YOUR VIRTUAL DNA AND HOW IT MAKES YOU VULNERABLE

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Most people know what DNA is. In short, it's the material, a long chain of molecules, that carries all information about you.

But virtual DNA, what is that?

Virtual DNA are the facts and statistics of your online behavior, collected together for reference or analysis. In short, it's the data trail that you leave behind on the internet.

We all know that data is information.

This information, all your online movements, are recorded and will never leave the internet. Anyone who has access to a device and gets online, leaves a data trail, YOUR virtual DNA!

To mention some examples on how we leave a trail;

- Searches, on search engines for jobs, vacations, translations, people, routes, etc.
- Your voice, commands or messages: Alexa Siri, Google Home, voice messages, voice texts and so on.
- Fingerprints or face scans for opening devices, apps and even doors.
- Pictures, stored on devices or apps, shared in messages and social media etc.
- Likes; the hearts, crying or mad faces, thumbs up or down, light bulbs etc.
- Posts and publications. Any picture, meme, article, video, message, tag, activity etc.
- Check-ins. To show others where you are and often also with whom or at what type of event you are.



As you see without really realizing, we all leave a lot of information in the out and open of the digital world. Not necessarily a bad thing because sharing as well as learning with and from each other has become so much easier nowadays. However, information in the wrong hands also means that it can be used against you.

So, who are the main users of that information and where do they use it for? Data, your virtual DNA, is mainly used by, or data brokers or cyber-criminals/predators. Data brokers are companies that buy and sell third party data for marketing leads. That information is often used to create profiles of you—think of them as virtual, possibly erroneous versions of you—that can be used to target you with ads, classify the riskiness of your lifestyle, or help determine your eligibility for a job. Cyber-criminals or predators are simply people who ruthlessly exploits others. They can all use our data for one simple reason, and that is because we freely hand it to them. Did you know that only 10% of the people read the privacy agreements? How about you? Or what about the security settings on your devices, do you know about them all and have you adjusted them in a way that you, your company or your loved ones are better protected?

I believe that we all have to admit, certainly the first internet generations, that we up until the last couple of years never really realized how much information about ourselves, our companies or our loved ones, we left behind on the digital world for others to freely obtain and use which can now make us vulnerable. Why did we do that all those years, or actually why are we still doing that, sharing all that information? That is because moods often dictate our behavior. Sharing happiness, sadness, grief or anger and frustration.

If you read further, I hope you understand that it is not to point a finger at you, but to make you aware of how your virtual DNA can make you, your company or our loved ones vulnerable. But more so to make you recognize and realize certain behavior and the effect it has.

Deep in our brain is a group of interconnected structures, called the Limbic system. This is the part of the brain that is in essence responsible for our behavioral and emotional responses. I'll not dive too deep into this neuroscientific subject, but it is maybe interesting to know that there are 5 primary chemicals that affect our (online) behavior.

Most of you, I'm sure, have heard of them because these chemicals are quite known, but not many are really aware of the effects, especially in response to our online behavior.

I'll quickly go over them in order to keep this article short but enough so that you can hopefully recognize certain behavior and if you like and feel the need, to do something about it. If you like to hear and learn more, feel free to contact me.

In a nutshell:

- Dopamine. The rewarding and motivation hormone. It motivates us towards a goal. A deficiency often exposes itself in procrastination issues, self-doubt etc.
- Oxytocin. For creating bonds and social interactions. A deficiency is social distancing.
- Serotonin. Flows when you feel significant or important. This is quite an addictive hormone from which many need a "fix" at a certain point when levels are low. Hence the bashing about achievements, posting selfies etc. for attention.
 Antidepressants are focused on the production of Serotonin. A deficiency often exposes itself in feeling lonely and depressed.



- Endorphins. Calming and satisfying hormone. Released under stress as a response to pain and anxiety as well as being released with laughter. (when you're happy you are less receptive for stress, anxiety or depression)
- Adrenaline. The focus and get ready hormone. Mainly tailored to focus the body's resources on survival.

If you read the above, you probably can already come up with some examples yourself of how you, or your surroundings, are sensitive for receiving or exposing certain behavior and more so how it can make you or them vulnerable. Many people unfortunately have experienced being catfished, scammed or hacked due to fishing emails, online money scams as well as being bullied and bribed in various ways.

Being forced to stay at home, especially now due to wars or epidemics, also has its effect. For example, more emails back and forth, more online meetings, insecurity about your job, lack of income or relationship, loneliness etc. In the first quarter of 2020, 8.4 billion accounts were compromised. Criminals are all too aware that we, now more than ever, thrive on collaboration tools. It is a morbid opportunity for them. Did you know that still 94% of the data breaches are through email? Yet, only 10% of IT spending is focused on email! Think of spear fishing, whaling etc. Criminal- and terrorist organizations often go hand in hand. They lure people in to attack, extort or recruit them for various reasons.

I can go on about the examples and the affects, but rather do that in person in order, and with the goal, to make individuals and organizations more aware and less vulnerable. For now, I leave you all with a few tips to end this article that I hope will benefit you or your organization.

- Be aware of what you share! (on social media, online dating etc.)
- Don't believe everything you see, hear or read. Verify!
- If you don't trust it, report and/or block the person.
- Give more attention to privacy agreements and security settings
- Realize that awareness and cyber security trainings are very important
- Make sure that you have policies and procedures that are well understandable, from the janitor to the C-suit executives.
- Continue to try to find and identify gaps and weaknesses and develop an understanding how long it would take to restore normal operations.
- Make "what-if" scenarios and develop various incident response plans.
- Never forget that people are the strongest and the weakest link

Keep in mind that all your online movements, are recorded and will never leave the internet. Anyone who has access to a device and gets online, leaves a data trail. This is YOUR virtual DNA!

Protect yourself and your devices with the right and up to date security tools and programs. Better so, educate the next generations about this to make them less vulnerable.

Remember, moods often dictate our behavior!



If you like to talk or learn more about this subject or are looking for a speaker on one of your conferences or webinars, feel free to reach out!

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