ACHIEVING SCALE – THE STORY OF DROPBOX

Akhil Gupta

VP of Engineering at Dropbox







500m

users



500m

users

200k

Business customers



500m users 200k

Business customers





\$1,000,000,000

Revenue Run Rate



How did we grow our user base?

Delight your users

Viral Growth



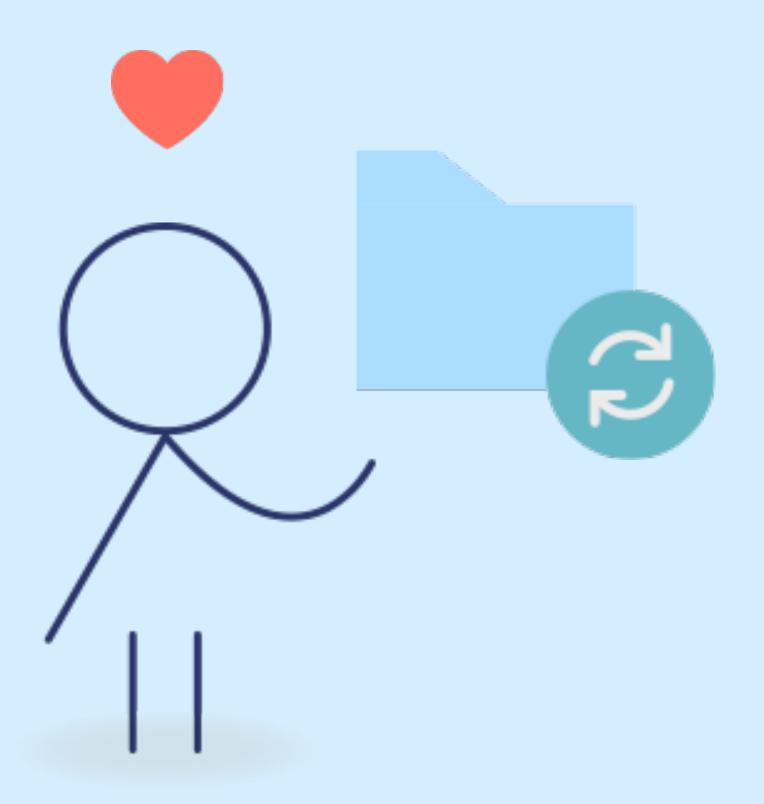
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It Just Works



