FORRESTER[®]

FOR: Security & Risk Professionals



Build A Corporate App Store Into Your Corporate Mobility Strategy

by Christian Kane and Michele Pelino, January 16, 2013

KEY TAKEAWAYS

Leverage Lessons Learned From Consumer App Stores

Consumer app stores have been phenomenally successful at engaging consumers, creating a new set of expectations for how employees discover and acquire new applications and content. Forrester predicts that app stores will become the primary way that employees access applications and will go beyond smartphones and tablets to include the PC ecosystem.

Don't Limit Your Corporate App Store Search To MDM Vendors

Short-list suppliers that provide a simple and intuitive user experience, enablement, and policy management. Thus, S&R professionals should investigate corporate app store offerings from mobile device management vendors, corporate app store specialists, client virtualization vendors, telcos, system integrators, and public app stores.

Embrace HTML5 Web Apps, Cloud Apps, And Native Apps In Corporate App Stores

HTML5 web apps don't take full advantage of unique device functions such as location, presence, and user interface and have limited network connectivity -- which means that native application deployment will not disappear. Use corporate app stores to deliver native, HTML5, cloud, and virtualized applications.

Build A Corporate App Store Into Your Corporate Mobility Strategy

Manage Mobile Complexity Through A Corporate App Store

by Christian Kane and Michele Pelino

with Stephanie Balaouras, Laura Koetzle, Christopher Voce, Benjamin Gray, David K. Johnson, Eric Chi, and Thayer Frechette

WHY READ THIS REPORT

Today, many employees use their personally owned smartphones and tablets for work to access a variety of mobile applications. Some companies are also proactively deploying mobile applications to interact with partners, suppliers, and customers. Companies often task security and risk (S&R) and infrastructure and operations (I&O) executives with managing and securing not just the device itself but the work-related applications on them. IT executives in proactive companies are solving this challenge by deploying app stores that provide a self-service, user-friendly channel to distribute corporate-approved mobile applications to employees, partners, or customers. However, during the next few years, these app stores will include expanded functionality such as content sharing, granular discovery, provisioning, and reporting and monitoring services that both IT professionals in I&O and S&R can use to support smartphones, tablets, and even PCs.

Table Of Contents

- 2 Mobile Complexity Drives IT Demand For Corporate App Stores
- 4 Transform Employee Engagement By Deploying Apps And Content
- 8 Don't Limit Your Corporate App Store Search To MDM Vendors

RECOMMENDATIONS

9 Use App Stores To Support App Distribution And Improve Security

10 Supplemental Material

Notes & Resources

Forrester interviewed 30 vendor and user companies, including AirWatch, AT&T, Citrix Systems, IBM, MobileIron, Partnerpedia, and VMware.

Related Research Documents

Define A Road Map For Mobile Security And Operations May 16, 2012

Develop Mobile Operations And Security Balanced Scorecards May 11, 2012

Market Overview: Cloud-Hosted Mobile Device Management Solutions And Managed Services January 3, 2012



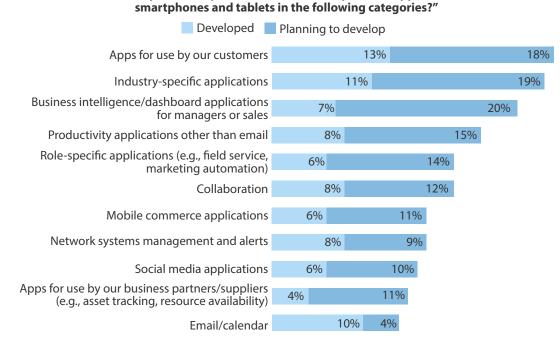
MOBILE COMPLEXITY DRIVES IT DEMAND FOR CORPORATE APP STORES

The corporate mobility landscape is snowballing in diversity and complexity as employees increasingly use their own technology to do their jobs more effectively.¹ This is part of a trend called the consumerization of IT, which Forrester defines as:

An adoption trend led by a technology-native workforce that self-provisions collaborative tools, information sources, and human networks — requiring minimal or no ongoing support from a central IT organization.

