



# Bring Your Own Service

The Effects of Cloud Services on Compliance  
and Data Protection

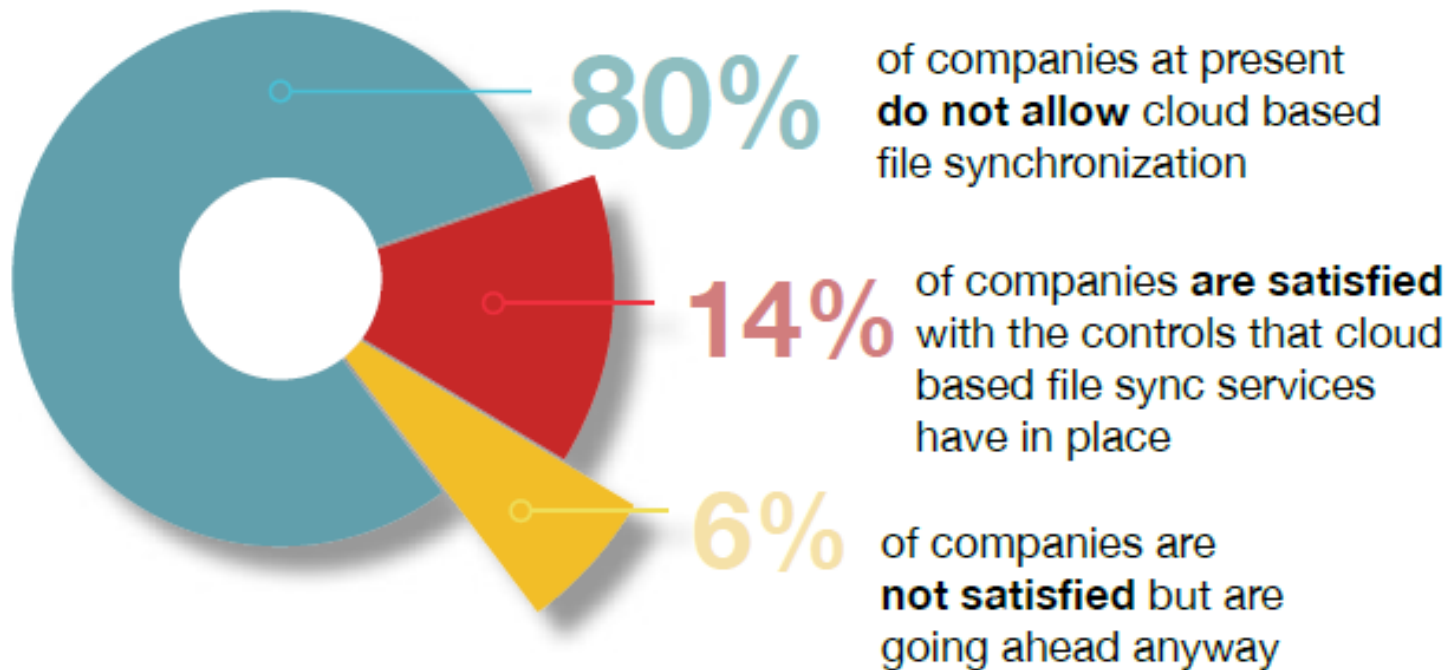
# Cloud Explosion

- Public cloud file sharing has exploded
- As of November 2012, Dropbox claimed to have **100,000,000** customers



# Hey boss, can I use Dropbox?

Today



# Why not?

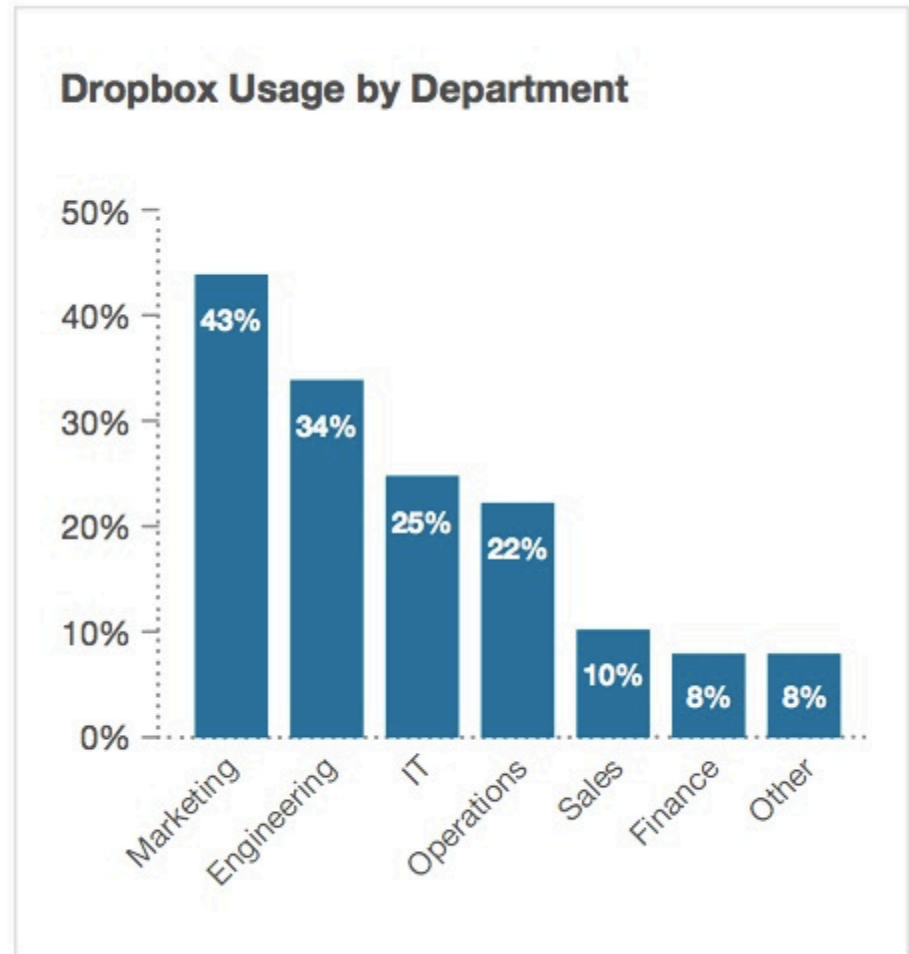
- Risk
- Control
- Complexity



# Too bad! We're doing it anyway

**1 in 5**

Employees use  
Dropbox for work!