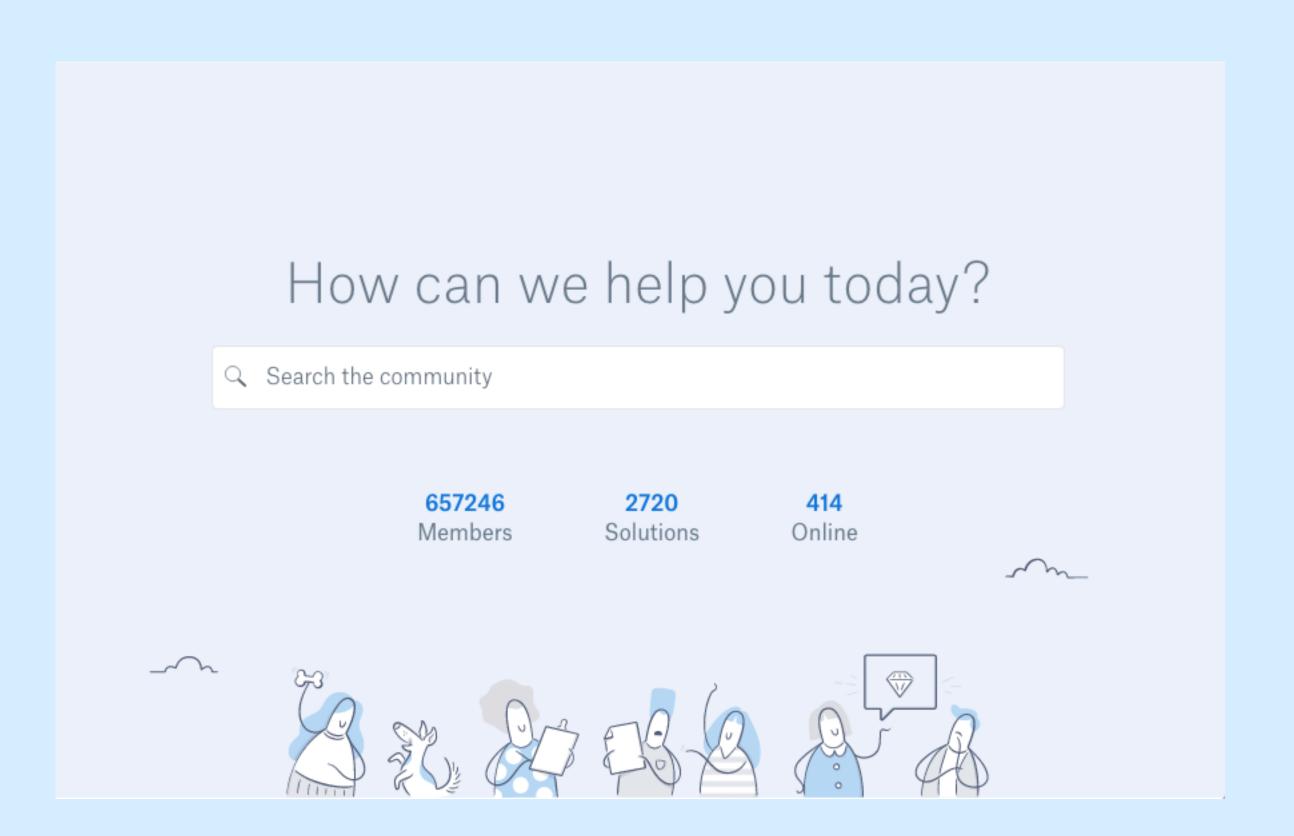


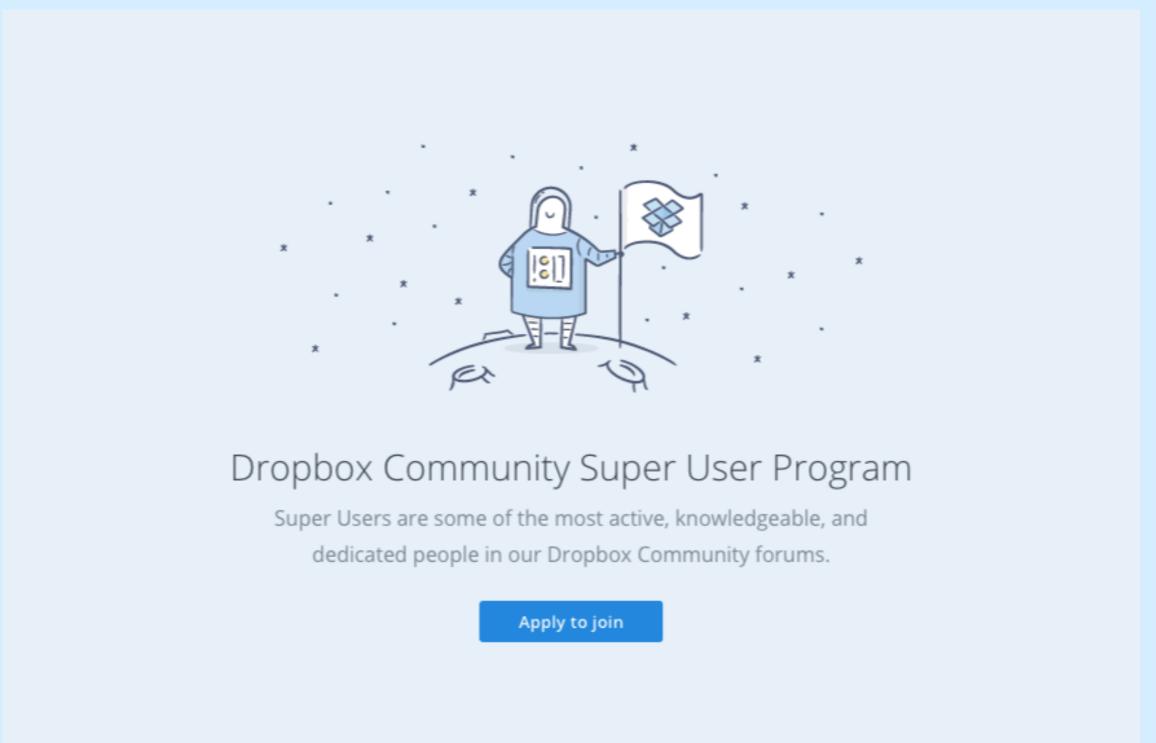
Sweat the details

Group		Total	20m	1m	Users	20m	1m	Teams	20m	1m
client MountLockFailureException: Failed to grab locks for 1447272867: lock held by connection 35	0	+3K	15	5	152	8	3	135	6	3
client EdgestoreNoneUsedAsKeyException	0	+172K	68	5	+12K	22	2	+1K	1	0
client ChangeTargetNsWithoutMountException: Tried to change mount outside mount call	1/2	+125K	171	13	287	53	6	28	8	0
client Exception: p2p_key_generation_error	0	+56K	7	1	+4K	5	1	+1K	1	0
client SystemExit: Traceback (most recent call last): File "/srv/yaps/mounts/metaserver/default/701	0	+306K	12	2	+1K	7	1	711	7	1
client Error: Incorrect padding	0	+7K	11	2	14	5	1	1	0	0
client MountLockFailureException: Failed to grab locks for 1463172919: lock held by connection 36-	0	+1K	16	0	119	9	0	121	9	0
client EdgestoreStaleRevisionException: Invalid add, attempting to update an outdated revision ou	0	+2K	2	0		N/A			N/A	
client IntegrityError: (IntegrityError) (1062, "Duplicate entry '666825377' for key 'PRIMARY'") u'INSE	0	+3K	2	0	+3K	2	0	239	1	0
client KeyError: 'file_mtile'	@	+7K	10	0	10	5	0		N/A	
client ImportantXAttrsOnDirectoryException: Tried to put an important xattr on a dir	0	+6K	9	0	11	4	0	3	0	0
client AssertionError: Request with non-Truthy use_64bit_ns_ids None 83148473 18894115008	0	+2K	4	0	7	2	0		N/A	
