Supporting Your Apple Enterprise Environment

$25 Billion in sales. That's an amount you need to take seriously, especially for those who haven't taken the idea of Apple devices in the enterprise seriously in the past. Apple enterprise sales last year were $25 Billion, approximately 14% of their total revenue and growing.

A big part of the reason enterprises want to support Apple comes from their experience with their own users. According to TechTarget, "In an April study by Tech Pro Research, 32% of respondents said using Apple products had led to fewer calls to IT. Thirty-one percent saw a reduction in training employees to use the technology, and 23% experienced longer and cheaper upgrade cycles."

In a June 30, 2014 VMware blog post entitled "The Apple Enterprise Invasion" VP of End-User Marketing Erik Frieberg reports that "VMware commissioned a survey of 376 IT professionals conducted by Dimensional Research to assess the current state of enterprise desktops and created a report titled 'The Apple Enterprise Invasion.' We are releasing the results for the first time today and they clearly show that Windows is losing its grip on the enterprise."

"It should come as no surprise," explains Frieberg, "that the study found that 66 percent of businesses are already using Macs in the workplace today. But as we all know, end-users will work around corporate IT if they don't get their way but the study found that a large majority of companies – more than 70 percent – officially support Macs as a corporate endpoint."

Frieberg lists the top three justifications given in the survey for employees wanting a Mac being:

1. Macs are easier to use (73 percent)
2. Macs are cooler (52 percent)
3. The Mac display is better than Windows (42 percent)

He also points out the "top capabilities that are most valuable to IT administrators are all related to productivity and security:

1. Ability to run Microsoft Office on a Mac (59 percent)
2. Ability to enable secure access to enterprise applications (59 percent)
3. Ability to run Windows on a Mac (41 percent)"

The Business Case for Apple in the Enterprise – "The Island Days are Gone"

For those who have taken Apple in the enterprise seriously, you're in very good company. In just the past two years many major IT industry manufacturers have joined your ranks and those numbers are still growing as well. Each of these manufacturers have recently entered into highly proactive partnerships with Apple, which was formerly considered somewhat of a closed ecosystem.

"We still compete today, but we can partner on more things than we can compete on, and that's what the customer wants, explained Apple CEO Tim Cook in a [recent appearance](#). "If you're a CIO, you want to do business with someone who's part of an ecosystem, not someone who's on an island somewhere. The island days are gone."

IBM Enterprise-Class Applications

Most IT professionals will readily agree that applications drive everything. In 2014, IBM and Apple announced a "[Global Partnership to Transform Enterprise Mobility](#)" by delivering "a new class of more than 100 industry-specific enterprise solutions including native apps, developed exclusively from the ground up, for iPhone and iPad."

The announcement continues to explain that "The new [IBM MobileFirst for iOS solutions](#) will be built in an exclusive collaboration that draws on the distinct strengths of each company: IBM's big data and analytics capabilities, with the power of more than 100,000 IBM industry and domain consultants and software developers behind it, fused with Apple's legendary consumer experience, hardware and software integration and developer platform. The combination will create apps that can transform specific aspects of how businesses and employees work using iPhone and iPad, allowing companies to achieve new levels of efficiency, effectiveness and customer satisfaction—faster and easier than ever before."

The first wave of 10 MobileFirst for iOS apps, which appeared in [December 2014](#), addressed six vertical markets:

- Plan Flight (Travel and Transportation) addresses the major expense of all airlines—fuel—permitting pilots to view flight schedules, flight plans, and crew manifests ahead of time, report issues in-flight to ground crews, and make more informed decisions about discretionary fuel.

- Passenger+ (Travel and Transportation) empowers flight crews to offer an unmatched level of personalised services to passengers in-flight—including special offers, re-booking, and baggage information.

- Advise & Grow (Banking and Financial Markets) puts bankers on premise with their small business clients, with secure authorisation to access client profiles and competitive analyses, gather analytics-driven insights to make personalised recommendations, and complete secure transactions.