Because of this trend, both S&R and I&O leaders face significant challenges, including the need to:

- Support an ever-increasing variety of personally owned devices for work use. Sixty percent of firms in North America and Europe provide some support for personally owned smartphones such as Android, Apple, and BlackBerry devices.² These employee-owned devices pose challenges for corporate IT and help desk personnel; for example, the S&R organization must determine how to seamlessly control mobile applications for employees, customers, partners, and suppliers in this heterogeneous mobile device environment.
- Ensure the security of mobile applications within and beyond their control. Together, S&R and I&O teams serve as gatekeepers that monitor and control the security, compliance, and deployment of corporate-approved mobile applications.³ However, IT cannot apply corporate security and application management policies to consumer-focused app stores. In addition, IT cannot control the timing of application updates or app feature and function road maps in consumer-focused app stores.
- Expand support for a variety of mobile app distribution channels. Today, mobile apps come from a number of sources, including cloud offerings, consumer app stores, direct from ISVs, and even from in-house development. In fact, many IT organizations are developing or have developed a wide range of applications in-house (see Figure 1). Given the increasing diversity of mobile applications, the need for a distribution channel that can support these applications across a wide range of devices and platforms continues to grow.



"What are your firm's plans to custom-develop mobile applications for

Figure 1 A Diverse Range Of Applications Will Be Developed In-House

Base: 1,238 mobile technologies and services decision-makers at North American and European companies (multiple responses accepted)

Source: Forrsights Networks And Telecommunications Survey, Q1 2012

87122

Source: Forrester Research, Inc.

Outside In: Leverage Lessons Learned From Consumer App Stores

Consumer app stores such as the Apple App Store and Google Play enable mobile device vendors to distribute applications to individuals who use their mobile platforms.⁴ Consumer app stores have been phenomenally successful at engaging consumers, creating a new set of expectations for how people discover and acquire new applications and content. With the Apple App Store and Microsoft's recently launched Windows 8 app store, Forrester predicts that app stores will become the primary way for individuals to obtain applications. These app stores will go beyond the distribution of apps for smartphones and tablets to include the PC ecosystem. In addition, many other app stores are enabling tech vendors and service providers such as AT&T, Cisco Systems, salesforce.com, Samsung, SAP, and Verizon to distribute their mobile apps to customers.

Consumer app stores primarily distribute games, entertainment, and sports applications and content; however, they also provide an increasing number of business-focused applications to enhance employee productivity, such as expense management, time management, note-taking, and contact management.⁵ Today, 35% of firms allow employees to purchase mobile applications from consumer app stores.⁶ However, consumer-focused apps pose significant challenges for S&R and I&O executives who are considering a corporate implementation. Most app stores are platform-specific, which poses problems for IT organizations that must support multiple platforms and device types. Additionally, consumer app stores don't offer a realistic distribution channel for non-native applications or applications that IT has developed in-house.

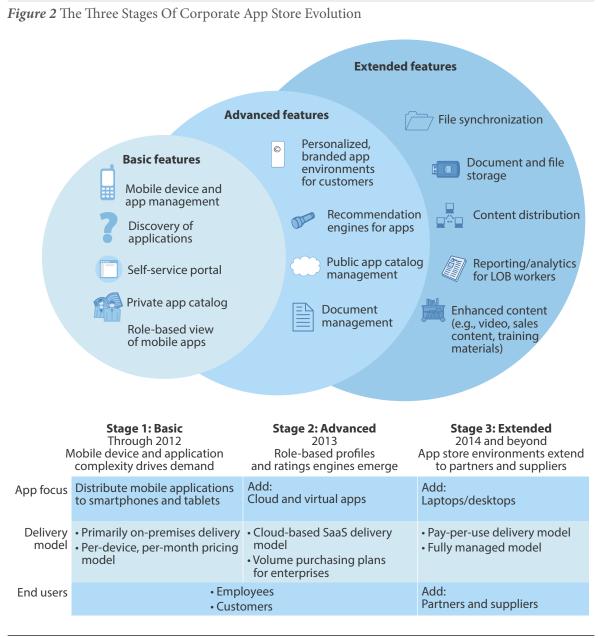
TRANSFORM EMPLOYEE ENGAGEMENT BY DEPLOYING APPS AND CONTENT

Most IT organizations start their corporate mobile enablement initiatives with small, simple pilots that offer email and calendar applications only on new platforms. The success of these pilot programs puts pressure on S&R and I&O teams to quickly expand bring-your-own-device (BYOD) programs and offer a variety of applications for collaboration, expense management, documents sync and share, and more. To help address these issues, S&R and I&O pros are beginning to look to corporate app stores, which Forrester defines as:

Technology solutions that enable companies to selectively distribute approved mobile applications and services to internal and external end users, including employees, partners, suppliers, and customers.

