

MARCH 2015 //////////////////////////////////////

ITWORLD CRAM SESSION

UNDER THE HOOD

Features you'll find in the best FSS tools

THE PLAYERS

A market ripe for disruption

IN PRACTICE

*Seattle Children's Hospital &
IMS Health share lessons learned*

DOS AND DON'TS

How to handle common challenges

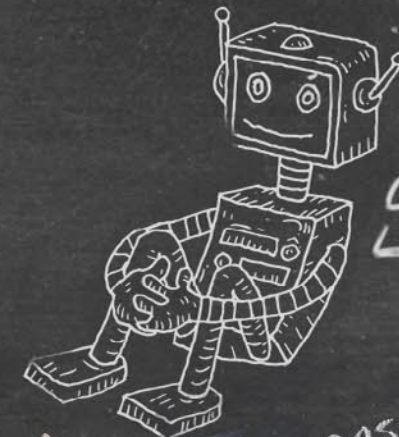
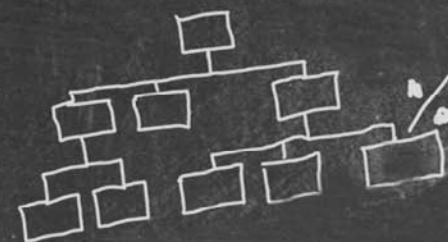
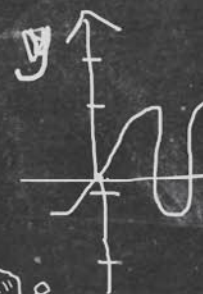
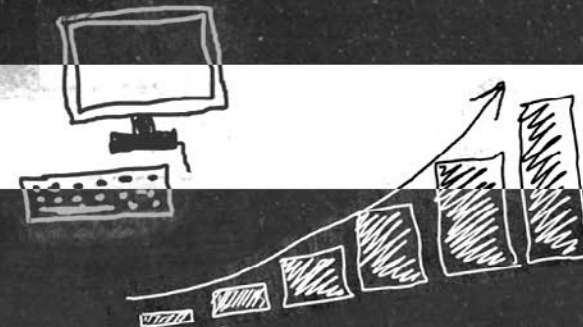
RECOMMENDATIONS

5 tips for getting FSS right

CHECKLIST

7 steps to choosing an FSS tool

File Sharing & Synchronization Software



GEEK
4 LIFE



impossible



INTRODUCTION

How enterprise IT is taking data back from the consumer cloud

BY ROBERT L. MITCHELL

C

onsumers may have started file sharing and synchronization in the cloud, but enterprise IT is catching up fast. Driven by the widespread employee

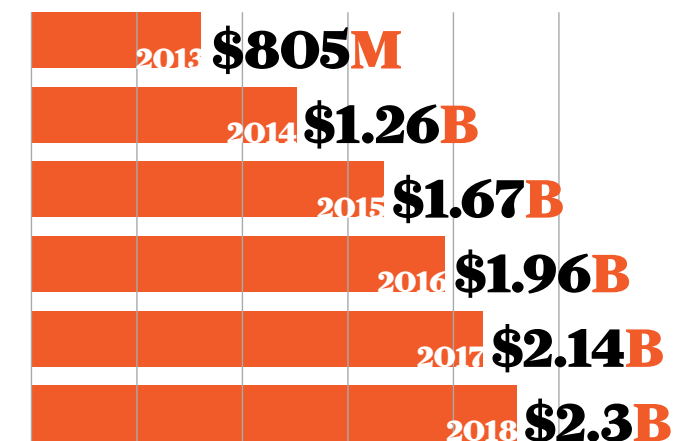
adoption of consumer file sharing services such as Dropbox, and the need to have centralized management and security for shared busi-

ness documents, businesses have been adopting enterprise file sharing and synchronization (FSS) products at a torrid pace.

