THE DISTRIBUTED WEB

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{“Charly_Yan_Miller”, “Ebrahim_Badawi”, (“Dylan_Hancock”)};
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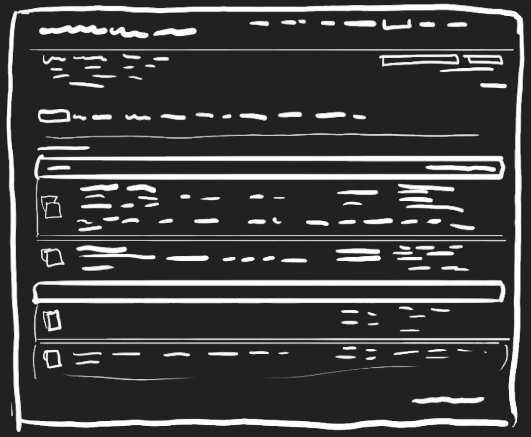
a brief history of a decreasingly distributed web

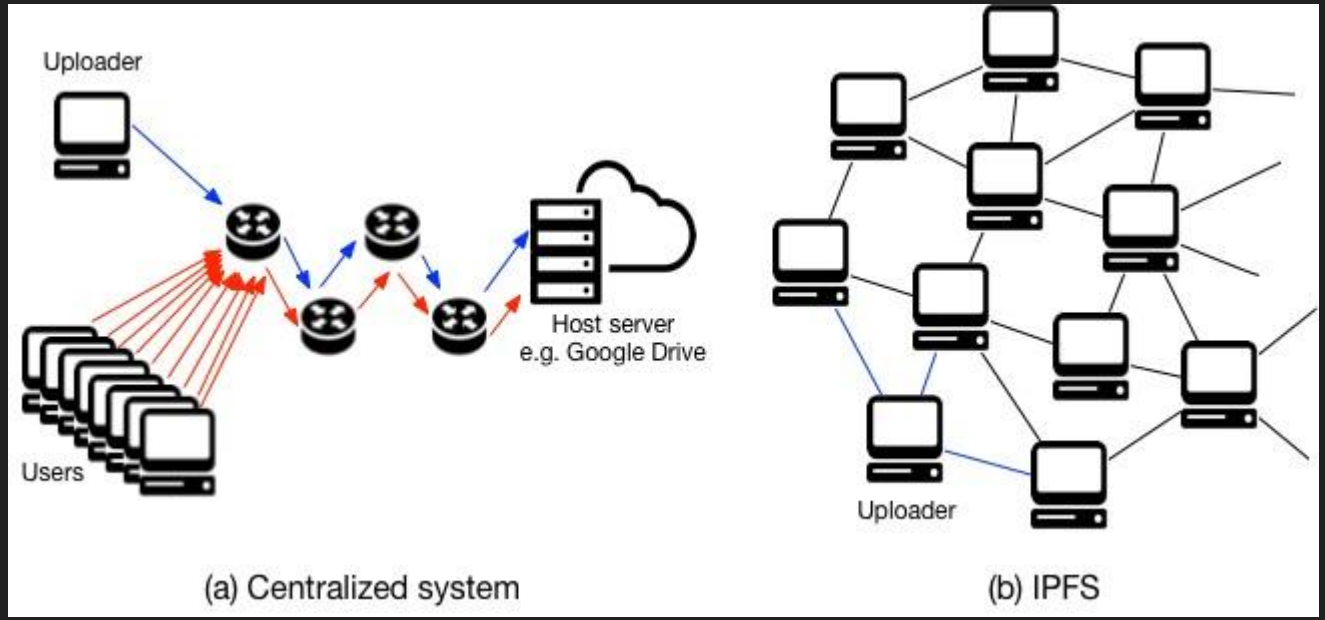
from dial-up, to message boards, to platform economies.



IPFS 101

IPFS: POWERING THE DISTRIBUTED WEB

The InterPlanetary File System is a peer-to-peer hypermedia protocol designed to make the web faster, safer, and more open.



BASICS

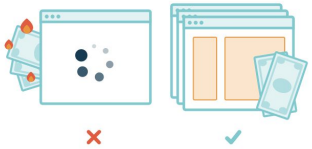
-IPFS is an open source project that accepts worldwide research and development contribution to enhancing the system.

-IPFS allows for distributed storage of data that is immune to altering and forgery.

-On the distributed web, every client is also a server that serves copies of everything the client has recently downloaded.

-IPFS aims to surpass HTTP in order to build a better web for all of us!!!!!!!

IPFS PRINCIPLES

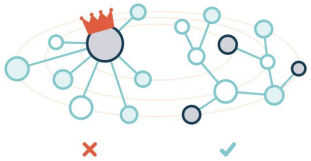


Today's web is inefficient and expensive

HTTP downloads files from one computer at a time instead of getting pieces from multiple computers simultaneously. Peer-to-peer IPFS saves big on bandwidth — up to 60% for video — making it possible to efficiently distribute high volumes of data without duplication.

Today's web can't preserve humanity's history

The average lifespan of a web page is 100 days before it's gone forever. It's not good enough for the primary medium of our era to be this fragile. IPFS keeps every version of your files and makes it simple to set up resilient networks for mirroring data.



Today's web is centralized, limiting opportunity

The Internet has turbocharged innovation by being one of the great equalizers in human history — but increasing consolidation of control threatens that progress. IPFS stays true to the original vision of an open, flat web by delivering technology to make that vision a reality.

