intelligent IT. Additionally, we will take a closer look at how Intelligent Automation will significantly bolster the capabilities of IT operations.

The insights and ideas covered in this issue have been central throughout Milestone's history of building strong and scalable IT foundations. We hope you find this knowledge as valuable as we have on our continued mission to revolutionize IT.



STRATEGIC IT TRENDS FOR 2018

With the rapid and ceaseless evolution of technology, digital transformation promises to remain a top priority and central topic of discussion in the tech industry. From leveraging cutting-edge technologies to experimenting with new methodologies and processes, active and continual digital transformation is essential for organizations to stay relevant, competitive, and scalable. Though optimizing business through digital innovation is not a new initiative for companies, more than half of IT executives currently believe they are behind in their digital transformation despite their awareness of its importance.¹

Digital transformation should be thought of as an ongoing, strategic journey through which businesses must navigate over time rather than a definitive endpoint at which they should one day arrive. To avoid falling behind in this journey, companies must proactively plan their advancement through their digital transformation by prioritizing innovative initiatives and keeping pace with the strategic agenda they create. IT teams, then, are entrusted to help lead their organizations through this digital transformation journey, and IT leadership must develop a two-fold digital transformation strategy. This two-fold strategy will guide their own internal team through the journey, but also work to help achieve the business goals of their organization. When made into key initiatives, the following strategic IT trends for 2018 will enable IT teams to embrace their role as an important partner within the company and successfully navigate their digital transformation agenda.



1. LEVERAGE INTELLIGENT AUTOMATION

Intelligent technology and automation were top trends in 2017, but in 2018 companies will leverage the benefits of both via Intelligent Automation (IA). Going beyond Robotic process automation (RPA) which uses software robots to perform repetitive tasks, IA employs capabilities like machine learning, pattern recognition, incident analysis, and intelligent analytics to provide businesses with valuable, actionable, and consolidated insight into operations across their organization. With repetitive tasks automated, IT personnel can refocus their time and efforts on higher value, more innovative initiatives to help propel their company through their digital transformation journey.

One of the most impactful applications of IA is to service desk operations. When integrated with IA, ticket creation, diagnosis, assignment, escalation, and resolution become automated and intelligent processes, enabling service desk technicians to provide more accurate and timely end-user assistance. Using pattern recognition and contextual analysis, IA platforms gather and analyze incident data to identify issue patterns and produce reports. IT teams can then use the insight from these reports to facilitate strategic and proactive service improvements and make more informed decisions about how to enact their digital transformations.

Though Gartner predicts that intelligent platforms will become foundational for most IT organizations in 2018,² companies must be properly prepared to make the transition to Intelligent Automation. Deploying IA involves layering the platform on top of an existing IT foundation, so it's critical that sound fundamentals like documented processes and secure toolsets are already in place in the IT infrastructure. Moreover, there are various possible applications of IA, including network security and data center operations, so it's important to explore which options best suit the goals of the business and its unique digital transformation agenda.

2. FORTIFY IT TEAMS

As organizations move through their digital transformation journeys, they'll discover the necessity of bolstering their IT teams, both in number of personnel and diversity of skillset. Indeed, 70 percent of businesses with 5000 or more employees plan to hire additional IT professionals in the coming year.³ But while IA and other innovative technologies will undoubtedly transform IT infrastructures and the way they operate, they will also change the roles and processes IT personnel will perform and the skillsets necessary.

“70 percent of businesses with 5000 or more employees plan to hire additional IT professionals in the coming year.”³

Not only does this mean that advanced technologies will present new challenges to existing personnel expertise, but they'll also require employees to take on roles as “versatilists” who perform a variety of duties within IT, many of which will necessitate more business and soft skills rather than technical aptitude alone.⁴ The importance of communication, collaboration, leadership, and other interpersonal skills will become increasingly evident as IT teams engage with other stakeholders in the company to drive the business' digital transformation agenda forward. Moreover, innovative initiatives will also mean more complex IT processes, so ensuring that these processes are established, documented, and streamlined will be essential to enabling these individuals' success in their new and diversified roles.

A company that opts to deploy an IA platform as a part of their digital transformation will require professionals who specialize in automation tools to ensure a successful implementation. Moreover, IT employees whose duties formerly consisted of performing the repetitive tasks that are now automated will see their responsibilities shift and must proactively seek out opportunities to acquire new skills that can bring value to the team. In turn, IT leadership must empower their team's development and enable them to explore alternative skills by providing the tools and training necessary to acquire new capabilities. Additionally, an implementation as transformative as IA will also have ramifications that will be felt to certain degrees in other business units throughout the company. As such, IT leaders will need to communicate and collaborate with other company leadership during the planning and execution phases of the implementation to ensure all parties affected know what to expect.

To ensure that their team remains fortified throughout their digital transformation journey, IT leadership must actively foster innovation, proactivity, adaptability, transparency, and collaboration, as intrinsic aspects of their department culture. Successful digital transformation initiatives require professionals who proactively seek out opportunities for technological, methodological, and process innovations within their organization and who are willing to embrace the reallocation of their responsibilities along the way. Moreover, IT teams that make exceptional communication and collaboration skills a part of their culture position themselves to work effectively with other stakeholders to shape and achieve the digital transformation initiatives of the organization as a whole.