Source: Nasuni <http://www6.nasuni.com/shadow-it-2012.html>

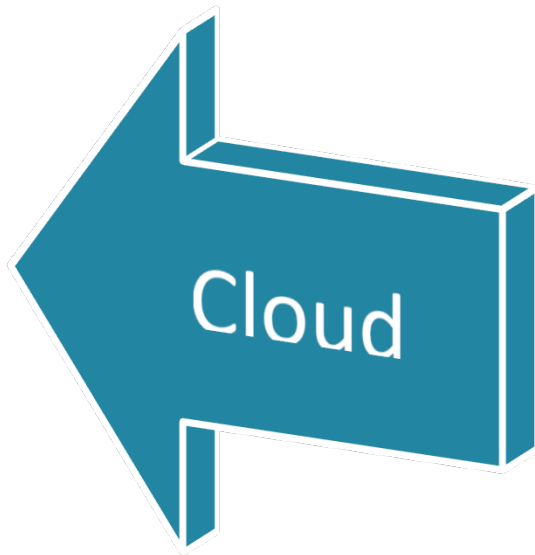
# What can we do about it?

- Given what end-users want:
  - ▶ **Simplicity**
  - ▶ **Accessibility**
  - ▶ **Mobile support**
- And what organizations need:
  - ▶ **Control**
  - ▶ **Compliance**
  - ▶ **Security**

# What are the options?

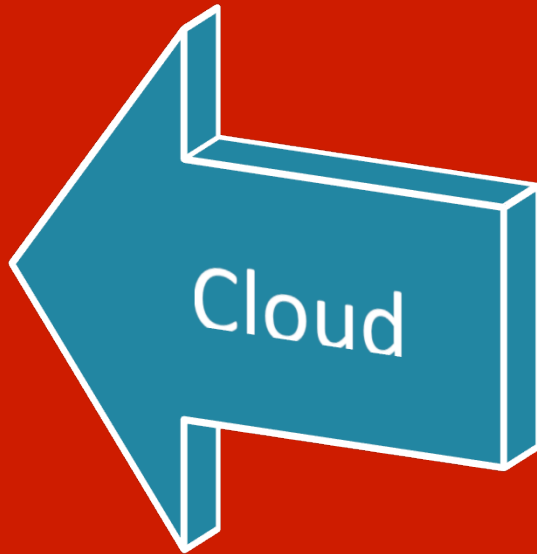
# Every business is different

CHOOSE YOUR  
OWN ADVENTURE®





# To the cloud!



# How does this affect data protection?

- You're still responsible according to the Information Commissioner's Office (ICO)
- Unless you are getting rid of all internally stored data, you'll need to extend your controls and processes:
  - ▶ **Backup & recovery**
  - ▶ **Entitlement reviews**
  - ▶ **Classification**
  - ▶ **Retention**
  - ▶ **Access auditing**
  - ▶ **Change control**

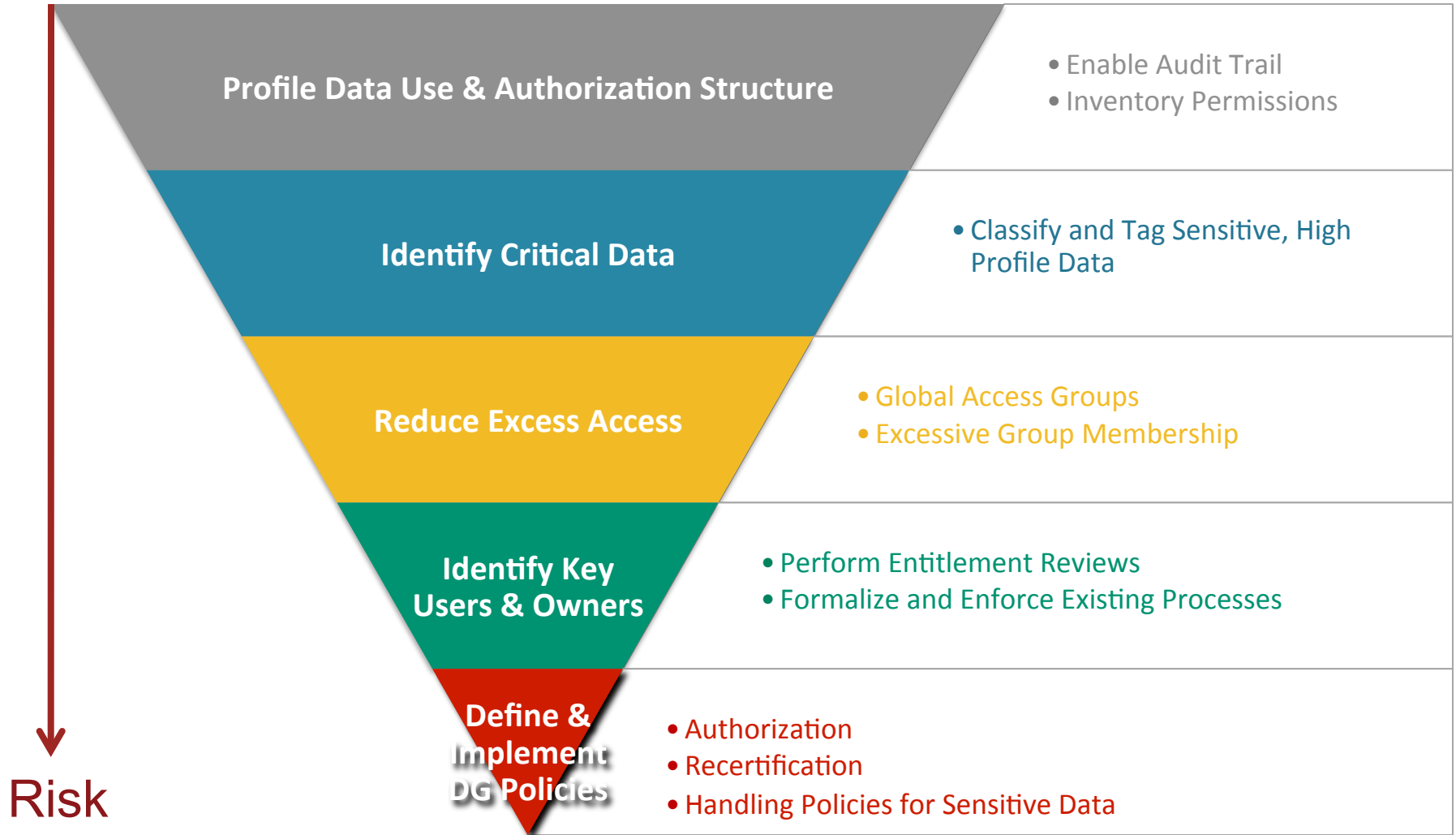
# What about compliance?