- Trusted Advice (Banking and Financial Markets) allows advisors to access and manage client portfolios, gain insight from powerful predictive analytics—in the client's kitchen or at the local coffee shop, rather than the advisor's office—with full ability to test recommendations with sophisticated modeling tools all the way to complete, secure transactions.

- Retention (Insurance) empowers agents with access to customers' profiles and history, including an analytics-driven retention risk score as well as smart alerts, reminders, and recommendations on next best steps and facilitation of key transactions like collection of e-signatures and premiums.

- Case Advice (Government) addresses the issue of workload and support among caseworkers who are making critical decisions, one family or situation at a time, on the go. The solution adjusts case priorities based on real-time analytics-driven insights, and assesses risk based on predictive analysis.

- Incident Aware (Government) converts an iPhone into a vital crime prevention asset, presenting law enforcement officers with real-time access to maps and video-feeds of incident locations; information about victim status, escalation risk, and crime history; and improved ability to call for back-up and supporting services.

- Sales Assist (Retail) enables associates to connect with customer profiles, make suggestions based on previous purchases and current selections, check inventory, locate items in-store, and ship out-of-store items.

- Pick & Pack (Retail) combines proximity-based technology with back-end inventory systems for transformed order fulfillment.

- Expert Tech (Telecommunications) taps into native iOS capabilities including FaceTime for easy access to expertise and location services for route optimisation to deliver superior on-site service, more effective issue resolution and productivity as well as improved customer satisfaction.

Twelve more have been released in 2015, six of which address new vertical markets: Healthcare (Hospital RN, Hospital Lead, Hospital Tech, Home RN); Energy & Utilities (Field Connect); and Industrial Products (Rapid Handover). The remaining six new apps are in Travel & Transportation (Passenger Care, Ancillary Sale), Banking & Finance (Advisor Alerts), Insurance (Risk Inspect) and Retail (Dynamic Buy, Order Commit).

The Premier Productivity Platform Runs on Mac

An interesting vote of confidence comes from long-time Apple competitor Microsoft. On July 9, 2015, Information Week reported that "Office 2016 For Mac Is Here."

"During what Microsoft describes as the "largest Office for Mac beta ever," testers provided more than 100,000 pieces of feedback to inform the suite's

development. Over the four-month preview period, Microsoft rolled out seven updates to bring new features to Office apps while it improved stability and performance," explains reporter Kelly Sheridan. "In addition to the familiar ribbon interface and task panes, the newest version of Office for Mac brings additional features and updates to Word, Excel, PowerPoint, Outlook, and OneNote. The suite is cloud-connected to enable document access across all devices and allow team members to collaborate on files."

Cisco Optimizing Apple on the Enterprise Network

Another major vote of confidence comes in the form of an agreement between Apple and networking giant Cisco under which Cisco will "optimize how its networking gear runs with iOS devices, and the two companies will collaborate on products and services."

The Apple announcement of the partnership explains, "To address the ever-increasing demands on corporate infrastructure, Cisco networks and iOS devices will be optimized so that they work together more efficiently and reliably with the goal of providing users with even greater performance. With Apple's support, Cisco will deliver experiences specially optimized for iOS across mobile, cloud, and premises-based collaboration tools such as Cisco Spark, Cisco Telepresence and Cisco WebEx in order to deliver seamless team collaboration and reinvent the meeting experience."

In his August 31, 2015 blog post, Cisco CEO Chuck Robbins said, "I'm thrilled about our new partnership we announced today with Apple. We are coming together to optimize Cisco networks for iOS devices and apps, integrating iPhones with Cisco environments and providing unique collaboration capabilities on iPhones and iPads. Together, we will enable mobile apps and experiences that deliver the quality and experience we need while meeting enterprise requirements for management and security."

