

digital identity on Facebook could be valued at almost 10 times what it is today, at close to \$2,000USD [5]. Additionally, as users are likely to own multiple digital identities on various platforms, it is possible for the aggregate value of a user's digital identities will be worth more than the user's value on the labor market. The binary representation of human beings will one day be valued more by society than humans themselves. How much of this value has flowed back to benefit the user?

3. RECLAMATION

The inability for users to own and store their digital identities is one of the root causes of its alienation. To solve this problem the power and rights of access to centralized databases must be redistributed back to users. All data related to a user's digital identity such as text, images, and metadata should be stored on and accessed from a decentralized file system like IPFS [6] or Bigchaindb [7], which are maintained by the community that it serves.

3.1. Technical Requirements

To successfully reclaim a user's digital identity, this new system must satisfy all of the below requirements:

Ownership	Data must be in the complete control of user.
Architecture	Data must NOT be stored in privately owned centralized storage.
Access	The system must provide granular access rights similar to traditional databases.
Performance	It must not be any less performant than centralized storage.
Compatibility	It must be compatible with existing protocols like HTTP.
Open Source	All code and products must be openly accessible to public audits.

3.2. Benefits

3.1.1. Choices

Currently, users are locked into platforms because they are dependent on them to access their digital identities. Additionally, there is no way to import existing digital identities from one platform to another easily. Users must rebuild their entire digital self from scratch. By owning their digital identities, switching platforms would become seamless, thus breaking their dependence to platforms.

3.1.2. Competition

The difficulties in competing with established social networks have stagnated innovation in the field. A new entrant, apart from having to attract a large user base, must also develop the technical infrastructure to manage and securely store users' digital identities. With the use of decentralized file system, platforms can just "plug into" the already existing network and function without the need to host their own database. As a result, this will lower the barrier to entry thus, drive innovation within the social media space.

3.4 Challenges

1. Infrastructure

Although the underlying storage systems exist, much of the necessary infrastructures that make current digital interactions

possible is still absent in IPFS or Bigchaindb. Essential tools such as ORMs and Access Control Lists still need to be built.

2. Legal

With the alteration of the storage of digital identities, will require the signing of new legal contracts between users and platforms. These documents need to detail the access and usage rights such that the terms and conditions focus more on the protection of the user's power and rights to their data.

3. Definition

The definition of what is public and private still lives in a gray zone. As described by Bratton, "[users] cannot possibly claim that anything and everything any sensor senses about him/herself is really a part of his/her expanded sovereign person." [8]

4. CONCLUSION

Over the past decades, digital identities have evolved from the crude user operated identifiers to complex social commodities owned by media conglomerates. The inability for users to store their digital identities and the lack of understating for its sources of value have made them alienated from their users, revising their role in society. Within the next decades, alienated digital identities will have a tremendous impact on users both psychologically and physically. The goal of this paper is to provide an alternate perspective on our relation to digital identities and justify their reclamation, in the hope of making the ownership of our future more equitable.

5. REFERENCES

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