

E-Filing study

Modernizing the E-filing
experience and
infrastructure

Presentation structure

1

Goals and approach

2

What we found

A. filer experience

B. scalable infrastructure

3

How to move forward

4

Questions

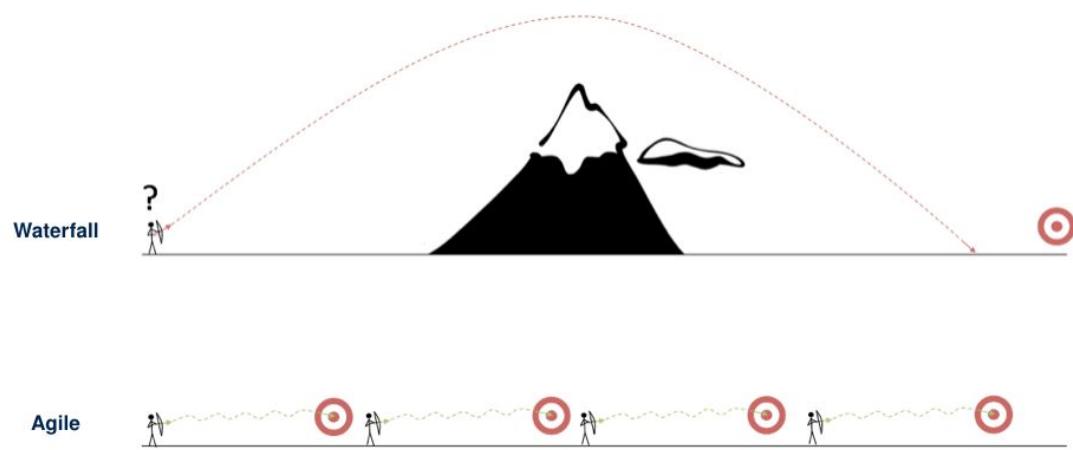
Background and goals

**How can we modernize the e-filing system
to get better quality data, be responsive to
user needs, and handle increasing
volumes of data?**

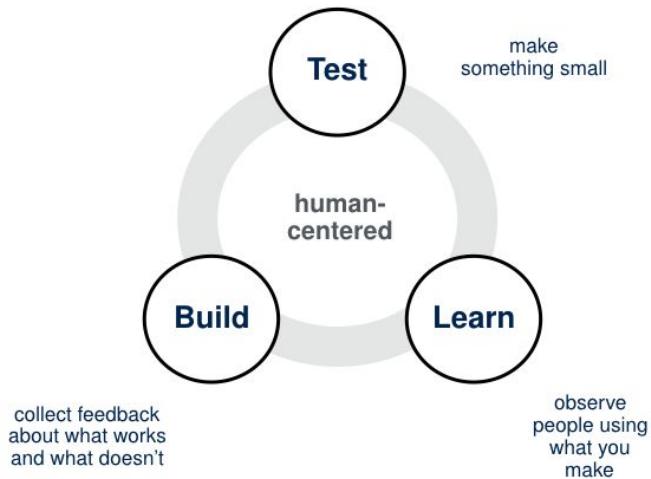
Our approach

18F methods

1. We work iteratively



2. We design for people



Research activities

- Goal-setting workshop with FEC
- Contextual interviews and observations
- Prototyping and prototype testing
- Survey distributed to all current E-filers

We talked to

- **12** Filers of varying experience (+10)
- **12** Experts in various roles within the FEC (+9)
- **5** Commercial campaign finance software vendors
- **3** Data consumers (e.g., journalists, academics)
- **533** Survey respondents (filers)

What we found (at a high level)

A. Filer experience

Helping filers complete forms correctly will improve data quality, filers' experience, and the experience for data users both inside and outside the FEC.

B. Scalable infrastructure

Existing infrastructure and processes meet the current demand.

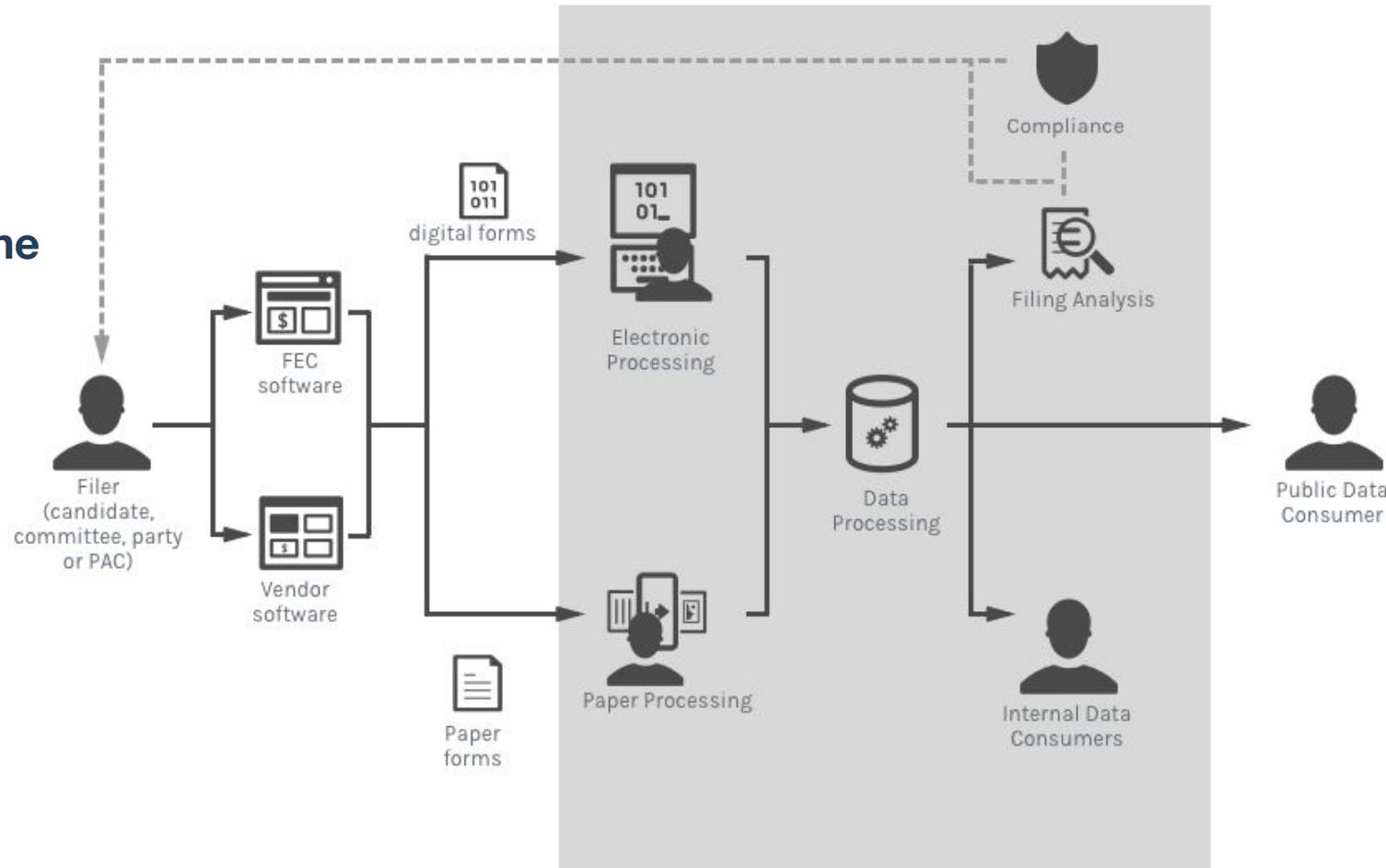
But this will likely be increasingly difficult in the future...

...without continued evolution.

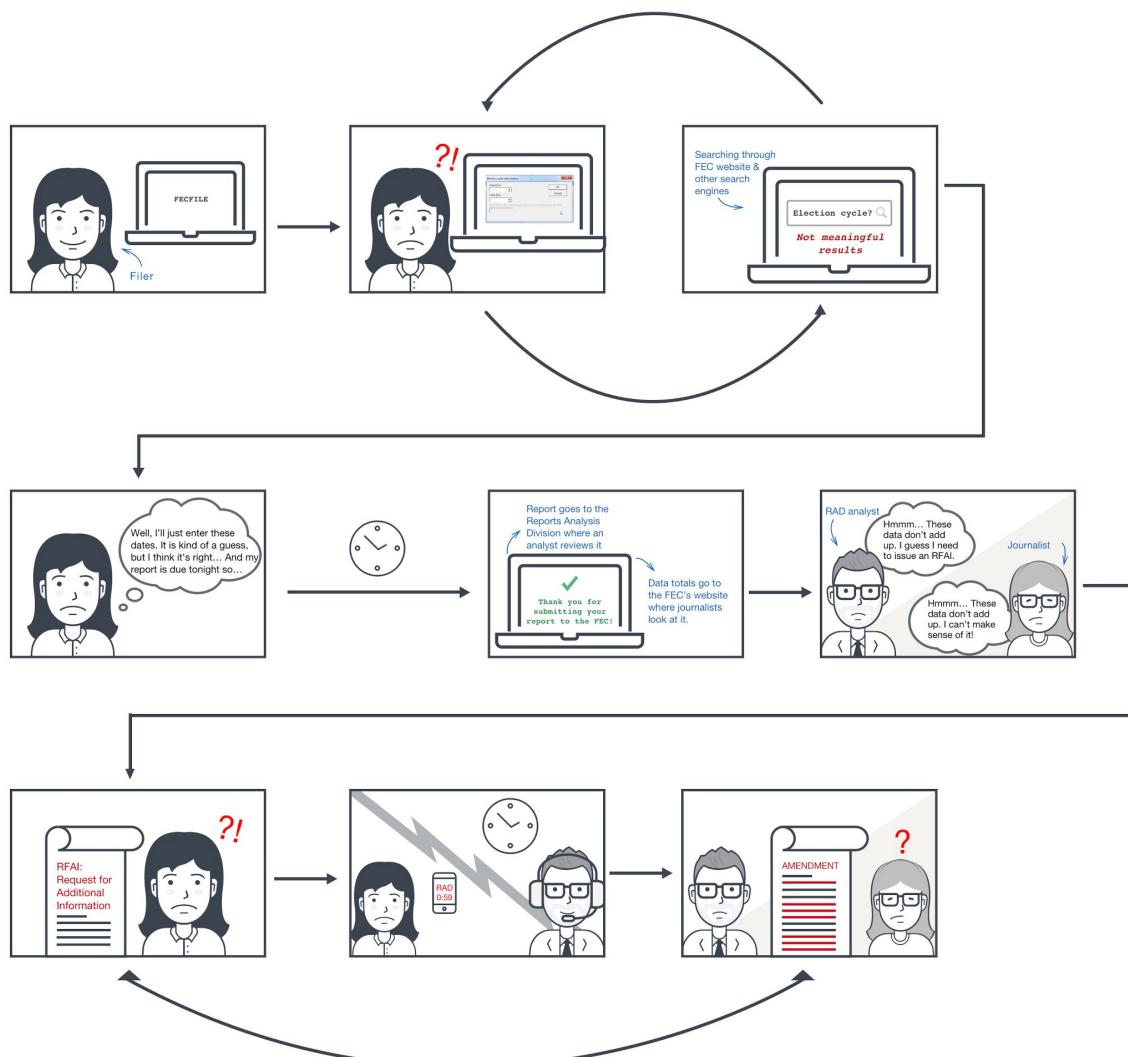
What we found deep dive: Filer experience

