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Introduction

Digital transformation to a modern workplace is evolving rapidly.

The limit of what is possible continues to expand creating changing economic models, testing the limits of our imagination, and leading a paradigm shift in how people conduct business, connect with each other, and experience the world. Leading companies that embrace digital transformation can disrupt others and achieve unprecedented growth. However, executives are often unclear on the specific steps they must take to enable digital transformation and optimize digital business.

As more and more businesses are exposed to the benefits of the modern workplace, the IDC forecasts that the percentage of enterprises creating advanced digital transformation initiatives will more than double by 2020, from 22% today to almost 50%. Meanwhile, Gartner says that 125,000 large organizations are launching digital business initiatives now and that CEOs expect their digital revenue to increase by more than 80% by 2020.¹ Digital transformation is not on the horizon — it is here, and many businesses are making this transition.

The benefits of these digital transformations are clear; modern workplaces are innovative and flexible organizations that enable employees to access information anytime and anywhere. They take advantage of mobility and collaboration gains while leveraging built-in intelligent security to protect their data from modern threats. Such modern workplace environments help companies attract talent, increase productivity and employee satisfaction, decrease employee attrition, and enhance innovation agility while optimizing limited IT budgets.

The organizations who make the transition to a modern workplace boost creativity and innovation by empowering people to express their ideas and collaborate more effectively with others. They can offer the broadest set of apps and services to provide people flexibility and choice in how they connect, share, and communicate. They can simplify user experiences and technology administration by unifying management across users, devices, apps, and services. Finally, these organizations benefit from unmatched security protection, keeping employee and customer data secure across devices, apps, and services without impeding productivity. A modern workplace features happier employees that are more productive and satisfied because they are empowered to do more to deliver value for their business.

 $1\,https://www.forbes.com/sites/gilpress/2015/12/06/6-predictions-about-the-future-of-digital-transformation/\#7dc593541102$



DATA POINT

78 percent of respondents to a 2017 global survey from Harvard Business Review Analytic Services say that connecting and empowering firstline workers are critical for success.

Source: Harvard Business Review Analytic Services, July 2017

The productivity and mobility gains of the modern workplace

Over the last ten years, the cloud has become ubiquitous. Many enterprises are moving applications and systems to the cloud while new businesses are being born in the cloud and realizing productivity, efficiency, and even security gains. These improvements are happening across the board regardless of industry – 79% of survey respondents reported cost savings and/or productivity gains.²

Our main motivation is to keep user experiences ahead of the curve. It's a game changer when people working on the sales floor have the latest tools...it's the newest version of Windows 10 and Office 365 ProPlus that deliver those benefits.

Øyvind Hirsch

Head of Digital Platforms, Bertel O. Steen

Butel O. Steer

 $2\ https://www.uk.insight.com/content/dam/insight/EMEA/blog/2017/05/Trend\%20Report\%20-\%20Why\%20Businesses\%20\ are\%20Moving\%20to\%20the\%20Cloud.pdf$

These businesses are achieving success because of key features of their digital transformations:



Increasing access to work productivity tools and data through mobile devices



Regular updates to software rolled out easily online



Cloud only analytics providing insights everywhere



More efficient apps and infrastructure

Employees often have the opportunity to choose their own device with which to work, whether that is a laptop, their work desktop, or their mobile phone. As they work across more devices, the connected nature of these SaaS applications enables data collection and insights that continue to increase application efficiency and usefulness. With 72.3% of the US workforce expected to be mobile workers by 2020, enabling employee mobility is essential for the modern workplace.³

By offering employees secure, mobile friendly collaboration tools, you give them flexibility and ownership over how they work. By empowering these employees, these collaboration tools support cross-organizational teamwork. However, too often there are multiple sources of information and tools that are difficult to access and require several logins. Modern technologies provide secure, seamless, and connected experiences for users to enable sharing and discovery across applications. These technologies maximize productivity and drive efficiency while still building a strong sense of community, even for these mobile workers.

3 https://msenterprise.global.ssl.fastly.net/wordpress/2018/01/Microsoft-Envision-your-modern-workplace.pdf



With the right tools, employees can harness their knowledge, collaborate in real time regardless of geographical location, and learn from and connect with others in a secure way. That is the modern workplace realized.

One of the most exciting things we have done is the adoption of Office 365 across the Trust. And in particular, [Microsoft] Teams, to improve the flow of information, decision making, and bringing people from disparate teams and disparate sites into one collaborative group.