- Will vary by country
- Regulations can be complicated:
  - ▶ **EU – 1995 Data Protection Directive (DPD) provides framework for separate laws in EU member nations**
    - In 2012 , EU introduced a revision to DPD to make laws more uniform – e.g., personal data identifiers vary by nation – and placed under single authority.
  - ▶ **US – Personal data protection spread across different agencies (SEC, FTC, & HHS) and based on different legislation. Some key ones:**
    - HIPAA, FCRA (Fair Credit Report Act), Gramm-Leach-Bliley, COPPA, Sarbanes-Oxley.

# Key strategic decisions

- Which data are we moving? All, some, most?
- How do we *select* the data we're going to move?
- Do we keep a duplicate copy inhouse?
- If so, which is the master copy?
- How do internal users synchronize with external users?
- How do we get the data back out of the cloud?
- How do we ensure compliance if we can't monitor access?

# 5 phase process to ensure cloud readiness

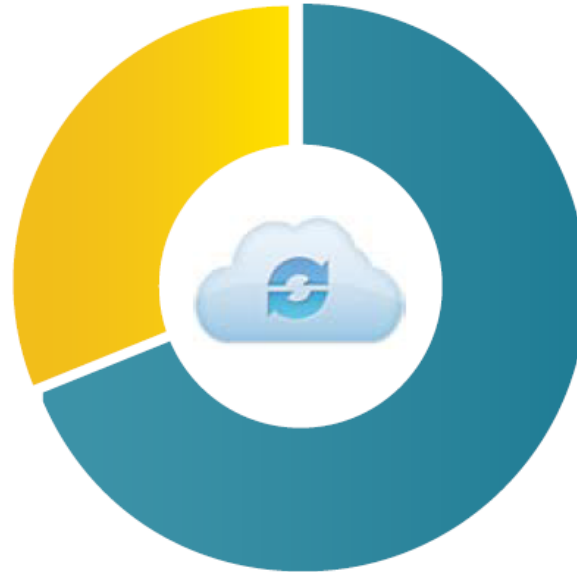


