

# MILESTONE 360 MAGAZINE

VOLUME 1, ISSUE 2

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An aerial photograph of a city skyline, likely New York City, taken from a high vantage point. The sun is setting or rising, creating a warm, golden glow over the city. The sky is filled with soft, orange and yellow clouds. The city buildings are densely packed, and the water of the harbor is visible in the distance.

*Shaping the way  
technology is delivered.*

# FOREWORD

For 20 years, Milestone Technologies Inc. has been revolutionizing the way IT is deployed and supported worldwide. As a Managed Services Provider (MSP), we've partnered with some of the largest global enterprises to develop innovative solutions that help businesses grow, and our experiences have equipped us with valuable knowledge about the important issues and trends dominating the tech industry.

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 first issue, we explored best practices for overcoming IT challenges and discussed the fundamental concepts and questions surrounding Managed Services. In this issue, we will consider how IT leaders can drive progress and deliver strategic business value through effective communication and data-driven decision making. And lastly, we will examine the evolving and expanding landscape of data centers.

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.



# Best Practices for an Effective IT Strategy

Information technology (IT) is revolutionizing almost every aspect of how businesses operate. Organizations are steadily recognizing and leveraging the long-term benefits of IT capabilities, such as risk mitigation or reduction in overhead costs. IT teams are developing innovative, new solutions for resolving inefficiencies, reducing costs, and achieving scalability. For some teams, innovation comes in the form of new software that streamlines operations for sales or finance. For others, IT advancements are manifested as a reduction in network lag times or environmentally conscious processes.

In short, the relationship between business and IT is evolving, and IT leaders must embrace their essential role in driving organizational progress. So, how can IT departments contribute the most strategic value to business stakeholders? Here are 5 practices for developing and implementing an effective IT strategy:

# ONE.

## ALIGN WITH EXECUTIVE EXPECTATIONS

This year, 41.7 percent of executives consider business alignment to be the primary concern for IT leaders. Thus understanding and exceeding executive expectations should be a top priority for every IT team.<sup>[1]</sup> As key decision-makers, executives are responsible for establishing and directing organization-wide initiatives that reinforce business goals. The onus is on IT leaders to develop tailored strategies that align with the executive direction, forging a supportive relationship between the enterprise and IT.

Having executive support is helpful for multiple reasons. A mutual partnership between IT and management can be beneficial for securing crucial resources. When IT and executive teams are unified, stakeholders are more likely to accept transitions to new systems and processes that may disrupt the status quo. Finally, working with organizational decision-makers ensures that all IT projects serve a business purpose and support overarching objectives, for example increasing market share or outperforming competitors.

# TWO.

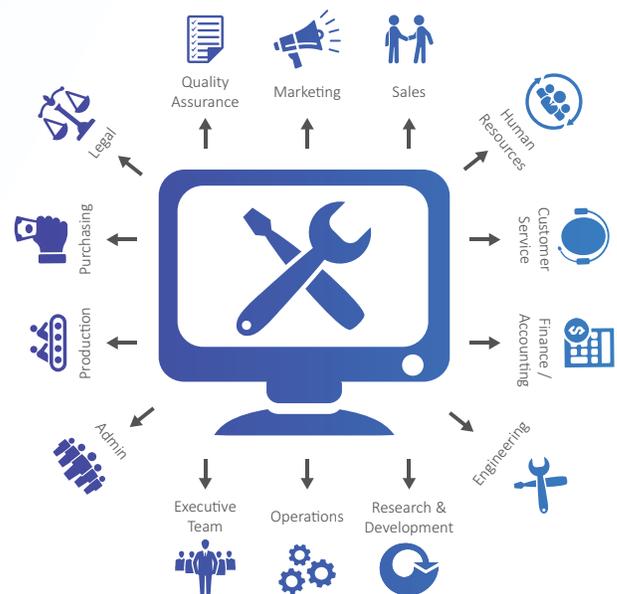
## LISTEN TO ENTERPRISE NEEDS

All functional enterprise departments rely on IT to enable and drive day-to-day operations. So driving a successful IT strategy is highly reliant on an open dialogue between departmental and IT leaders. When asked to evaluate the pace of technological change in the workplace, 63 percent of managers found progress to be slow, due mainly to poor communication regarding the strategic benefits of new tools.<sup>[2]</sup>

It's important, therefore, for IT leaders to be mindful of how they communicate technical concepts with department heads by using language that emphasizes potential benefits – improved customer service or smoother business operations, for example. As tech experts, IT leaders should address and define operational objectives with department heads and then design solutions for achieving those objectives with the rest of the IT department. On the other hand, when IT is delegated tasks from other departments without considering alternative approaches, businesses risk missing opportunities for improvement.

One way to ensure that IT initiatives are aligned with stakeholder expectations is to create a framework for defining enterprise-wide strategies.