Stephen Docherty

Stephen Docherty, CIO, NHS (National Health Service UK)

South London and Maudsley
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Wait – what about the physical workplace?

While the number of mobile workers is growing, a key source of employee satisfaction is the workplace itself. Buildings are becoming "smart"—they support more collaborative activities, flexible working environments, and an enhanced quality of life. Technology-enabled structures forego dedicated desks over touchdown and team spaces equipped with tools to enable heightened productivity—a model often seen in consulting firms. Building offices in nature, such as treehouse workspaces, or designating work-free spaces that encourage social connection can improve employee experiences and creativity. Companies are also enriching remote teamwork and social experiences through technology, while creating quiet spaces to accommodate an individual's desire for privacy. In the end, it's about flexibly—tailoring the workplace to varied human needs and enabling every team member to have what they need.

How much control over data do you have?



DATA POINT

3 Trillion Dollars: the estimated cost in economic value of cybercrime by 2020.

Source: Microsoft Envision Your Modern Workplace 2018

In the traditional workplace you had firewalls, email gateways, and proxies to perform content inspection when data resided on-premises. Users were typically given preapproved devices to use and were restricted to using applications identified and approved by the IT department. Everything was contained within the boundaries of the on-premises environment.

Eventually the boundary was expanded to include mobile devices. This is the lightly-managed environment where you have mobile devices such as smartphones, tablets and other personally managed devices. Mobile Device Management solutions can help enforce some level of security; but not when data moves outside your controlled environment.

Then you have unregulated and unknown spaces such as personal storage and other cloud-based services. This is the grey area we live in today. This is the new normal where data becomes more difficult to protect because data is everywhere; on premises, on PCs, on phones, in the cloud. With data now sitting outside of an organization's infrastructure it now needs to be protected from unauthorized access – prompting the need for new security features and strategies to address user identity. This changing playing field and the magnitude of available data has caused an adjustment in the profiles of attackers as well. Today's cybersecurity threats are often sophisticated syndicates bent on profit instead of lone attackers.

This is in part due to the fact that without careful consideration, the constant expansion of your environment with additional applications, users, data, and devices may introduce increasingly complex security vulnerabilities that can put your business at risk. So, the question becomes – how do you live in that world while adhering to regulatory compliance and business requirements to protect your information? How do you protect not only your own intellectual property (IP), but Personally Identifiable Information (PII) such as Social Security or credit card numbers? In the event of a breach, how do you protect your data so that you can ultimately say, "The information may have fallen into the wrong hands, but it's protected so it can't be opened."

How can we start our transformation journey safely and securely?

Starting the journey to a modern workplace can be tricky. It isn't always easy knowing where to start and how to be effective with a change that is so transformative to your business. Done right, and the transition to the modern workplace will mean your employees will be connected, empowered, and secure. Done wrong, and your transformation may stall, employees may feel overwhelmed within an avalanche of new technology, and your organization may be more vulnerable to security threats.

One of the important things to keep in mind is that the goal is to provide your employees with more mobility and the ability to unlock their creativity while fostering teamwork. The modern workplace enables your employees to be more effective, therefore driving further value for your business and for your customers. Because of this, one of the most important features of this transformation is to empower employees with new experiences, processes and technologies. This starts with fostering a culture that encourages people to do their best work and makes work inspiring for everyone.

Digital transformation starts with your employees and how your culture empowers them to transform and grow the business.

Kathleen Hogan

Chief People Officer, Microsoft





The four keys to a successful and secure modern workplace

To successfully navigate the challenges of this transformation, we tailor our modern workplace transformation to deliver on the following key promises:

- **1. Unlock Creativity**: Empowering people to express their ideas more effectively and to innovate together.
- **2. Build for Teamwork**: Providing the broadest and deepest set of apps and services with a universal toolkit for teamwork, regardless of geographical barriers. These capabilities give people flexibility and choice in how they connect, share, and communicate.
- **3. Easy to Use:** Simplifying user experiences and technology administration by unifying management across users, devices, apps, and services.
- **4. Unmatched Security**: Keeping employee and customer data secure across devices, apps, and services without impeding productivity.

Embracing a new culture of work also means finding new ways to manage and secure your productivity infrastructure while minimizing costs and employee impact. You can find success by supporting unique learning opportunities and career progression for your employees, however you also need to understand the changing risks that come with this workplace transformation.

As you embark on this modernization journey, consider these questions:



 $How do you \ maintain \ secure \ platforms \ for seamless \ collaboration \ by \ your \ employees?$



How do you secure your identities, data, and devices, especially for mobile workers?