Robbins continues, explaining that "Our two companies share a common passion to create a vastly improved mobile work experience. We also recognize the enormous opportunity we have to bring together the leading mobile platform and the leading provider of secure networks and collaboration to make the mobile work experience what it should be. What makes this new partnership unique is that our engineering teams are innovating together to build joint solutions that our sales teams and partners will take jointly to our customers."

Enterprise Mobility Management

On June 22, 2015, TechTarget reported that "Apple is taking a whole new approach to getting secured iOS apps into enterprises," in an article announcing that "VMware's AirWatch and MobileIron will work with iOS to deploy secured business apps."

In a September 16, 2015 [press release](), VMWare announced several key updates that AirWatch customers using iOS9 could take advantage of, including:

- New telecom management functionality possible with expanded network usage rules that allow IT to prevent cellular usage and roaming at the app-level, for any app that is available in the App Store. With AirWatch Telecom Management™, this allows IT to control telecom costs directly related to managed apps that employees use to do their jobs, but it won't prevent them from using their personal apps.

- Several new restriction profiles from AirWatch to help secure corporate data and help users prevent accidental data leakage due to automatic device syncs. IT can prevent users from sending enterprise data or attachments via AirDrop to keep corporate data on managed devices. Restricting screen recording, iCloud photo library backup, keyboard shortcuts and pairing with Apple Watch secures data so it isn't accidently automatically shared to another device due.

- Implicit application trust and security. Applications installed via an EMM provider can be implicitly trusted. Previously, users were often prompted with a pop-up notification that asked if they trusted the application developer, which could be confusing to users installing enterprise apps. This new feature also provides a more seamless experience for users.

- Ability to block side-loading of any apps outside of the Apple App Store or the enterprise App Catalog. If side loading is allowed, the process is improved to greater emphasize the importance of trusting the app. By default, the use of the application is blocked, and the user must explicitly trust that app from the settings menu in order to install it.

The MobileIron Mobile@Work Client is available free of charge on Apple iTunes. The product description explains that, "MobileIron's Mobile@Work™ app seamlessly integrates your iOS device with your company's mobile operations.

- Automatically configure your device for access to your corporate Wi-Fi and VPN networks.
- Get access to email, protected attachments, and other corporate resources."

MobileIron's own description of their iOS Mobile Device Management software says, "The demand for iOS devices among enterprise users has exploded. Employees want to use their iPads and iPhones for everything, and are putting more pressure on IT to support them. By combining MobileIron's advanced mobile security and management platform with Apple's expanding ecosystem of devices and apps, IT admins can deliver the full value of iOS mobility to enterprise users."

They emphasize their confidence in Apple as an enterprise platform, saying, "Apple has made tremendous progress in developing iOS as a mature enterprise-ready mobile platform. With every release, Apple delivers more advanced features to help IT simplify device setup, deployment, management, and security. Combined with MobileIron, IT can secure iOS devices and apps with capabilities such as single sign-on, per app VPN, open-in management, app installation, VPP, and much more."

Supporting Your Apple Enterprise Environment

With more enterprise partners and customers lining up, it is undeniable that Apple will bring its leadership in unified communications, app delivery, and preference as the "BYOD" product of choice into the enterprise environment more and more. Many have suggested that it was Apple that started the "Bring Your Own Device" (BYOD) movement in the first place.

The challenge for these companies will be to balance the need to properly support and secure Apple devices and operating systems just as they do Windows, Linux, and other operating platforms today, with budgets that are already constrained in many cases.

Apple devices are being activated for use in enterprises every day, whether the company knows it or not. "Rogue" users abound, connecting to the corporate network with their own Apple device without official approval. IT departments are challenged to either keep them out or accommodate them. Most of these organizations have not researched available Apple support resources are unsure of their options when, and if, these devices are detected.

As a result it is estimated that close to two-thirds of all Apple devices connected in enterprise environments are currently unmanaged. The risks of data loss, data theft, and disruption of operations are becoming staggering.