3. FOCUS ON THE CUSTOMER EXPERIENCE

Customers today have more influence over organizations than ever before, so whichever initiatives companies choose to pursue as a part of their digital transformation strategy, they will likely share a goal of enhancing the customer experience (CX). With new communication technologies and enhanced social media platforms transforming CX into an immersive experience, customers have come to expect and demand more as organizations struggle to keep pace.⁵ Indeed, delayed digital transformation progress in 2017 will translate into customer expectations exceeding organizations' ability to provide a satisfactory experience in 2018.⁶

A customer-centric approach to digital transformation will require IT teams to embrace their two-fold role as both service providers to end users within their organization and as key players in increasing their organization's external customer satisfaction and retention rates. Service desk technicians, for example, are an important part of fulfilling this two-fold role. They work to keep their internal customers—end users—productive and optimized, so that end-users can work to exceed external customers' expectations.

Implementing innovative tools that function to enhance CX should be a priority for organizations' digital transformation strategies. IT teams can help enhance their organization's reputation among customers by leveraging innovative tools like IA in their service desk operations to more efficiently and effectively serve their end users who serve external customers. As CX moves to the fore as a key part of digital transformation strategies, soft skills are becoming an essential skill for IT personnel. Promoting refined soft skills will require an internal strategy shift for IT leaders who must foster this as a cultural element of the team.

LEADING YOUR ORGANIZATION TO SUCCESS IN 2018

Whatever your organization's goals for 2018 might be, strategizing your digital transformation journey is key to success. Enacting these three IT trends as a part of this strategy will help your company make the technological, methodological, and cultural transformations that will propel your organization through your journey. From leveraging transformative platforms like Intelligent Automation, to ensuring that your IT team is empowered in their new dynamic roles and focusing on the customer experience as a renewed priority, each of these strategies will enable businesses to achieve their objectives in 2018 and position themselves to scale into the future.

¹ [Forrester Predictions 2018: A year of reckoning](#)

² [Gartner Top 10 Strategic Technology Trends for 2018](#)

³ [The 2018 State of IT](#)

⁴ [Pace Yourself for Gartner Top Strategic Predictions for 2018 and Beyond](#)

⁵ [Gartner Top 10 Strategic Technology Trends for 2018](#)

⁶ [Forrester Predictions 2018: A year of reckoning](#)





ADVANCING IT WITH INTELLIGENT AUTOMATION

As the Internet of Things (IoT) continues to generate Big Data at a growing rate, technologies like Intelligent Automation are becoming increasingly necessary for businesses to stay competitive. In fact, companies on average are expected to invest in Intelligent Automation within the next four years. And with a staggering 75 percent of enterprises pursuing and adopting automation within their IT operations, it's clear that Intelligent Automation is rapidly emerging as the future of IT operational strategies.¹ But what is Intelligent Automation, and what advantages does it bring to the table for IT departments?

“75 percent of enterprises are pursuing and adopting automation within their IT operations.”¹

Milestone's recent partnership with a leading provider of Intelligent Automation (IA) and Artificial Intelligence (AI) software, IPsoft, places us at the forefront of the digital transformation. We sat down with their Chief Commercial Officer, Jonathan Crane, to gain his insight on how Intelligent Automation is changing the way businesses operate.

Q: WHAT IS INTELLIGENT AUTOMATION?







Intelligent Automation (IA) is a combination of automation and Artificial Intelligence (AI) with advanced capabilities like machine learning and predictive analysis that make it possible to interpret data, make decisions, and adapt to change. As a result, IA tools can gain a contextual understanding of different business environments by gathering information and identifying patterns. Through semantic and episodic learning, Intelligent Automation goes beyond the capabilities of scripted bots – IA tools analyze incidents to independently seek out solutions and make predictive adjustments.

Q: HOW IS IA DIFFERENT FROM TASK AUTOMATION?

Machine learning and Artificial Intelligence capabilities differentiate Intelligent Automation from traditional task automation, because IA tools are configured to imitate cognitive thinking by finding solutions to unresolved problems. Task automation, on the other hand, is coded to follow pre-determined processes without applying any problem-solving capabilities. In this sense, task automation tools are unable to provide end-to-end automated solutions. By combining AI with task automation, businesses can benefit from the advantages of IA technology.

Q: WHAT ARE THE BIGGEST ADVANTAGES IT LEADERS HAVE TO GAIN FROM IA?

One of the key benefits that IA offers is the ability to automate tasks that are repetitive in nature. By doing so, businesses have the potential to reallocate the resources that would have been spent on mundane tasks to invest in strategic development for higher-level operations and job elevation. Intelligent Automation also helps improve customer relationships by delivering a more efficient and accurate customer experience (CX). IA tools don't just reduce error rate, but they also study patterns to continuously improve IT performance. Finally, Intelligent Automation enables greater visibility, allowing businesses to evaluate vendor and internal efficacy based on performance analytics.

Service Support Level	Task Automation	Intelligent Automation
Tier 3 Analysis and Service Strategy		
Tier 2 Complex Issue Support		
Tier 1 Routine Tasks and Troubleshooting		

Q: WHAT DIFFERENTIATES IPCENTER FROM OTHER PLATFORMS?

It's difficult to compare IPsoft's IA Platform, IPcenter, to another platform, such as ServiceNow, because it's not an exact comparison. IPcenter is built on an accumulation of knowledge and expertise we have gained from managing IT environments. Drawing from our years of experience, we coded 25,000 out-of-box automations into our exhaustive remediation library, allowing IPcenter to understand and execute 85 percent of tasks in a typical IT model. ServiceNow is primarily an ITSM ticketing system that is expanding its capabilities by building out an IA library. However, its current range of IA capabilities is still limited. IPcenter is much more than just a ticketing system. Our platform not only contains an intelligent workflow that utilizes ticket information and integrates into almost any IT infrastructure, but it also has the most aggressive Service Level Agreement (SLA) for priority resolution.