How do you maintain visibility, control, and protection of your applications?



Are you able to identify and minimize the impact of a breach and recover quickly?



Are your cloud applications compliance ready?



Intelligent security in the modern workplace

To reach the level of security required by today's enterprise, we need to recognize that modern threats accompany modern technology. In today's digital landscape, simply defending against breaches is not enough; we need to assume that a breach has already occurred. Therefore, pre- and post-breach threat protection, as well as identity and access management and information protection solutions, are necessary to address today's cybersecurity challenges.



From a security operations standpoint, the top security priorities for most organizations can be bucketed into four areas:

- 1. Defending against advanced threats and recovering quickly if attacked
- 2. Safeguarding user identities and controlling access to resources
- 3. Protecting sensitive and confidential information
- 4. Gaining visibility into and control over security tools

Microsoft has organized these needs into the four pillars of cyber-resilience that we focus on solving for customers: information protection, threat protection, identity and access management, and security management. By building and implementing a security roadmap for these four areas which focuses on your critical business priorities, you will build resilience against cyber-attacks into your business.



Information protection

Ensure documents and emails are seen by only authorized people.



Threat protection

Protect and recover quickly, so that you have the advantage, not the attacker.



Identity & access management

Build an identity based security perimeter and implement an access contrtol policy based on user risk level, to keep up with modern attacks and new asset types.



Security management

Gain visibility and control over security tools so you can be aware of suspicious or malicious incidents, and better prepared to take action on threats and respond to attacks.

Information protection

In the digital workplace, data sharing and data mobility creates new business value by enabling and fostering collaboration. Yet, it is imperative that organizations strike a balance between security and productivity to prevent unauthorized disclosure, modification, or destruction of data and important information. It is equally important that organizations reduce and manage the risk of user errors – such as unintentional sharing or inappropriate use of sensitive information. In fact, a full 58% of workers admit to having accidentally sent sensitive information to the wrong person. How many of your organization's top leaders do you think have done this at one time or another?

Ultimately, this is why data must be protected at all times, and Microsoft offers data loss prevention, encryption, and cloud access security broker (CASB) solutions to ensure that data is protected both inside and outside of the network.

Threat protection

A constantly evolving threat landscape means that organizations are continuously exposed to advanced attacks and requires that companies not only protect against threats but that they are able to detect and recover quickly from security incidents. Microsoft's threat protection solutions offer a combination of traditional approaches and new innovations for both pre-breach protection and post-breach detection and response. Our goal for threat protection is to enable organizations to protect themselves from advanced cyber-attacks, provide solutions which can help detect suspicious behavior and anomalies, and enable organizations to respond to threats and limit the effects from an attack.

As you consider how your workplace is protected, you should ask yourself:

- How quickly am I able to detect suspicious activities throughout my organization?
- How quickly am I able to understand the scope of a breach?
- Do I have the ability to detect when credentials have been compromised?
- Do I have the ability to block access to malicious email links or attachments?

5 https://cloudblogs.microsoft.com/enterprisemobility/2016/09/27/ignite-recap-my-session-on-protect-manage-your-digital-transformation/

Identity and access management

As we have outlined, traditional security perimeters fail to provide adequate protection in the modern workplace. Today's security strategy needs to start with a strongly protected single identity at the center of the business and identity becomes your control plane and the new perimeter. As such, identity becomes the trust boundary which controls how users access information and applications and from which device. Having a successful identity and access strategy is crucial for balancing security and productivity in the organization and provides the first line of defense.

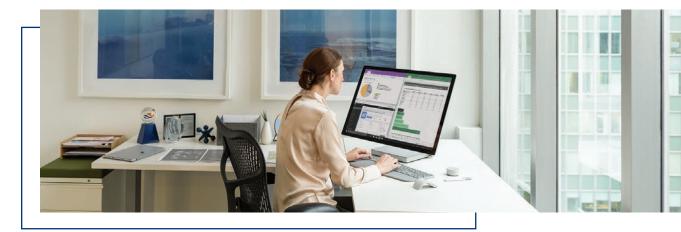


DATA POINT

More than 80% of hacks and cyber-attacks were traced back to lost, weak or comprimised user credentials.