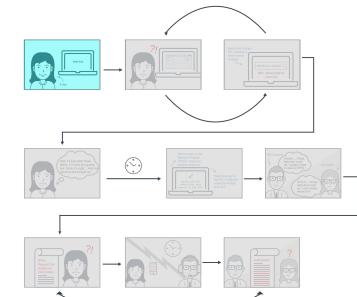
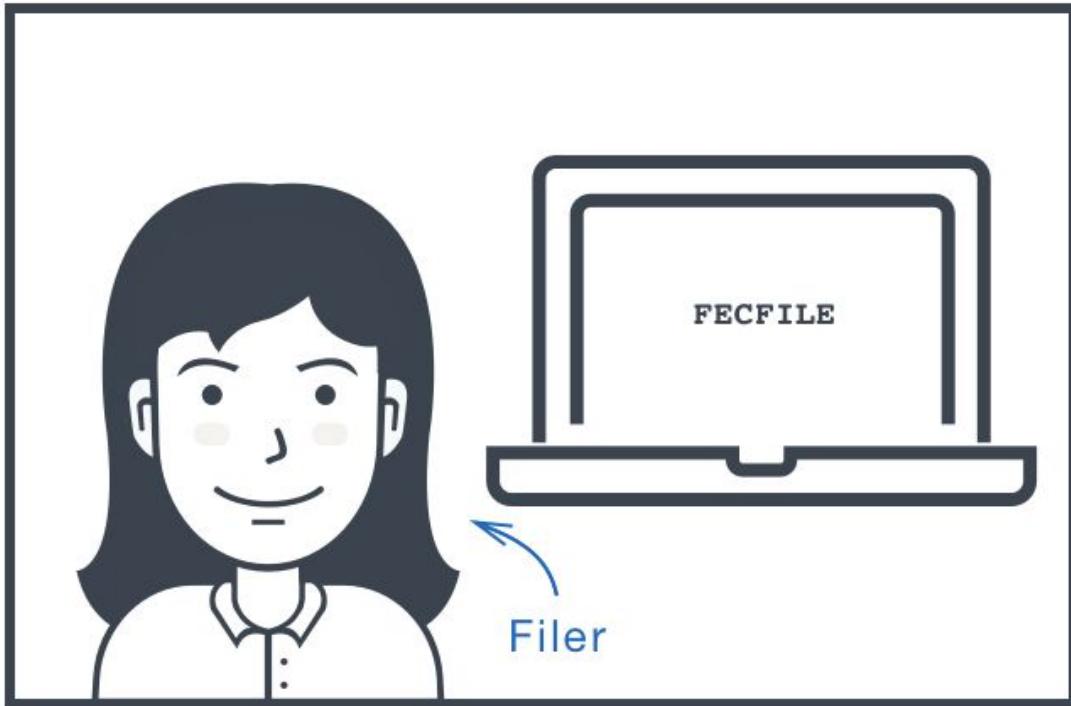
The flow of campaign finance information throughout the E-filing system.

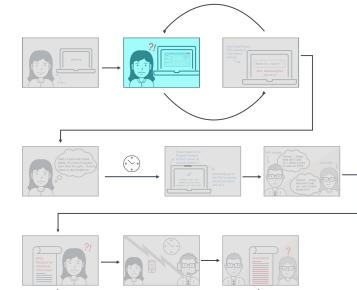
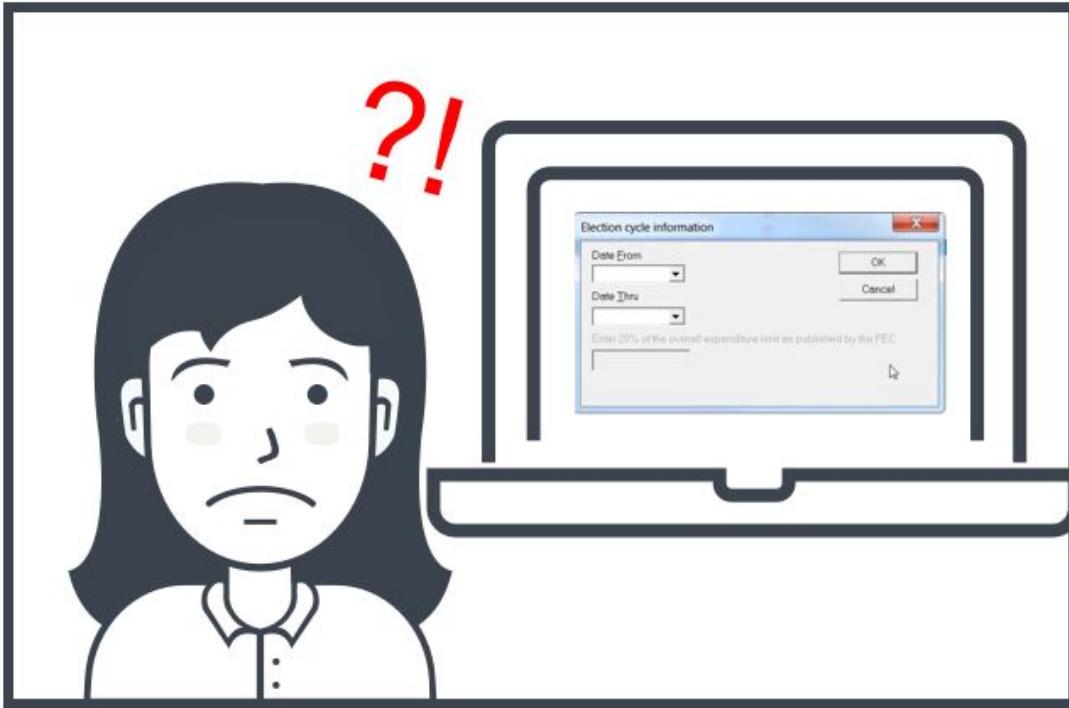
Stakeholders inside the FEC



A short story about the filer experience



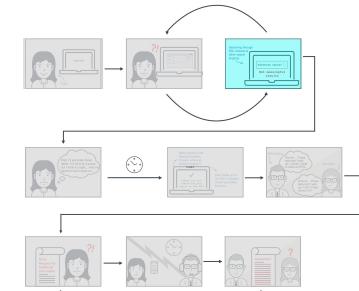




Searching through
FEC website &
other search
engines

Election cycle? 🔎

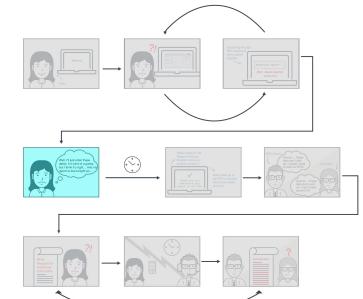
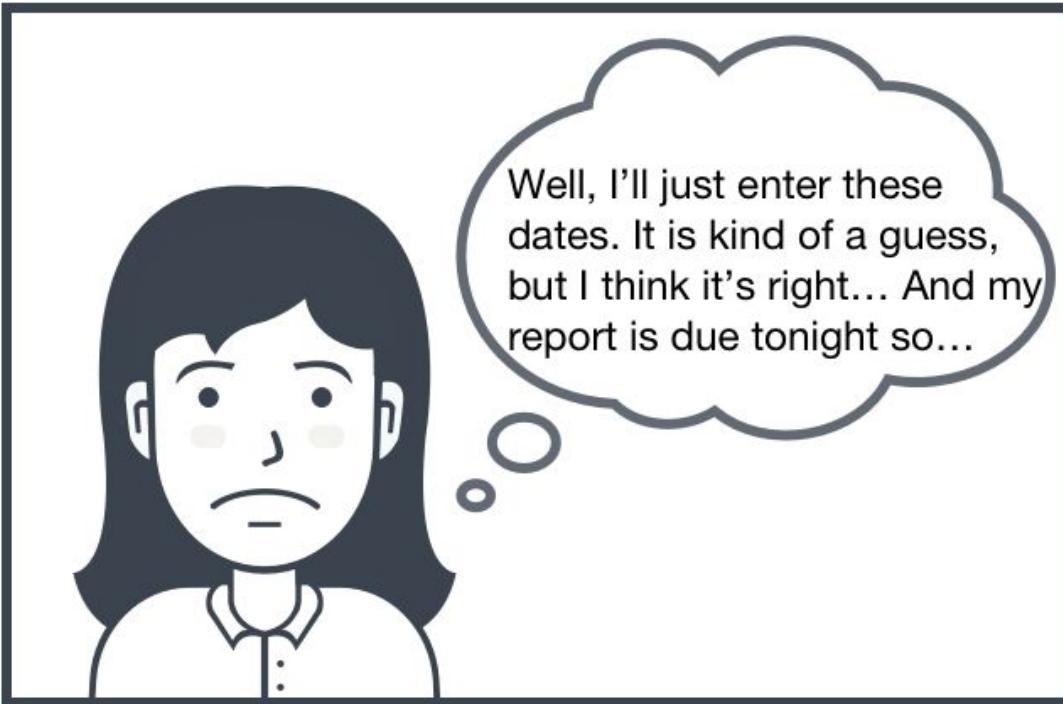
*Not meaningful
results*

