

Forgotten But Not Gone

Identifying the Need for Longitudinal Data Management in Cloud Storage

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THE UNIVERSITY OF
CHICAGO

Cloud Storage

2007

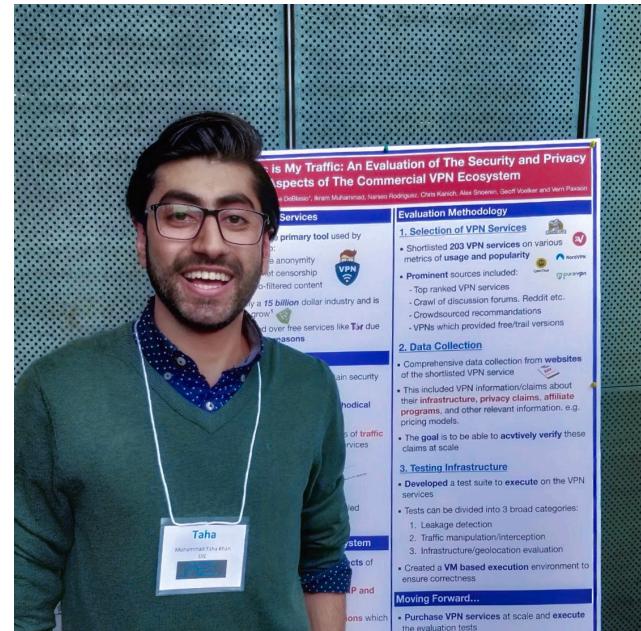
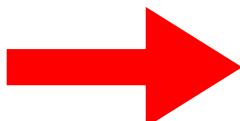


Cloud Storage

2007



2018



Cloud Breaches Are Real

The screenshot shows a news article from The Independent. At the top, there's a red circular logo with a white bird icon, followed by the word "INDEPENDENT". To its right are links for "News", "Voices", and "Sports", along with icons for search, menu, and user profile. Below this is a large, dark, moody photograph of a cloudy sky with silhouettes of people at the bottom. Overlaid on the image are several white rectangular boxes containing text. The first box on the left says "INDY/TECH". The main headline in a large, bold, black font reads "DROPBOX HACK: CLOUD STORAGE COMPANY HACKED, POTENTIALLY REVEALING OVER 60 MILLION PASSWORDS". A small portion of another box is visible on the right.



The screenshot shows an email from Dropbox. At the top right is the blue Dropbox logo. The email begins with "Hi Mohammad Taha," followed by a message about a password update reminder. It includes a link to a help page and contact information. The email concludes with "Thanks, The Dropbox Team".

Hi Mohammad Taha,

We're reaching out to let you know that if you haven't updated your Dropbox password since mid-2012, you'll be prompted to update it the next time you sign in. This is purely a preventative measure, and we're sorry for the inconvenience.

To learn more about why we're taking this precaution, please visit [this page](#) on our Help Center. If you have any questions, feel free to contact us at password-reset-help@dropbox.com.

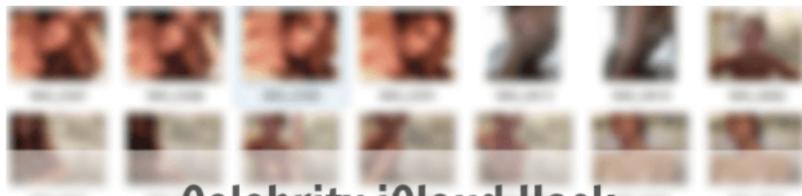
Thanks,
The Dropbox Team

Cloud Breaches Are Real

Email Phishing scam does the trick for the Hacker.

Email phishing is a very old technique used by hackers to get the log in credentials of the victim. On September 23rd 2016 a man hacked into iCloud and Gmail accounts of 30 celebrities in Los Angeles. As per the report the hacker conducted the email phishing scam through his computer from Chicago.

Mr. Edward Majerczyk the man behind the email phishing scam has pleaded guilty to computer fraud in federal court on 28th of September 2016. He had been charged and found guilty on violating the Computer Fraud and Abuse Act and faces a maximum of five years in prison.