In some businesses, this could be a SWOT (strengths, weaknesses, opportunities, and threats) analysis or the OGTM (objectives, goals, tactics, and measurements) method. Frameworks like this also enable IT departments to compare departmental plans to find common objectives and suggest consolidated solutions.



# THREE.

## EXAMINE DIFFERENT SOLUTIONS

IT solutions are critical for driving innovation, value, and cross-functional business operations. After partnering with upper and departmental management on defining strategic initiatives, IT departments should consider which technologies and processes are best suited for meeting the needs of the enterprise.

For example, if a business is having challenges tracking devices, how can IT facilitate effective asset management? A small organization might only require basic tagging and inventory documentation. However, for expanding organizations, implementing a comprehensive Configuration Management Database (CMDB) provides device lifecycle visibility and automated inventory alerts, enabling scalability and longevity for future expansion.

Similarly, if an employee needs IT assistance, what is the best way for he or she to connect with a technician? For a smaller organization with a lower frequency of incidents, it might make sense for employees to report issues through a ticketing software platform. For workforces that require more hands-on support, desk-side assistance or a walk-up help desk may be the best solution. If technicians notice recurring incidents, then it might be of interest to employ a service desk component for more strategic support. All three solutions offer unique advantages, so it's important to consider multiple factors before kicking off formal implementation.



# FOUR.

## DESIGN AN INSTRUCTIONAL FRAMEWORK

Periods of change can be stressful for employees, especially when prompted by technology. Maintaining morale and productivity is key for a successful transition, so IT leadership and Human Resources (HR) should work together to design an instructional framework for training employees and addressing issues.<sup>[3]</sup>

Instructional frameworks vary by company culture. If a workplace is comprised primarily of early technology adopters, then a minimal framework for supporting and enforcing best practices, such as an online knowledge base, might be preferable to a robust training program. However, a different demographic of employees might benefit from a combination of visual, auditory, or experiential methodologies.

<sup>[4]</sup> One effective approach for ensuring that employees successfully adopt new tools is to involve them in the installation and setup process. When stakeholders play an active role in implementing technology, they are better equipped to use it properly and recognize abnormalities.

Finally, it's important to consider the method of consumption for training programs. Will employees need to have access to instructional resources on desktops, laptops, smartphones, or all three? Who is responsible for ensuring a smooth flow of information across departments? In order to avoid chaos and boost confidence, IT and HR departments should create a detailed communication plan to clearly address all of these questions before introducing new technology to the workplace.

# FIVE.

## ANALYZE AND REVISE

No IT strategy is flawless. But in order to evolve, IT departments must be diligent about leveraging analytics to facilitate data-driven improvements and revisions. Outcomes of major IT programs should be evaluated against benchmarks defined by business stakeholders early on, such as the number of employees transitioned to a new technology or the amount of reduction in system-wide interruptions.

If there is a discrepancy between results and expectations, then is there a key functionality that IT has overlooked?<sup>[5]</sup> Network Operations Centers or IT Service Management tools are effective mechanisms for gaining insight on fluctuations in business performance. Even by following basic practices such as tracking IT contracts or using standard terminology for components, IT departments have the opportunity to consolidate equipment, reduce spending, and achieve deeper technology knowledge.

The rapid advancement of technology is placing IT at the forefront of industry leaders. Executives and stakeholders are increasingly turning to IT for innovative solutions that not only lower costs, but also increase efficiency and add competitive value. Given the wide range of business expectations, successfully implementing an IT strategy can be challenging. But following these five practices can position IT departments to better understand and deliver on strategic goals.

<sup>[1]</sup> [CIOs' Top Three Concerns for 2017: Alignment, Security, Skill Shortages](#)

<sup>[2]</sup> [Convincing Skeptical Employees to Adopt New Technology](#)

<sup>[3]</sup> [5 Steps to Building an IT Integration Plan](#)

<sup>[4]</sup> [How to Train Employees on a New Software Rollout](#)

<sup>[5]</sup> [How to Help Employees Embrace New Technology](#)

# SHAPING THE CUSTOMER EXPERIENCE WITH IT



Customer experience (CX) seems to dominate every conversation about enterprise strategy – but what exactly is CX, and why is it so important to today’s business leaders? According to Gartner, CX is “the practice of designing and reacting to customer interactions to increase customer satisfaction, loyalty and advocacy.” The concept of catering to the client certainly isn’t new, but in an age of unprecedented customer access to research and comparative experiences, CX is more important than ever for businesses to stay competitive.

## THE MODERN CUSTOMER

When you're looking for a new product to buy, do you make your purchase on a whim, or do you read user reviews, compare products, and come to an informed decision? If you're the latter type, then you're like most modern consumers who are not only aware of what to expect from a product or service, but are even able to influence or dictate the type of experience they receive.