Q: HOW DOES IPCENTER LEARN OR RECOGNIZE PATTERNS?

IPcenter's learning abilities are supported by human assistance. If an incident occurs, the IPcenter platform takes a note and logs the incident. When the problem occurs again, IPcenter, with assistance from a NOC engineer, will create an automation to resolve the issue. Once the automation is validated with a service engineer and signed off by the client, it is implemented into the IT environment and logged in the remediation library. Through this process, IPcenter can compare environments and identify opportunities for more automations. As a result, the IPcenter platform is constantly learning new solutions and consistently updating our database of 25,000 automations.

Q: HOW CAN IPCENTER TRANSFORM AN END-TO-END OPERATION?

Let's follow an example of a router that is having problems with network connectivity. In IPcenter, a ticket will be automatically generated for the router. Through an automated process, IPcenter will reference a list of all the potential issues a router might have trouble with. If anything on the list matches against the identified incident, IPcenter will resolve it with an automation from the remediation library. If not, IPcenter will escalate the incident to the appropriate Tier 2 or 3 engineers using a skills routing engine. The engineer will be able to study the router and all relevant diagnostics on a centralized dashboard and implement the appropriate solution. At the end of every incident, data is collected to be analyzed and added to the automation database.

From more efficient Service Desks to optimized Network Operations, Intelligent Automation clearly offers significant benefits for enterprises. Our conversation with Crane ended with one major takeaway: businesses leveraging IA tools have the ability to take action that is not just proactive, but predictive. To learn more about how Intelligent Automation can be properly implemented to benefit businesses, check out our next Q&A with Milestone's EVP of Global Technology Operations.

¹ [2017 Everest Group Survey](#)



ENABLING DIGITAL TRANSFORMATION THROUGH INTELLIGENT AUTOMATION

Although more and more businesses have come to rely on their IT infrastructure to deliver their products and services, IT budgets have steadily shrunk over the last year.¹ With these budget cuts, IT infrastructure and operations teams are under significant pressure to handle the increased ticket and incident volume while improving operational performance levels to support critical business processes. Some companies are using task automation to help address these IT needs, but basic automation scripts lack the flexibility to address advanced technical issues without human intervention. Consequently, they fail to remediate many of the core issues driving excess ticket volume in networks.

However, there is an approach that goes beyond simple task automation and gets to the heart of the problem – Intelligent Automation (IA). As we discussed in our interview with Jonathan Crane from IPsoft, IA is poised to revolutionize the way companies manage and improve their IT infrastructure and operations. In fact, 86 percent of global business leaders believe their organization must successfully deploy Intelligent Automation solutions within the next five years to be a leader in their field. However, 69 percent said their company is not currently deploying it.² Considering the robust capabilities of IA platforms, what's preventing companies from using it to improve IT operations? And how can companies effectively implement IA into their IT infrastructures?

To better understand how Managed Services Providers (MSPs) can help businesses deploy and use IA, we asked one of our executives for his insights.



Doug Tracy
Chief Operating Officer

With 30 years of executive experience, Doug supports Milestone's service delivery, technology and service strategy, partnerships, and internal IT operations while focusing on ways to enhance Milestone's services through innovative technology.

WHY DO BUSINESSES NEED MSPs?

Although companies can certainly choose to work alone, most have found the use of highly skilled and experienced partners to be the optimal path forward. World-class MSPs have developed a wealth of expertise from years of experience with multiple clients in a variety of scenarios. As a result, MSPs can dramatically improve their customers' ability to drive efficiency through improved IT operations, which helps their clients reach long-term goals faster and addresses issues around scaling their digital enterprise. Businesses rely on the MSP's people, processes, and tools—backed by strong Service Level Agreements (SLAs)—to effectively manage and optimize IT operations while they concentrate on their core business value drivers.

As IA becomes a significant component of IT strategies, successfully implementing IA platforms will be imperative. However, before even considering IA, businesses need to have a fundamental understanding of their IT environment. Without a clear framework in place, IA won't solve any problems. MSPs can bring the expertise to establish that necessary framework and mature the business' IT environment so that it's ready for IA.

WHY HAS MILESTONE CHOSEN TO EXPLORE INTELLIGENT AUTOMATION?

We leverage IA to perform routine IT functions and optimize the way effective processes are implemented. As those processes evolve and become more complex, we've started to utilize IA's advanced pattern recognition and learning capabilities to drive even more efficiency in our clients' environments. This ensures that our personnel can focus on critical technical issues and high-level strategies to help our customers drive even more business value.

Additionally, the economics of IA has become extremely compelling, especially when compared to legacy models like offshore outsourcing. Moreover, IA delivers a much higher degree of quality and consistency in IT operations—something that our customers require as they become more dependent on digital business models to drive revenue.

WHICH OF MILESTONE'S SERVICES WILL BE LEVERAGING INTELLIGENT AUTOMATION?

Our initial focus is on Network Operations, Service Desk, and Data Center services, but any area within IT infrastructure and operations can benefit from IA. While reducing ticket-handling time is a major goal, an even better outcome is to eliminate the root cause of the ticket, reducing outages and operational interruptions as close to zero as possible. With more and more incidents handled by IA, our skilled technicians can dedicate more of their time to creative problem solving and problem elimination, thus accelerating progress towards a fully resilient and reliable infrastructure for our clients.