nashville EdgestoreRpcException: HTTP status 500 (rpc status: 6 code: dropbox/rpc_error msg: Rp ==	@	+4M	7	0	+34K	0	0	+34K	0	0
client OperationalError: (OperationalError) (1205, 'Lock wait timeout exceeded; try restarting trans	0	214	1	0	109	1	0	23	0	0
client ExistFreeMemberException: (110847L, 243125885L)	0	+40K	2	0	20	1	0	4	1	0
client OperationalError: (OperationalError) (1205, 'Lock wait timeout exceeded; try restarting trans	0	274	2	0	117	1	0	27	0	0
client Error: Incorrect padding	0	702	2	0	1	1	0		N/A	
client OperationalError: (OperationalError) (1205, 'Lock wait timeout exceeded; try restarting trans	0	159	2	0	71	1	0	19	0	0
client OperationalError: (OperationalError) (1205, 'Lock wait timeout exceeded; try restarting trans	0	136	4	0	54	3	0	10	0	0
client OperationalError: (OperationalError) (1205, 'Lock wait timeout exceeded; try restarting trans	0	920	4	0	226	3	0	33	0	0
client EdgestoreStaleRevisionException: Invalid add, attempting to update an outdated revision ou	0	+2K	4	0		N/A			N/A	
omaha SystemExit: Traceback (most recent call last): File "/srv/yaps/mounts/metaserver/default/70	0	+106K	1	0	962	0	0	356	0	0
client KeyError: 'exmf_model'	0	+4K	4	0	10	2	0		N/A	
client KeyError: 'exif_moden'	1/2	+2K	4	0	10	2	0		N/A	
client Error: Incorrect padding	0	+1K	1	0	2	1	0		N/A	
client InvalidXAttrsException: Invalid value type in dataless xattr	(0)	+2K	2	0	8	1	0		N/A	