More than half of businesses with 1,000 or more employees have already deployed at least one company-sanctioned product, according to IDC. The market research firm expects sales of FSS products and services to grow 32% this year, to \$1.67 billion.


Exploding demand for enterprise file sharing and synchronization software

Business sales of FFS will increase 32% this year, and reach \$2.3 billion by 2018, a 26.9% compound annual growth rate.



SOURCE: Worldwide File Synchronization and Sharing and Business File Synchronization and Sharing Revenue, 2013-2018, IDC, Sept 2014.

Businesses need to introduce an enterprise-wide standard quickly, analysts and consultants say, before departmental- and consumer-based choices create a mish-mash of sharing options that can be difficult to manage — and secure.

“Sensitive business information is being synchronized onto peoples’ home computers every day, and sensitive personal information is being synchronized onto business computers,” says Brian Podolsky, practice leader of the enterprise content management practice at Kraft & Kennedy, Inc. Adopting an FSS strategy reduces security risks for both parties, while enabling workers to be more collaborative and productive. 

Sales of FSS products and services to grow 32% this year, to

\$1.67 billion

SOURCE: IDC

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UNDER THE HOOD

Features you'll find in the best FSS tools

F

SS software facilitates the sharing of documents, images, videos and other file types with both internal and external users, and synchronizes access

across a wide range of endpoint devices, including desktop computers, laptops, tablets, smartphones, and virtual desktops. The best FSS tools

combine the ease of use of consumer products with administrative controls, such as the ability to back up and recover content and accounts, wipe content from devices, and audit usage to meet regulatory compliance requirements. A few products enable collaborative editing as well as basic file sharing, and some offer version control.

Packaging. FSS tools vendors offer both standalone products, and products

closely associated with related software suites, such as collaboration, content management, enterprise mobility management, and other enterprise application software. These products offer tight integration with the vendor's related software, says Charles Smulders, managing vice president for mobile and client computing at Gartner Inc.

The tools may be included in a software bundle the organization has already purchased, or offered as standalone,

complementary products. Some products are simply an extension of the vendor's associated enterprise application software and have limited features for sharing files that fall outside of the vendor's own product ecosystem. However, most are either positioned as a general file sharing and synchronization repository for the enterprise, or are rapidly evolving in that direction.

Security. All products offer basic security features, such as password protection and data encryption. A few offer enhanced capabilities of interest to highly regulated industries. Enhanced security features, such as strong encryption at rest and in transit, data loss prevention (DLP) and digital rights management (DRM), are some of the most

important differentiators for many businesses, says Srinidhi Kaniyar, vice president of the Enterprise Data Architecture and Management practice at IT consultancy NTT DATA.

Integration. All FSS products establish a dedicated repository for data sharing, but some offer integration features with document stores associated with enterprise applications, such as Microsoft SharePoint. Data integration usually flows one way, however. "You're pulling data out of these content repositories and placing it into these file sharing platforms," says Podolsky. In a few cases, FSS tools will synchronize changes between the source and sharing repositories. For example, Citrix ShareFile will keep document updates in synch with

HP's iManage content management system. But most FSS products don't keep documents in the source and sharing repositories in synch.

The best FSS tools combine the ease of use of consumer products with administrative controls

Mark Prior, director of enterprise systems at healthcare software vendor IMS Health, prefers it that way. He set

up the company's FSS to be completely separate from the company's document management system. "It's hard to look at 4 million documents in a system designed for internal use and decide which to open up for external sharing. If people make one mistake they can accidentally expose sensitive documents to outside access," he says.

Cloud/on premises/hybrid.

Vendors offer products that run on premises, in the cloud, or in a hybrid model where data gets stored on premises but the cloud service manages access and stores account credentials. Highly regulated industries often have no choice but to run the entire service on premises, Smulder says. "Compliance regulations haven't caught up with the

Enhanced security features, such as **strong encryption at rest** and **in transit, data loss prevention** and **digital rights management**, are some of the most important differentiators for many businesses." - *SRINIDHI, KANIYAR*

cloud so they really don't have an option." IMS Health went with a hybrid setup. "The authentication and handshaking goes on in the cloud, but the content is stored internally," Prior says. His staff is comfortable managing the content repository, but wanted to avoid administering, patching and updating the Web-based software that provides access to it.

