



"THINKING FUTURE, MOVING AHEAD"

Online Identity in the Age of Cloud Computing

And how the cloud has reshaped consumer search interests

Cyfuture India Private Limited

(Aug 2021)



Online Identity in the Aeon of Cloud Computing

Identity, the essence of how you interact and socialize with people around you, is in a phase of extra tumult. A few decades back no one would have thought that a virtual, online identity would ever exist, besides the real life identity but now, with the dawn of cloud and other breakthrough technology, online identity is as much a reality as the real-world identity itself.

An online identity is the behavior and characteristic of someone virtual, who shares the same digital footprints as yours. So, when I type in “how to cook chicken” into Google, I am in a way, defining or changing my attribute online, and thus my identity. To put things short, what we do on the web defines what sort of a person we become, and could be, in many ways, similar or different to our real-life self.

Cloud computing and identity

The concept of identity goes back to the age when humans evolved into intellectual beings but online id wasn't coined until the late 1900s, during which time, the tech theorists had gained enough insight to propose that humanity would soon have an online presence and their actions would directly influence those around them.

Even before cloud computing had evolved, websites and other e-commerce platforms existed and even collected data to study consumer behavior, but none could put the information collected to good use since the technology to direct this information to other platforms wasn't materialized yet. With the discovery of cloud computing, several devices could be linked, ensuring that they can utilize a common database and put data fields crucial for them into good use. As a result, consumer behavior on any one platform reflected on all other platforms that shared the very same database.

To put the above in an example: items that you search for in Google often appear as ads on YouTube because the two platforms are steered and guided by the same AI.

Cloud computing in a nutshell

Cloud computing is combining of resource from different hardware into a common, shared repository, followed by need-based allocation of the resource to customers as and when needed.

This can be better understood from the fact that several servers along with their hard drives are combined together to act like one mammoth hard drive defined innately by its constituent hard drives. If we were to virtualize 10 such hard drives, each with 10 GB of free space, we would have

a cloud with 100 GB space. Of course, some of this would be taken by the system so the entire 100 GB would never be available. In fact, the amount of free space available on the cloud would always total out to less than the cumulative free spaces of individual disks.

Pragmatic behavioral analysis

If the internet is the driver of online economy, the cloud is its engine. Our foundation of pragmatic behavior analysis of customer identity began with mainframe computers, the bulky systems that looked like giant shoe racks and could only do things that a calculator does today.

The concept of online identity had been conceptualized by then but the technology just didn't allow it to be materialized. As time went by, the mainframes were centralized and slowly ushered clouds into the picture. The epiphany that centralization of mainframes had sparked then continued to spread unabated at a drastic pace. More and more research was put in and as computers continued to become powerful, clouds surpassed what was once a system of a couple mainframes.

Once clouds became more of a reality than a notion, behavioral analysis kicked in. Devices were interconnected with one another and each dumped colossal amount of data onto the cloud; concepts like machine learning and artificial intelligence became so profound that it went from an idea to a billion dollar industry within few weeks; customer behavior patterns were analyzed and content curated as per customer interests were being pitched; the internet became cheaper and more easily accessible.

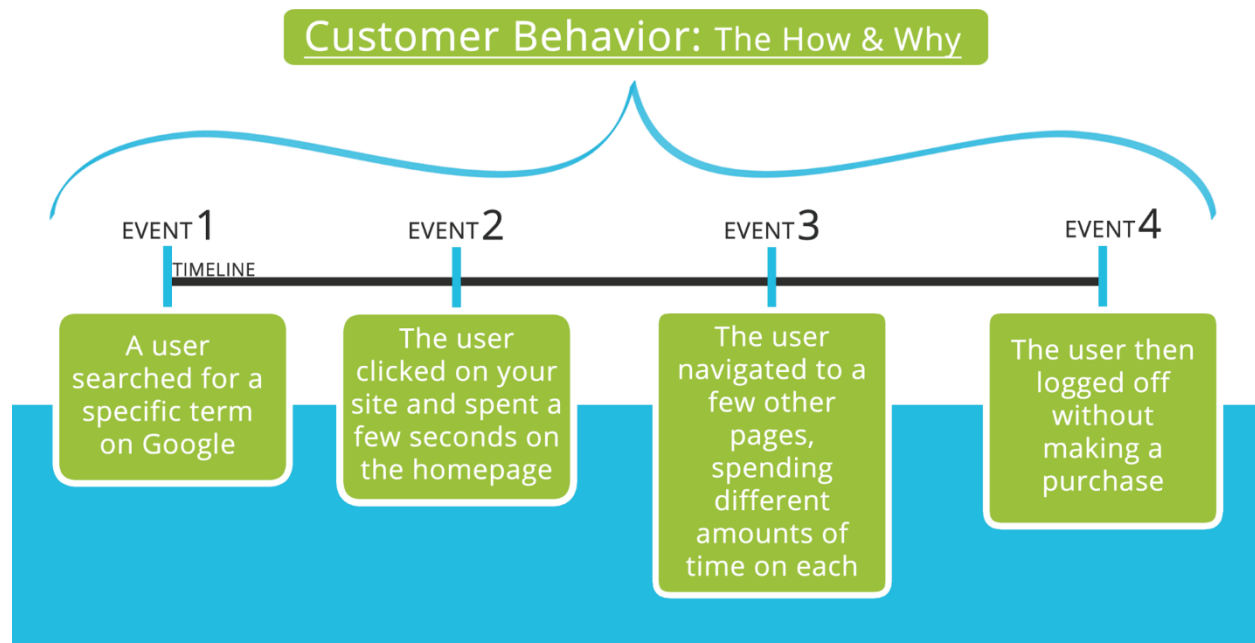
Within five years, what was only a concept, was now the technology that many believed would change the way we identified people online, and the aeon of online identity had dawned.