Invest in your community





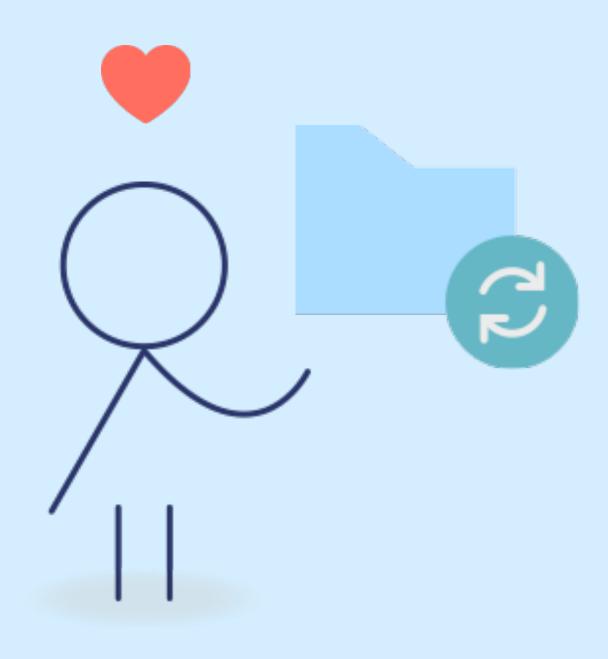


How did we grow our user base?

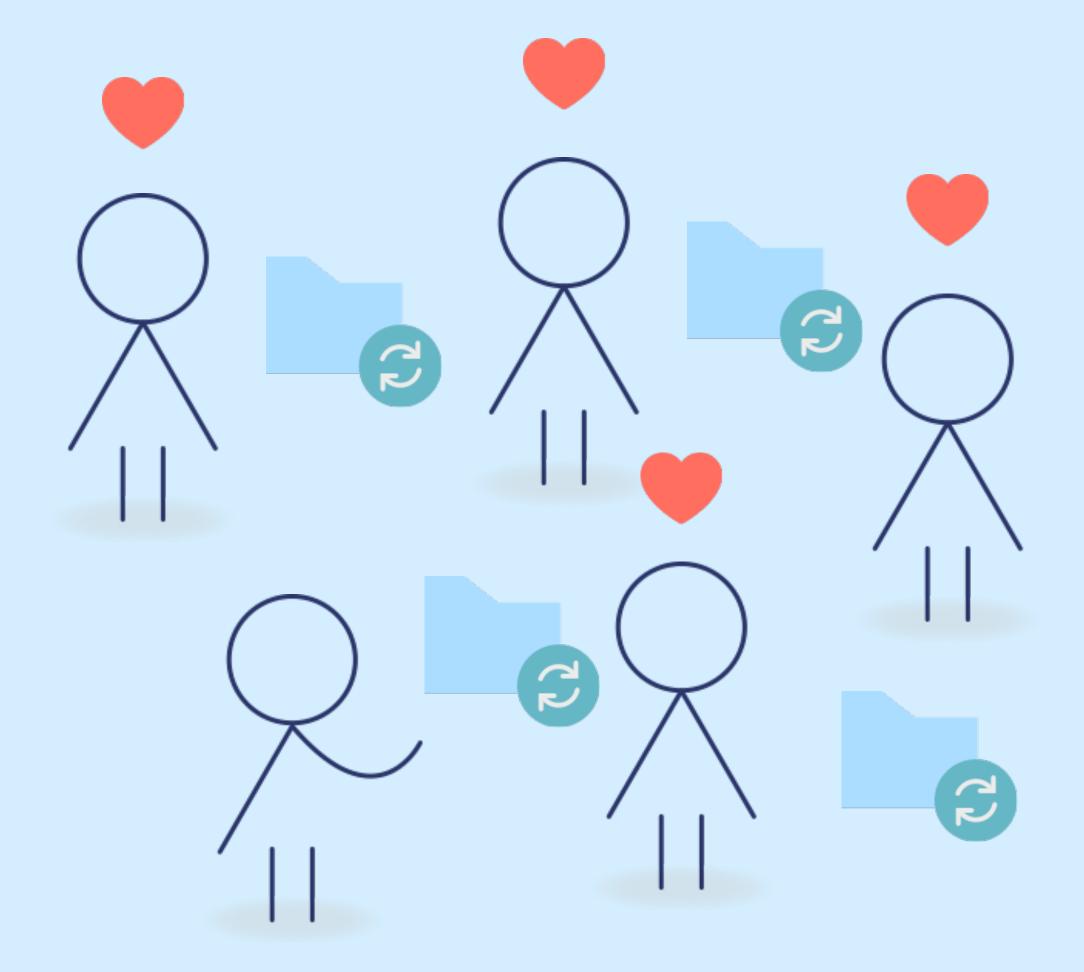