"The Web interface is hosted outside of your system, which is nice because new features are handled automatically for you and you don't have to handle upgrades," says Podolsky. In this way, IMS gets the benefits of SaaS (software as a service) while retaining full control over its data. -R.M.

THE PLAYERS

A market ripe for disruption

F

SS buyers face a confusing array of choices and a volatile and rapidly changing market. More than 100 players currently offer FSS products.

Of those just five account for nearly three quarters (73.3%) of the market, according to IDC.

Other prominent vendors include

WatchDox, which offers DRM; Alfresco, which embeds an FSS with its content management software; and IBM, which includes a file sharing component with its Connections social networking software. Dropbox offers a business version of its popular consumer product, as do Google (Google Drive/Google Apps for Business) and Microsoft (OneDrive for Business).

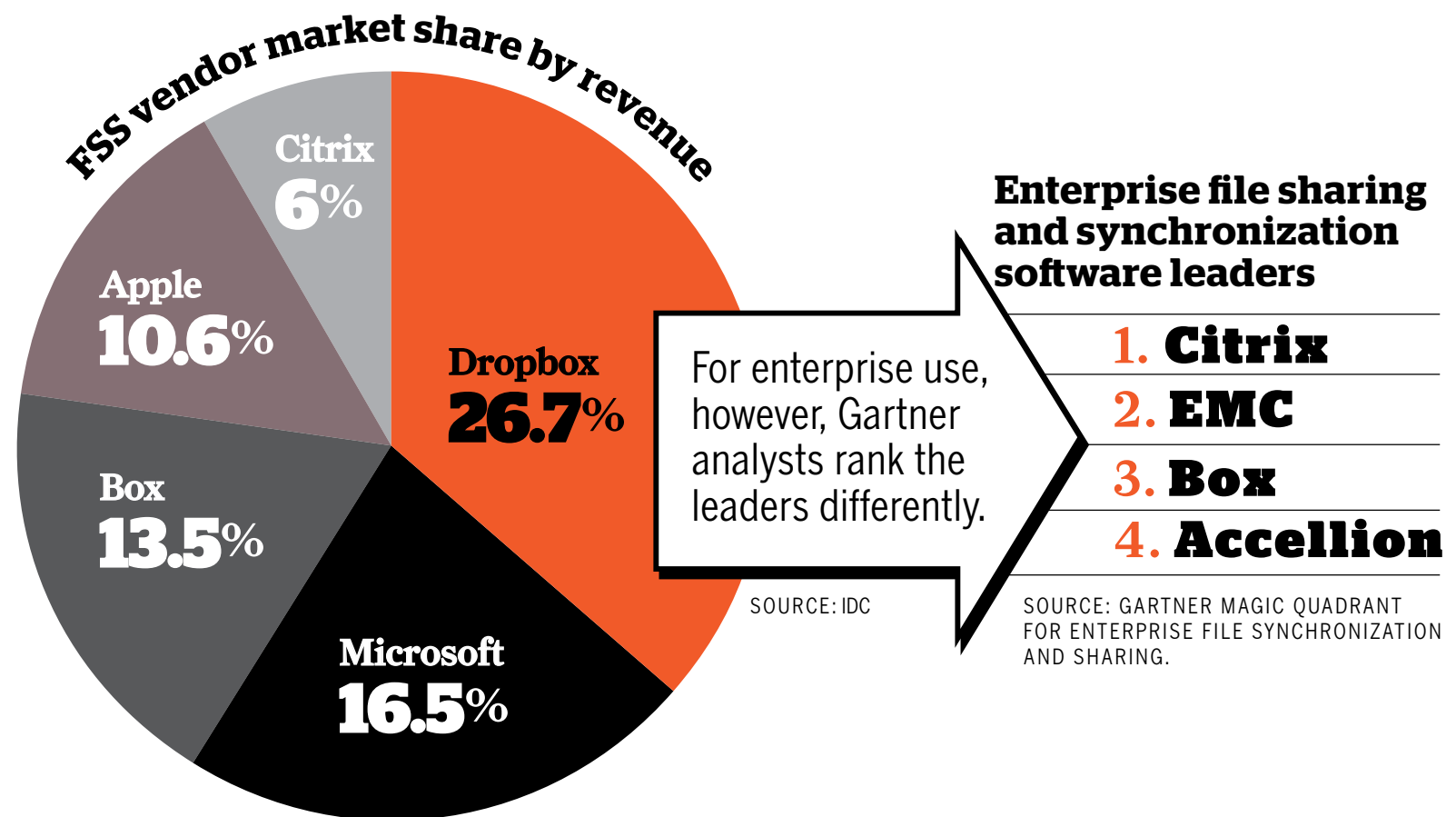
“This is a chaotic market that’s ripe for a shakeup,” says Smulders. “Expect