With 55 percent of consumers willing to pay a premium for a guaranteed good experience, research on the impact of CX validates its prominence in business strategies. Conversely, 66 percent of customers who switch brands or providers do so because of poor service.<sup>[1]</sup> The bottom line is that if customers like a service, they are going to favor more business with that provider and recommend it to other potential customers. Thus, it comes as no surprise that over 50 percent of organizations plan to increase their spending on customer experience innovations by 2018.<sup>[2]</sup>

## WHO IS RESPONSIBLE FOR IMPROVING CX?

Successfully executing CX initiatives requires cross-organizational collaboration—from marketing and sales departments to finance and operational teams. IT teams can play a key role in helping business leaders leverage technology to evolve their CX and service delivery efforts. In fact, according to Gartner, business leaders consider the IT department to be a central element of CX initiatives in 80 percent of cases, indicating that companies today rely strongly on technology to differentiate them in a customer-centric market.<sup>[3]</sup> IT leaders supporting CX initiatives must therefore understand how to measure consumer standards in terms of quality, satisfaction, loyalty, and advocacy.

## SUPPORTING CX INITIATIVES WITH IT

IT leaders should pursue investments and organizational changes that enable enterprises to understand their customers' journey. This includes leveraging a Customer Relationship Management (CRM) platform that allows collection of key customer data across the enterprise. Additionally, IT teams must address the challenge around applying analytics to Big Data to drive key customer insights back to the business.

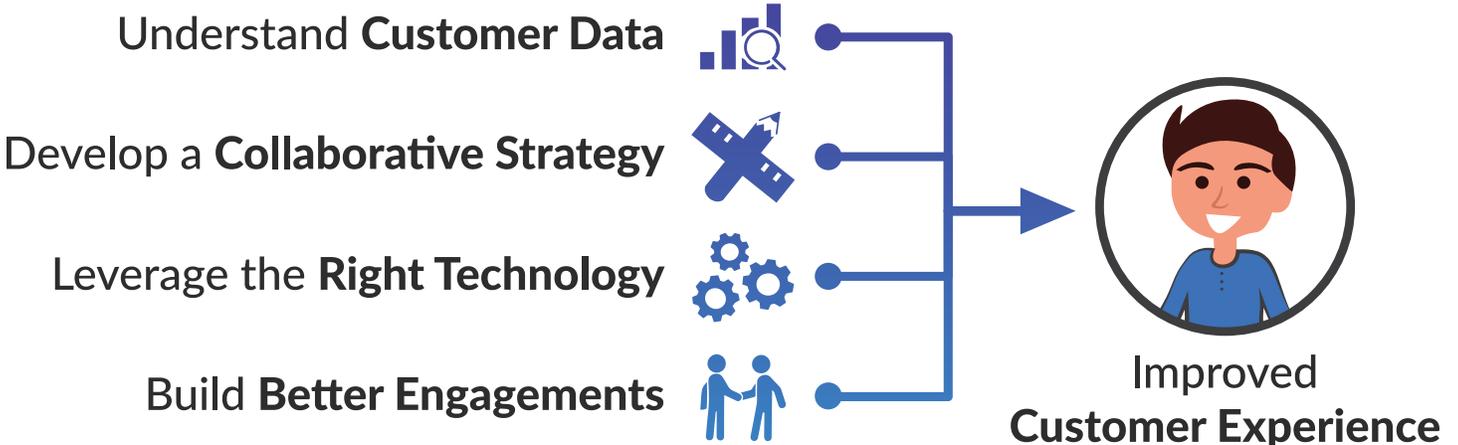
A CX initiative that is data-driven offers numerous benefits. Insights generated from consumer data position businesses to better understand the behavior of their clients at various touch points across the customer experience. This enables departments to improve their operations on multiple levels. Sales teams can use personalized customer profiles to create tailored interactions with prospective clients. Customer service representatives can ensure loyalty and retention by being proactive with support issues. And product experts can rapidly troubleshoot and resolve problems that matter to customers the most. The ultimate result is a better CX that drives trust and differentiates enterprises from the competition.

Improving CX requires a collaborative strategy that leverages technology and data to derive valuable insights for engaging consumers and meeting their needs. But before executing a CX initiative, businesses need to ensure comprehensive visibility into the consumer experience across all organizational levels. Only after enterprises have developed a solid understanding their customers' journeys, needs, and values can they begin to design a truly better CX.

<sup>[1]</sup> [50 Important Customer Experience Stats for Business Leaders](#)

<sup>[2]</sup> [Gartner Says Organizations Are Changing Their Customer Experience Priorities](#)

<sup>[3]</sup> [CIOs Play a Vital Role in Customer Experience](#)



# HOW TO TURN A SERVICE DESK INTO A DATA-DRIVEN OPERATION

## WHAT DOES IT MEAN TO BE DATA DRIVEN?

People rely on data when making decisions every day, often without even realizing it. For example: think about that new pizza restaurant down the street. Are you more likely to try it because it looks good, or because it scored 4.5/5 stars on Yelp, offers dishes between \$7 and \$21, and accepts Apple Pay?