HOW DOES PARTNERING WITH IPSOFT CHANGE MILESTONE'S CAPABILITIES AS AN MSP?

We reviewed and considered a number of partners as we endeavored to enhance our capabilities. IPsoft offered the industry-leading solution for IA but also committed to a true partnership with Milestone. This partnership enables us to unite our extensive experience working with major companies in the tech industry with IPsoft's innovative technology platform that has enabled scalability for their large financial services and technology customers. In addition, we believe the mid-market is underserved with respect to bringing IA capabilities to play, and Milestone plans to address this with our IPsoft partnership.

WHAT ARE SOME OF THE CHALLENGES OF IMPLEMENTING AN INTELLIGENT AUTOMATION PLATFORM?

Effectively implementing IA can't be accomplished overnight—it's a process; a journey. So, the biggest obstacle that businesses face is trying to short circuit that journey. Upwards of 50 percent of IA implementations fail because the foundation of governance, processes, and data weren't in place before automation began. Therefore, companies need to establish a solid IT Service Management baseline before considering IA platforms by:

- Understanding their IT environment in detail
- Mapping dependencies in their architecture and tools
- Establishing clear governance
- Developing effective processes
- Documenting procedures
- Defining metrics and analytics to measure and review to progress towards goals

Without establishing these fundamentals, a business doesn't truly understand its IT environment. With 20 years of industry experience, this is a journey that Milestone thoroughly understands, and we can help our clients navigate it.

WHAT EFFECT WILL INTELLIGENT AUTOMATION HAVE ON IT OPERATION TEAMS AND END USERS?

People sometimes fear automation because they suspect it will eliminate their job, but that fear is largely unfounded. Automation eliminates the mundane work that often prevents people from focusing on what they are really good at. By leveraging IA, we enable people to be creative and apply their skills to higher-level problem solving. This, in turn, allows businesses to reinvest their human capital into business-critical work that is both rewarding to the person and essential for the company. Automation hones and refocuses a workforce and often leads to more satisfying work by allowing people to develop their core competencies while the automation platform takes care of the routine tasks.

HOW CAN THE RIGHT MSP MAKE A DIFFERENCE?

Although IA is capable of significantly improving IT operations, how it is implemented is key to its success. Whether a business is new to automation or already has some internal automations in place, a partnership with an experienced MSP can provide the skilled personnel, mature processes, and industry experience necessary to help businesses prepare for integration with IA by establishing a strong IT foundation. Beyond just implementation, MSPs can leverage IA to fundamentally improve back-end infrastructure, significantly reduce ticket volume, and prioritize business-critical objectives that keep IT operations at peak performance. However, the choice of MSP is critical. Enterprises need an MSP that has experience scaling with clients, has established true strategic partnerships with carefully selected platform suppliers, is rigorous but flexible about building upon a solid IT Service Management Foundation, and is an agile partner who will collaborate effectively. Milestone is all of that, which is why our clients continue to grow with us.

¹ [Gartner Newsroom](#)

² [CIOinsight.com](#)



Scaling Infrastructure with **Intelligent Automation**

Today's CIOs and IT leaders face more demanding responsibilities than ever before, and given businesses' ever-increasing reliance on IT, they are expected to accomplish more while minimizing costs. Most modern enterprises now consider CIOs as strategic business partners whose initiatives help drive both the top and bottom line:

- Drive digital transformation agendas for the company's business model
- Lead and deliver on key application implementation projects
- Maintain consistent superior quality operations
- Enable scale by optimizing infrastructure

When these expectations are added to the foundational responsibilities of building and operating basic IT infrastructure, the role of the CIO can become complex and rife with interruptions. As CIOs face more pressure to drive rapid scale, there is great temptation to bypass critical IT fundamentals. For example, outsourcing basic IT functions to a low-cost, offshore model may seem like a viable approach. However, businesses who do so typically struggle to regulate and maintain service quality, ultimately undermining their growth potential. Moreover, scaling through labor alone ultimately requires more and more labor, creating additional complexity for IT leaders to manage.

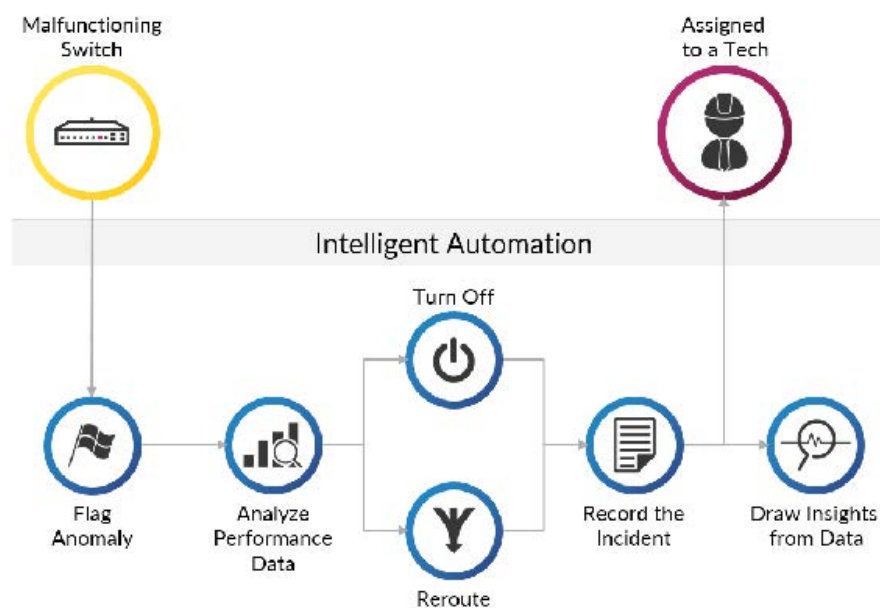
So, how can CIOs develop an approach that helps them accomplish more while ensuring efficient scalability? One answer is Intelligent Automation.