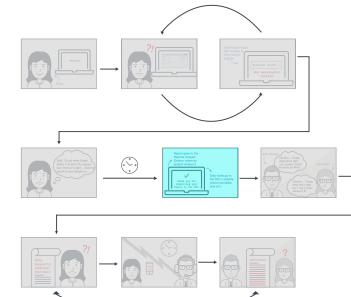
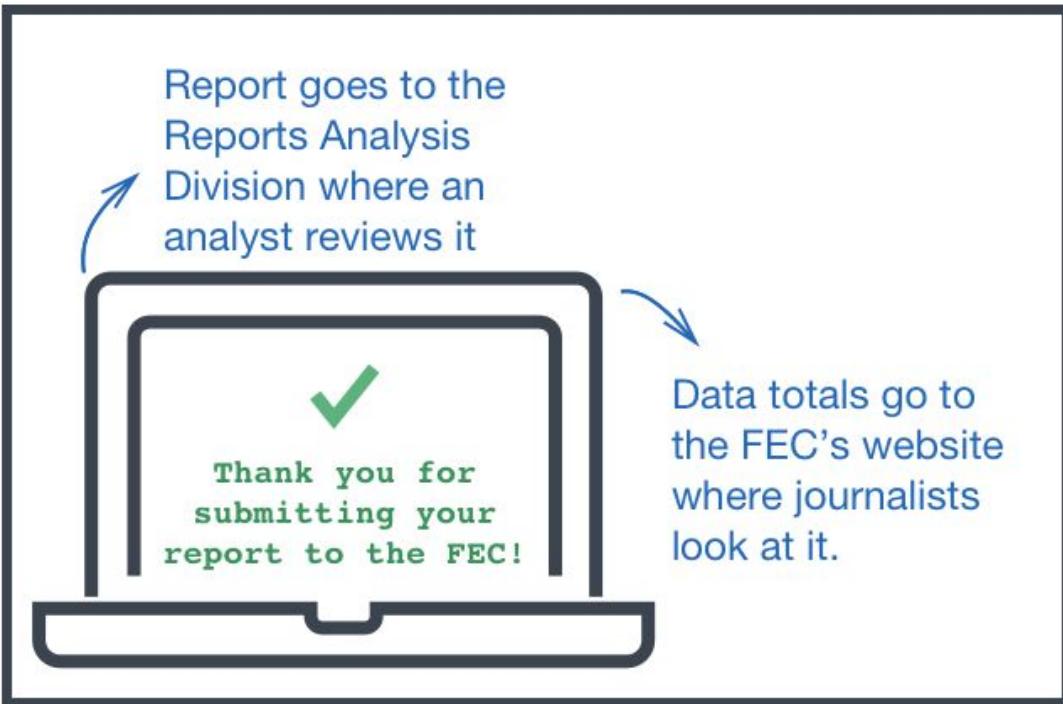


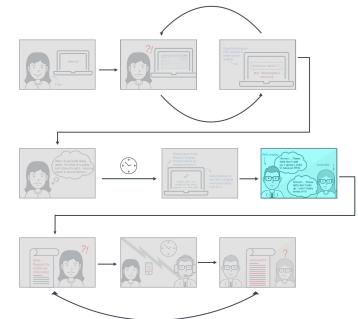
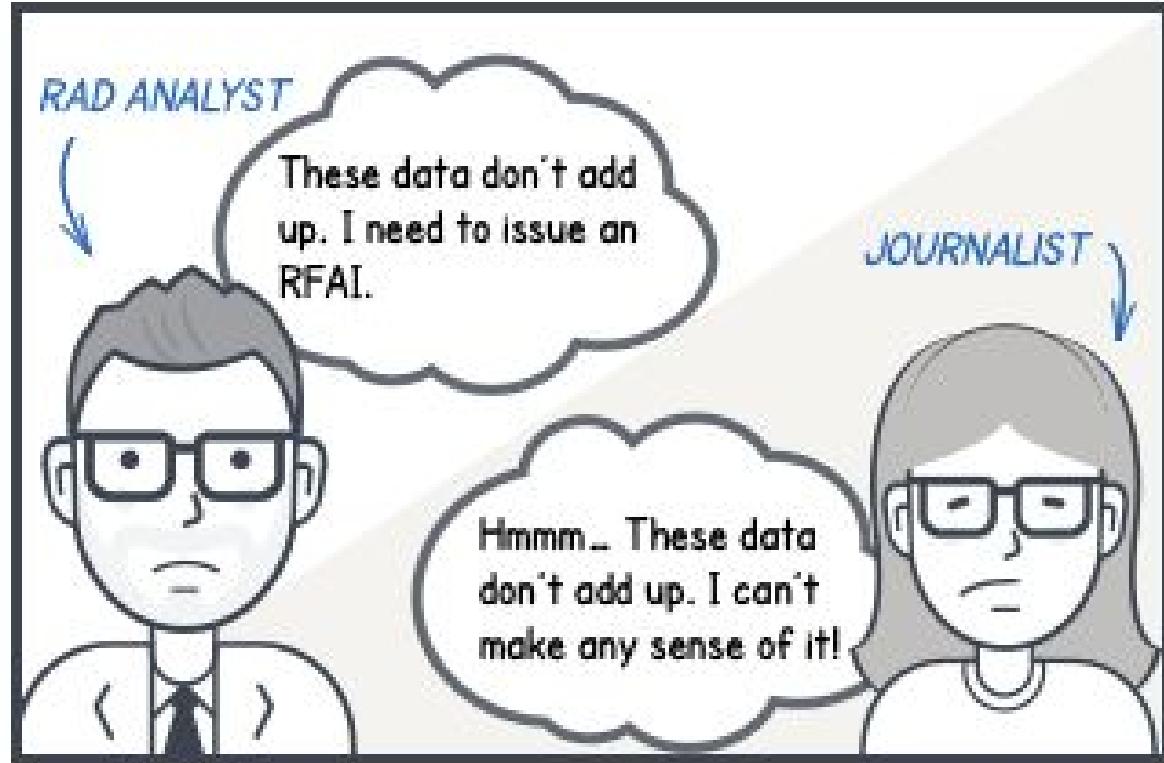
Filers often have trouble with election cycles.

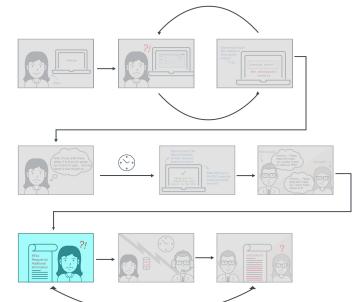
If the election cycle is incorrect, the filer will get a letter because their columns A and B cycle-to-date totals will be wrong.

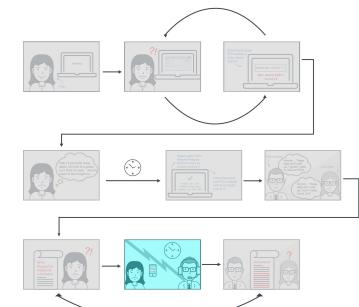
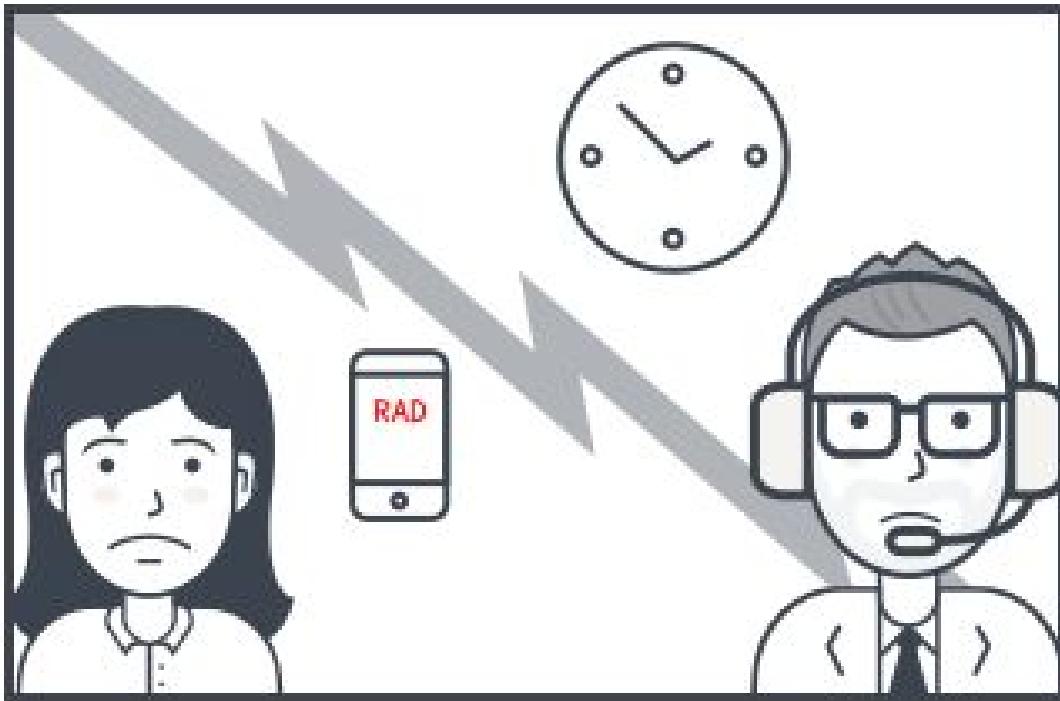
One analyst estimated that nearly every time column B is wrong on federal candidate committee reports, it is because the election cycle is incorrect.