When you use Yelp, you're not only analyzing data to inform your decisions; you're also inputting valuable customer data that businesses analyze to inform their decisions—from the amount of salt in their sauce to the UI of their online ordering tools.

Take Domino's, for example. As a response to mounting criticism on social media sites, like Yelp, the company embarked on an endeavor known as the "Pizza Turnaround." The data they gathered not only inspired recipe changes, but also motivated them to design and implement The Pizza Tracker app—a system that allows customers to order pizza from their mobile devices and even track the pizza creation and delivery process. These changes resulted in store growth, rising stock shares, and a 12 percent rise in customer satisfaction scores.<sup>[1]</sup>

Nowadays, customers and businesses are more likely to make decisions based on data than intuition because decisions based on data tend to produce better results. This methodology is referred to as being data driven, and IT leaders who apply a data-driven methodology to their Service Desk benefit from more insightful Business Intelligence (BI), allowing them to drive Continuous Service Improvement using an IT Service Management (ITSM) framework. As a result, they are able to optimize their performance and make informed decisions about their services, teams, applications, infrastructure, tools, and best practices.<sup>[2]</sup>



## WHY SHOULD MY SERVICE DESK BE DATA DRIVEN?

A Service Desk makes strategic decisions about processes that support a business's cross-functional goals. Often, these decisions impact budget significantly and have ripple effects on other departments within the organization. As a result, shifting to a data-driven Service Desk can pose a challenge for many organizations, but the benefits of becoming data driven ultimately outweigh the risks for many IT leaders. These benefits include:

### **Data helps IT leadership allocate resources and balance workloads for technicians.**

Ticket data allows the Service Desk to collect valuable information about incidents, identify which technicians are the most qualified to handle certain kinds of incidents, and assign tickets accordingly. This not only enables IT leaders to balance workloads, but also to make staffing decisions based on ticket volume. Ticket trend data may show that 90 percent of tickets are generated during normal business hours, so rather than staffing each shift evenly, the service desk may allocate fewer resources during off hours.

### **Data quantifies and measures the business value of the Service Desk.**

Data-driven Service Desks can establish clear, measurable, and achievable goals, and then use quantifiable data to show that those goals have been met, ultimately proving their business value.

### **Data acts as compelling evidence to justify IT budget decisions.**

Hard evidence is much more influential to decision-makers than recommendations based solely on opinion. A data-driven approach allows the Service Desk to provide concrete justification for budgetary requests and IT spending decisions.

### **Data allows support teams to contribute to the overall health of the service.**

Measuring data allows the Service Desk to determine necessary performance improvements and contribute to the overall health of the organization. For example, if onboarding takes three days on average before employees can be productive, the Service Desk may implement an automated onboarding process to set up user accounts and deploy necessary equipment, cutting onboarding time by 40 percent.

## TRANSITIONING TO A DATA-DRIVEN SERVICE DESK

So, how can you turn your existing Service Desk into a data-driven operation? It can be a lengthy process, but before you start, consider the following aspects:



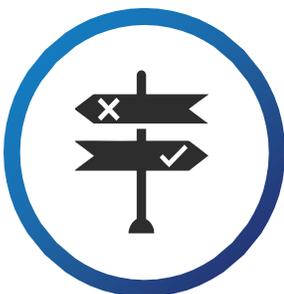
### Identify Your Needs

If you're making the choice to become data driven, be sure to identify not only why you want to become data driven, but why now. Avoid rushing into the lengthy process of altering your business intelligence (BI) strategy without a clear understanding of what prompted your decision. What needs to be measured, do you have the data, and how will those measurements improve your business?



### Be Prepared to Change

For most companies, becoming data driven has the potential to affect your corporate culture. This cultural shift begins when IT leaders agree to prioritize data and act as executive sponsors for making a transition. By nature, data-driven Service Desks need to adopt different decision-making processes, assign data management responsibilities, and consider any cross-functional impacts of change.



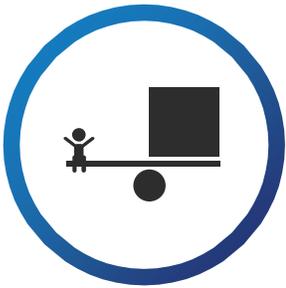
### Determine Standards, Methods, and Tools

Most Service Desks use IT Service Management (ITSM) tools that offer a variety of out-of-box data points; however, simply having access to data is not enough. In order to turn mountains of data into actionable information, you'll need to identify standards, methods, and tools to manage the data you collect. Then, you will need to organize and present your data in a meaningful way, such as a dashboard, to make it useful.