Today's corporate app stores are purely an internal distribution and engagement channel that allows IT organizations to distribute and manage mobile apps. However, there is the potential to do much more:

- Corporate app stores enable IT teams to change how they support and deliver apps. With app stores, I&O teams can give end users a self-service option and an intuitive interface to access corporate-approved mobile applications. S&R pros are happier because they're gaining some ability to control mobile apps and manage access policies. Employees can also use the app store as a portal for accessing all the tools that they need to do their jobs.
- Leading firms use examples from consumer channels to change how IT engages with business. Neither users nor I&O teams enjoy today's error-prone process of pushing out applications or installing them on PCs. As more users gain access to more tools (apps), managing delivery across a broadening application landscape becomes much more complicated. Thus, progressive IT organizations aim to use app stores to distribute content and manage access policies. However, even progressive firms are only addressing users' basic needs. In the future, users will expect access to all the applications they need, regardless of which device they're using. S&R and I&O professionals must prepare for three stages of corporate app store evolution (see Figure 2). To succeed in each stage, they must incorporate evolving feature sets and expand awareness among end users.



87122

Source: Forrester Research, Inc.

Basic Stage: Deploy Mobile Applications In A Fragmented Device Environment

The fragmented mobile device and application landscape is driving corporate app store momentum. Current corporate app stores:

- Support both custom-developed apps and corporate-approved consumer marketplace apps. Internal corporate app stores offer employees a self-service way to discover and use corporateapproved mobile apps for their work activities. Such apps include custom-developed business applications such as executive reports and dashboards, document libraries, and enterprise application apps. These corporate app stores also include links to web apps and approved business apps from consumer-focused app stores such as the Apple App Store.
- Provision apps to specific workforce segments. Simplified application development for mobile devices speeds development of a large number of applications targeted at specific workforce segments, lines of business, and industries. App stores provide S&R teams with the ability to make collections of apps available to employees based on criteria such as region (e.g., North American employees), function (e.g., sales), and device (e.g., iPad).
- Control application configuration and distribution. Today's internal corporate app stores help S&R teams control mobile app authentication, configuration, and distribution. Application discovery functions highlight approved applications for each end user based on their unique role profile, device type, and mobile operating system (OS) platform. S&R pros can deploy corporate authentication, configuration, and monitoring policies to track usage.⁷
- Provide security features to control and protect mobile applications and data. These features enable the S&R organizations to manage application inventory, identify approved applications, and blacklist apps that may contain malware or other malicious content. For example, the IT organization can block certain applications such as an enterprise file-sharing service application for specific employees to avoid legal and security issues resulting from sending data to other devices through the synching feature. S&R professionals can also remove corporate apps from an employee's device if he or she changes jobs or loses the device.

Advanced Stage: Provide Recommendation Engines And Flexible Delivery Models

Given the rapid increase in mobile requirements, employees and IT teams will quickly outgrow the basic features that corporate app stores provide. To meet these requirements, corporate app stores will add the ability to:

Incorporate app recommendation engines and employee rating features. Recommendation engines allow employees and customers to recommend apps and comment on their usability and effectiveness. Recommendation engines enable end users to access approved apps based on their roles, business requirements, and company characteristics. Employees can also recommend third-party mobile applications for the S&R organization to evaluate (to assess the app's scalability, security, and functionality) and add to the internal corporate app store.

- Enable volume purchase plans for apps in consumer- and vendor-sponsored app stores. Consumer-focused app stores and vendor-sponsored app stores will evolve to support corporate volume purchase discounts and enable app license transfers when employees change jobs or leave the organization. Apple highlighted the importance of this capability when it introduced the App Store Volume Purchase Program (VPP) for Business in mid-2011, but to date, most IT professionals Forrester has spoken with have found the experience clunky and that VPP does not fully address their needs, such as automated license provisioning and license management.⁸ Corporate app stores must evolve to address these concerns.
- Expand deployment models to address the needs of small and medium-size organizations. The range of solution delivery models will also expand to address the different needs of small, medium-size, and large businesses. On-premises delivery models will enable large enterprises to deploy internal corporate app stores and vendor-sponsored app stores within their corporate mobility infrastructure. Flexible deployment options, such as cloud-based software-as-a-service (SaaS), will open the doors to small and medium-size businesses that want to deploy internal corporate app stores in a cost-efficient manner.⁹

Extended Stage: Widen Functionality To Support Partners, Suppliers, And More Devices

In the final stage of corporate app store evolution, firms will deploy app stores to support contractors, suppliers, and partners. These app stores will include applications for PCs in addition to apps for smartphones and tablets. In terms of functional requirements, it will be vital for firms at this stage to:

- Implement app stores for contractors, partners, and suppliers. Key functions will include providing temporary access and support, tracking leads, managing orders, monitoring incident resolution, and offering storage services for laptops, smartphones, and tablets. New billing functionality will also support billing and support for in-app additions, partner ecosystem participants, and supply chain vendors.
- Connect to other purchasing and distribution channels. The app store ecosystem is set to expand dramatically in the next few years, fueled by Microsoft's Windows 8 and Office store, salesforce.com, SAP, as well as in-app purchases and cloud apps. As the ecosystem expands, the complexities around management, billing, support, and policy increase. Corporate app stores will need to evolve to support distributed app purchasing and channel options.
- Differentiate solutions based on easy, intuitive user interfaces. In this final stage of evolution, firms of all sizes across many vertical markets will widely deploy corporate app store environments. To capture a share of this expanded market, vendors will continue to differentiate their app store solutions by developing intuitive, easy-to-use interfaces and offering user experiences comparable to those that Amazon.com, Apple, and Google offer consumers.

- Address the needs of line-of-business (LOB) purchasing decision-makers. Purchasing decision-makers will expand to include LOB executives in marketing and sales. These execs will need solutions that allow them to easily distribute applications to sales and marketing teams and distribute mobile applications to business customers and consumers. Vendors will need to expand their relationships with LOB purchasing decision-makers, who do not often participate in the IT decision-making process for app store solutions.
- Extend management to virtual applications and hybrid workspaces. Today's solutions are often limited to particular mobile OSes and device types. To truly add value for S&R and I&O pros struggling to fire up more robust BYOD programs, corporate app stores must deliver management of virtual apps as well as hybrid workspaces made up of physical and virtual apps, personas, and desktops.

DON'T LIMIT YOUR CORPORATE APP STORE SEARCH TO MDM VENDORS

In evaluating corporate app store vendors, S&R and I&O pros should short-list suppliers that provide a simple and intuitive user experience, enablement, and policy management. Here's how Forrester predicts the corporate app store universe will evolve:

- MDM vendors will expand functionality to include app management. To capture a share of the emerging corporate app store market, mobile device management (MDM) vendors such as Fiberlink Communications, MobileIron, Sybase, and Zenprise must expand their solutions' features to include management and control of mobile applications.¹⁰ Vendors will integrate mobile app management capabilities and mobile app stores with their MDM offerings to identify the specific mobile device, OS, and application version so that IT professionals can manage and monitor app usage.
- Corporate app store specialists will expand support beyond internal employees. App store specialists such as Embarcadero Technologies and Partnerpedia provide a cost-efficient channel through which firms can distribute company-approved applications. A core aspect of the differentiation strategy for corporate app store specialists is to deliver a comprehensive array of mobile application management services, policies, third-party applications, and private branded corporate app store services and to make them available through a self-service channel to customers and employees. Corporate app store specialist vendors will continue to expand support to address application management for partner, contractor, and customer needs.
- Client virtualization vendors will expand into enterprise mobility with new tech. Client virtualization vendors such as Citrix Systems and VMware face an uphill battle to convince S&R and I&O professionals that they can offer simple, easy-to-deploy, end-to-end solutions because of the historical complexities in doing so. However, during the next 18 months, these vendors will evolve their solutions to become service brokers across all applications cloud, virtual,

PC, and mobile; this will reduce the complexity for any IT organization trying to manage all its applications with a single solution.

Telcos and SIs will integrate app stores into broader services capabilities. Telecom service providers such as AT&T, Verizon, and Vodafone and systems integrators (SIs) such as Accenture, IBM, Infosys, and Tata Consultancy Services are adding corporate app store functions to their overall mobility solutions, often through partnerships with corporate app store specialists. Telcos and SIs will incorporate app store services into their comprehensive mobility solutions. For example, end-to-end mobility solutions should include corporate app store services in addition to mobile application development platforms, middleware solutions, security, and service desk capabilities. Bundling services will give IT pros the option of a single provider for their mobile management options.