This is a chaotic market that’s ripe for a shakeup. Expect vendors to evolve quickly. **Some will disappear.**”

- CHARLES SMULDERS

vendors to evolve quickly. Some will disappear.” As more sophisticated FSS capabilities are integrated into related enterprise application suites over the next two years, many standalone products will start to disappear. By 2017, Gartner expects just 10% of standalone products to remain, serving niche markets such as highly regulated businesses that require DRM or other extraordinary security requirements.

Eventually, Smulders says, file synchronization and sharing will become a feature of enterprise application suites, rather than a separate product, and they will allow sharing of files from “heterogeneous sources,” as well as document repositories associated with the vendor’s own applications.



Enterprise IT doesn’t have time to wait for things to shake out because corporate data is being lost to the consumer cloud every day. But think twice before paying

up front for a long-term contract, even if it offers more attractive pricing, Smulders advises. “Realize that the relationship may be short-term.” –R.M.

IN PRACTICE

Seattle Children's Hospital and IMS Health share lessons learned

reate one standard, make it easy

The challenge in establishing a common FSS standard lies in finding one product that can accommodate everyone's needs. Wes Wright, CIO at Seattle Children's Hospital, needed a tool that would meet three "wildly different" uses. This includes the

hospital, with its regulated patient data; a research institute that shares large documents liberally with a wide range of external partners; and a foundation that deals with sensitive donor financial data.

"I didn't want 14 different tools out there," Wright says, so he had to find a system that was as easy to use as possible for the research team while meeting stringent regulatory compliance standards for financial and

healthcare users. "I had to be able to tell who put something out there and who came and got it," he says. It had to be easy to administer and support. And it had to support video lectures, clips, and research documents that could exceed 1 terabyte in size.

Wright ended up with a system that passed all of the required compliance certifications and uses an Outlook plug-in to make sharing easy. Users click on a button in the

email client to “attach” a shared document. The document passes to an FSS appliance, a server located in the hospital’s DMZ that then provides secure access for the recipient.

Compliance requirements and the sheer size of files that users wanted to share mandated an on-premises deployment instead of cloud. “The cloud-based FSS would have chewed up my pipe to the outside world. I don’t want that kind of traffic passing through my Internet connection.”

Wright thought about integration with the research organization’s SharePoint repository, but decided against it for now. “Once I link them up I lose some visibility. And when they use the FSS they know the rea-

son they’re in there is because they are working with protected information. I liked that hyper awareness, so I decided to keep the activities separate,” he says.

User adoption has been high — about 80% — among hospital and foundation staff, who needed a more secure option. The research team, however, has come along more slow-

ly. “Some folks use it for large file transfers, but we still have a lot of Dropbox users over there,” Wright says, adding that he doesn’t mandate use of the FSS, except for documents that need to be protected.