## Evaluate Your Skills Gap

Combing through terabytes of complex Big Data is a specialized skill that falls outside the realm of many Service Desks, so it's important to consider whether your company has the right skill set to make data useful. To address this challenge, many organizations have begun hiring Data Scientists, a relatively new IT position that is underrepresented according to 83 percent of the participants in a recent CrowdFlower poll.<sup>[3]</sup>



## Start Small and Scale

Use data to drive a small project with minimal stakes before diving into something big. The process of becoming data driven involves some trial and error, so starting small will allow you to experiment with your processes and with minimal impact to your organization. On the other hand, demonstrating success at a micro level will help you prove the business value of prioritizing data, which will help you secure executive sponsorship and allow you to scale to larger projects.



## Review and Re-Evaluate Your Measurements

Don't be discouraged if your initial set of measurements doesn't provide the insight you expected—you can continuously refine the questions your data needs to answer by re-evaluating your existing measurements or investigating new areas for data collection.

Transitioning to a data-driven Service Desk model requires dedication, but forming a carefully planned strategy can help companies minimize the period of trial and error that typically accompanies a data-driven change. Some companies have the bandwidth to strategize on their own, while other businesses may choose to leverage the experience and insight of a Managed Services Provider (MSP) to streamline the transition. In either case, making the switch to a data-driven methodology is a worthwhile way to increase the effectiveness of your IT.

<sup>[1]</sup>[Food Service Case Study: Domino's Pizza Turnaround](#)

<sup>[2]</sup>[Gartner IT Glossary](#)

<sup>[3]</sup>[2016 Data Science Report](#)