Celebrity iCloud Hack

Fappening Hacker Admits to Stealing Celebrity Pics from iCloud Accounts

January 13, 2018 by Swati Khandelwal

Share 649 | Share | Tweet | Share

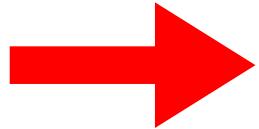
Fappening

Identify whether there is a need for
longitudinal data management
in cloud storage services

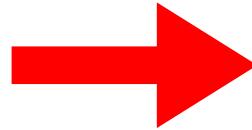
Study Overview



API-based
File Access



amazon
mechanical turk



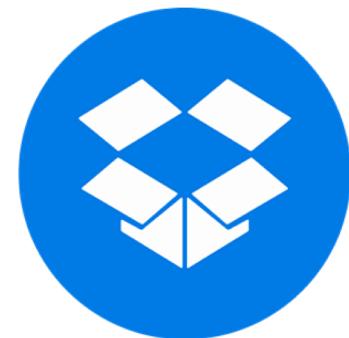
100 Participants

Survey-based
Study

Cloud Storage Study



OR





Generic Survey







File Specific Survey

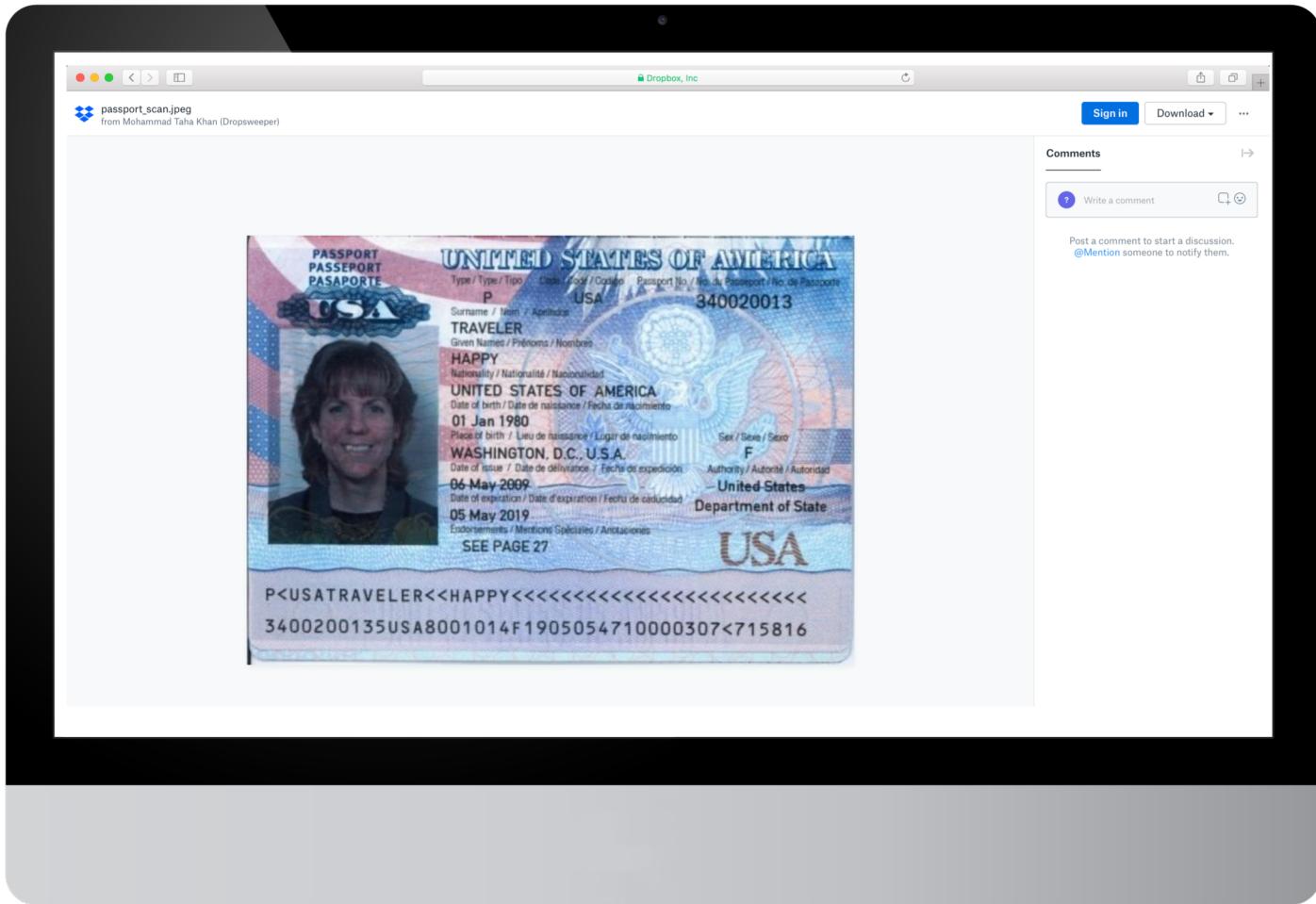
File 1/10

File Name: Passport_scan.jpg

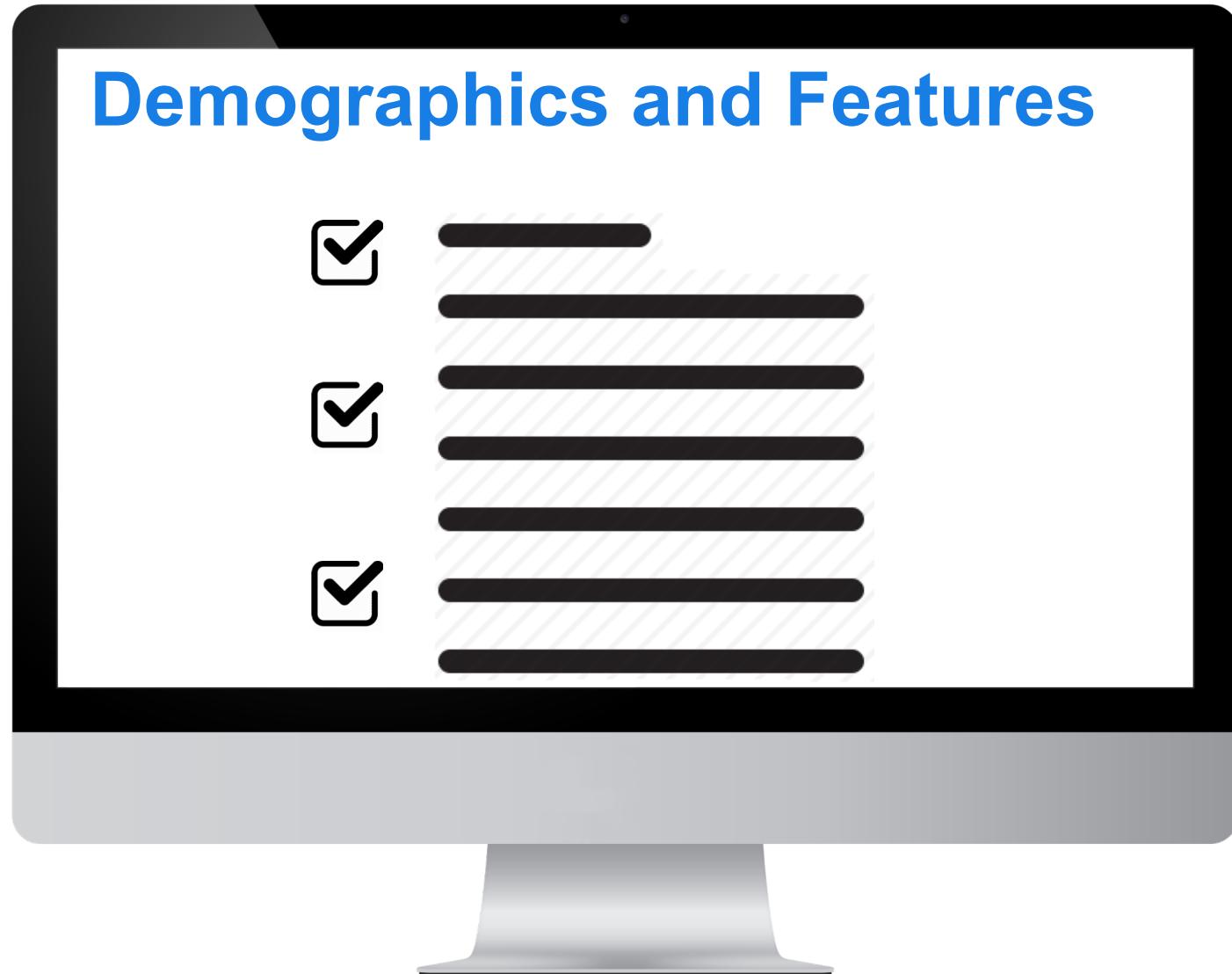
Location within Dropbox: /ScannerApp/MobileUploads/