“IA offers significant benefits when factored into the business's overall IT strategy and approach.”

What is Intelligent Automation?

Intelligent Automation (IA) is a system that uses machine learning to interpret data, make decisions, and take action on those decisions. IA systems learn from both patterns and human guidance, going beyond the capabilities of scripted bots found in traditional automation. Rather, IA tools analyze incidents to independently seek out solutions and make predictive adjustments. IA is incredibly powerful in IT environments because of its ability to not only infinitely scale repeatable work, but to do so consistently and with high quality.

To fully understand how IA differs from standard automation, let's follow the example of a malfunctioning network switch. In a traditional automation approach, this situation will be flagged and escalated to a technician for further troubleshooting and remediation. IA, on the other hand, will not only recognize the anomaly, but will analyze the performance data and decide on a specific remediation to address the issue. If the issue cannot be resolved through automation, the IA platform will only then escalate to a technician. The IA platform will not only record the incident, but it will shadow the resolution process to improve the outcome of possible future events. Also, if the issue is pervasive across the environment, it will study the aggregated data to draw insights about reoccurring problems so that the root cause can be addressed and resolved. Traditional automation, conversely, will simply continue to flag future incidents without a mechanism to develop better intelligence.



How Does IA Contribute to Scalability?

IA offers significant benefits when factored into the business's overall IT strategy and approach. In fact, businesses leveraging IA can expect to experience increased efficiency, better performance, and reduced costs, all of which help improve IT operations and positively impact business outcomes.

The real benefit of IA, however, is the ability to scale rapidly with high quality. By using IA to streamline mundane and time-consuming IT tasks, CIOs have the opportunity to reprioritize critical talent to more strategic work across the organization. And, by working smarter, businesses can expect to attain a higher-performing IT infrastructure that is capable of scaling efficiently.

Implementing IA Effectively

IA offers a viable solution for CIOs to eliminate guesswork, optimize processes, and scale efficiently -- but only when implemented correctly. With proper visibility and knowledge of IT fundamentals, IA can be a revolutionary tool for businesses. These fundamentals include:

- **Valuable data:** The starting point is good data generated by sound fundamental processes. With those in place, IA tools can gain a contextual understanding of different business environments by gathering information and identifying patterns.
- **Knowledge base:** It's important to have a robust knowledge base about the IT environment through in-depth documentation of infrastructure and processes. This may require instituting proper governance for maintaining a current knowledge base of processes, such as change management, service updates, etc.
- **Operational awareness:** Before implementing IA, it's important to be aware of bottlenecks and operational workflows. Through service blueprinting, CIOs can analyze service tickets and infrastructure failures to identify areas for service improvement and also record effective business processes to mirror when implementing IA.
- **Process visibility:** IA is most effective for reducing repeatable errors, especially when applied to large-volume processes and tasks that are repetitive in nature. By identifying "quick-fix" tasks, such as email authentication and password resets, IT leaders can maximize the effectiveness of their IA implementation. Likewise, by recognizing which processes are more error-prone, IT leaders can discern where automation can most likely mitigate the risk of error.

Finding the right partner

When formulating a strategy that includes IA, it's important to recognize that IA is not a like-for-like replacement for existing personnel and processes, but rather, an enhancement. IA alone is not an end-to-end IT solution and needs to be implemented and managed sensibly to reap its full benefits. When it comes to tackling such a challenge, IT leaders must juggle maintaining day-to-day businesses operations and delivering on digital transformation initiatives with devoting the time necessary to achieve a successful outcome with IA.

Rather than embarking on the IA journey alone, CIOs can ensure success by partnering with the right Managed Services Provider (MSP) with strong IT fundamental capabilities and data-driven expertise. Businesses looking to scale with IA should seek experts that offer the following qualities:

- **Experience scaling up:** An automation project that can't scale up turns into an expensive experiment; thus enterprises need a partner that understands how to scale. Digital transformation puts inevitable stress on IT infrastructures, and businesses can't afford to fall behind from either a financial or scheduling perspective.
- **Pragmatic approach to ITSM maturity:** Effective IA implementations focus on data and process first, and only then apply tools to address specific requirements. It's critical that CIOs seamlessly translate IT projects into business initiatives, so having a sound approach to ITSM is crucial.
- **Technology insight:** To drive business value, enterprises need a carefully selected, comprehensive toolset that leverages existing investments but also drives consolidation and automation over time. Trying to integrate too many "best of breed" solutions at one time is extremely difficult, and smart MSPs know that it's best to start with a comprehensive, extensible platform.
- **Flexibility and honesty:** The relationship between enterprises and MSPs needs to be agile and collaborative so that both sides are learning, growing, and aligned with business goals. One-sided relationships, or those based on rigid, contractual rules, tend to break down over time, resulting in a less-than-stellar outcome.
- **Continual service improvement:** Effective MSPs ensure long-term success by using data to make strategic decisions that consistently improve performance. Continual service improvement is a crucial component of any IT strategy and is a key ingredient required to derive sustainable value from IA tools.