# Extend your existing infrastructure



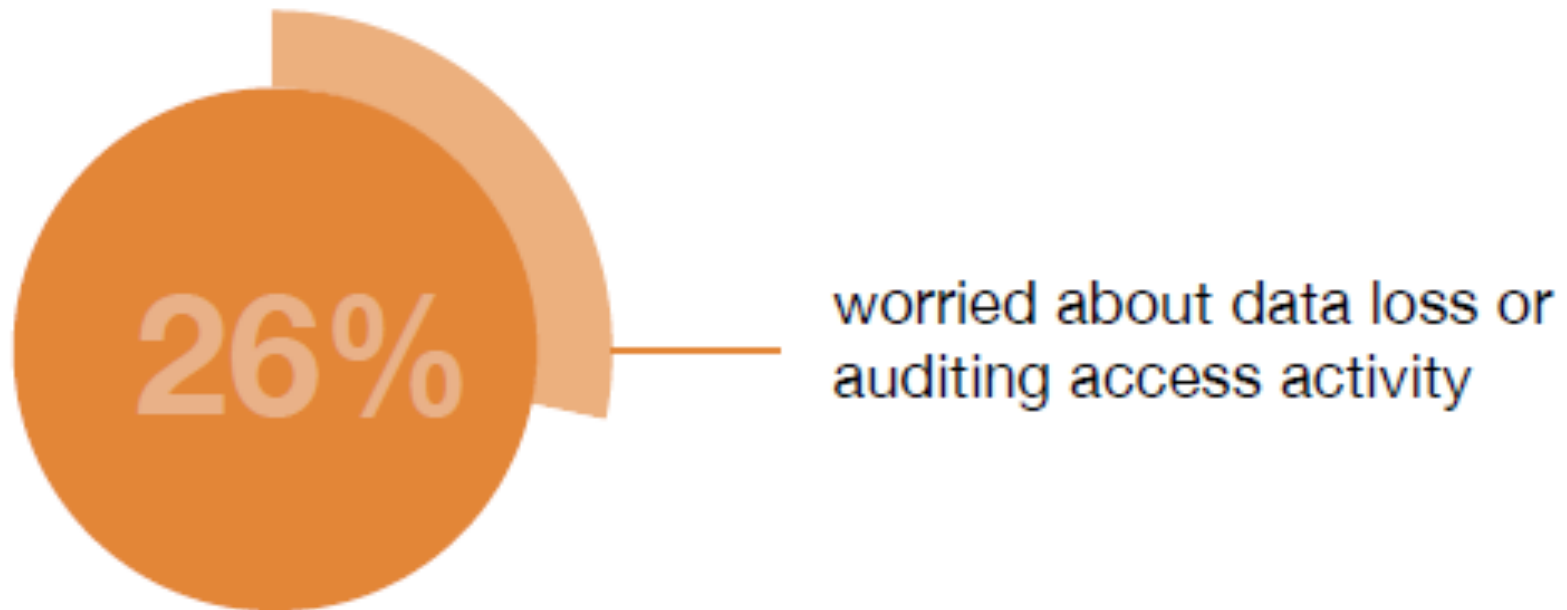
# 69% want to keep data inhouse

IT plans to allow the use of cloud based file synchronization service



# Why is that?

## Concerns about cloud based file synchronization





# What to look for in a solution

- Do I have to move my data?
- Can I use my existing Active Directory users/groups?
- Do I have to re-permission data?
- Can I quickly identify who has access to what?
- Can I monitor and audit who is touching data?
- Can I detect when sensitive data is being synchronized?
- Can I safely make changes to permissions?

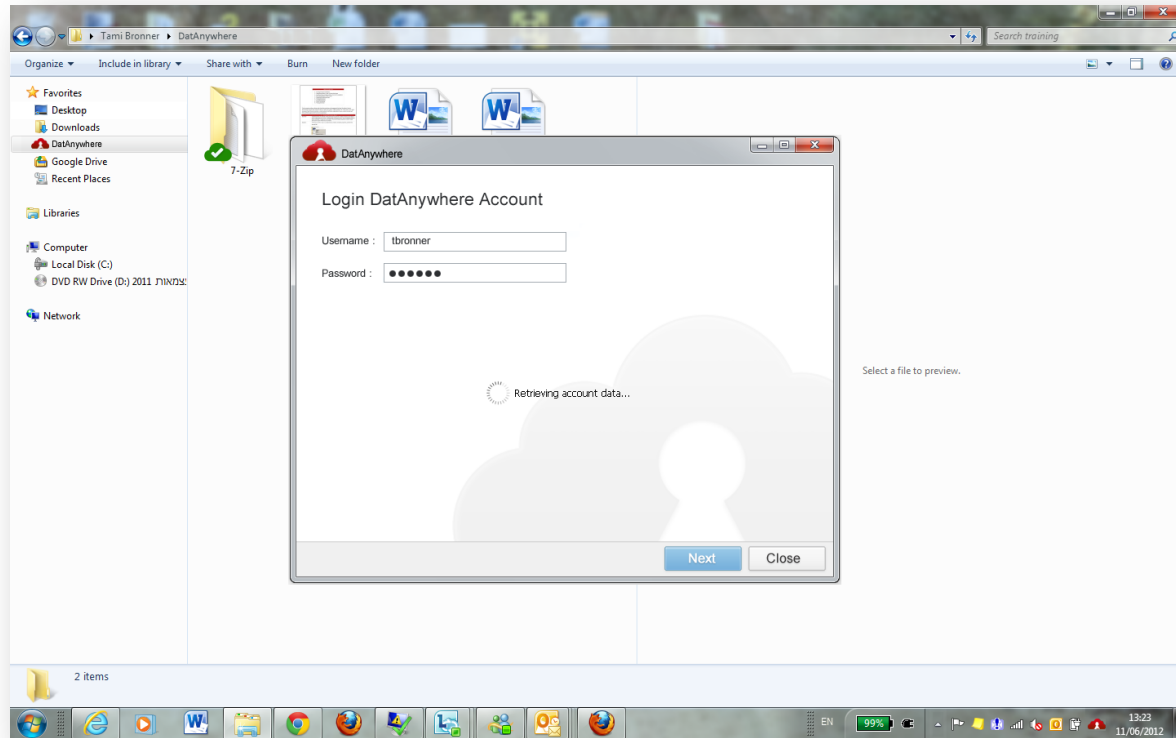
# Varonis DatAnywhere



Provide cloud *usability* using only existing infrastructure:

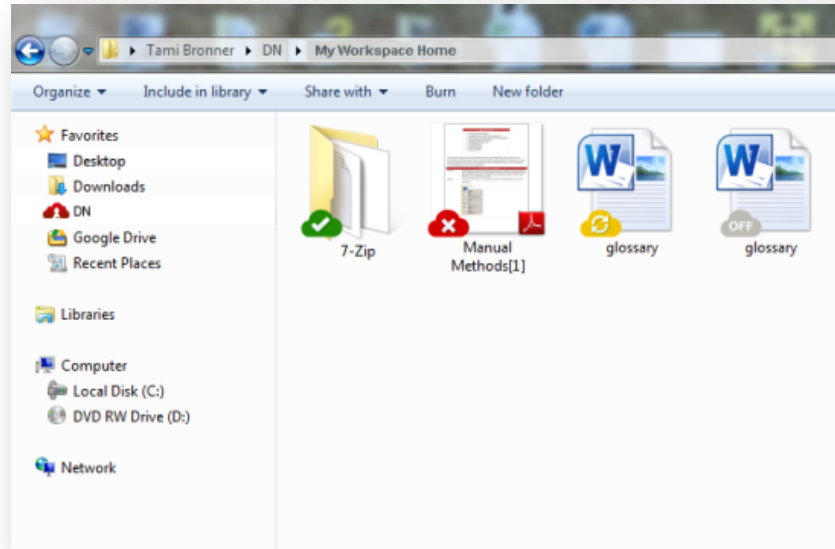
- There's a folder
- You put stuff in it
- It syncs...
  - ▶ ***With your existing storage (NAS, file servers, SharePoint)***
  - ▶ ***Using Active Directory credentials***
  - ▶ ***Using your existing file system permissions***