Picking up tracks

Like every offline store that you visit, CCTVs track you in the online world as well, though not in the form of CCTVs but your search pattern. How you landed onto a website, the keyword that brought you there and what website you navigated to – everything is being picked up (not in a negative way). *You cannot be tracked outside your local web browser unless you have an application with permission to access data granted to it.*

As intimidating as it sounds as a user, it is in fact useful if you place yourself in the shoes of e-commerce websites. By learning your search pattern, these websites train their AI to pitch you products based on your interests and that greatly improves the probability of you buying from them. ^[1] It is no wonder that once you have bought a mobile phone, your next recommended item is a cover made for that specific phone and model, and how many times do you go without buying?

If we look closely there are more than a million choices with you, and it is very likely that like our DNA, you share 90% or 99% of your online search pattern with another user, but it would never be 100% because two people cannot have one identity.



Shaping your online identity

Many are of the opinion that in days to come, company HRs, private and government firms would perform background check of their applicants' online identity as well. Most firms do so even now but its scope and accuracy is severely condensed. Hate comments, speeches, harangues and racial remarks online could get you into trouble. There are technologies even now that can accurately track you down but the online platforms do provide some level of immunity and almost never share their data with anyone except in certain cases.

Even though data as early as your first search is available, only the most recent data is accounted for while evaluating your online ID because customer behavior changes from time to time. This does not however mean that you can cover up your past activities and won't have legal or formal implications of any previous actions.

Your actions are stored on the cloud with a time stamp so every order, comment, and/or photo you upload are first stamped with time and then backed up on the database. In some of the cloud data centers, records as old as 50 years are stored and they would likely store them for another semi-centennial.

Although most experts would argue but it is entirely possible to shape your online identity or have yourself evade search engines from registering your activities.

VPN, incognito and logging off ensures that none of the activities that you subsequently perform will get mapped to your Google account and won't appear in your search history either. Note that the website that you visit will still be able to keep track of your actions and may map the same to your IP, but you will remain hideous throughout with the VPN.

Clouds have helped make lives transparent

1. Before clouds existed, there were many means for banks and lenders to pull out your CIBIL and consumers loans imposed huge risks for the lenders. The mechanism that existed then involved the bank checking from its own database; if the applicant had defaulted on a loan from another bank, the setup did not allow it because no bank would share its customer data with another bank.

Some years later when clouds became largely profound, a consortium of different banks, setup as an autonomous credit agency began collecting credit info for the collective benefit. Lenders could now upload their credit data and help identify consumers that have failed repayment of their loans and are likely to default again.

2. The concept of cloud and online identity has helped the local vigilance and police departments eliminate threat and keep close eye on those previously convicted of crime.

Expert columns

We're at a point where we are commoditizing the entire computing by turning into the cloud. Day in and out we're catering to businesses planning to move their entire data to a centralized system for added benefits. Just a few days ago we mobilized one such system for one of the leading public sectors in our country, and hope to do in the years to come.

We've reached an inflection point and the learning curve has significantly been reduced. Only a few years back, one could not even think of configuring his own website, given the amount of efforts involved in maintaining and up keeping servers. Fast forward to today, a majority of our customers are those who've never owned a website let alone managing a server.^[2]

There are other two properties of the internet that we're largely unaware of: transparency and straight-through processing.

When amalgamated with social networks we can augment our reach and enable capabilities we are yet to see. The internet will completely transform how businesses operate and clouds will be the driving factor that will bring about this change.

When asked how much time he thinks will take for the above to happen our expert replied,

It is already happening. Social media generates billions in revenues and is one of the preferred marketing rendezvous for businesses. Most things that we are talking about is around us and happening and for the large part of it, we are still unaware.