Today's web is addicted to the backbone

IPFS powers the creation of diversely resilient networks that enable persistent availability — with or without Internet backbone connectivity. This means better connectivity for the developing world, during natural disasters, or just when you're on flaky coffee shop wi-fi.

Solid

Reference

TALK: Solid: empowering people through choice

An ecosystem of data & apps that works seamlessly together

Solid Ecosystem

- **DATA PODS**

  Servers or spaces that you store your data

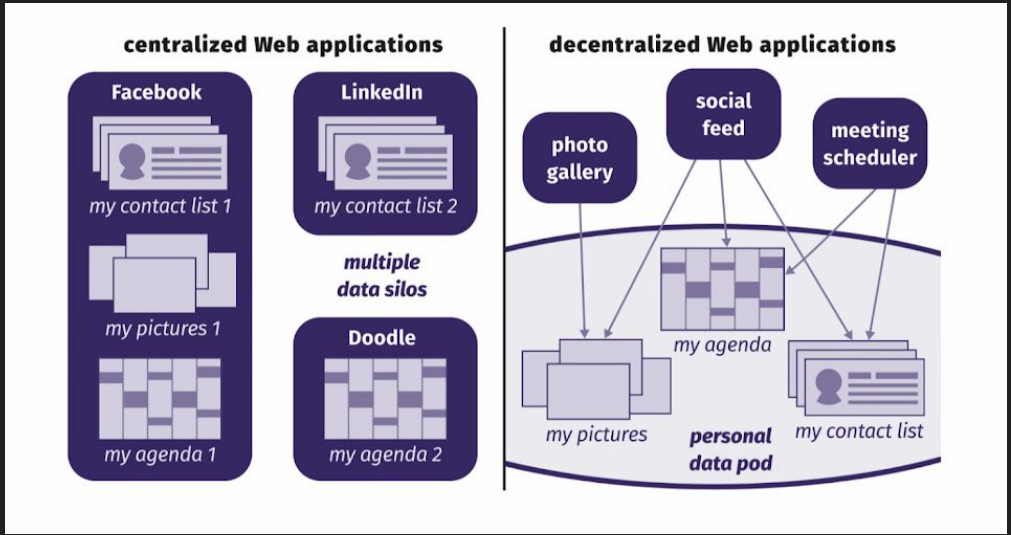
- **APPLICATIONS**

  Which use that data

- **STANDARDS**

  That ensure those two can communicate seamlessly

How does it work?

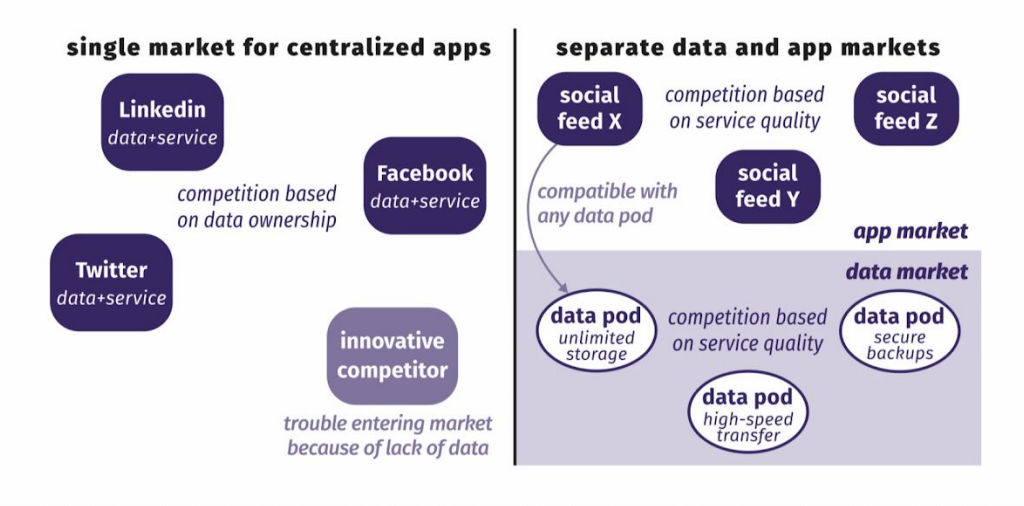


You own your data
and can share it with the apps and people you choose

How does it work?

THERE IS JUST ONE COPY OF YOUR DATA

How does it work?



Separates app & storage competition
=> Permissionless Innovation

Available Resources

- SOLID SERVERS

  Solid.community, Inrupt.net

- APPLICATIONS

  Solid Apps

- LIBRARIES & DOCUMENTATION, etc.

  GitHub, Solid.MIT.edu, Solid.Inrupt.com

Scott Draves’ ELECTRIC SHEEPS

the inventor of Fractal Flames and the leader of the distributed computing project Electric Sheep. He also invented patch-based texture synthesis and published the first implementation of this class of algorithms.

Artist’s Website

Video Another Video (Explanation)

QUESTIONS

Is IPFS the magical solution we have all been waiting for to reclaim internet privacy and space?

What are the pros and cons of *platformization?*

As a computation artist, what would you create with Solid ?

REFERENCES

TALK: Solid: empowering people through choice

Solid | Home

Decentralized Web Summit

IPFS powers the Distributed Web

Learn to securely share files on the blockchain with IPFS!

A Beginner’s Guide to IPFS

The Decentralized Web

Where Uber and Amazon rule: welcome to the world of the platform

Conceptualising media platforms: from a culture of connectivity to a platform society