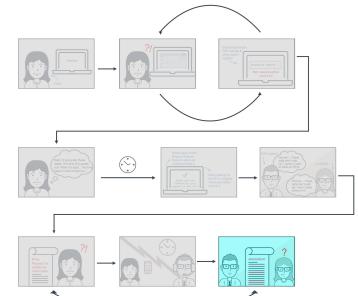
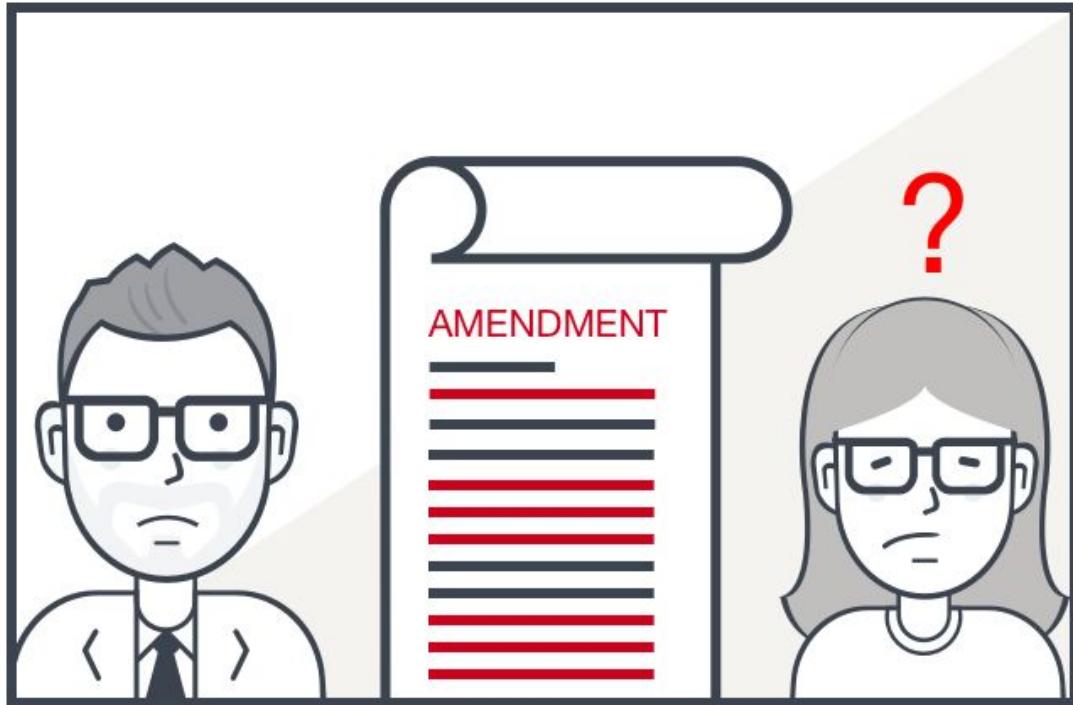












Filer experience | Recommendations



Re-architect current data validation



Provide an export capability



Improve FECFile's usability



Offer an open source, web-based version of FECFile

Filer experience | Recommendations



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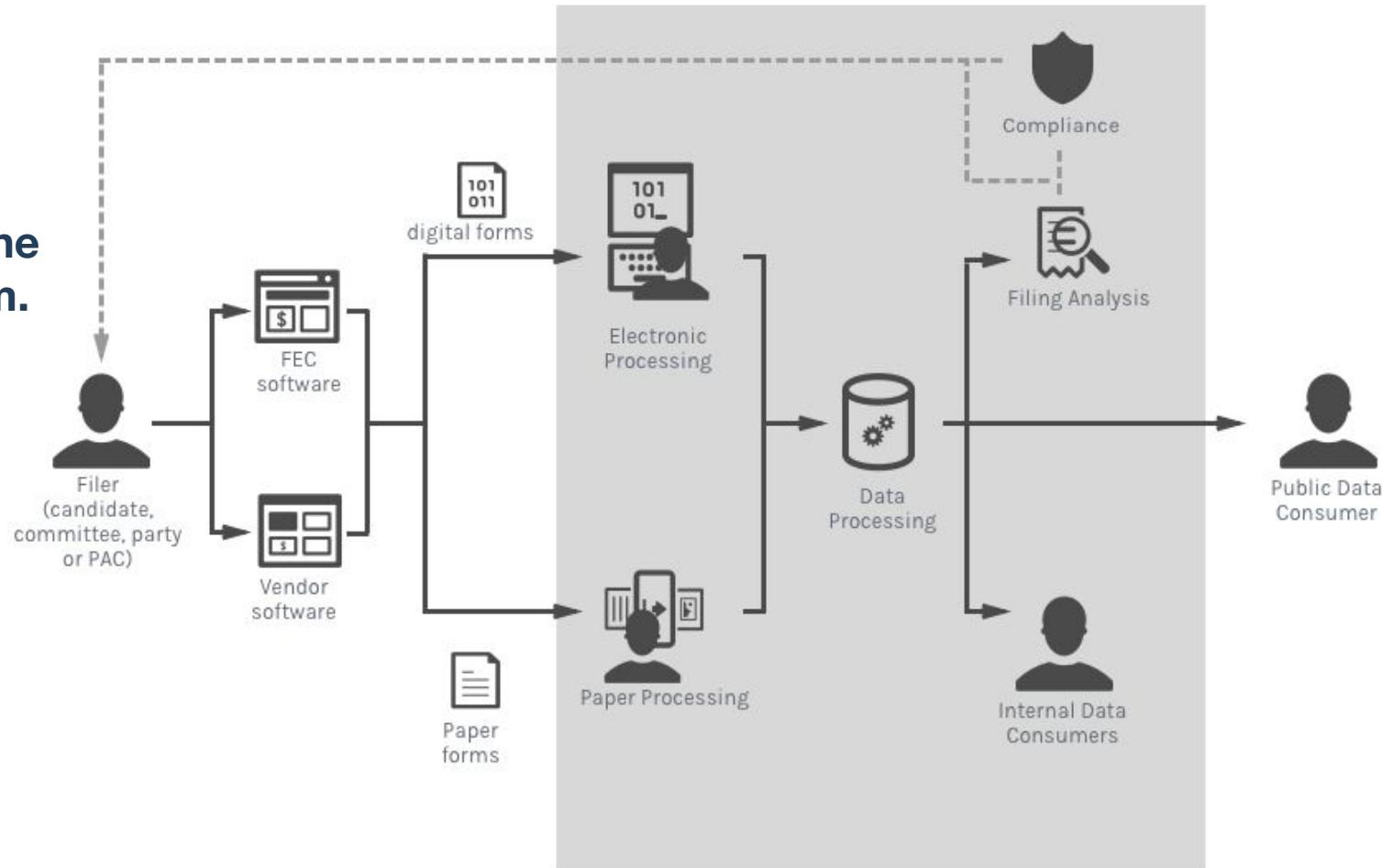
**59% of entities filing electronically
use FECfile.**

**Only 17% of the 402 FECFile users in
our survey identified themselves as
compliance professionals.**

**One of the most powerful ways to
make the filing process more
intuitive is to make the FECFile
software more usable.**

The flow of campaign finance information throughout the efiling system.

Stakeholders inside the FEC



Filer experience | Recommendations



Re-architect current data validation



Provide an export capability



Improve FECFile's usability



Offer an open source, web-based version of FECFile

The fact that FECFile is a desktop application constrains filers' workflow.

Filers need open source software that is operating system independent.

"I am a MacBook Air user, so I have to go and find the PC laptop in the office that stores FECfile. If I forget that a report is due and I'm at home, I have to go to the office, find the laptop, and fill out the report."

"I live in constant terror of a computer crashed around filing time, even to the point of being afraid to make updates on my computer in the event that I may lose filing information that I have already entered. A cloud-based storage system would provide so much relief from those concerns."

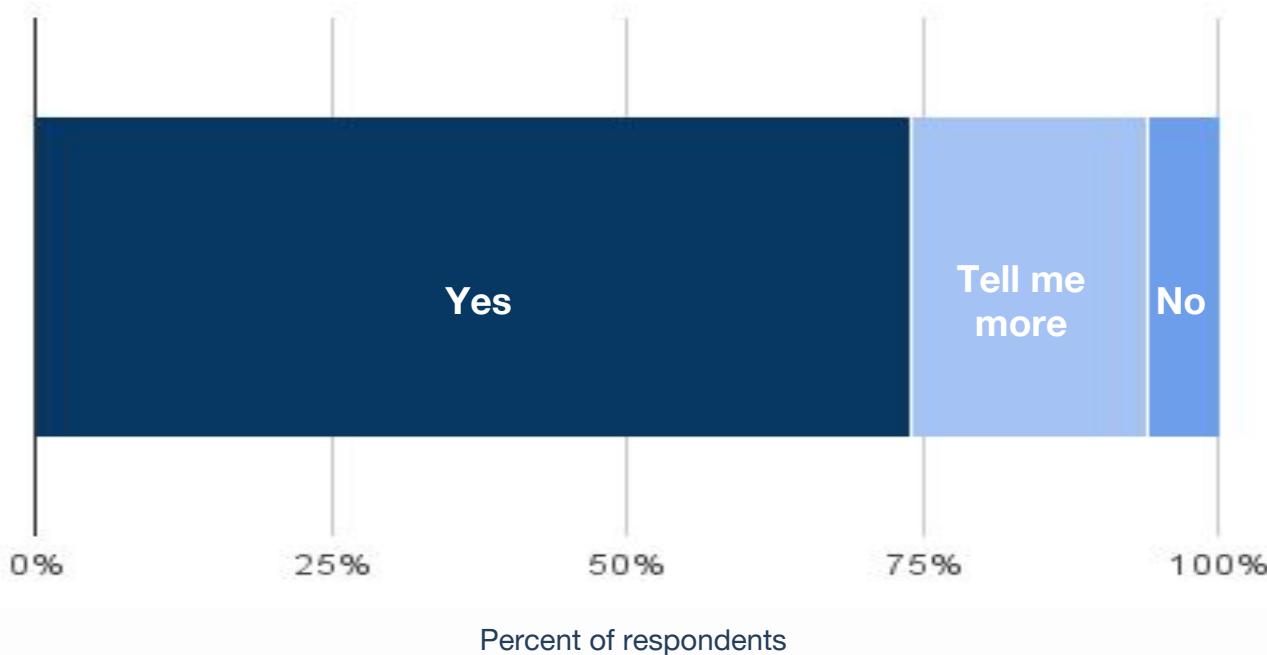
"I travel extensively and sometimes must complete the report from locations other than my office and computers other than my regular workstation. As a result, I must remember to download the data file to a USB drive and take with me to use. Then I must remember where my most recent data is stored. A web based system would eliminate this problem."

"[a web-based system] would absolutely be helpful! There are two of us that work on the FEC filings and, currently, I have to wait until I can use the other person's laptop (where the FECFile software is stored) in order to enter the data needed for a filing."