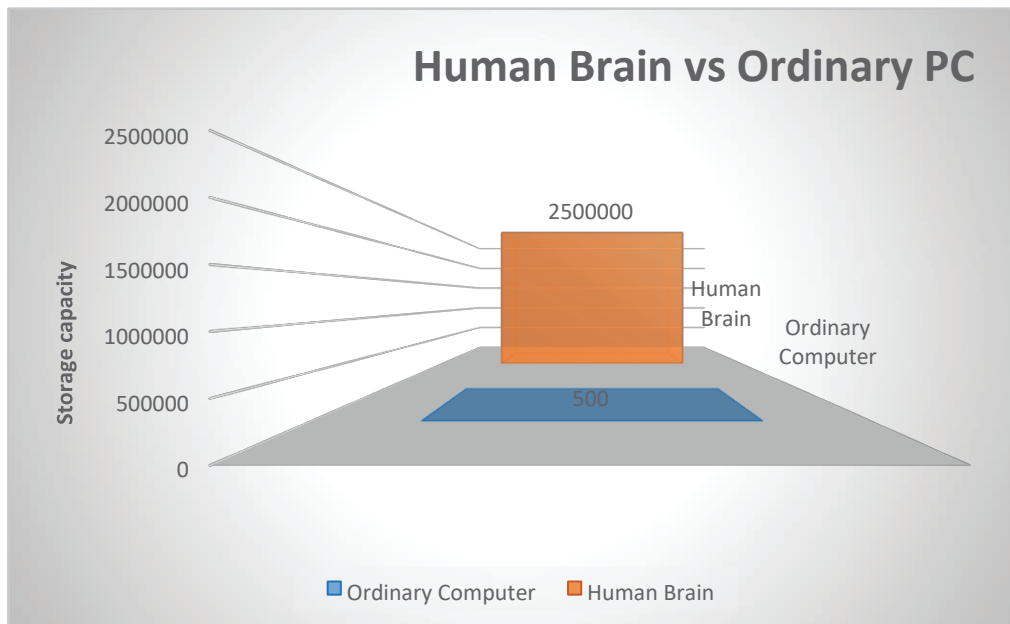
Sky-rocket revenue by understanding customer identity

Back when I was interning at a firm in my hometown, there existed a Starbucks on my way to office. For a period of three months I always showed up at almost the same time and in the same clothes, and ordered the usual White Mocha. I showed up so routinely that the person behind the counter knew what I would order and recommended me variations of coffee that I mostly liked. As time passed by, my usual changed. I was now buying a bigger glass of a more expensive Mocha just because the executive knew what to recommend.

This was indeed one of the first instances of how understanding customer identity and interests help sky rocket sales. When you understand what usually interests your consumers, you start off by pitching products directly linked to those interests, and gradually encourage them to try related products, thus making them stick around and continue buying from you.

As humans with highly-sophisticated brain the capability of comprehending expressions and thoughts is innately built into our DNA without us realizing the same. To put in a layman's terms, oftentimes, we are able to anticipate in advance what other humans in our vicinity are up to even without interacting with them.^[3] And this was what the Starbucks employee leveraged when he pitched me Flat White Mocha, an upgrade to what I had been having then.

Humans have their own database –their mind – that can coordinate movement of each organ and part of the body but computers are really restricted in this sense as the amount of memory available to them isn't very huge. "The neurons in our brains can combine so that each one helps with many memories at a time, exponentially increasing the brain's capacity to something closer to around 2.5 petabytes (or a million gigabytes)...."^[4]



The computers need enormous amounts of information to understand you and curate content based on your online identity, which is but impossible save for the cloud computing and the amount of data dumped to the cloud from various devices.

Cyfuture Cloud

In line with “thinking future, moving ahead”, Cyfuture Cloud is developed with intention of offering the best cloud solutions to venture of every size. From business owners to artists, from eCommerce startups to huge financial institutions, Cyfuture Cloud has adaptable and scalable solutions for all.

Cyfuture Cloud offers cutting-edge solutions to businesses yearning to expand. From high-speed computing to expandable SSD memory, Cyfuture Cloud makes flawless computing possible for any business, even with no technical expertise on board. Through “pay what you use” plans, you can test your operational strategies without blowing off your resources.

Moreover, Cyfuture Cloud offers 24*7 IT support so that you can focus on what you do best and leave the tech on the experts. Integrate any operating system of your choice and enjoy 99.95% uptime. Keep your data secured at all times and get benefitted from the robust disaster recovery strategy which keeps your valuable data protected by any attack or loss.

In closing

One of our cloud architects at Cyfuture says that he has the following message to the GenZ that we found intriguing and valuable enough to close this excerpt with.... My advice to Gen-Z and also Gen-X is to surf the internet with care. The systems are interconnected and although there are fundamental rights that protect your online identity, it is better to err on the side of caution and stay away from activities that can have legal implications. Contrary to what most people think and say, you can get sued if any of the content (or parts of it) that you curate has racial, sexual, and hate speeches. As the generation that's witnessed the dawn of a new era with cloud computing, you are advised to help us carry forward the legacy and act mature, cautious, and vigilant in the online space.

For more details about the cloud technology and one-to-one discussion with the experts, get in touch with Cyfuture Cloud.

Best of Luck!

Team Cyfuture

"Thinking future, moving ahead"

References

[1] Slate. "2 MB of knowledge taunt"

[2] Ai impacts. The report on how the brain is still the most powerful computer

[3] LiveScience human brain could store the entire internet's content

[4] Scientific American.com