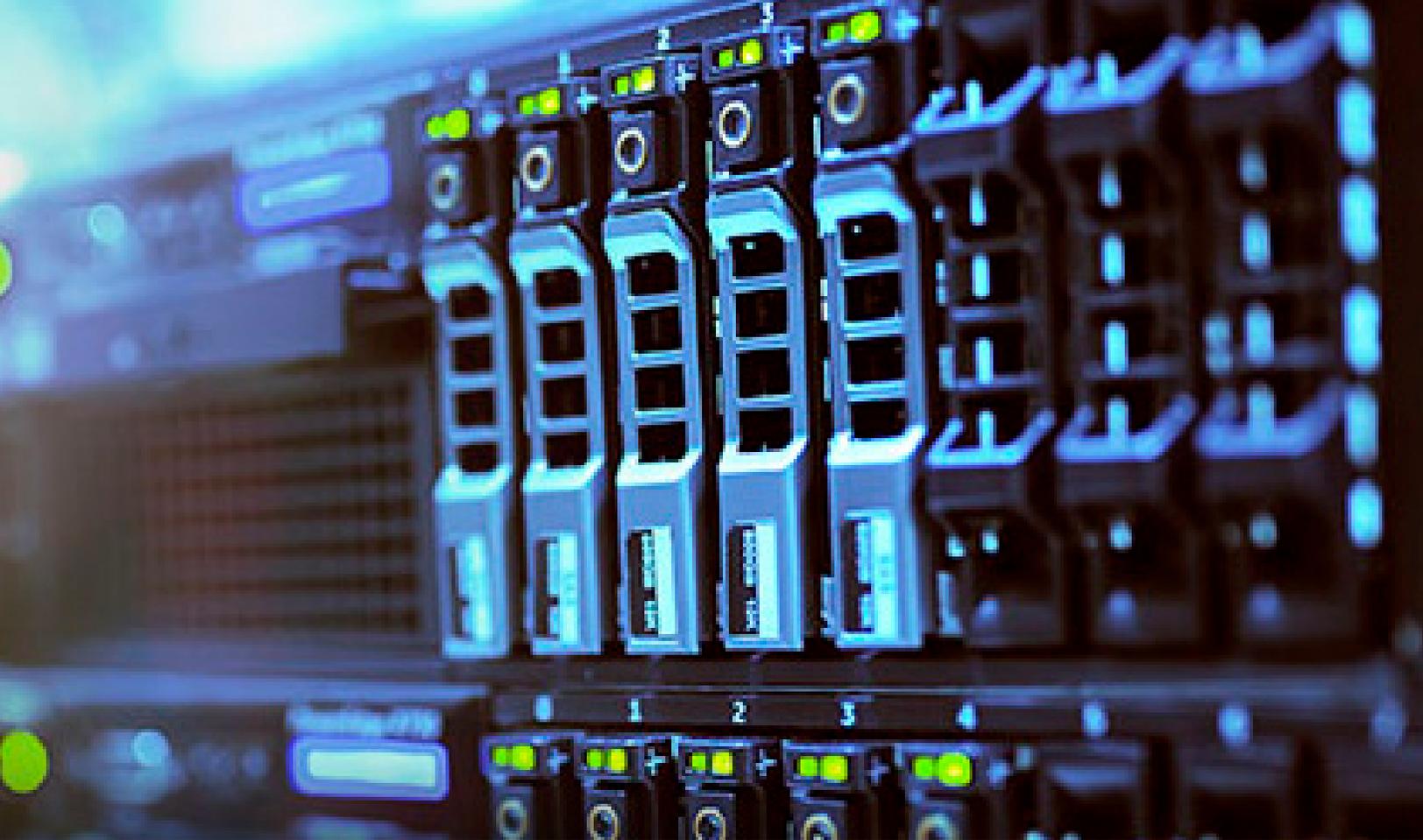
# COLOCATION

## THE EVOLUTION OF MANAGED DATA

In today's business landscape, data centers have not only become crucial for day-to-day operations in every industry, but they have also grown to be more complex and varied to help companies achieve their nuanced business objectives. Apart from a price tag that reads "most cost effective," several dynamics, including location, convenience, security, efficiency, and reliability should all play a critical role in the formation of any data center strategy.

Colocation data centers—which lease space to enterprises for data center hosting—have become increasingly popular as businesses are realizing the plethora of benefits of leasing from a colocation, or colo, rather than building their own data center infrastructure. The revenue generated by colocations in the past two years alone signifies their growing popularity. From 2014 to 2015, colocations increased their revenue from \$22.8 billion globally to a jaw-dropping \$27 billion. This explosive growth is projected to continue and reach \$33.2 billion in estimated revenue by 2018.

“From 2014 to 2015, colocations increased their revenue from \$22.8 billion globally to a jaw-dropping \$27 billion.”



## FLEXIBILITY

Compliance, hardware, software, security, energy efficiency, and cost have all contributed to the shift towards colos in the world of data and accessibility, but the ability to scale as needed is one of the defining benefits of leasing space from a colocation provider. Colocations offer volumes of flexibility compared to traditional in-house data centers because flexibility is built right into the design of most colocations. Enterprise IT leaders are discovering that renting space from a colocation provider offers significant savings while allowing businesses to scale on a manageable schedule without making large upfront investments in hardware. Instead, they can provision exactly the right type and size of computing resources they need to power their newest bright idea or operate their IT department.

Cloud-computing technology within colocations also allows expanding businesses to simply and easily lease extra space with their existing contract. Amazon Web Services (AWS) and Azure, for example, both have global footprints in the cloud computing space and provide flexibility to scale. AWS and Azure let users access as many resources as they need, almost instantly, and only pay for what they use. Because usage from hundreds of thousands of customers are aggregated in the Cloud, providers such as AWS can achieve higher economies of scale which translates into lower “pay as you go” prices.

## TECHNOLOGY

While the increase in connected devices has been beneficial to consumers and enterprises alike, the amount of data they generate and transmit will only continue to magnify. However, colocation facilities can mitigate the overwhelming torrent of information by acting as data processing powerhouses and aggregation points for clients’ data, which can also prevent internal servers from getting clogged with excessive information. Colos can redirect data traffic to underutilized servers through load balancers that help keep bandwidth efficient. The control of data currents is an essential component of cutting-edge colos that have a unique system of power redistribution.

The push to accommodate and improve the quality of high-bandwidth Internet services has established a whole new category of colo providers referred to as “edge data centers,” which bridge the gap between users and their access to data by increasing speed and stability. Furthermore, colocations can handle many core data protection tasks by offering enterprises with security edge in the form of advanced access control and robust network security through multi-tiered security protection systems and dedicated firewalls, all which ensure that our data is both internally and externally secured from hackers.

Colocations also offer advantages when it comes to consolidating various types of big data because they are primed for a high-density computing architecture. Rather than provisioning additional floor and rack space to accommodate increasing storage needs, facilities that follow a high-density model maximize computing power per square foot of space by housing multiple CPUs in each server – this means more data storage in less space. Colocations are generally ideal high-density environments because of their large energy capacities, optimized power delivery systems, and network interconnects. So by leasing colocation space, enterprises not only avoid the trouble of expanding their own infrastructure, but also reap the benefits of a more condensed and efficient computing architecture.

## RELIABILITY

As specialists in data center operations, colocation providers dedicate substantial resources to achieving robust network performance for their clients, backed by Service Level Agreements (SLAs). Uptime is a key factor for data center clients, and colocations have been shown to provide better reliability. In fact, when surveyed over the previous year, 7 percent of data center operators reported having experienced at least five “business impacting” outages while only 3 percent of colocations experienced similar issues. Colocations are proving themselves to be up to the challenge of providing reliability with an always-on environment.

## THE FUTURE OF COLOCATION

Colocation providers have forged a relationship with flourishing businesses seeking economic solutions for data center hosting. With the number of colocations undoubtedly on the rise, here are a couple noteworthy trends to keep an eye on:

### The Race for Unique Colocation Benefits

The four largest colocation providers only account for 16.8 percent of expected colocation revenues by the end of 2016, meaning that there is significantly more competition amongst colocation providers to offer unique benefits that will entice customers. As colocations spread into new markets, Data Center Infrastructure Management (DCIM) software, both internally and externally, is on track to become a major component of colocation services.