RECOMMENDATIONS USE APP STORES TO SUPPORT APP DISTRIBUTION AND IMPROVE SECURITY

An increasing range of application types, development architectures, and supported platforms is creating the need to streamline the delivery process for workforce applications while still ensuring the security of sensitive corporate information such as intellectual property and the personally identifiable information of employees and customers. To realize the benefits of corporate app stores, S&R professionals with their I&O counterparts must do five things:

- Use corporate app stores as employee enablement portals. As app stores add more content management capabilities, they will be able to provide self-service access to more than just applications. Thus, the corporate app store will become a one-stop shop for all the tools and information that employees need to do their jobs. S&R professionals will need to continue to engage with employees to determine their preferences and needs making sure IT tailors that app store for employee experience and enablement by providing them with collaboration and feedback options, offering the right tools at the right time, and making the discovery of new tools as simple as possible. App stores will give S&R better ability to manage user authentication, authorization, and access control to and within corporate apps, so employee acceptances of the app store is critical.
- Engage LOB decision-makers and end users. It will take more than just designing mobile app store solutions in an intuitive, user-friendly manner to win over broader audiences. IT executives must also appeal directly to LOB decision-makers, such as marketing and sales execs who may have already purchased corporate apps for end users, partners, and customers. S&R execs must engage frequently with these LOB groups to ensure the tools that they develop and deliver address the needs of employees, stakeholders, and the IT team. Additionally, it's important to use a range of corporate awareness campaigns, blogs,

communities, and social media channels to expand awareness and generate feedback among these end users as they roll out new mobile applications and services.

- Embrace HTML5 web apps and cloud apps as part of corporate app store environments. Many firms are adopting HTML5 web apps in lieu of native applications to reduce the cost of developing, testing, and deploying mobile applications for devices with a browser.¹¹ However, HTML5 web apps don't take full advantage of unique device functions such as location, presence, and user interface and have limited network connectivity — which means that native application deployment will not disappear. Use corporate app stores to deliver native, HTML5, cloud, and virtualized applications.
- Educate mobile application developers on corporate app store reach. Corporate app stores will include a number of apps developed in-house. S&R must work closely with application developers on the integration processes, version update activities, and security requirements for deploying applications to corporate app stores. It will also be extremely important to include developers when connecting with end users about their requirements, to ensure that there is a unified vision of the user experience that includes app usage as well as app deployment.
- Plan to provide support for PC apps. Today, PCs access cloud, native, and virtualized applications, and both Apple and Microsoft have plans to roll out PC app stores for consumers. Corporate app stores will eventually provide a means to unify application delivery across all platforms. IT executives should prepare for this evolution by developing a road map that includes a portal that employees can use to access corporate applications on any device.

SUPPLEMENTAL MATERIAL

Methodology

Forrester's Forrsights Networks And Telecommunications Survey, Q1 2012 was fielded to 2,347 IT executives and technology decision-makers located in Canada, France, Germany, the UK, and the US from SMB and enterprise companies with two or more employees. This survey is part of Forrester's Forrsights For Business Technology and was fielded from January 2012 to March 2012. LinkedIn Research Network fielded this survey online on behalf of Forrester. Survey respondent incentives include gift certificates and research reports. We have provided exact sample sizes in this report on a question-by-question basis.

Each calendar year, Forrester's Forrsights For Business Technology fields business-to-business technology studies in more than 17 countries spanning North America, Latin America, Europe,

and developed and emerging Asia. For quality control, we carefully screen respondents according to job title and function. Forrester's Forrsights For Business Technology ensures that the final survey population contains only those with significant involvement in the planning, funding, and purchasing of IT products and services. Additionally, we set quotas for company size (number of employees) and industry as a means of controlling the data distribution and establishing alignment with IT spend calculated by Forrester analysts. Forrsights uses only superior data sources and advanced data-cleaning techniques to ensure the highest data quality.

Absolute Software	MobileIron
Accenture	Orange Business Services
AirWatch	Partnerpedia
Apperian	Research In Motion
appsFreedom	salesforce.com
AT&T	Samsung
BMC Software	SAP
BoxTone	SilverbackMDM
Citrix Systems	Sprint.com
Embarcadero Technologies	Sybase
Evernote	Tata Consultancy Services
Fiberlink Communications	Tech Mahindra
Fujitsu	Thomson Reuters
HCL Technologies	Trend Micro
IBM	Verizon
Infosys	VMware
JackBe	Zenprise

