

Shadow IT Security Gaps and 7 Resolutions

Ben Cody | Head of Product Management for DLP



Shadow IT consists of SaaS applications used by employees for business, which have not been approved by the IT department or obtained according to IT policies.

Research Undertaken

- Contents based on McAfee / Intel Security Commissioned Report on Shadow IT
- Research conducted by Stratecast | Frost and Sullivan
- Includes 167 respondent companies, and 600 individuals (equal number LOB & IT)

FROST & SULLIVAN

What's driving Shadow IT?

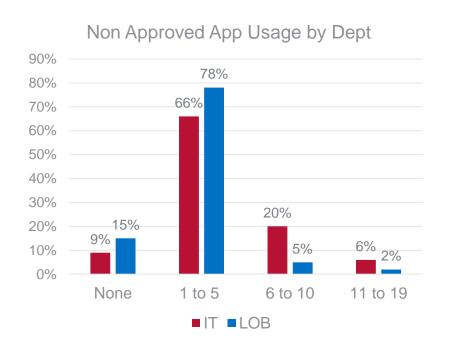
People want to get their job done.

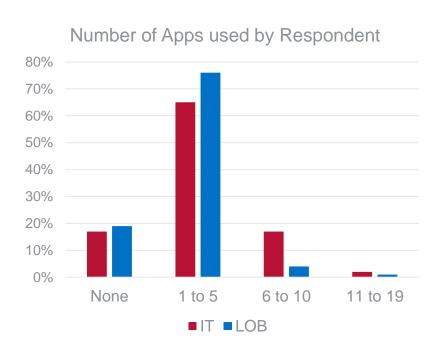
- 1. Ease of access
- 2. Ease of maintenance
- 3. Free or low cost
- 4. Quick deployment



How pervasive is the problem?

Everyone does it, but IT is even more likely to use shadow IT!



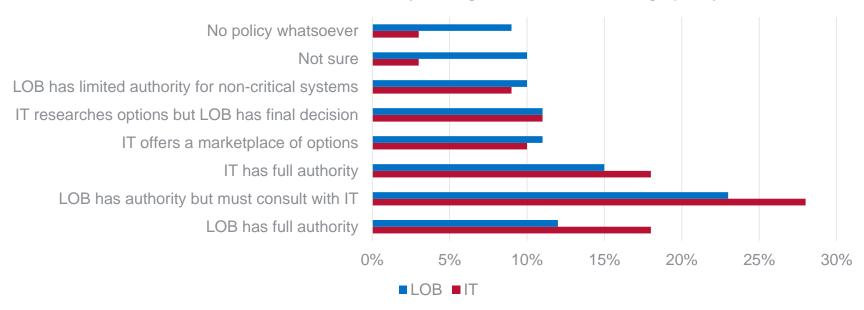


Source: Frost and Sullivan

What exacerbates the problem?

Corporate Policies are not clear or well understood. IT and LOB have different views.

Which statement best describes your organizations SaaS usage policy?



Source: Frost and Sullivan

Why do they do it?

Here's the Top Five Reasons

- 1. They are more familiar with it (the SaaS application).
- 2. IT process for new application requests is too cumbersome.
- 3. The non-approved solution meets my needs better than the approved solution.
- 4. I tried to get approval first, was denied, but am using it anyway.
- 5. It's free.



What are they using it for? It's not just Facebook...

Facebook LinkedIn Twitter YouTube Dailymotion Google+ Tumblr

Blogger Wordpress Dropbox Box via Google Drive Microsoft Skydrive Apple iCloud YouSendIt/Hightail Mozy via Google Apps Microsoft Office 365 Zoho Adobe Creative Cloud CloudOn Open Xchange Google Docs Microsoft Sharepoint IBM Smartcloud Google Chat AOL Instant Messenger Trillian Jive Webex

Citrix ConferencePlus Adobe Connect Skype InterCall Google Voice Join.me Constant Contact Eloqua Marketo

SurveyMonkey Cvent IBM SPSS Online Indicee Salesforce Netsuite SugarCRM Microsoft Dynamics Oracle On Demand SAP

Business ByDesign ADP Ariba Coupa Intuit Quickbooks Online Paypal DocuSign Gmail Outlook.com Yahoo Mail

AOL Mail Mail.com ISP Zoho Workday SuccessFactors Monster SilkRoad Ceridian Dayforce Oracle/Peoplesoft McAfee Symantec

Trend Micro Proofpoint Websense Pinglidentity Booking.com TripAdvisor Expedia Priceline Kayak Travelocity

American Express

Business Productivity is largest category, closely followed by social media.

Fastest growing category of apps are HR, Finance, Legal, and CRM/ERP.



They recognize the risk, but do it anyway!