Start fresh, leverage partnerships

Mark Prior wasn’t interested in cre-

Compliance requirements and the sheer size of files that users wanted to share mandated an on-premises deployment instead of cloud.

ating an FSS system that extended the existing document management platform at IMS Health, which was designed to hold internal documents, and he wanted to put an end

to use of the consumer versions of Dropbox and Google Docs, which the healthcare software vendor saw as a liability, but had reluctantly allowed on a case-by-case basis.

“We wanted to start fresh,” he says. Prior looked first to the enterprise application software providers with whom he already had relationships. Several had FSS offerings, in-

OPPORTUNITIES

Once enterprises put FSS tools into play, expect users to integrate them into business processes, change those processes, or even create new, unexpected uses. “People think of enterprise FSS as a way to solve a point problem, but it can be used more strategically to optimize workflows,” says Smulders.

■ At IMS Health users began asking for FSS accounts to share files with ... themselves. “Some people wanted to set it up so that they don’t have to bring their laptop home anymore, as a convenience,” says Prior. **In this way users could have access to documents on their home laptop, tablet or smartphone.** “It’s a secondary use case that’s emerging,” he says, “and we are giving people accounts for that.”

■ Airlift Northwest, a helicopter transport service that brings patients to Seattle Children’s Hospital, found an innovative new use for the hospital’s FSS. Medical professionals aboard the aircraft now use the hospital’s mobile FSS app to capture video and photos of patients while in transit, and send the information to the hospital, where **doctors can review it before the patient arrives.** No video remains on the smartphones after the data has been uploaded to the FSS repository. “FSS is morphing into many different use areas,” Wright says.

cluding the vendor of the company's content management, sales force management, and enterprise mobility management systems. Prior chose an existing partner's software for about 1,500 users because it was easy to use and administer, and he was able to use the relationship to negotiate better pricing.

Competitive price quotations varied greatly. "There was a 100-fold difference in the per-seat pricings I received," he says, adding that costs tended to be higher for cloud-based options. The vendor for one of the enterprise applications the company uses even offered an FSS product at no extra cost. Unfortunately, it wasn't quite mature enough or easy enough

to use to meet the business' needs.

IMS Health considered cloud, on premises, and hybrid options before deciding on a hybrid configuration with authentication and sharing controls in the cloud and data stored on premises. This allows for a single access point for file sharing, but will allow IMS Health to eventually create separate repositories in countries that regulate where and how data must be stored and accessed. That's an important consideration for global businesses, he says. IMS Health's new HIPAA-compliant FSS can also restrict access to shared files by location or role.

Adoption got off to a slow start but has steadily gained momentum,

driven in part by a corporate policy that now prohibits the use of consumer-focused file sharing services. Nearly a year later, he says, "It's like a snowball rolling downhill." -R.M.



DOS AND DON'TS

How to handle common challenges

D

DON'T make the mistake of thinking that FSS tools can solve all of your collaboration needs, says Kaniyar at NTT DATA. You'll still need more structured tools for document

management and collaboration, particularly for internally shared content. "File sharing and synchronization is just one part of the equation."

DO recognize that technology is only half the solution. You need strong user policies, and policing the use of the tools can be a challenge, says Prior. Although internal-only documents aren't supposed to be used in the FSS at IMS Health, there's no enforcement mechanism in place, nor is there a good way to easily track compliance. You must provide clear guidelines and rely on users to exercise good judgment.

DO anticipate "content sprawl" and **DON'T** expect it to be easy to change the rules after the fact. As the service continues to grow, the volume of documents in the shared space may expand rapidly, and users aren't always good about cleaning up their spaces. IT may need to set up space quotas or even have documents expire after a period of time, but user expectations should be set up front. "What do you do long term to clean

up the data and manage growth? I see that as a challenge,” says Prior.

DO have a strategy, says Kaniyar. For example, one option might be to separate business critical information sharing into repositories associated with specific named user accounts and let individual users manage nonessential documents within the limits of their own allocated space.