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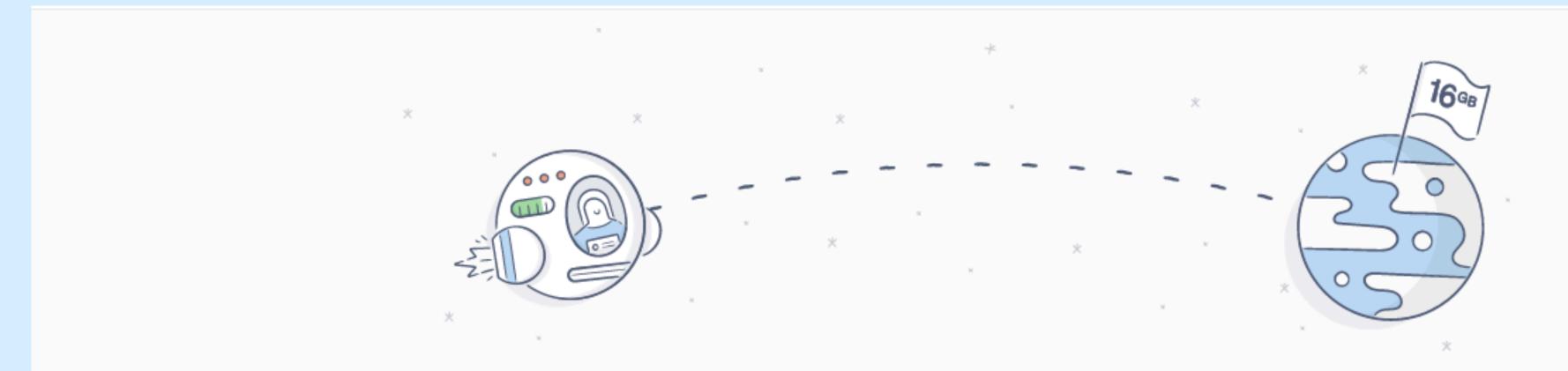
Built a product users loved