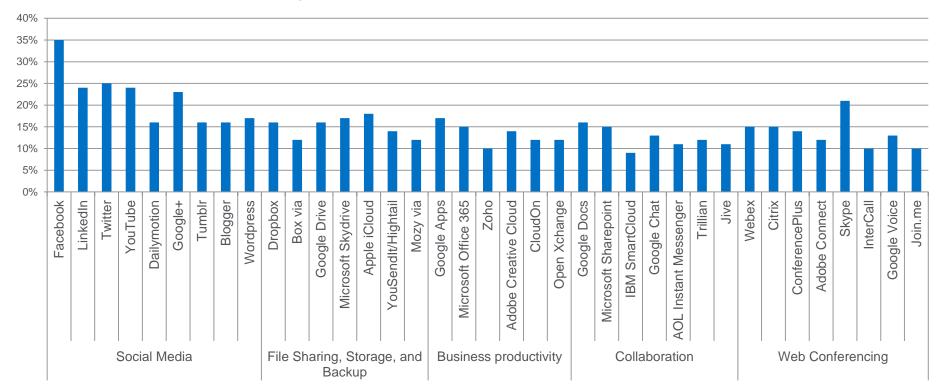
The Top 5 Security Concerns Users Cited for Shadow IT

- 1. Sensitive corporate or personal data will be accessed or stolen by unauthorized actors
- 2. Sensitive corporate or personal data will be accidentally exposed
- 3. Account information will be compromised
- 4. Corporate reputation will suffer
- Data will be lost or deleted



And the risk is real!

Security Incidents by Category / Application



Seven Steps to Address Shadow IT

Here's what to do

- 1. Establish a clear policy that aligns with your business objectives and culture
- 2. Allow users a degree of choice e.g. 2 or 3 options in each category
- 3. Consider single sign on tools to reduce password re-use risk
- 4. Make sure you have an end user awareness and engagement program (no FUD!)
- 5. Make sure you've got the technology basics in place email & web gateways, DLP, etc.

Technology Maturity Model – Draft

None

No security controls

Baseline

- + Anti-malware
- + Endpoint device encryption with HW acceleration
- + Mobile device management
- + DLP discovery
- + Device control
- + Email and web gateways
- + Single factor access control
- + Penetration testing / vulnerability scanning

Enhanced

- + Anti-theft: remote locate, lock, wipe
- + Client SSD with encryption
- + Policy based encryption for files and folders
- + Endpoint DLP
- + NDLP monitoring & capture
- + Multi-factor authentication with timeout
- + Secure remote administration, HW enabled
- + Server / database / backup encryption, HW accelerated

Advanced

- + Server SSD with encryption
- + NDLP "prevent"
- + Endpoint detection and response
- + Database activity monitoring
- + Digital forensics capabilities
- + SIEM
- + Threat intelligence exchange / collaboration
- + MFA with walk-away lock

Improved Breach Security, Usability, Cost, Operations

Seven Steps to Address Shadow IT

Here's what to do

- 1. Establish a clear policy that aligns with your business objectives
- 2. Allow users a degree of choice e.g. 2 or 3 options in each category
- 3. Develop clear metrics for measuring your initiative's success
- 4. Make sure you have an end user awareness and engagement program (no FUD!)
- 5. Make sure you've got the technology basics in place email & web gateways, DLP, etc.
- 6. Implement rules gradually to reduce risk without undue business impact
- 7. Develop a comprehensive data protection program

Successful Data Protection

Examples of Key Elements of Program Success

Risk Based Approach Clear Governance Structure

Defined Policies and Principles

Centralized IT Event Triage

Business units own Data

Business units own and resolve incidents

Business units provide priorities

Senior Management Support

Effective enduser awareness and training Technology shapes end-user behavior

Step Eight – Bonus

Be more responsive to the business. There's a reason why shadow IT is popular.

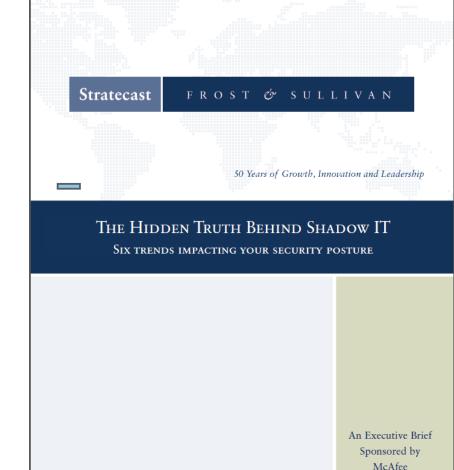
- If you are not responsive, you are not relevant. Do you have good processes in place for dealing with demand management? Above and beyond break fix?
- Getting these in place is perhaps the best answer for proactively addressing the problems of shadow IT.



Find Out More

For the full report visit http://mcafee.com/shadowit

Contact Ben at ben.cody@intel.com



NOVEMBER 2013

www.frost.com