### The Changing Face of the Provider

As technology continues down the path of innovation, colocations will add new components and services to their infrastructures. The demand for a global infrastructure, support, and maximum capacity has pushed towards having lower latency and providing customers with a better experience at a minimal cost. Edge data center markets will expectedly continue to expand as providers build smaller hubs in areas that are increasingly bandwidth-hungry.

With 20 percent of all IT assets already housed in colocations and projected revenues skyrocketing, businesses expect their data to be secure, scalable, and easy to access. Colocation providers bear the responsibility of ensuring that these priorities are met.

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# OPTIMIZING DATA CENTERS WITH **HYPERCONVERGENCE**

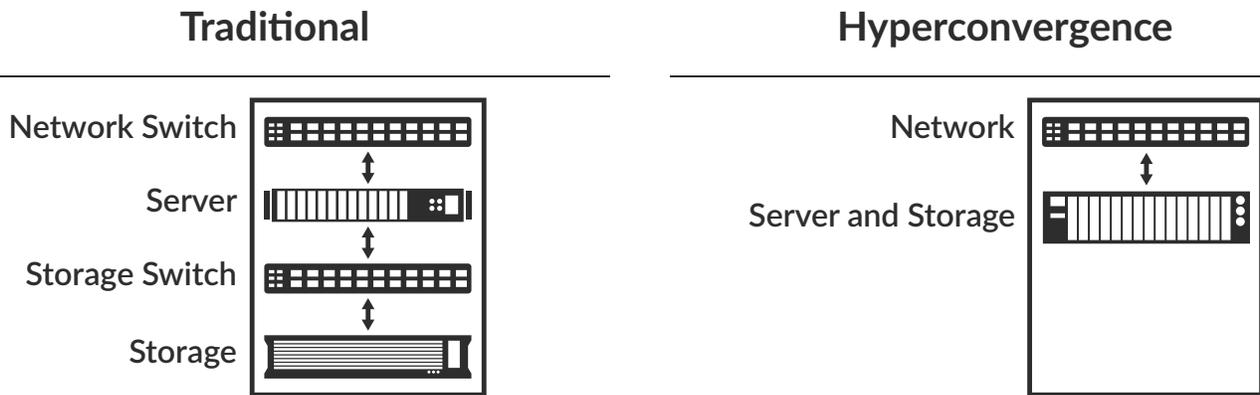
New applications, devices, and software are a dime a dozen in the data center industry. With each purpose-built point product that is introduced to the market, data centers become increasingly difficult to manage and operate. From divergent platforms and redundant processes to vendor conflicts and time-consuming inventory management, a complex data center with disparate components poses numerous challenges to business productivity.

“Over the course of the next decade, infrastructures will evolve to become more modular, dynamic, and economically efficient, suggesting a departure from the traditionally rigid and pre-determined hyperconverged system.”

## THE EVOLUTION OF DATA CENTER INFRASTRUCTURE

Over the past decade, the need for control and consolidation within data centers prompted industry experts to take a new approach to IT. By bundling hardware resources – such as storage, compute, and networking – into a combined architecture, data centers could benefit from a converged infrastructure that was easy to deploy and manage. Yet, despite the convenience that convergence introduced to data centers, it lacked the agility necessary to keep pace with Big Data trends. If a business wanted to scale its data center capacity, it would have to scale each of the storage, compute, and networking components and find personnel with the right specialized skill sets to execute the expansion.

In order to meet demands for scalability, IT engineers combined the idea of convergence with the idea of a software-defined data center (SDDC) and emerged with a new technology that shook the data center market: hyperconvergence.



## WHAT EXACTLY IS HYPERCONVERGENCE?

Hyperconvergence is the consolidation of storage, networking, and compute resources into a single silo that is managed through one software interface. This is accomplished through the use of virtual machines rather than physical servers to create scalable storage that can be modified without incurring the cost and complexity of additional hardware. A data center that houses ten servers could achieve the same amount of storage capacity through a hyperconverged system using virtual machines, which occupy less space and can expand more easily than hardware. The benefits of this type of homogenous infrastructure, when applied to data center deployment, are that it allows for simpler management of services, faster provisioning of resources, streamlined transactions across vendors, reduced spending on maintenance, and most of all – unparalleled capability for growth.

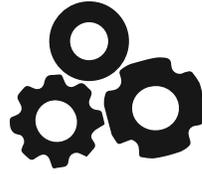
## IS HYPERCONVERGENCE RIGHT FOR YOUR ORGANIZATION?