By increasing efficiency, improving availability, enhancing performance, and reducing costs, IA offers businesses the tangible benefit of rapid scale, but only with the proper strategic approach and expertise.

WHY DO YOU NEED AN ALM STRATEGY?

How does an organization manage the IT assets that their business relies on? Do they have a methodical, proactive strategy in place or something more rudimentary and reactive? Most importantly, how can this strategy be used to add value to their business?

Asset Lifecycle Management (ALM) is the process of purchasing and managing an IT asset throughout each phase of its lifecycle, from its initial procurement to its final decommissioning. An IT asset is any type of hardware or software necessary to an IT operation (laptops, mobile devices, servers, etc.), and its life refers to its total period of functionality or ownership. Though ALM may seem like little more than an obligatory, routine procedure, there are several significant benefits organizations experience when they have an effective ALM strategy in place. As such, more and more companies are recognizing ALM as an indispensable component of an optimized IT strategy.

WHAT ARE THE BENEFITS OF IMPLEMENTING AN ALM STRATEGY?

There are several notable reasons why ALM has become increasingly essential to successful businesses. From streamlined daily operations to substantial cost benefits over time, organizations can expect to see some significant process improvements and more opportunities for scalability by implementing an effective ALM strategy.



Fortified IT Infrastructure: Assets that are improperly transferred, stored, imaged, or maintained can encounter performance deficiencies later on in their lives or have their periods of functionality cut short. A comprehensive, standardized ALM strategy, however, prevents these kinds of issues and maintains optimal asset performance levels by ensuring that an established setup procedure and regular maintenance and refresh schedule are in place. For example, having a dedicated data center ALM team to conduct regular hardware refreshes helps ensure that the leading data center technology is always being used. In addition, the ALM team monitors server performance with asset lifecycle reports to help keep their company attentive to performance levels.



Improved Network and Device Security: ALM increases visibility into the security levels of an organization's assets. Through consistent security monitoring procedures, companies have more accurate insight into how well their practices meet information security compliance standards. An IT environment with poorly maintained equipment is not only inefficient, but also vulnerable. By establishing standardized timelines and procedures for the setup, maintenance, and decommissioning of assets, ALM helps prevent security breaches caused by obsolete, compromised, or inadequately installed hardware and software.

In the case of a data center, ALM facilitates the proper setup of a Network Operations Center (NOC) to ensure that data center activity is accurately monitored and secure information is thoroughly protected from potential exploitation later on. Outside of the data center, predetermined and documented protocols for collecting and decommissioning user assets enable efficient and secure data destruction to safeguard companies' sensitive information. With more and more companies implementing "bring your own device" policies, ALM also maintains security levels throughout the organization and impedes network threats by ensuring that assets not owned by the company remain protected.



Enabled Business Scalability: Growing businesses require IT assets and asset management processes that not only scale with them, but also promote scalability. As such, effective ALM strategies are not only reactive, working to monitor and quickly resolve asset issues, but also proactive, helping to facilitate business growth. For example, data analysts work with ALM teams to ensure that their company purchases servers, switches, and load balancers capable of handling the volume increases the analysts are tracking. These teams also collaborate to develop plans for purchasing and setting up new racks, or even whole new data centers, to accommodate business growth.

Moreover, Gartner estimates that 70 percent of businesses have a 30 percent discrepancy between their intended asset portfolio and their actual asset inventory.¹ With enhanced visibility into their asset portfolios, ALM plays a key role in a growing organizations' asset management capabilities. An effective ALM strategy that meticulously tags, tracks, and maintains assets enables businesses who are planning an Initial Public Offering (IPO) to readily perform inventory counts across multiple locations around the globe. This consistent visibility into asset inventory is not only key for audit preparation, but also imperative for ensuring SOX compliance. ALM teams can also develop practices for mitigating asset waste, thereby reducing unnecessary asset purchases and creating cost savings that can help their organization scale. In this way, smart ALM empowers maintenance of IT assets so that organizations can stay ahead of the curve and proactively position their business for continued expansion.



Ensured Business Continuity: As IT assets continue to become more and more necessary to companies' day-to-day functionality, consistently maintaining and optimizing them becomes equally important. Effective ALM works to prevent potential disruptions caused by improperly imaged or obsolete assets altogether so that daily business always runs smoothly. Developing a comprehensive plan for change management in a data center helps prevent potential loss of bandwidth and operating speed.

This plan might include ensuring that backup servers are properly installed before racks are switched out to avoid or reduce potentially lengthy network downtimes. In front-end offices, a proactive ALM strategy ensures employees receive hardware and software upgrades as soon as they're needed and before they encounter technological hang-ups that disrupt their productivity. With reliable, optimized assets, employees are able to maintain consistent productivity levels.



Reduced Costs: Organizations with an effective ALM strategy are positioned for dramatic reductions in overhead costs. Indeed, Gartner estimates that businesses who execute an effective ALM strategy experience 30 percent cost savings in the first year of implementation and at least 5 percent cost savings in each of the following five years.² ALM saves companies money by monitoring asset performance and ensuring that replacements for obsolete equipment are purchased before aging assets create business inefficiencies.

In the example of a data center, the risk of network downtime and disruptions to productivity—all of which result in massive costs to companies—is prevented or mitigated via strategic ALM. ALM also prevents loss of physical equipment, such as hard drives, with standardized tagging and space management procedures. In turn, this promotes increased visibility into organizations' asset inventories, helping to avoid needless or redundant purchases later on. With assets consistently maintained and regularly updated, lifecycles are extended so that new equipment doesn't need to be purchased as often, reducing assets' total cost of ownership (TCO).