Source: Verizon 2017 Data Breach Report

Ironically, the traditional recommendations of requiring long passwords, the use of multiple character sets, and password expiration may no longer be the most effective approach in password management since they often result in predictable or weaker passwords over time. In the modern workplace, features such as Windows Hello provide stronger authentication using biometric security with face and fingerprint recognition. Windows Defender Credential Guard protects sign-in tokens and identities against pass the hash, pass the ticket, and domain password theft by isolating credentials away from the operating system using virtualization-based security. Another defense is conditional access policies which control users' access based on group membership, the device platform (operating system), device state (compliant vs. non-compliant) and device location (trusted vs non-trusted). You can even block access to a resource or prompt the user to change their password or authenticate using multi-factor authentication based on conditions such as location and risk level.





Security management

Whether your assets are deployed in the cloud, on-premises, or across a hybrid environment, your organization's security has four core components for you to manage and secure: identities, devices (or end points), apps and data, and infrastructure.

Across these four core components, an effective security management solution should provide three key tenets – visibility, control, and guidance:



Full **visibility** that helps you understand the security state and risks across resources



Built-in security **controls** to help you define consistent security policies



Effective **guidance** to help elevate your security through actionable intelligence and recommendations

Microsoft helps you consolidate from a plethora of specialized functions and tools to key solutions that integrate and coordinate across tools and platforms. Our management solutions ensure specialized security teams have the flexibility and freedom to manage the unique needs of identity, devices, data, apps and infrastructure across workloads.

How Microsoft Services can help

Microsoft Services is uniquely positioned to help organizations deal with their digital transformations through packaged and custom solutions that enhance productivity while ensuring the highest level of security, compliance, and privacy.

We have the industry expertise, technology and resources to help you better protect your business and critical assets. Our solutions help organizations integrate security capabilities within Microsoft products and provide solutions that help you protect, detect, and respond to cyber threats.

Recognizing that digital transformations are more successful when change management is built into the culture, we use a proven behavior methodology that addresses leadership and sponsorship; coaching and motivation; communications and training; measurement and benchmarking; metrics and business insights; and resistance management and reinforcement practices. Backed by 18 years of Prosci research, we develop and use this methodology with certified practitioners to help organizations adapt individual and organizational behaviors to ensure a successful transformation.



Modern Workplace Security Essentials

The security of your productivity solutions implementation requires a partnership between you and Microsoft. Microsoft cloud services are built on a foundation of security, privacy, control, compliance, and transparency that can provide you with security controls and capabilities to help you protect your data and applications. Meanwhile, your organization owns your data, devices, and identities, as well as the responsibility for protecting them. When considering adopting cloud services, it is important to have a clear understanding of all security features available to you and to implement a successful approach in planning how, or if, these features meet your goals and objectives. To facilitate this, Microsoft Services has created a unique approach to help you bridge these responsibilities and develop and implement a comprehensive strategy to meet your security objectives.

Productivity Governance & Compliance

Microsoft Services experts work with you to develop prescriptive governance and compliance solutions specific to your intended use of the platform. The engagement covers both technical and operational governance topics and produces governance directives that will facilitate controlling and administering. Microsoft is fully GDPR compliant and committed to not just staying up to date and compliant, but also protecting your data from potential threats. We provide superior data governance tools to enable simple and effective recordkeeping and reporting, while allowing for better internal transparency.

From an IT standpoint, there are intrinsic benefits beyond the primary benefit of avoiding penalties through governance and compliance. A strong data governance strategy will prepare your business as customers demand more security around the storage and use of their data, and as employees demand that the security perimeter extends beyond the corporate realm and onto mobile devices.





Information Protection

Our Microsoft Services experts deliver our Information Protection solution to help you detect, classify, protect, and monitor your data on-premises and in hybrid and cloud-only environments.

Based on your requirements, our solution enables the following capabilities:

- Data discovery, classification & labeling, and rights management
- IT shadowing prevention, cloud data leakage prevention, cloud data visibility, and abnormal usage behavior detection on cloud data
- Accidental data leakage prevention in Windows 10 devices
- Data protection for mobile devices including Android and iPhone

Cybersecurity Essentials

Our Cybersecurity Essentials solution is delivered by Microsoft Services experts who help you assess your cyber risk exposure and help create a roadmap to improve your security posture; protect your identity platform from advanced cyber-attacks; secure privileged access from advanced cyber-attacks; and detect investigate and respond to suspicious activity and advanced threats.

