

Digital identity

1. What is digital identity?

Definition: Digital identity can be defined as both the collection of traces (writings, audio/video content, forum messages, sign-in details, etc.) that we leave behind us, consciously or unconsciously, as we browse the network and the reflection of this mass of traces as it appears after being “remixed” by search engines.

A **digital identity** is made up of the **sum total** of digital traces relating to an individual or a community: “profile” traces corresponding to what I say about me (who I am); “browsing” traces showing which sites I visit, comment on or buy from (how I behave); what my credential is for login on sites; credit cards details; and finally, written or declarative traces – what I publish on my social profile, for example – which directly reflect my ideas and opinions (what I think).

2. Security concerns.

Digital identity can be attacked just as a real identity.

1.Privacy. Your Digital identity regarding your browsing logs, your post on social platforms, your interest can be traced, collect, and sold to marketing companies, governments, or even individuals. Or they can be sniffed by individuals in order to impersonate you.

Solution: **VPN** (a virtual private network).

A VPN scrambles your traffic in an encrypted tunnel so not even your ISP can read it. No monitoring, no activity logs.

A VPN encrypts your entire internet connection to protect all your communications, even over unsecured networks.

2. **Same credentials.** According to a report made by google in 2019 as many as 65% of people reuse the same password for multiple or all accounts. This makes individuals very vulnerable. Only one company needs to be breached in order for the attackers to gain access to many more companies where the users have accounts because they now have a valid identity.

Solution: **Password managers/wallet**

Make it easier to use strong passwords so prevents password-reuse attacks

They can protect you from "phishing" attacks because they can recognize a false website and will not let you introduce your password.

They can help you find unused accounts that you may want to close or delete data to reduce your online exposure.

Password Policy

To block known breached passwords.

3. Market analysis.

VPN - Virtual private network:

The global private network (VPN) market was valued at \$25.41 billion in 2019.

It is projected to reach \$75.59 billion by 2027, growing at a CAGR of 14.7% from 2020 to 2027.

Insights: Increase in data security concerns, rise in advanced & complex cyber threats, and an upsurge in usage of mobile & wireless devices within organizations are the major factors that fuel the growth of the virtual private network market. In addition, the increase in the need for remote accessibility propels the growth of this market.

Advantages of virtual private network: hiding online identity, bypassing geo-blocks, preventing bandwidth throttling, avoiding online price discrimination, accessing region-blocked services, providing network scalability, and offering cheaper leased-line alternatives.

Popular choices: [ExpressVPN](#), [NordVPN](#), [Surfshark](#)

Password managers/ wallet:

The global password management market was valued at \$881.5 million in 2020

It is projected to reach \$2.05 billion by 2025, growing at a CAGR of 19.4% from 2017 to 2025

Insights: In the last decade was a great increase in internet users and businesses move their activity online. That drives users to make a great number of accounts that need to be password protected. Since, the COVID-19 outbreak, the number of cyberattacks has been drastically increasing, adversely affecting individuals, businesses, and organizations. Thus, some of the affected organizations are now investing financial resources into fixing the current inefficient data and password management systems.

Advantages of password managers: stores all of your passwords in a single account, generate Random Passwords, login to Accounts Simply, use the Convenient Autofill Feature, protect from phishing

Popular choices: [Dashlane](#), [NordPass](#), [1Password](#), [Keeper](#), [RoboForm](#)

Resources

- 1 [Digital Identity Issues](#), Johann Vincent
[Universite de Caen Basse-Normandie](#)
- 2 [What is digital identity](#), Olivier Ertzscheid
- 3 [What is digital identity?](#)
[Avast](#)
- 4 [What is digital Identity and How it works](#)
[Tech Funnel](#)
- 5 [VPN market](#)
- 6 [Password Manager market](#)
- 7 [Electronic Identities - a brief introduction](#)
[European Union](#)
- 8 [Brief on Digital Identity](#)
[World Bank Group](#)
- 9 [Password managers](#)
[techradar.com](#)
- 10 [VPN's](#)
[cnet.com](#)