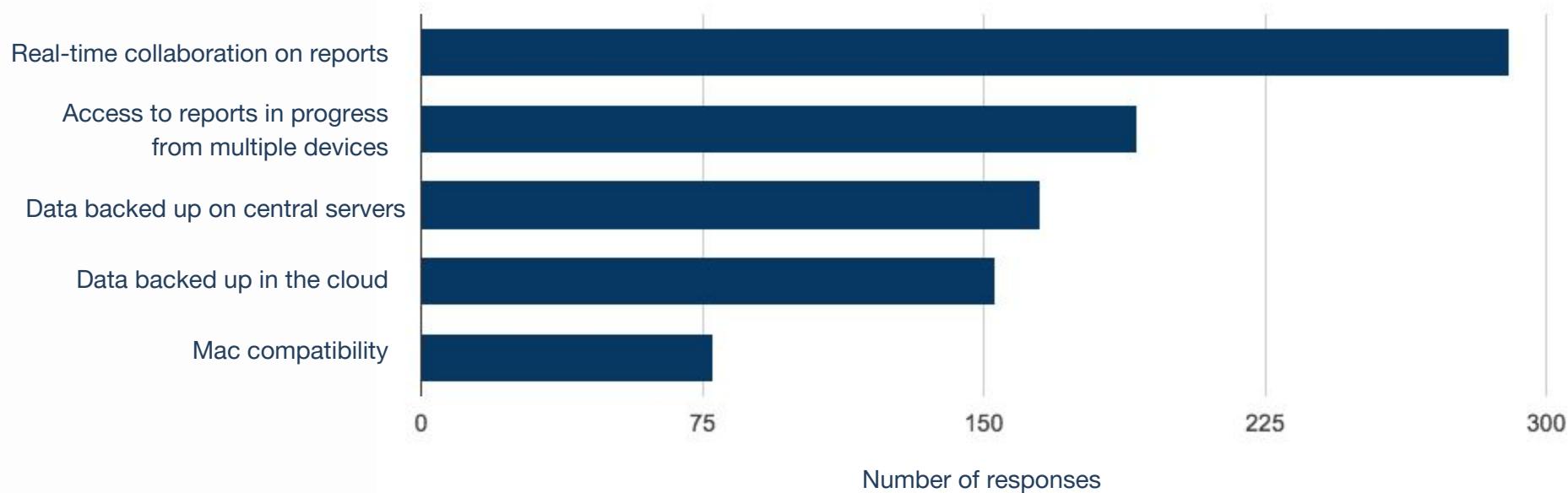
We wanted to let all current E-filers tell us their thoughts about a web-based FECFile.

We sent an anonymous survey to 8,906 unique email addresses. We received 533 responses.

“If a web-based version of FECfile were available, would you use it?”

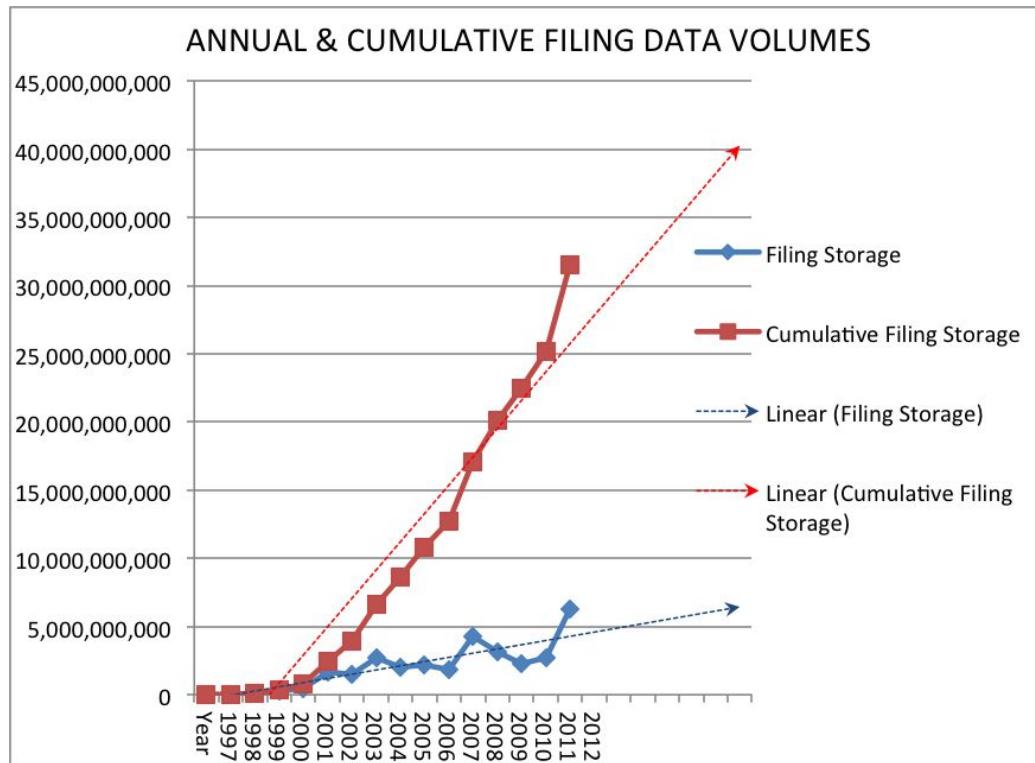


“Of the following capabilities we hope this change will accomplish, which are you most excited about?”

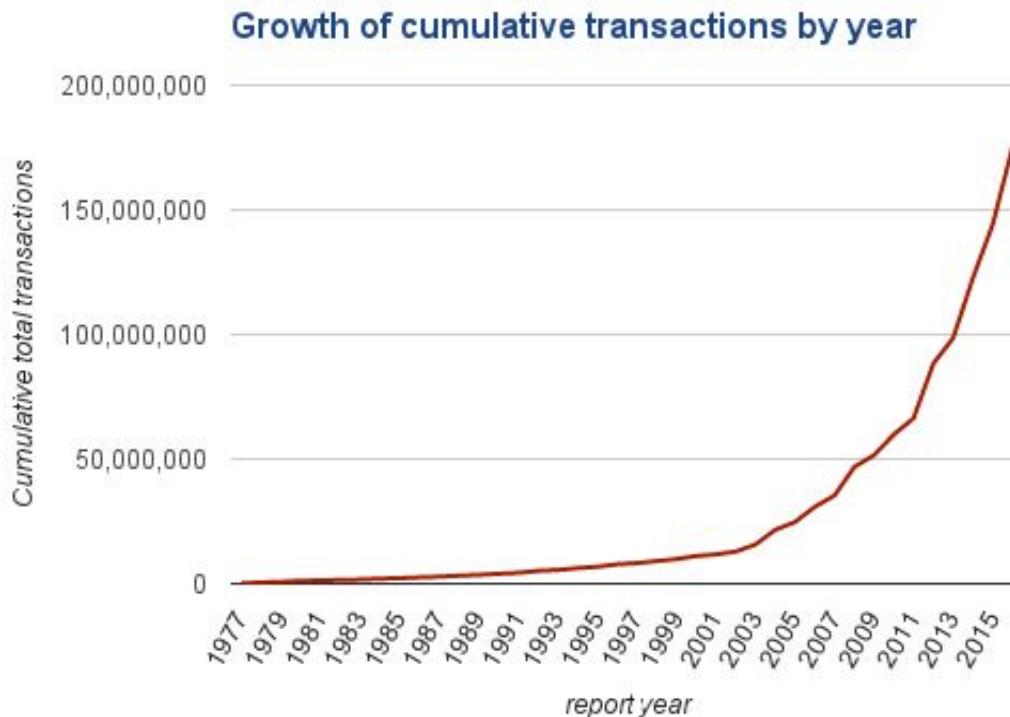


What we found deep dive: **Scalable Infrastructure**

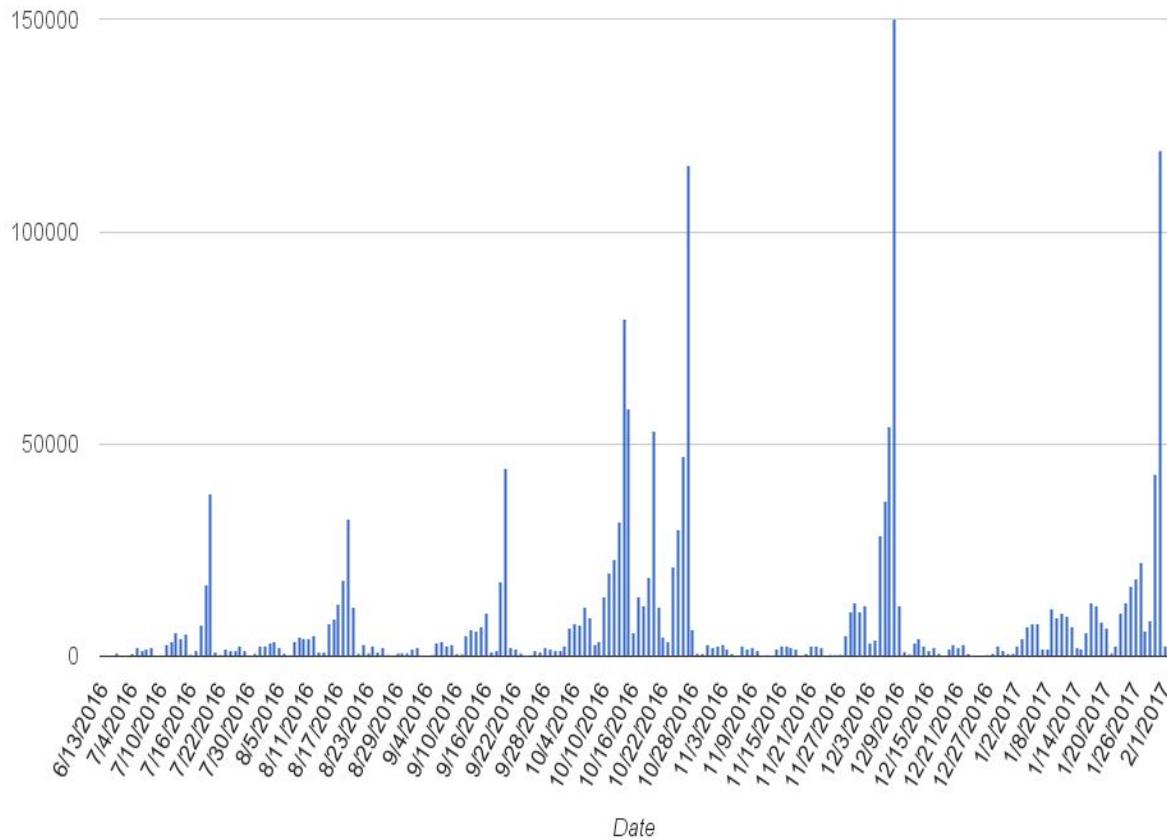
2013 Study projection



2016 Study (actual data)



E-filing records per day



Impacts



Storage and processing needs will increase at an increasing rate



Analysis more reliant on help from machines



Storage and processing needs are likely to increase at an increasing rate



Storage and processing needs are likely to increase at an increasing rate

Traffic has peaks and valleys.

Keep moving to the cloud.