Like any new technology, a homogenous and centralized infrastructure isn't ideal for every data center, and there are a few considerations to keep in mind when contemplating the shift to hyperconvergence.



### Vendor Lock-in

Most vendors offer hyperconverged bundles with pre-configured sets of proprietary hardware, meaning that engineers are limited in the technology options that are available to them. Businesses with specialized workloads may not benefit from the standardization of a hyperconverged infrastructure due to the lack of component-level flexibility.



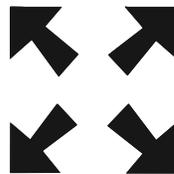
### Disparate Product Lifecycles

Although hyperconvergence introduces the opportunity to consolidate unused or outdated equipment, it's important to keep in mind that not all devices and software in a data center are necessarily on the same expiration schedule. Unless a data center's infrastructure is due for across-the-board replacement at the same time, there's a chance that hyperconvergence may not be a cost-effective investment.



### Personnel Realignment

The impact of hyperconvergence goes beyond the infrastructure level; it also has a significant effect on the IT staff and technicians that operate data center technologies. Infrastructure that once required separate teams for storage, networking, and computing will require fewer people with more generalized skill sets, meaning that businesses will have to realign their personnel and resources accordingly.



### Simultaneous Scaling

In a typical data center environment, increased storage or computing resources are provisioned through the addition of more hardware. In a hyperconverged infrastructure, however, storage and computing are combined as parts of each virtual machine. Since virtual machines are the building blocks of hyperconverged infrastructures, it may not be possible to scale only storage capacity or only compute power. Instead, businesses may be required to add on resources that they do not necessarily need.

Despite these considerations, hyperconvergence could be ideal for organizations that are negatively impacted by legacy technology. For example, businesses that struggle with integrating disparate technologies or experience difficulty scaling with multiple platforms could benefit from the simplicity of a consolidated infrastructure and a single interface. Likewise, organizations that are limited by convoluted policies and management processes – especially those in need of standardization across multiple remote and branch offices – are ideal candidates for hyperconvergence, which can enable them to close gaps between workload requirements and IT capabilities, improve inventory management, and reduce delays caused by slow incident response times.

## WHAT'S NEXT IN 2017?

As with any developing technology, it's important to holistically evaluate the impact of introducing hyperconvergence to your data center before enacting drastic changes in your organization. According to Gartner, IT infrastructure is transitioning into a new phase of continual development in applications and microservices for hyperconverged platforms.<sup>[1]</sup> Over the course of the next decade, infrastructures will evolve to become more modular, dynamic, and economically efficient, suggesting a departure from the traditionally rigid and pre-determined hyperconverged system. Instead, IT architects will shift their focus to enable greater resource mobility and specialized application and software capabilities. As a new norm in the data center market, hyperconvergence has fueled the growing trend of infrastructure-as-a-service (IaaS) and will continue to disrupt the IT industry with the development of advanced technologies.

[\[1\]Prepare for the Next Phase of Hyperconvergence](#)



# ABOUT THE AUTHORS



**Jay Preston** | **EVP of Sales and Services**

Jay Preston has served as EVP of Sales and Services at Milestone since 2012. Jay began his technology career at Quantum Corporation and has worked with startup companies like Panasas and ONI Systems (acquired by CIENA). Most recently, Jay completed a six-year term at Cisco, where he served as a Director in the Services Sales Organization and earned the Chairman's Club Award—a distinction reserved for the top 2 percent of Cisco sales executives personifying leadership, teamwork, innovation, and customer satisfaction.

Jay's responsibilities at Milestone include global sales, marketing, and engineering. He holds a Bachelor of Science degree from Cornell University and a Master's degree in Industrial Engineering and Engineering Management from Stanford University.



**Rob Pfeifle** | **VP of IT Managed Services**

Rob Pfeifle has been a technology leader at Milestone since 2007 as a Service Delivery Executive and Director of Organizational Development. Prior to Milestone, Rob served in various IT consulting and operational design roles at companies such as Chevron, Lawrence Livermore Laboratories, and Cisco Systems.

In his current role, Rob is responsible for building and managing IT service delivery teams across Milestone's global customer base. Rob received his degree from the University of Denver.

## 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 1,800 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.

The image shows a grand, ornate library interior. The walls are covered in dark wood paneling and bookshelves filled with books. At the top, there are three large, decorative crests or coats of arms. In the center, a wooden door is topped with a circular clock face. Below the door, a bust of a man is set within a decorative frame. The overall atmosphere is one of historical grandeur and intellectual pursuit.

For more information visit the  
Milestone Resource Library:

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



Corporate Headquarters  
3101 Skyway Ct  
Fremont, CA 94539  
[www.milestonepowered.com](http://www.milestonepowered.com)



Contact Information  
Phone: (877) 651-2454  
Email: [ITSolutions@milestonepowered.com](mailto:ITSolutions@milestonepowered.com)