They introduced their friends to it



Referral Program



Get up to 16 GB of free Dropbox space!

Invite your friends to join Dropbox, and for each one who installs Dropbox we'll give you both 500 MB of bonus space. If you need even more space, upgrade your account.

Names or email addresses

Send



Dropbox User Growth

500M users
March 2016

400M users
June 2015
300M users
May 2014

10M users Sep 2010

Launched

Sep 2008

Time

100M users

Nov 2012

25M users

Apr 2011

200M users

Sep 2013



Solved internal culture clashes

How did we scale our business?

Embraced our customers

Invested in growth infra



Solved internal culture clashes

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"Does this need to be called the Monetization team? That word makes me feel incredibly dirty. Like we're some kind of horrible company just trying to figure out how to monetize our users."

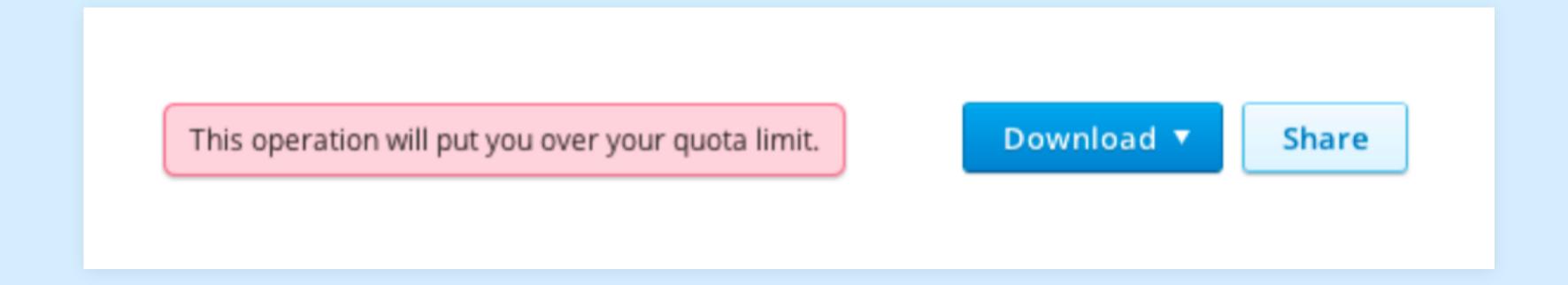
-Anonymous engineer, 2013



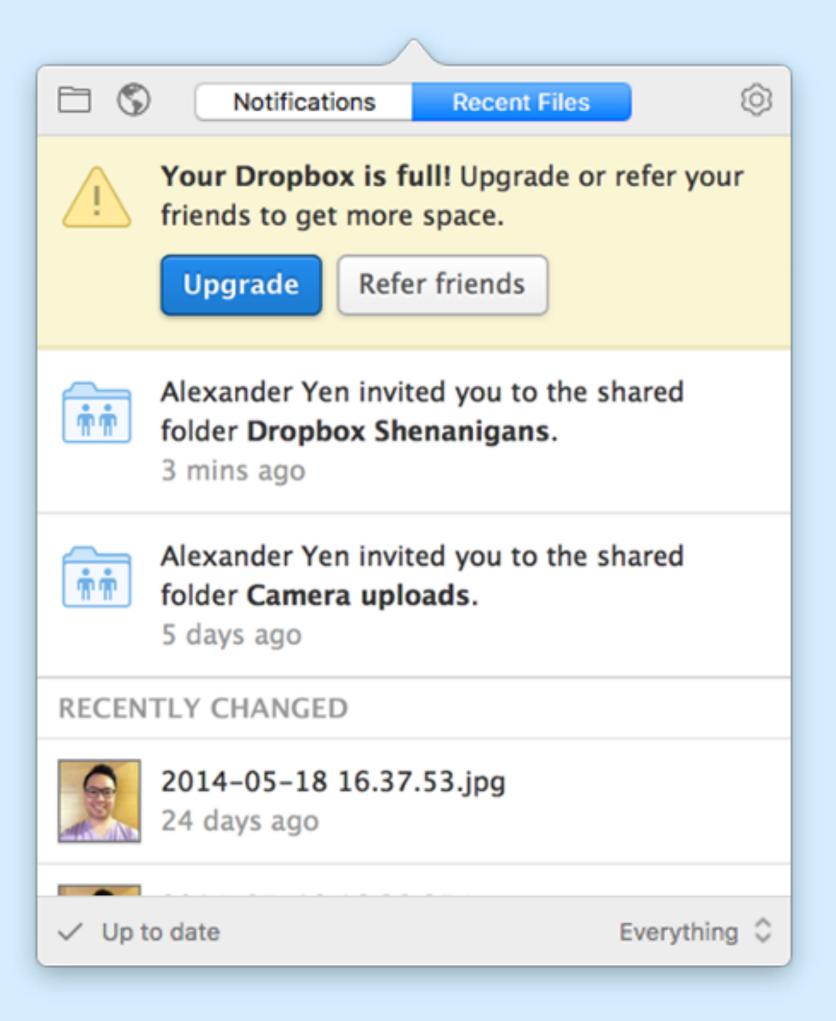
Change came from the founders

Aligned EPD with our business functions











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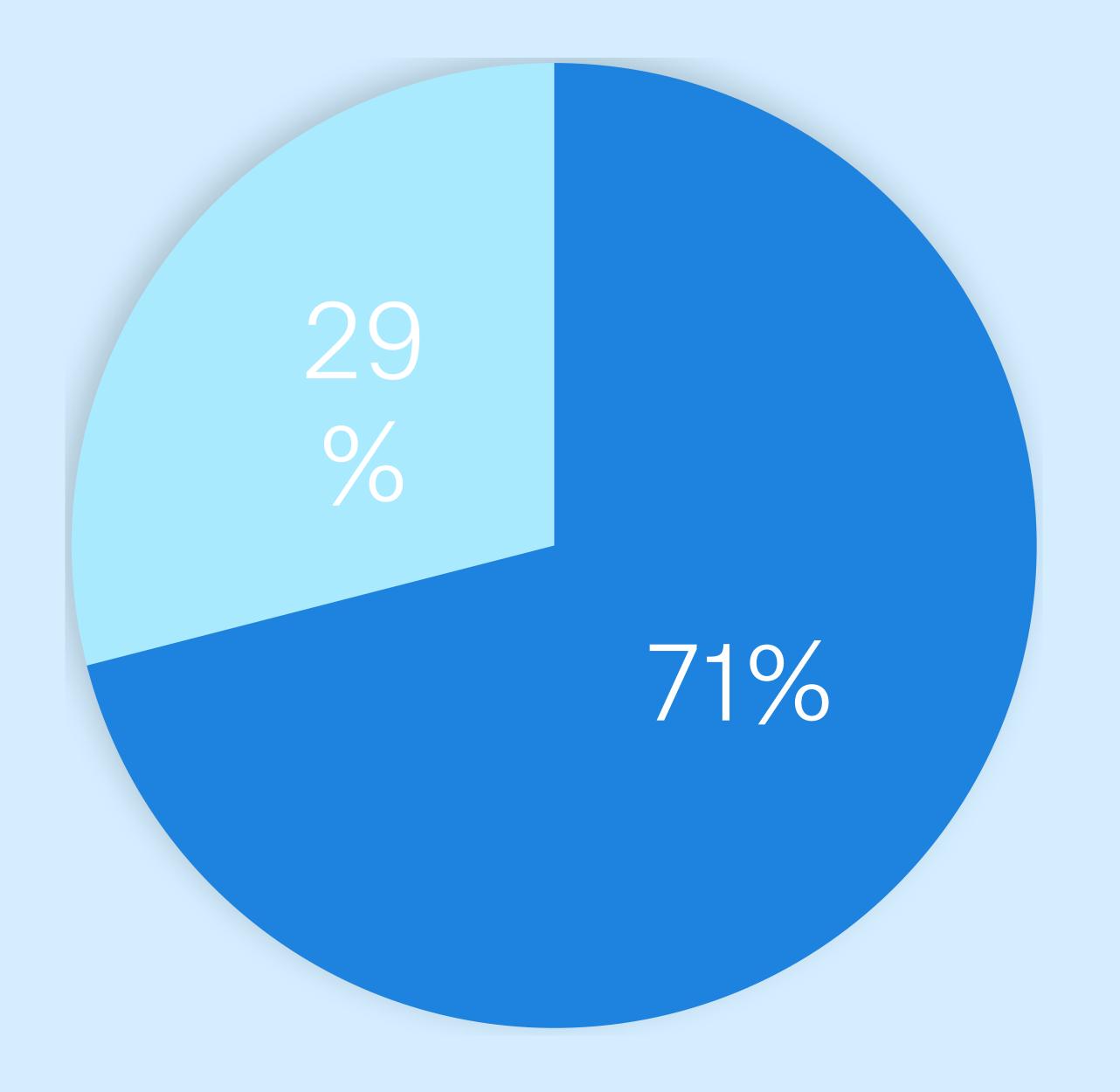


- Personal use
- Work use





- Personal use
- Work use





Standard

\$12.50

/ user / month, starting at 5 users

2 TB of space for secure storage with easy-to-use sharing and collaboration tools

Try free for 30 days

or purchase now

- 120 days of file recovery
- Smart Sync
- Dropbox Paper admin controls
- Granular permissions
- User management
- Active directory connector
- API access for data transport
- Require two-factor authentication (2FA)
- Unlimited API access to Partner Network

Advanced

/ user / month, starting at 5 users

As much space as you need with sophisticated admin, audit, and integration features

Try free for 30 days

or purchase now

Enterprise

Contact us

Customizable solutions with individualized support to help admins manage at scale

Contact us

- 2 TB (2048 GB) of space **Everything in Standard**
- As much space as needed
 - Advanced admin controls
 - Tiered admin roles
 - Audit logs with file event tracking
 - Invite enforcement
 - Single sign on (SSO) integration
 - Device approvals
 - Enables HIPAA compliance
 - Business hours phone support
 - Enhanced monitoring and reporting tools

- **Everything in Advanced**
- Account Capture
- Network control
- Domain Insights
- Integration and development support
- Assigned account success manager
- 24/7 phone support
- Advanced training for end users and admins
- Enterprise mobility management (EMM)