Companies Interviewed For This Report

ENDNOTES

- ¹ Vendors deploying new information and communications technology (ICT) products and services face changing information worker behaviors driven by five innovations that empower users to provision and use technology with little help from their IT department. For insight into the impact of this trend on vendor strategy executives, see the January 9, 2012, "Consumerization Will Erase Boundaries Between Corporate And Consumer Technology Markets" report.
- ² For additional insight into corporate mobility trends and enterprise adoption of mobile devices and applications, see the July 22, 2011, "Forrsights: Mobility Dominates Enterprise Telecom Trends In 2011" report.
- ³ This report outlines the road map of Forrester's solution for security and risk (S&R) executives working with their counterparts in security and risk (S&R) to build a five-year technology road map for mobile security and operations. See the May 16, 2012, "Define A Road Map For Mobile Security And Operations" report.
- ⁴ The Apple App Store for iPhones opened in mid-2008 and grabbed the attention of independent application developers and mobile device users as a distribution channel for mobile applications. Since that time, many other consumer-focused mobile app stores have opened, including Google's Android market, Nokia's Ovi store, and Research In Motion's (RIM) BlackBerry App World. For further details on these consumer-focused app stores, see the May 21, 2009, "Mobile App Stores Are Important To Biz Users" report.
- ⁵ For additional details on the use of these mobile app stores by workers in small, medium, and large enterprise organizations, see the May 21, 2009, "Mobile App Stores Are Important To Biz Users" report.
- ⁶ Source: Forrsights Networks And Telecommunications Survey, Q1 2012.
- ⁷ For more information on mobile authentication, see the December 5, 2012, "Mobile Authentication: Is This My App? Is This My User?" report.
- ⁸ Apple's Volume Purchase Program enables companies to find, buy, and distribute applications in bulk using blocks of redemption codes; enables firms to assign these codes to individual employees; and covers business-to-business (B2B) applications built by third-party developers that cost at least \$9.99 per year.
- ⁹ Vendors are developing mobile cloud services to meet emerging demand from IT organizations for help in managing this Wild West-type mobile device and application environment. This report identifies the factors creating demand for mobile cloud services, defines the characteristics of those services, and discusses how corporate mobile cloud service adoption will evolve over the next few years. See the May 2, 2011, "Vendors Seize Emerging Mobile Cloud Service Opportunities" report.
- ¹⁰ The MDM market is burgeoning, with more than 40 vendors offering on-premises and cloud-hosted solutions. This report is part of a series to help S&R professionals understand the MDM vendor landscape and develop a shortlist of vendor solutions for further evaluation. See the January 3, 2012, "Market Overview: Cloud-Hosted Mobile Device Management Solutions And Managed Services" report.

¹¹ HTML5 is the best known of the open web technologies, but the open web also includes JavaScript (client and server), CSS3, Representational State Transfer (REST) application programming interfaces (APIs), and mobile frameworks (e.g., jQuery Mobile). These technologies comprise a new application platform for the Internet that will gradually replace today's web platforms (HTML4, Adobe Flash, Microsoft Silverlight, Simple Object Access Protocol [SOAP] web services, Java EE, and .NET) for most applications. For additional insight into the evolving use of these open web technologies, see the January 24, 2012, "Embracing The Open Web: Web Technologies You Need To Engage Your Customers, And Much More" report.

About Forrester

A global research and advisory firm, Forrester inspires leaders, informs better decisions, and helps the world's top companies turn the complexity of change into business advantage. Our researchbased insight and objective advice enable IT professionals to lead more successfully within IT and extend their impact beyond the traditional IT organization. Tailored to your individual role, our resources allow you to focus on important business issues margin, speed, growth — first, technology second.

FOR MORE INFORMATION

To find out how Forrester Research can help you be successful every day, please contact the office nearest you, or visit us at www.forrester.com. For a complete list of worldwide locations, visit www.forrester.com/about.

CLIENT SUPPORT

For information on hard-copy or electronic reprints, please contact Client Support at +1 866.367.7378, +1 617.613.5730, or clientsupport@forrester.com. We offer quantity discounts and special pricing for academic and nonprofit institutions.

Forrester Focuses On Security & Risk Professionals

To help your firm capitalize on new business opportunities safely, you must ensure proper governance oversight to manage risk while optimizing security processes and technologies for future flexibility. Forrester's subject-matter expertise and deep understanding of your role will help you create forward-thinking strategies; weigh opportunity against risk; justify decisions; and optimize your individual, team, and corporate performance.

« SEAN RHODES, client persona representing Security & Risk Professionals

Forrester Research, Inc. (Nasdaq: FORR) is an independent research company that provides pragmatic and forward-thinking advice to global leaders in business and technology. Forrester works with professionals in 17 key roles at major companies providing proprietary research, customer insight, consulting, events, and peer-to-peer executive programs. For more than 29 years, Forrester has been making IT, marketing, and technology industry leaders successful every day. For more information, visit www.forrester.com. 87122