By Cloud we mean:

- Scalability
- Don't worry about hardware
- Automated processes



Benefits:

- Handle more traffic
- Don't worry about hardware
- Automating workflow
- Pro-rated pricing



Analysis more reliant on help from machines

Optimize data intake for data analysis

Optimize data intake for data analysis

- Optimize data elements for analysis
- Better integrate paper into E-filing process

Optimize data elements for analysis

Image# 201607159020603819

SCHEDULE B (FEC Form 3) ITEMIZED DISBURSEMENTS		Use separate schedule(s) for each category of the Detailed Summary Page	FOR LINE NUMBER: (check only one)	PAGE 88 OF 96
<p>Any information copied from such Reports and Statements may not be sold or used by any person for the purpose of soliciting contributions or for commercial purposes, other than using the name and address of any political committee to solicit contributions from such committee.</p> <p>NAME OF COMMITTEE (In Full) Randy Perkins for Congress</p>				
Full Name (Last, First, Middle Initial) A. Southwest/O'Brien Helicopters Inc.		Date of Disbursement M M / D D / Y Y Y Y 08 / 21 / 2016		
Mailing Address 32 Calvin Ave		Amount of Each Disbursement this Period 10795.00		
City Lehigh Acres		State FL	Zip Code 33936-6702	
Purpose of Disbursement Travel See In Kind above from Randy Perkins				
Candidate Name		Category/ Type		
Office Sought:	<input type="checkbox"/> House <input type="checkbox"/> Senate <input type="checkbox"/> President	Disbursement For: 2016	<input checked="" type="checkbox"/> Primary <input type="checkbox"/> General Other (specify)	
State:	District:			

Optimize data elements for analysis

Select data type ▶

DATA TYPE

Processed Raw

This data *has been* categorized and coded by the FEC. The FEC's multi-step process can take days (for electronic filings) or weeks (for paper filings).

Edit filters (4)

Spender information (1) -

COMMITTEE NAME OR ID

RANDY PERKINS FOR CONGRESS (C00592261)

🔍

Recipient information (1) -

RECIPIENT NAME OR ID

"Southwest"

Disbursements data

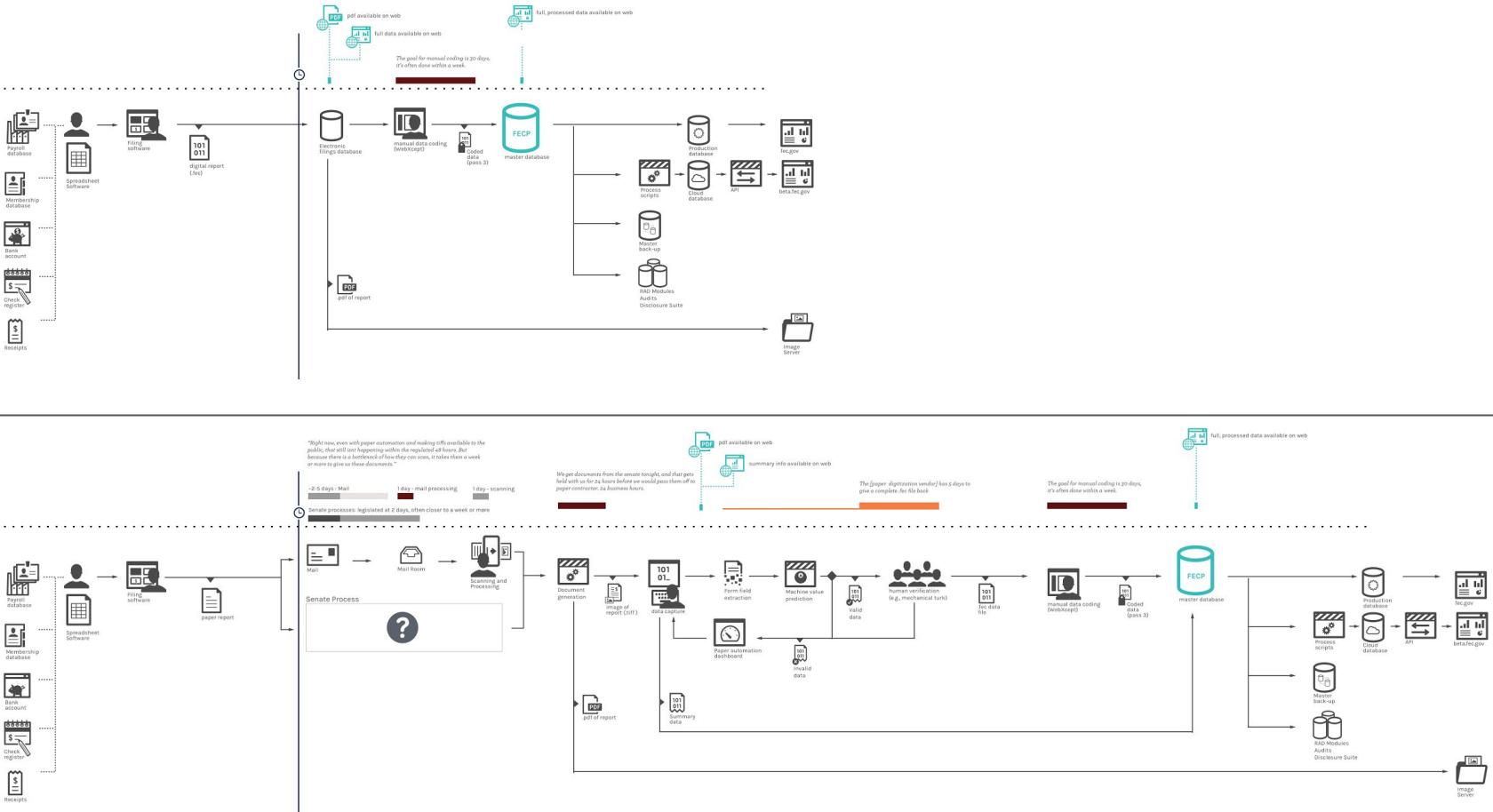
Viewing about **2** filtered results for:

Spender	Recipient	State	Purpose	Disbursement date	Amount	...
RANDY PERKINS FOR CONGRESS	SOUTHWEST AIRLINES	TX	TRAVEL	09/01/2016	\$304.27	...
RANDY PERKINS FOR CONGRESS	SOUTHWEST/OBRIEN HELICOPTERS INC.	FL	TRAVEL SEE IN KIND ABOVE FROM RANDY PERKINS	06/21/2016	\$10,795.00	...

Results per page: **30** ▼ ◀ ▶

**Better integrate paper into the
E-filing process**

E-Filing (top) versus paper process (bottom)



SCHEDULE A (FEC Form 3)
ITEMIZED RECEIPTS

Use separate schedule(s)
 for each category of the
 Detailed Summary Page

FOR LINE NUMBER:	PAGE 5 OF 20
(check only one)	
<input checked="" type="checkbox"/> 11a	<input type="checkbox"/> 11b
<input type="checkbox"/> 12	<input type="checkbox"/> 13a
<input type="checkbox"/> 13b	<input type="checkbox"/> 14
<input type="checkbox"/> 15	

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NAME OF COMMITTEE (In Full)
Shaban for Congress

Full Name (Last, First, Middle Initial)
A. Springfield Republican Town Committee

Mailing Address 60 Evergreen Terrace

City Springfield	State CR	Zip Code 06610
---------------------	-------------	-------------------

FEC ID number of contributing
federal political committee.
C

Name of Employer	Occupation
------------------	------------

Receipt For: 2016 <input type="checkbox"/> Primary <input checked="" type="checkbox"/> General <input type="checkbox"/> Other (specify) ▼	Election Cycle-to-Date ▼  250.00
--	--

Date of Receipt
 M M / D D / Y Y Y Y
 10 06 2016

Transaction ID : SA11AI.5782

Amount of Each Receipt this Period

 250.00

Memo Item

Full Name (Last, First, Middle Initial)

B. Buckley, Jeff

Mailing Address 248 Evergreen Terrace

City Springfield	State CR	Zip Code 06883
---------------------	-------------	-------------------

FEC ID number of contributing
federal political committee.
C

Name of Employer Retired	Occupation Retired
-----------------------------	-----------------------

Receipt For: 2016 <input type="checkbox"/> Primary <input checked="" type="checkbox"/> General <input type="checkbox"/> Other (specify) ▼	Election Cycle-to-Date ▼  300.00
--	--

Date of Receipt
 M M / D D / Y Y Y Y
 10 16 2016

Transaction ID : SA11AI.5810

Amount of Each Receipt this Period

 100.00

Memo Item

Full Name (Last, First, Middle Initial)

C. Johnson, Robert

Mailing Address 1 Evergreen Terrace

City Springfield	State CR	Zip Code 06855
---------------------	-------------	-------------------

FEC ID number of contributing
federal political committee.
C

Name of Employer Bicycle Records	Occupation Blues Musician
-------------------------------------	------------------------------

Receipt For: 2016 <input type="checkbox"/> Primary <input checked="" type="checkbox"/> General <input type="checkbox"/> Other (specify) ▼	Election Cycle-to-Date ▼  300.00
--	--