# Step 1: Login



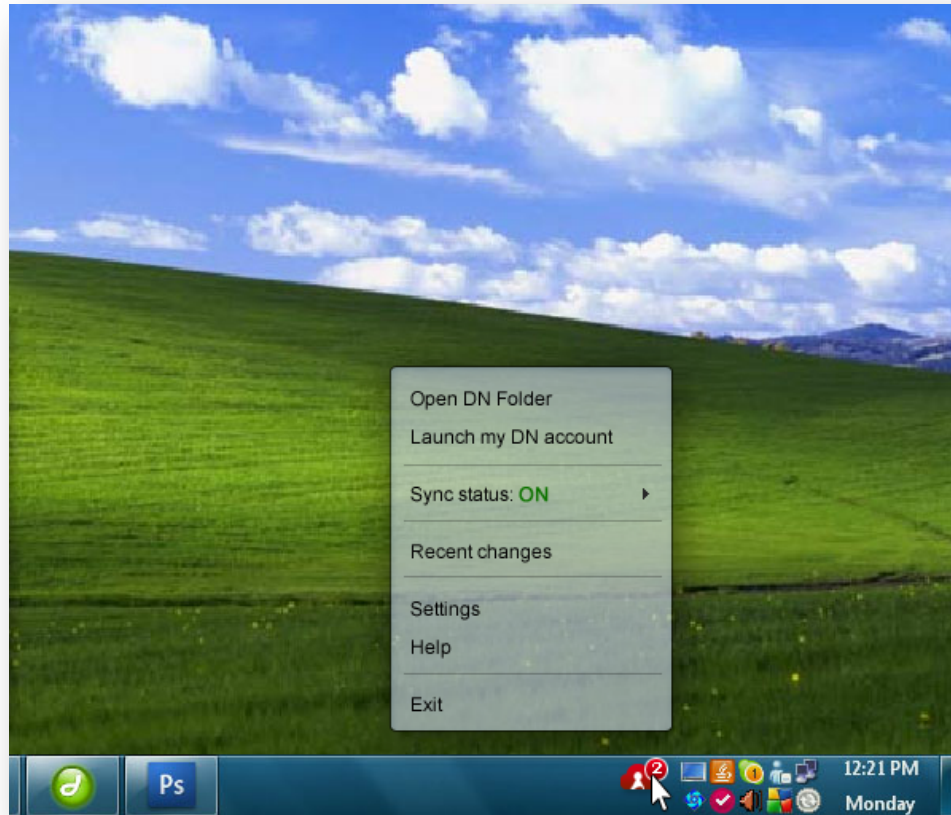
Login with your domain credentials (Active Directory) and/or multi-factor authentication