What to Focus On

As with devices running any operating system connected to your network, proper management of OS/X and iOS devices requires focus on several specific key areas:

Mobile Device Management (MDM)

Most corporate IT policies rightly dictate that all devices connected to the network must be fully compliant with published corporate requirements and managed by the corporation either through an internal department or external provider. Effective management of the device includes provisions for authentication and authorization of the user, network access control which assures that the device attempting access is properly configured to do so safely, encryption of data in transit between the device and the network as well as in storage on the device, intrusion prevention controls, and the ability to selectively disable the device in the event it is lost or stolen.

Mobile Application Management

One of the heralded capabilities of MobileIron is to enable software distribution without using an App Store. Corporations will want to make informed selections regarding how their corporate software is distributed to Apple devices and managed once there. "Native Apps" designed specifically to take fullest advantage of the features of the device they are running on are making application and sensitive data access on mobile devices more and more ubiquitous. Enterprise organizations must be careful to keep this access completely secure and performance-optimized.

"User Experience" (Desktop/Application) Virtualization

To avoid having any corporate data resident on mobile devices, many companies are extending the Virtual Desktop Interface (VDI) to include smartphones and tablets. This has also proven useful in making legacy applications available in the field. While VDI can deliver an excellent user experience in terms of execution speed and responsiveness, "panning" and "zooming" around interfaces designed for larger screens can be daunting. Given the complete isolation of data from the device, expect to see more and more development of VDI as a mobile application delivery option.

Network Optimization

Once connected to the network, Apple devices will be expected to interoperate with other devices, other operating systems, other protocols, and other file systems. While remote desktop (RDP) was previously popular, today's Apple users are preferring their devices because they prefer the user interface, making RDP an obsolete option. Apple device users will expect at least parity with other users accessing the network. This is one of the challenges the Cisco partnership will help to resolve.

Unified Communications

For most Apple users, unified communications is what their devices are really all about. They are accustomed to using their iPhones particularly to make voice calls, Facetime video calls, send emails, exchange instant messages, share photographs, and much more. Their expectation is effortless communication and enriched collaboration. The Cisco partnership is expected to contribute here as well.

Application Development

Many development platforms are emerging which make it easier for developers to create "native apps" for all major mobile platforms, including Apple iOS, Google Android, and Microsoft Windows Phone, simultaneously. Users will become more and more frustrated with the "pan" and "zoom" required of RDP, VDI, and HTML5 approaches, but these native app platforms will resolve that quickly, taking fullest advantage of the feature-sets available in each device without the need to re-code separately for each one.

Corporate IT departments will no longer need to "port" their applications over. These platforms will make the process fast and easy.

Synoptek Support Solutions for Apple

Your users' requests for access to enterprise resources with their Apple devices are growing in number. Don't let the budget impact of staffing and equipping a second support staff stop you from encouraging your users by granting their requests. Turn to Synoptek to provide the support needed to enjoy all of the Apple advantages. As one of the few Managed Services Providers that is an Apple Certified Partner, we have the tools and the skills to successfully manage an Apple iOS Mac and Windows environment. We do this daily for our own staff and many clients.

Synoptek offers unlimited technical support 24×7 to Apple / Mac OS X computers, OS X and Final Cut Servers, iPads, iPhones and any other networked device. Our Apple / Mac IT support services collects and tracks real-time data on every device in your environment to help ensure your business doesn't experience any unexpected downtime, or costly repair fees. Our 24×7 technical support teams provide rapid problem resolution using Apple-specific tools including the JAMF Casper Suite and Centrify.

Proud Member of the Apple Consultants Network

Apple is so integral to our business that Synoptek Vice-President Matt McGraw serves as a member of the Apple Partner Advisory Board, and we are a long-time member of the Apple Consultants Network. Some of our Apple-Specific Consulting & Support Services include:

- **IT Advice and Consulting**
- **Project and Program Management**
- **IT Management and Support**
- **Cloud Services**
- **Application Services**
- **Comprehensive IT Outsourcing**