Determine the ALM Strategy That's Right for Your Business

The scope of an ALM strategy might vary depending on a company's unique goals. Regardless of scope or scale, however, more and more organizations are realizing the value of having an ALM strategy in place. Even if a company's initial ALM strategy involves manually filling out a spreadsheet to keep track of asset inventory, it can be a critical step toward achieving process optimization and business growth. The significant benefits that ALM affords organizations are becoming increasingly indispensable as data centers evolve into hybrid environments, so explore what kind of ALM strategy your business needs to achieve its goals.

¹[Service Management: Asset Management Statistics & ROI Equations](#)

²[IT Asset Management: It's All About Process](#)

Data Center Relocation: What Should You Know?

Data Center relocation can be a daunting and often costly undertaking for an enterprise, but more and more businesses are considering relocation as part of their overall optimization strategy. Yet, what is motivating companies to relocate their data center operations? The evolution of Big Data, the explosive expansion of the Internet of Things (IoT), and the ever-increasing push toward virtualization certainly incentivize companies to consider relocation. However, there are several other key factors currently driving data center relocation:



Increased performance capabilities: Whether it's the growing number of IoT devices, internal company growth, the surge in streaming applications, or increased server throughput, data centers must keep pace with faster data speeds—and this often translates into more space to support the increased performance demands. Conversely, businesses that move more of their data center operations to the Cloud may find that their data center's current footprint is too large.



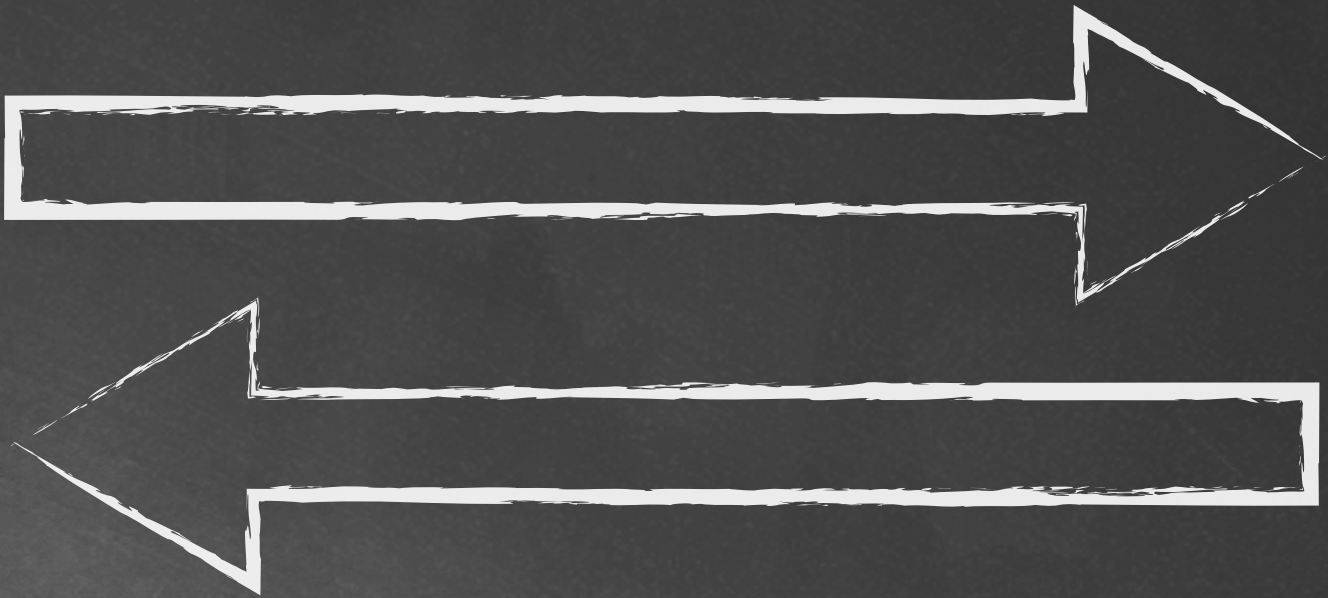
Geographical proximity: The primary motivation for relocation is to locate data centers closer to client markets, other branches of an enterprise, or closer to other resources. However, frequency of natural disasters, inclement weather, or other security concerns can also necessitate a relocation.



Reduction in capital expenses: While potential reduction in size or energy consumption undoubtedly informs a company's need to relocate their data center, there are several states offering data center-specific tax breaks to incentivize major tech companies to expand into growing markets.¹



Improved energy efficiency: Five years ago, The New York Times released a scathing review of data center energy practices, noting that data centers can waste 90% of the energy they pull from the grid.² Much of this waste stems from the internal temperature regulation required for data center equipment to run optimally. Consequently, many companies are relocating their data centers to more hospitable climates that allow them to minimize energy consumption and environmental impact.

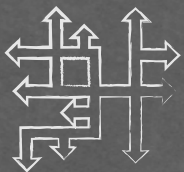


CHALLENGES OF DATA CENTER RELOCATION

Data center relocations will invariably introduce challenges that are unique to that specific data center and location, but there are several common issues businesses often encounter:



Preparation: The biggest challenge every company faces with data center relocation is planning. Accounting for the voluminous workload or the massive strain the move can put on equipment and system functionality is critical for a successful move. Additionally, businesses should ensure that communication with application owners is established early to pinpoint the appropriate timetables for application migration.