# Step 2: Collaborate



Your sync'd folders appear in explorer  
Changes sync to your CIFS servers

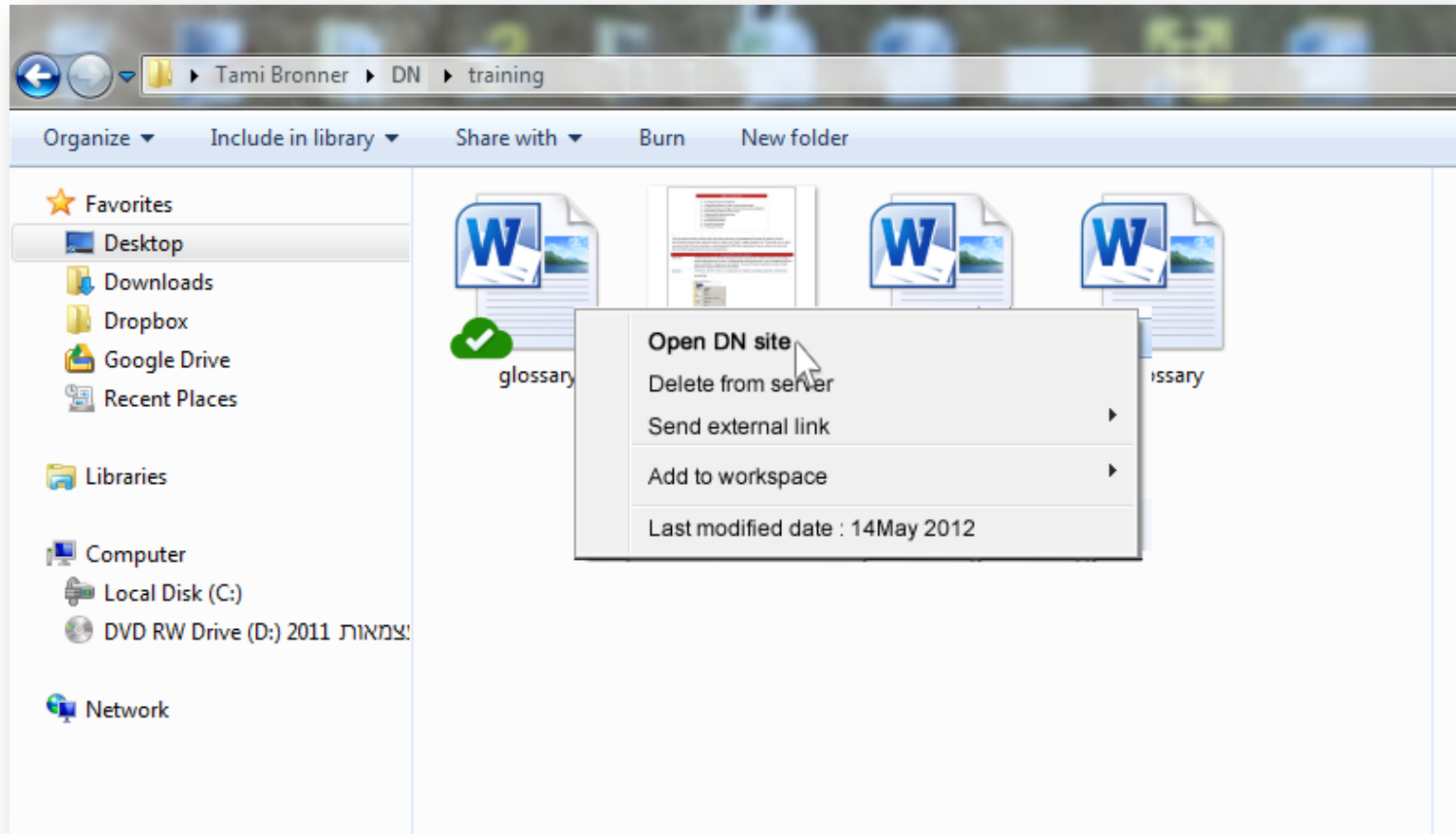
# See Sync Speeds and Notifications



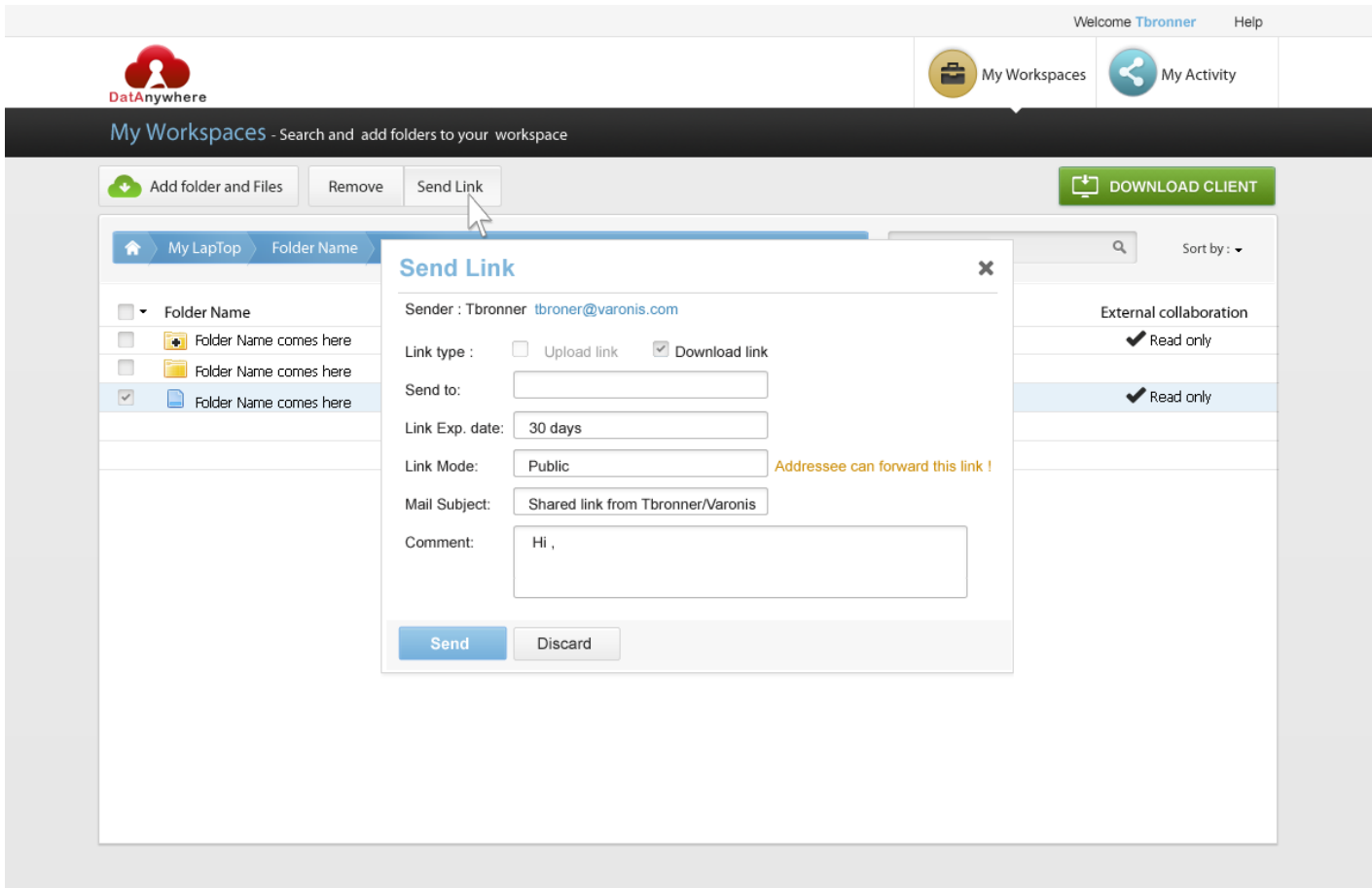
# Mobile Apps



# Right click for instant Extra-net



# Secure Collaboration with 3<sup>rd</sup> Parties



Set Permissions and Expiration dates

Share with partners, customers, vendors, and clients



# Integrates with Data Governance Suite

- Use DatAdvantage to manage permissions
- Use DataPrivilege to automate authorization
- DatAnywhere activity is recorded by DatAdvantage

Click on a user or group to see everything they can touch.