Assess your cyber risk exposure and create an improvement roadmap

Assess cyber risk exposure

Identify cloud security additions to bridge security gaps

Plan your personalized cloud security

Protect your identity platform from advanced cyber-attacks

Upgrade existing Active Directory

Harden Active Directory against cyber-attacks

Secure endpoints

Protect assets using secure cloud identity

Protect virtualized workloads

Secure privileged access from advanced cyber-attacks

Workstations for privileged users

Control privileged access

Dedicated environment for Domain Administrators

Detect, investigate and Respond to suspicious activity

Detect advanced threats on devices

Detect advanced Identity threats



Modern Identity Foundation

At Microsoft, we recognize that no organization's modern workplace transformation is complete without a secure identity for employees. As employees move from device to device, you need to be able to verify identity and simply manage access. Using multi factor authentication or other IAM solutions, we can secure your employee's digital identity and ensure users are authenticated in order to use applications and gain access to data.

We can manage user identity and associated access privileges through solutions such as:



Conditional access



User and sign-in risk calculation



A Multi-factor authentication



Privileged identity management

We can help you verify user's identity before you let them access your resources. Together with our experts we can develop a strategic plan of action to achieve your modernization objectives safely and effectively.

> As the world continues to change and business requirements evolve, some things are consistent: a customer's demand for security and privacy. We firmly believe that every customer deserves a trustworthy cloud experience and we are committed to delivering that experience in the cloud.

Satya Nadella

CEO, Microsoft





Specialized Support for the Long Haul

To protect your investment and ensure success with your productivity technology, Microsoft Services Enhanced Support provides solution-specific expertise to drive long-term optimization, performance, and value.

Designated Support Engineering - Modern Identity provides you with a team of experts dedicated to helping you use the cloud to create a secure, transparent, and consistent identity experience that empowers people to get things done anytime, anywhere. This allows you to increase productivity, reduce reactive support needs, and optimize your efforts with the confidence that your organization is leveraging identity safely and efficiently.

In the bigger picture, Designated Support Engineering - Cybersecurity helps empower your organization, with security expertise and a phased approach to boost security posture and build a fortress around your ecosystem. We support modernization of IT platforms to keep data safe through protection, detection, response planning, and ongoing education. With expanding volumes of connected devices, cloud protection is paramount, and this support option helps you get ahead and stay ahead of the threat landscape.

Conclusion

Microsoft Services experts are on the leading edge of technology trends, providing thought-leadership to help you develop innovative solutions for your business. Trusted by the world's largest organizations, our highly trained experts integrate decades of industry learnings, understanding of geographic constraints, and the depth of knowledge about your organizations that businesses needs to deliver exceptional service. Microsoft Services digital advisors, engineers, consultants, and support professionals help you implement and adopt Microsoft products, services, software, and devices to solve, envision, and understand new possibilities for your business.

You can benefit from our more than 35 years of commitment to promoting security in our products and services, to helping our customers and partners protect their assets, and working to help ensure that your data is kept secure and private.

Microsoft Services can help get you started on your modernization journey to a cyber-resilient foundation and help you address the following business challenges:



Understanding current cyber risk exposure and planning a security roadmap



Protecting the Identity platform and endpoints against cyber-attacks



Develop prescriptive governance and compliance solutions specific to your intended use of the platform



Secure platforms for seamless collaboration

We invite you to begin your journey to a more secure workplace by scheduling a Modern Workplace Security Essentials workshop with us.

When will you invest in a safer future?

Contact your Microsoft representative to learn more. For more information about Consulting and Support Solutions from Microsoft, visit www.microsoft.com/services.



What's next?

No matter where you are on your digital transformation journey, Microsoft Services can help.



Empower employees

Empower a high-quality, committed digital workforce to work as a team anywhere, on any device, with seamless data access—helping you innovate, meet compliance requirements, and deliver exceptional customer experiences.



Engage customers

Reimagine the customer experience for a digital world and deliver more value through insights and relevant offers by engaging customers in natural, highly personal, and innovative ways throughout the customer journey—driving increased relevance, loyalty, and profitability.



Optimize operations

Gain breakthrough insights into risk and operational models with advanced analytics solutions and act on real-time intelligence to optimize risk management and meet regulatory requirements.



Transform products

Drive agility with open, connected systems and automated digital processes to support new product development and optimize distribution channel strategies, while meeting the security, privacy, and transparency expectations of customers, regulators, and shareholders.

Credits

Many subject-matter experts from various groups at Microsoft contributed to the conceptualization and articulation of the story contained in this document.



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Microsoft Services empowers organizations to accelerate the value realized from their digital experiences.

Imagine. Realize. Experience.

microsoft.com/services