Hidden complexity: Although a company may have an extensive IT staff, their employees may not have extensive experience with back-end equipment setup and maintenance. Data center equipment is extremely sensitive, and improper breakdown, transportation, or storage can significantly impact its future performance, and potentially cost businesses more if equipment needs to be replaced. Businesses who do not regularly maintain inventory, or who do not take a comprehensive inventory before the move, may also discover legacy hardware or software as well as hardcoded IPs that will be difficult to migrate.



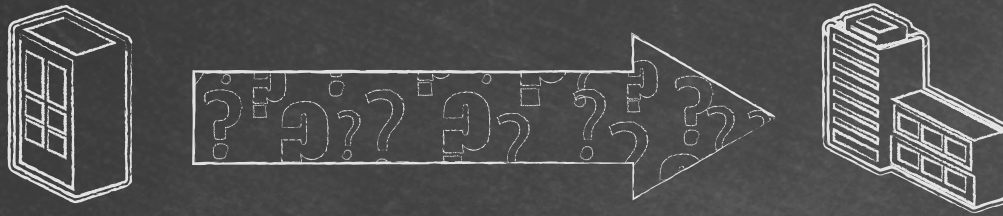
Downtime/uptime: Data center relocations are massive projects that can impact regular work hours and employee productivity. Since data center infrastructure is a complex web of interdependent servers and systems, creating a careful schedule for server or application downtime is imperative to minimize impact to employees and customers alike. Furthermore, relocation preparation and post-relocation testing can be extraordinarily time consuming. To avoid downtime, it's important to account for the extra strain on staff and internal systems.³



Configuration: Application Delivery Optimization (ADO) is a broad term that covers several key components of an enterprise's data center infrastructure that support efficient distribution of data traffic across your servers. Lack of insight into how the current configuration of load balancers and other optimization products that will handle the relocation can significantly hinder a company's ability to quickly set up their new data center operations. A lack of modularity in current configurations could also result in a reduction of operation performance after the move.

FIVE IMPORTANT QUESTIONS TO ASK BEFORE RELOCATING YOUR DATA CENTER

While the ramifications can be severe, the key to circumventing these obstacles—and any other unforeseen challenges that may appear—is developing a proactive relocation strategy well in advance of executing the move.



If a business is considering moving its data center operations, it will be better equipped for success by considering the following questions:

1. What is the scope of the relocation?

To better gauge the demands a move will place on a business's resources and personnel, clearly define the scope of the relocation early in the planning process. Will the relocation involve expanding an existing site or entirely building out a new location? Additionally, businesses should also account for the lifecycle of their equipment when moving. If a new version of server hardware will be available imminently, ensuring that the new data center can accommodate the equipment—both in terms of physical space and power requirements—will dramatically improve the longevity and performance of data center infrastructure.

2. How do you determine the right location?

Finding the right location for a new or expanding data center can be daunting, but diligently analyzing the size, power, and security requirements of the new location insulates businesses from unforeseen expenses. When determining the appropriate spatial and power requirements for a data center, consider if the location leaves room to grow. Additionally, take the time early in the planning process to assess security measures—like fences, locks, or badging equipment—and identify any additional measures that are needed to meet security standards.

3. What are the best practices for tracking equipment?

Companies should take inventory of equipment and monitor its transportation to the new location. Should staff create barcodes and manually scan equipment in and out of each location, or should companies rely on Cloud-based tracking software? Data centers require extensive hardware components to function, and losing even small amounts of cabling can extend system downtime and severely impact a business' ability to function. Develop a clear methodology for tracking and determine if there are sufficient resources to accommodate that approach.

4. Are there compliance factors to consider?

Ensuring that a new data center meets information security compliance standards is critical, especially if a business's server traffics payment card information or Protected Health Information (PHI). Businesses should review prior audits to clarify their data center's current state of compliance and use the move as an opportunity to remediate any gaps for future audits.

5. How will you execute the relocation?

Successful data center relocations require a significant amount of time and manpower. From taking inventory and breaking down servers to setting up equipment and testing functionality, moving a data center can necessitate overtime for staff and prolonged system downtime. Additionally, data center equipment is fragile and correctly implementing this equipment at a new location requires extensive experience. As such, businesses should weigh the benefits of executing a move in-house against leveraging the expertise of a Managed Services Provider.

Although relocating business-critical assets can be difficult and time consuming, thorough planning will ensure a seamless transition of data center infrastructure. Moreover, a meticulously planned relocation minimizes impact to both staff and customers while providing businesses with an opportunity for growth.

¹ [Data Center Companies Seek Tax Incentives](#)

² [Power, Pollution and the Internet](#)

³ [Colocation Hosting: Challenges in Data Center Migrations](#)

ABOUT MILESTONE

Milestone Technologies, Inc. is a Managed Service Provider focused on shaping the way technology is delivered within both the enterprise and the consumer space. Since our inception in 1997, Milestone continues to expand, achieving a consistent 25 percent growth rate over the last 9 years. We currently employ more than 2,000 employees who serve a base of over 200 companies in 21 countries. Milestone is driven by skilled and experienced people who are determined to help businesses and end-users get the most value from their technology investments.

A photograph of a grand, ornate library interior. The ceiling is high and features intricate woodwork and painted medallions. A large, ornate chandelier hangs from the ceiling. The walls are lined with tall, dark wood bookshelves filled with books. A balcony with a metal railing is visible, also holding books. The overall atmosphere is one of historical grandeur and intellectual pursuit.

For more information visit the
Milestone Resource Library:

<https://www.milestonepowered.com/resource-library>





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