Directory	File System Permissions	Violation Count	Size	DCF Notes
DataShare1		0	540.35 MB	
dsr	F M R W X L	7	34.14 GB	American Express (0/2),U...
Embd-Engineering		0	2.05 GB	
ERP-Arc		0	1.86 GB	
finance		40	136.73 GB	American Express (0/18),...
Fondue		2	1.15 GB	American Express (0/1),U...
groups	R W X L	0	521.01 GB	
HR		6	27.16 GB	American Express (0/1),U...
HR-Private		0	1.86 GB	US SSN (0/1)
HumanResources	F M R W X L	1	5.5 GB	American Express (0/33),U...
legal		1758		US SSN (0/1)
Market		1	1.1 GB	US SSN (0/1)
Market_Budget		2	7.8 GB	US SSN (0/1),Visa (0/1),Visa (0/1)
Market-Cost		0	2.76 GB	
Mobile		77	413.39 GB	American Express (0/24),...
OEM Sales		0	3.26 GB	
PRS		0	190.71 MB	

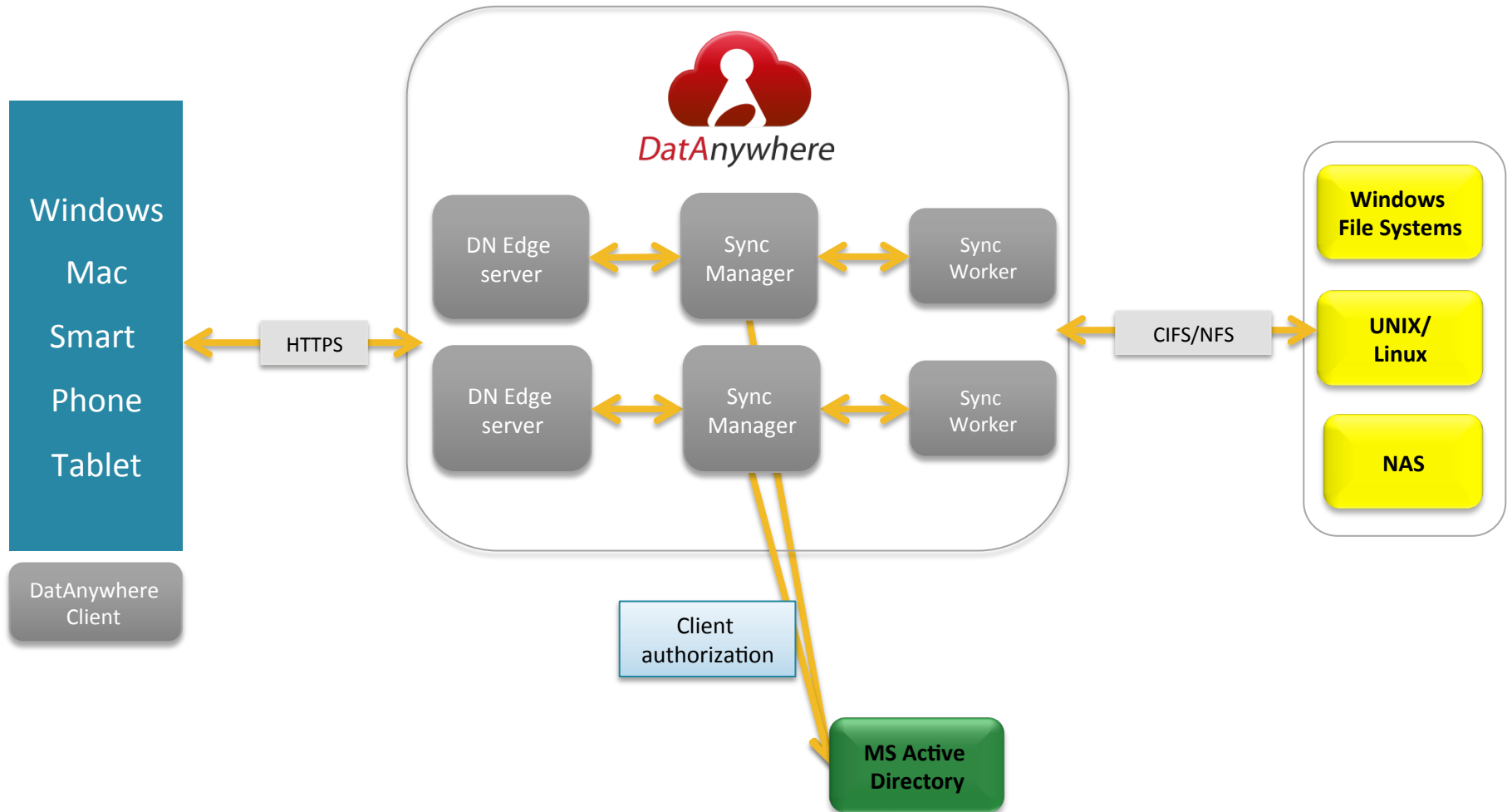
# Governance Suite – Real World Example:

Data owners can review DatAnywhere activity just as they would for any normal file share.