You **MUST** view the file in Dropbox before proceeding.

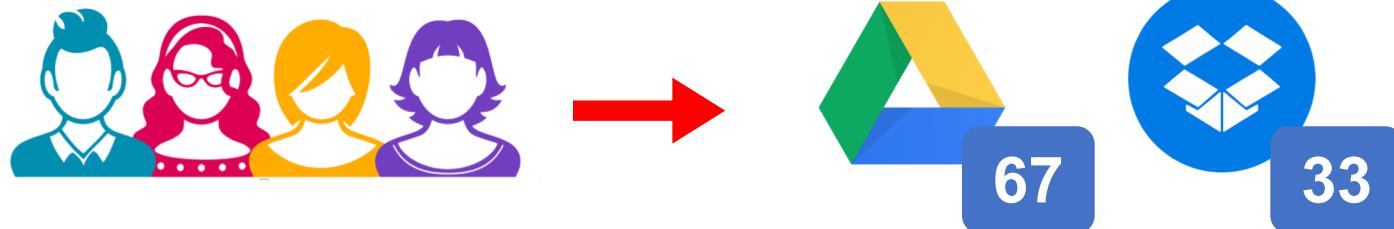
[View file in Dropbox](#)



Demographics and Features



Survey Participants



88% of accounts > 3 years old

80% used for both professional and personal

Media and documents were most common



Shown Files Were Recognized

Asked if files were recognized



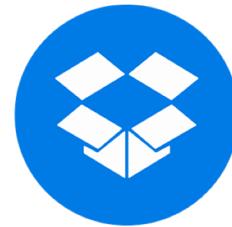
Less likely to recognize files from others

Documents and images were most recognizable



Some Files Will Never be Accessed

Never Access In Future:



23%

30%

Desired Management Decisions

Keep As Is



59%

Delete



34%

Encrypt



7%

Desired Management Decisions

Keep As Is



59%

Delete



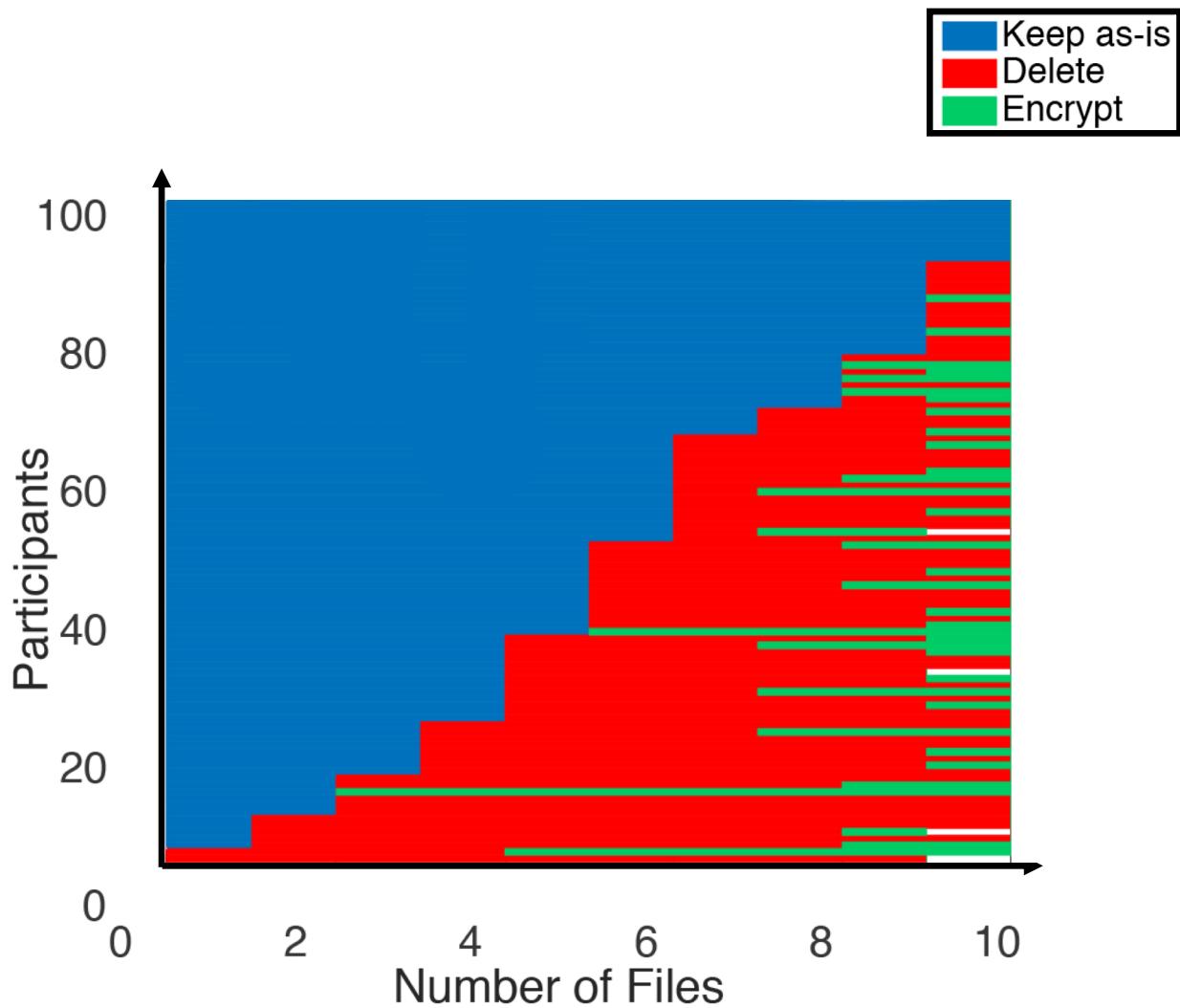
34%

Encrypt



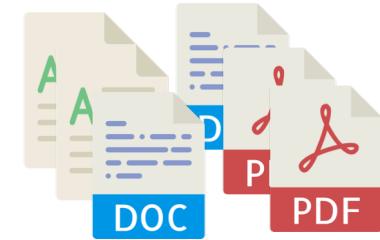
7%

Management Decisions Varied



Generalizing Decisions

Generalized decision to similar files



Keep media files as is

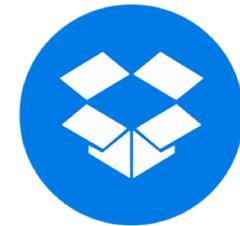


Delete other “not useful” files



Not All Files Were Remembered

Not remembered:



34%

39%



File Sharing

Keep Sharing



34%

Stop Sharing



11%

Key Findings

Many files in the cloud forgotten



Disconnect between desire and ability

Tools must handle large archives

Tools must handle long-lived archives

Conclusion

Longitudinal file management is necessary

Need for scalable retrospective management tools

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