Date of Receipt
 M M / D D / Y Y Y Y
 10 05 2016

Transaction ID : SA11AI.5761

Amount of Each Receipt this Period

 200.00

Memo Item

SUBTOTAL of Receipts This Page (optional)..... ►

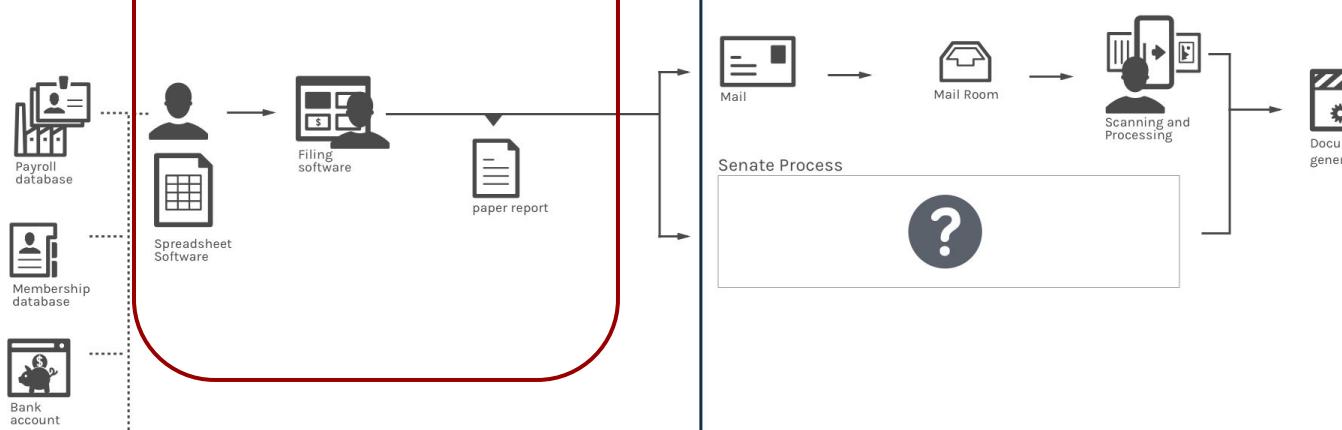
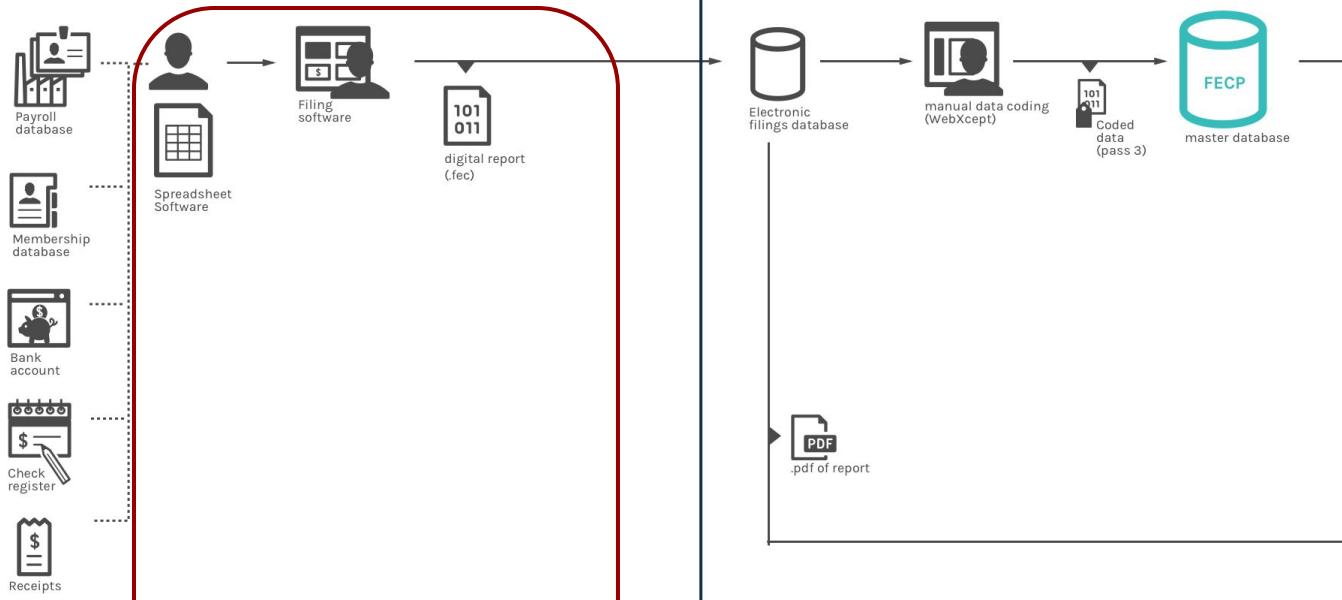
►

550.00

TOTAL This Period (last page this line number only)..... ►

►

550.00



SCHEDULE A (FEC Form 3) ITEMIZED RECEIPTS

FOR LINE NUMBER: (Use separate schedule(s) for each category of the Detailed Summary Page)

check one: 11a 11b 11c 11d 12 13a 13b

Any information copied from such Reports and Statements may not be sold or used by any person for the purpose of soliciting contributions or for commercial purposes, other than using the name and address of any political committee to solicit contributions from such committee.



NAME OF COMMITTEE (In Full)
Shaban for Congress

Full Name (Last, First, Middle Initial)
Springfield Republican Town Committee

Mailing Address 60 Evergreen Terrace

City Springfield	State CR	Zip Code 06610
---------------------	-------------	-------------------

FEC ID number of contributing federal political committee.

Name of Employer _____ Occupation _____

Receipt For: 2016

Primary General
 Other (specify) ▾

Election Cycle-to-Date ▾

Date of Receipt
M M / D D / Y Y Y Y
10 / 06 / 2016

Transaction ID : SA11AI:5782

Amount of Each Receipt this Period
250.00

Memo Item

Full Name (Last, First, Middle Initial)

Buckley, Jeff

Mailing Address 248 Evergreen Terrace

City Springfield	State CR	Zip Code 06883
---------------------	-------------	-------------------

FEC ID number of contributing federal political committee.

Name of Employer _____ Occupation _____
Retired

Receipt For: 2016

Primary General
 Other (specify) ▾

Election Cycle-to-Date ▾

Date of Receipt
M M / D D / Y Y Y Y
10 / 16 / 2016

Transaction ID : SA11AI:5810

Amount of Each Receipt this Period
100.00

Memo Item

Full Name (Last, First, Middle Initial)

Johnson, Robert

Mailing Address 1 Evergreen Terrace

City Springfield	State CR	Zip Code 06855
---------------------	-------------	-------------------

FEC ID number of contributing federal political committee.

Name of Employer _____ Occupation _____
Bicycle Records Blues Musician

Receipt For: 2016

Primary General
 Other (specify) ▾

Election Cycle-to-Date ▾

Date of Receipt
M M / D D / Y Y Y Y
10 / 05 / 2016

Transaction ID : SA11AI:5761

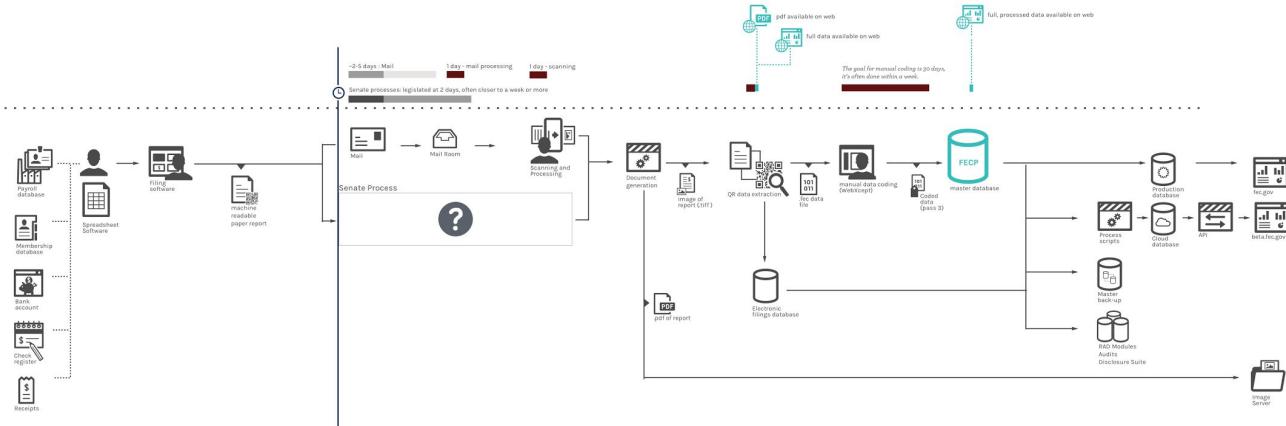
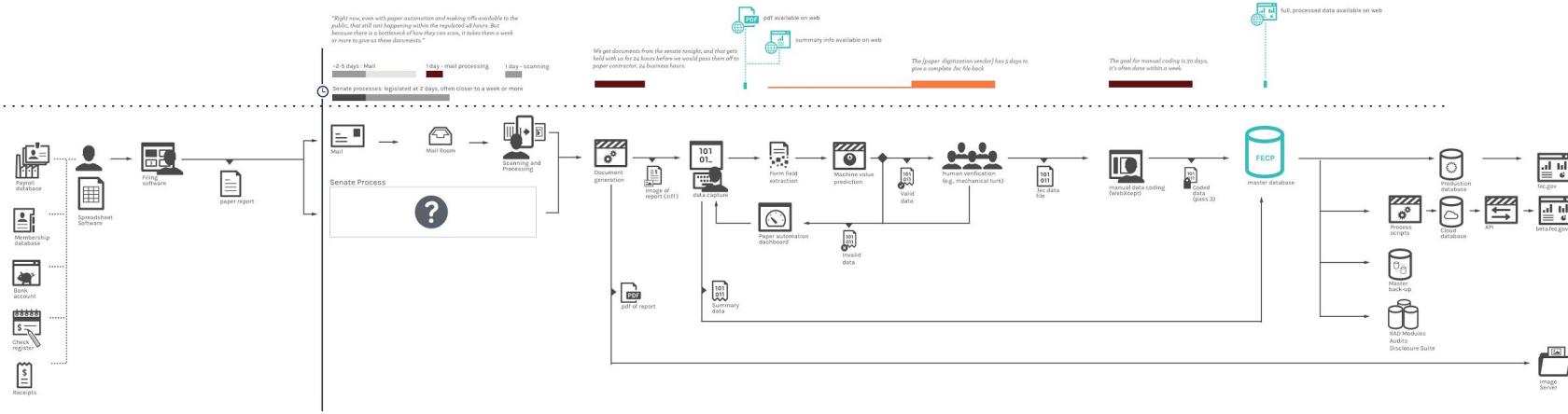
Amount of Each Receipt this Period
200.00

Memo Item

SUBTOTAL of Receipts This Page (optional) ▾

TOTAL This Period (last page this line number only) ▾

Paper process automation and machine readable process



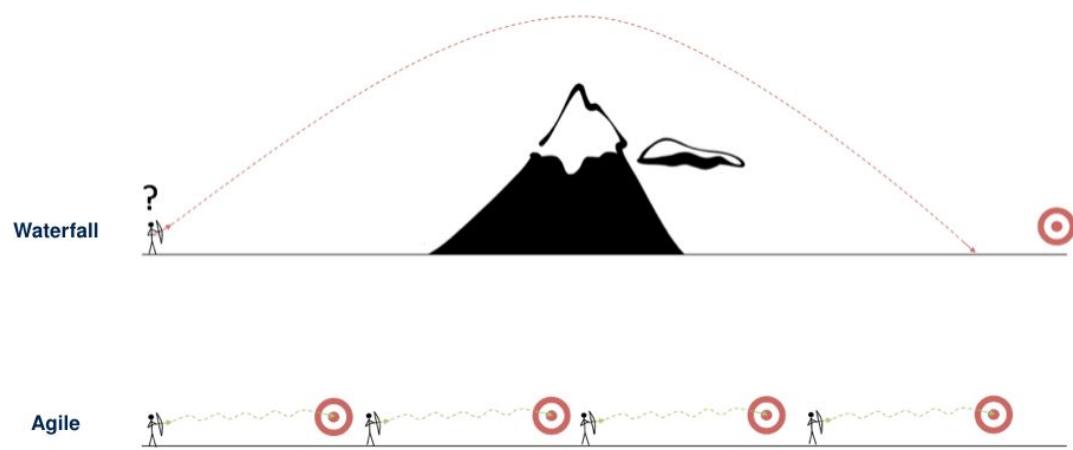
To recap:

- The data is growing exponentially.
- There are data quality issues that make it harder to analyze.
- Accelerate the improvements to the filer experience, modernizing intake, and continue moving toward scalable processes

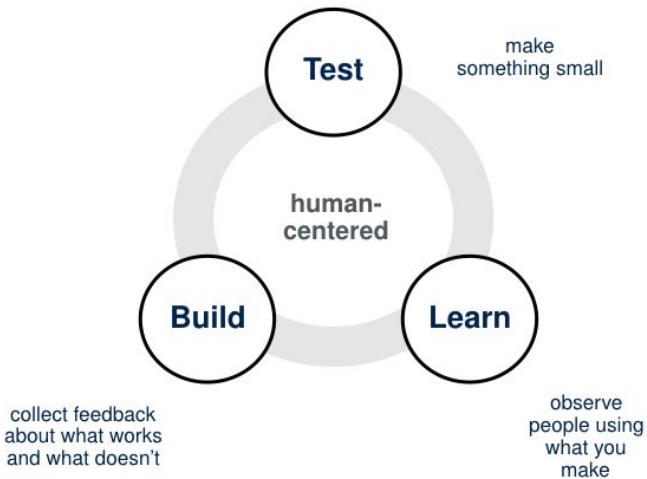
How to move forward

18F methods

1. We work iteratively



2. We design for people



Friends of Bo | Welcome Back!

Due in: 3 days

Report: October Monthly

Tell us how you'd like to get started (1 of 2):

What kind of transactions would you like to enter?



Receipts >>

Report contributions from individuals and committees



Disbursements >>

Report expenses made to vendors, individuals, and committees.

[Begin Submission Process](#)

[Feedback](#)

**The FEC has made significant
progress toward designing human
centered applications.**

**The FEC can expand ongoing efforts
to make changes in a human
centered, open, and agile way to
include designing changes to
E-filing.**

Thanks, this has been fun!

Questions?

Bonus session:

Prototype Show and Tell

Manual entry

Friends of Bo | Welcome Back!

Due in: 3 days

Enter Transaction | Contributions

AMOUNT

TRANSACTION DATE

ELECTION

CONTACT TYPE

 Individual Committee

LAST NAME

FIRST NAME

SUFFIX

CITY

ZIP

Name	Type	Amount
------	------	--------

Importing data

One way filers can minimize rekeying errors is by importing their data, yet using the current import feature requires workarounds that are error prone.

“I have to call them every time because I can’t remember how to do this [import file]. I can’t remember. I’ll have to call and have them walk me through it again... I have a good consultant, but he must think I’m the dumbest person in the world because he walks me through.”

IMPORTING PROTOTYPE

We prototyped one
possible look and feel,
and tested it with
users

Friends of Bo | October Monthly Report

Due in:
3 Days

Report : October Monthly

Tell us how you'd like to get started (1 of 2):

What kind of transactions would you like to enter?



Receipts »

Report contributions from individuals and committees



Disbursements »

Report expenses paid to vendors, individuals, and committees

Begin Submission Process

Other Report Actions:

[Check for duplicates](#)

[Run Validator](#)

[Preview Report Form](#)

[Print Report](#)

REPORT OVERVIEW

Beginning Cash on Hand \$3,400,238.00



Ending Cash on Hand \$---

Description	Itemized	Unitemized	Aggregate
Individual Contributors	\$0.00	\$0.00	\$0.00
Contributions from political party committees	\$0.00		\$0.00
Contributions from other political committees	\$0.00	\$0.00	\$0.00
Transfers from affiliated/other party committees			
All loans received	\$0.00		\$0.00
Loan Repayments received			
Offsets to operating expenditures			
Refunds of contributions made to others	\$0.00		\$0.00
Other Federal Receipts (Dividends, Inte			
Transfers from Non-federal Account			
Transfers from Levin Funds			
Allocable expenditures			
i. Federal share			
ii. Non-federal share	\$0.00		\$0.00
Other federal operating expenditures	\$0.00		\$0.00

A lot of our current work is formatting the Excel file. If we're able to select from the import file that we have, that would be really great. I would like to be able to select the columns that I need from the spreadsheet.”

“That's nice... I like that very much. So if someone didn't have the spreadsheet in the right order, it would make an attempt to understand what they've got. [The current system] takes a phone call to RAD to understand.”

Merging duplicate contacts (first attempt)

Keep version
in contact
history

select as
current

select as
current

Keep version
in contact
history

Thomason, Henrik



999 E St NW,
Washington, DC 20001



Banker



Self-Employed



Thomason, Henrik Larrimore

999 E St Northwest,
Washington, DC 20001



Banker



Self-Employed



Contributions from this name:

9/8/2016 - \$43.00

9/12/2016 - \$17.00

Contributions from this name:

10/8/2016 - \$189.00

Total combined contributions:

\$249.00

Merging duplicate contacts (second attempt)

Friends of Bo | October Monthly Report

Due in:
3 Days

Report : October Monthly

Ready to submit?
Let's check a couple
things first:

1. Check for Duplicates
2. Run validation
3. Preview, sign and submit

[go](#)

REPORT OVERVIEW

Beginning Cash on Hand \$3,400,238.00



Ending Cash on Hand \$1,975,702.00

Description	Itemized	Unitemized	Aggregate
Individual Contributors	\$287,033.00	\$13,000.00	\$300,033.00

Contributions from political party committees	\$40.00	\$40.00
---	---------	---------

Contributions from other political committees	\$300.00	\$300.00	\$600.00
---	----------	----------	----------

Transfers from affiliated/other party committees		
--	--	--

All loans received	\$12,070.00	\$12,000.00
--------------------	-------------	-------------

Loan Repayments received		
--------------------------	--	--

Offsets to operating expenditures		
-----------------------------------	--	--

Refunds of contributions made to others	\$77.00	\$77.00
---	---------	---------

Other Federal Receipts (Dividends, Inte)		
--	--	--

Transfers from Non-federal Account		
------------------------------------	--	--

Transfers from Levin Funds		
----------------------------	--	--

Allocable expenditures		
i. Federal share		
ii. Non-federal share	\$780.00	\$780.00

Other federal operating expenditures	\$250.00	\$250.00
--------------------------------------	----------	----------

Merging duplicate contacts (third attempt)

Current block comparison

Name: Joe Smith
Address: 123 House Ln.
City and State: Washington, District of Columbia
Zip: 20463
Employer: The Big Company
Occupation: Analyst

Name: Joe H. Smith
Address: 123 House Ln.
City and State: Wasingten, District of Columbia
Zip: 20463
Employer: The Big Company
Occupation: Analyst

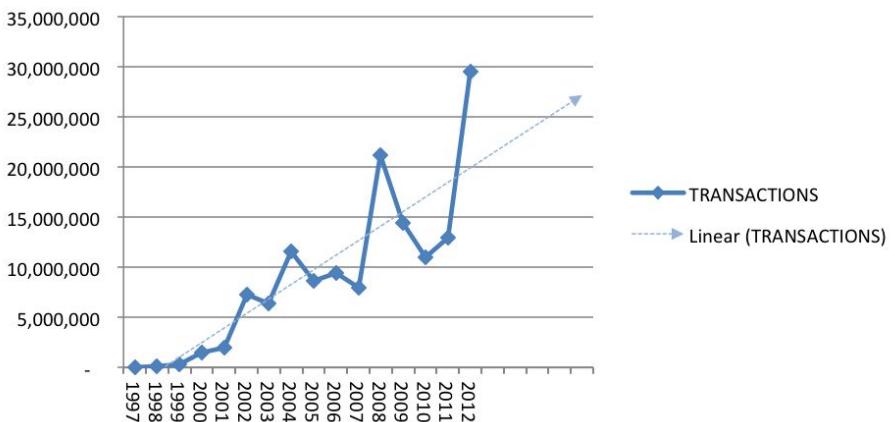
Suggested row comparison

Last name	Middle name	First name	Prefix	Suffix	Address	City	State	Zip	Employer	Occupation
Smith		Joe			123 House Ln.	Gary	IN		The Big Company	Analyst
Smith	H.	Joe			123 House Ln.	Gery	IN		The Big Company	Analyst
Smith	H.	Joseph			123 House Ln.	Gary	IN		The Bing Company	Analyst

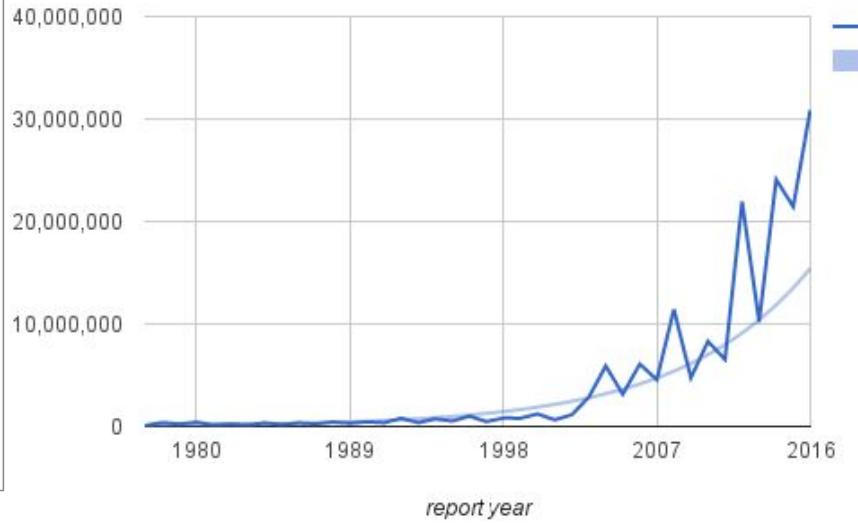
Thanks!

Back-up slides

FEC ANNUAL FILING TRANSACTIONS



total vs. report year



2013 Study Projections

2016 Study Actuals w
exponential trend