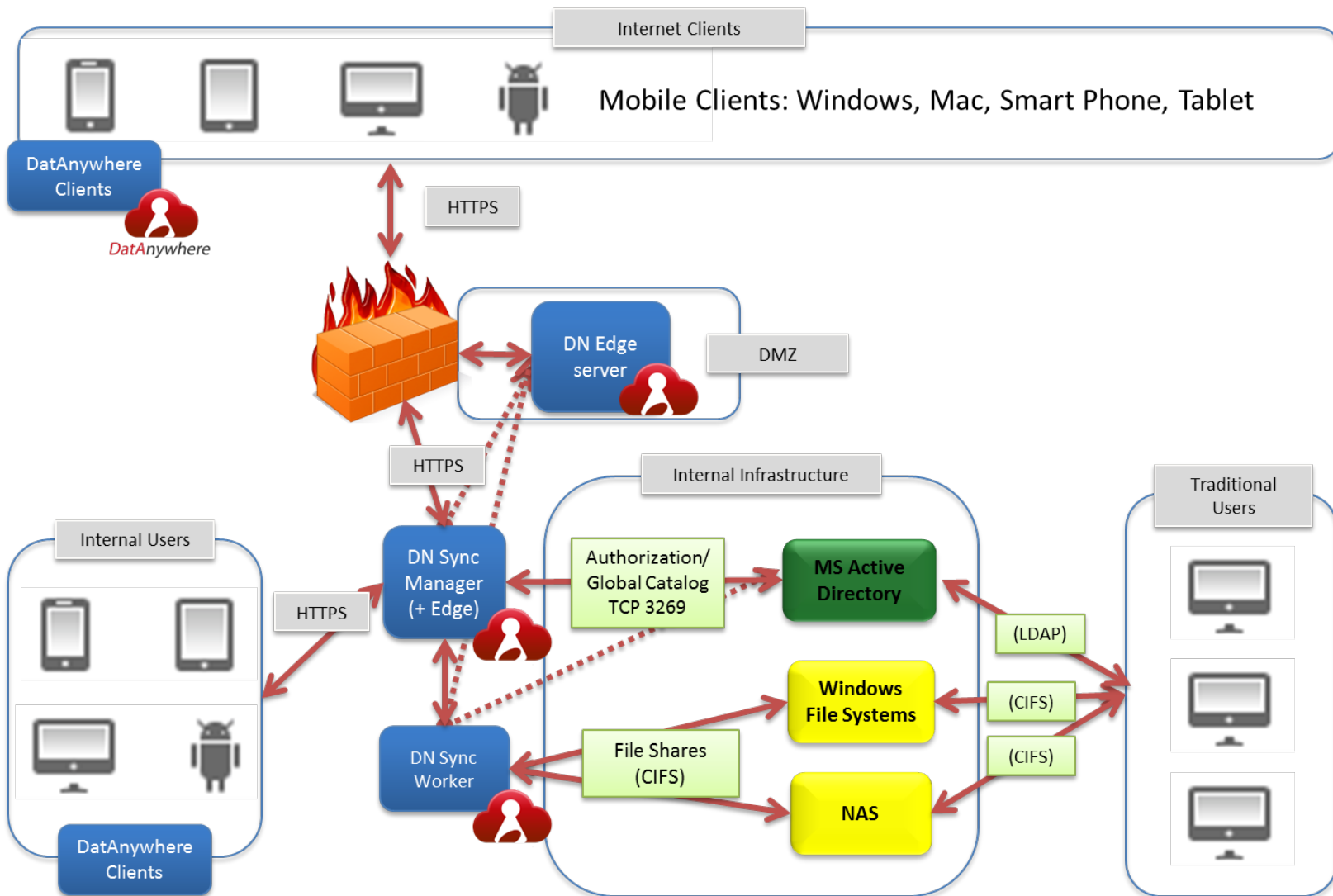
The screenshot displays the Varonis Governance Suite interface. The top navigation bar includes 'Home', 'F.A.Q', 'Help', 'Contacts', and 'About'. The main content area is divided into a left sidebar with navigation options like 'Summary', 'Pending Requests', and 'Management', and a central workspace. The workspace shows a 'Directory Owner' view for 'Managed Directories' with a search bar and a tree view of folders under 'MARKETING'. The right pane shows 'Statistics' for 'User Access' from December 06, 2012, to December 13, 2012. A pie chart illustrates the distribution of events per user, with SVC DN(VARONIS) accounting for 94.69% of events. Below the chart is a table listing users and their event counts.

Display Name	Event Count
Manuel Roldan-Vega(VARONIS)	11953
Steve Franco(VARONIS)	11273
Frank Martinez(VARONIS)	9802
Carolyn Hollowell(VARONIS)	8361
Brian Vecci(VARONIS)	2606
David Leung(VARONIS)	2585
Laura Johnson(VARONIS)	2440
Vathana Seui(VARONIS)	2235
Cindy Ng(VARONIS)	1546
Christopher Hill(VARONIS)	516

# DatAnywhere Architecture



# Sample Deployment



# Summary

- Cloud-*style* sharing and BYOD may be inevitable
- Organizations must choose a direction before the employees choose one for them
- Organizations have a choice between moving data to the cloud, or extending their existing infrastructure to provide cloud-style capabilities in-house
- Whichever direction your organization chooses, governance will be instrumental for secure collaboration

# One more thing...

- Do any of these questions look familiar?
  - ▶ **Who has and should have access to which folders?**
  - ▶ **What folders does a user/group have access to?**
  - ▶ **Who uses all this data & what are they doing?**
  - ▶ **Who does it belong to?**
  - ▶ **What's stale?**
  - ▶ **What's sensitive? And exposed?**
- Are your authorization processes manual?
  - ▶ **Granting access?**
  - ▶ **Reviewing access?**
- Are retention and migration projects manual?
  - ▶ **New NAS? New Domain? Cross platform?**
  - ▶ **How do we find the data we're supposed to move? Delete?**

# Varonis Solutions for Human Generated Content

## Governance, Risk, & Compliance

- *DatAdvantage* Ensures that only the right people
- *DataPrivilege* has access to the right data at all
- *IDU Classification Framework* times, access is monitored and abuse is flagged

## Accessibility & Collaboration



*Extends existing infrastructure to provide private cloud file synchronization and sharing, while ensuring all data remains within the organization, and existing permissions are enforced.*

## Electronic Retention



*Data Transport Engine*

*Intelligently automates data disposition , archiving and migration process using the intelligence of the Varonis Metadata Framework*

# Thank you!