DO expect additional support calls when documents are shared with external partners. While most tools support enterprise directories such as LDAP and Active Directory, as well as single sign-on to make ac-

What do you do long term to clean up the data and manage growth? **I see that as a challenge.**

- MARK PRIOR

cess easy for internal users, external users must register and remember a new user name and password. “That is a consistent area of complaint,” Wright says. While the registration process is simple, IT still gets calls for help with registrations, as well as for forgotten authentication credentials. -R.M.



RECOMMENDATIONS

5 tips for getting FSS right

U

Understand your business requirements. What are the needs of each department or business unit? What workflows will be affected? What types and quantities of

content will be shared? Will data be shared to external users? What security needs and regulatory compliance requirements do you have?

Take an inventory of what you have. Collaboration software and other enterprise applications that the business already owns may include an FSS component, or the vendor may offer an attractively priced complementary product that meets your basic requirements.

Ease of use — and administration — is paramount. The user interface should be as easy to use as

any cloud-based consumer file sharing system. Operation should be seamless and users should be able to manage the FSS themselves. Otherwise, IT might need another full time position to support it, and users may continue to gravitate toward uncontrolled sharing on those free, cloud-based file sharing services.

Integration with your back-end systems is key. Can the FSS extract

files from your Documentum or SharePoint document repository? Not all products can make the connections, so take an inventory of corporate platforms from which users may want to pull data and make sure those products are supported.

Resist the urge to allow multiple FSS deployments for different departments and use cases. One department may have Documentum, while another uses OpenText. Each of those vendors offers FSS capability, but standardizing means choosing one product that works for everyone. Look for one solution that can solve as many file sharing problems as possible.

NTT DATA acquired several different FSS products due to acquisitions and now runs one system for internal use and another for disseminating reports and other documents to clients. Some less sensitive materials, such as marketing materials and other public documents, may also be shared with consumer versions of Dropbox. “With different groups using different products it can be inconvenient for everyone,” Kaniyar says. He expects the business to eventually standardize on a single platform.

RISKS AND DEAL BREAKERS

- **Some vendors are likely to be acquired or disappear entirely over the next few years.**
- **Underlying technology in some products may become obsolete as the market continues to change rapidly.**
- **Once an FSS catches on, IT may be flooded with new user requests, raising named-user licensing counts, and storage needs may increase.**

Making the deal

While published pricing for standalone FSS tools may seem high, there’s plenty of room to negotiate. On-premise options tend to cost less than full-on cloud services, volume pricing can cut costs substantially, and with so many competitors in the market, prices vary widely.

The place to start is understanding

your requirements. “Know your own environment, what workflows this will make easier, how much content you want to share among how many users, and what level of security you need,” Podolsky says. Narrowing down required features can save money. “For example, if you don’t need single sign on or local storage you may be able to get a cheaper option that doesn’t have those features,” he says.

Approach your current enterprise software vendors first, says Kaniyar. Some may offer an FSS tool at no extra charge as part of their enterprise application offerings, while others may sell standalone tools that integrate tightly with their own product suite while supporting general file sharing and synchronization. As-

suming that the product meets your buying criteria, you may be able to leverage your relationship with the vendor to negotiate your best price.

Keep in mind that licensing is by named individual and users share a limited storage pool. Understand how a sudden growth in the user base and accompanying surge in storage requirements will affect your cost — and add a buffer.
–R.M.

Checklist

7 steps to choosing an FSS tool

- ☐ **Define** and **prioritize** your requirements
- ☐ **Determine** whether any enterprise applications the business already owns offer a tool that satisfies your baseline requirements
- ☐ **Create** a short list of vendors that meet your requirements using analyst reports and recommendations
- ☐ **Develop** evaluation and selection criteria
- ☐ **Evaluate** and **test** potential products
- ☐ **Negotiate** and **compare** pricing options
- ☐ **Finalize** your choice and **deploy** the tool