Solved internal culture clashes

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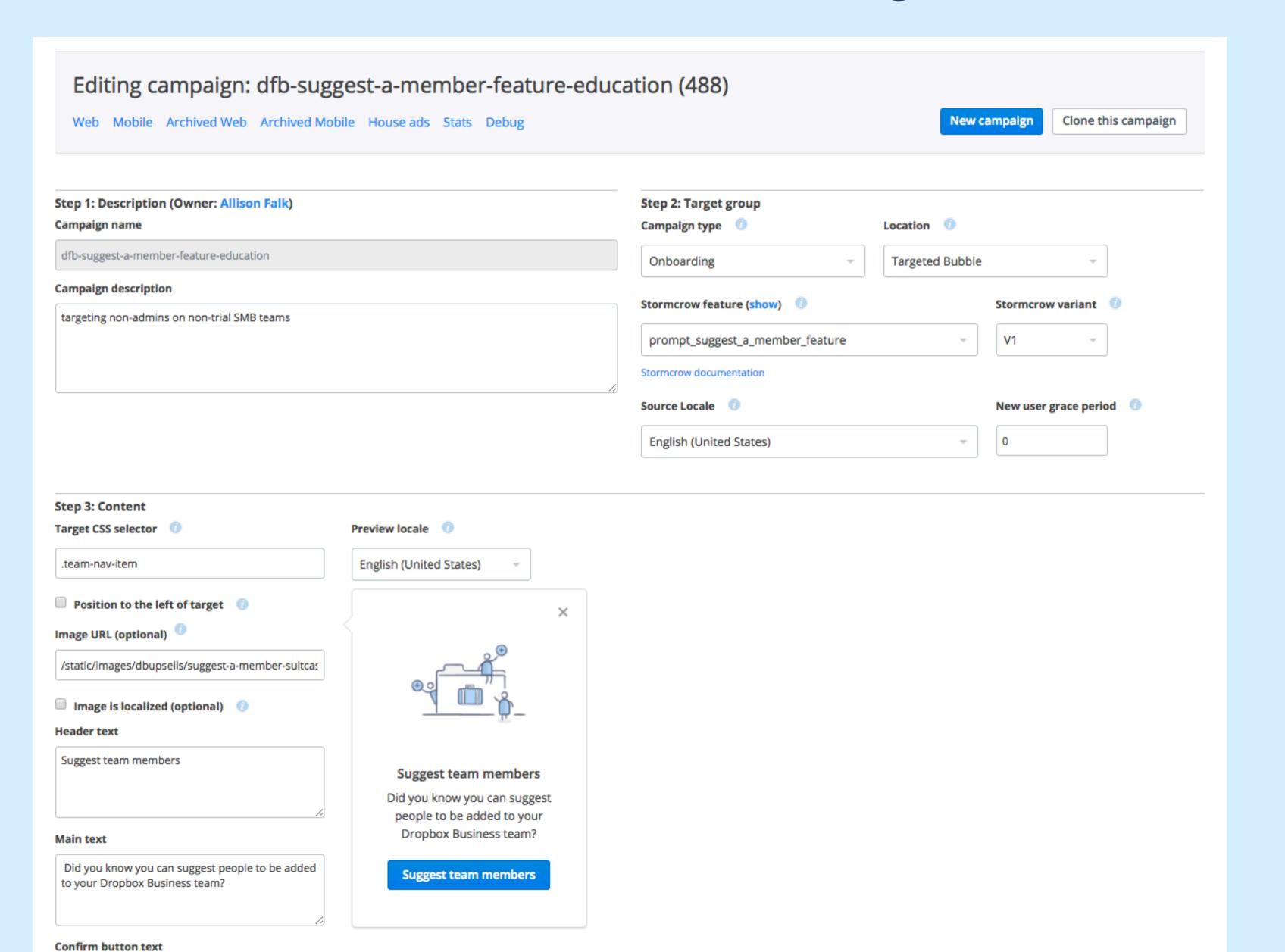
Experiments

2-3/month 80/month

2012 Today



Internal Tooling





campaigns running simultaneously

>\$100V incremental revenue every year

~50% of campaigns require zero EPD support



So what's next?



We aspire to be the biggest self-serve SaaS company in the world



Love the way you work



