

# Web3: A new era for social commerce



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# Introduction

In 2023, the social commerce market was valued at over \$1 trillion and is forecasted to grow by 600% by 2030 <sup>1</sup>. This growth signals a transformative shift in consumer behavior – fueled by ever evolving technological advances.

Despite this rapid expansion, significant friction points persist within social media platforms. These issues start at product discovery, where users have limited control over social platform algorithms and how their data is leveraged for brand engagement. First-time shoppers often face trust issues due to insufficient trust signals from brands or small businesses on these platforms – including being redirected to a brand’s website external to the social apps, which leads to cart abandonment.

This report explores the early paradigm shift from Web2 to Web3 and its impact on social commerce. Emerging Web3 social platforms, like Farcaster and Lens Protocol, and user-facing applications, such as Warpcast and Phaver, are gaining traction within the Web3 community. We explore the innovative functionalities that the Web3 ecosystem offers to users and brands, including using Web3 wallets, digital identity, open algorithms, and streamlined payments.

Join us as we explore the future of social commerce, discussing the potential of Web3 to revolutionize how we shop, interact, and build trust online. Discover how this shift could transform the user experience – making it more fun, transparent, and user-centric. Uncover the new tools brands can use within a social commerce construct to signal trust and enable a curated shopping experience.

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<sup>1</sup> <https://sproutsocial.com/insights/social-media-statistics/>

# Web2 Social Commerce

## Social Commerce - Background

Since their debut 15+ years ago, early platforms were designed with the primary objective to enhance and enrich human connections. These early social networks cultivated vibrant online ecosystems through social networks, the sharing economy, gaming, e-commerce, and more.

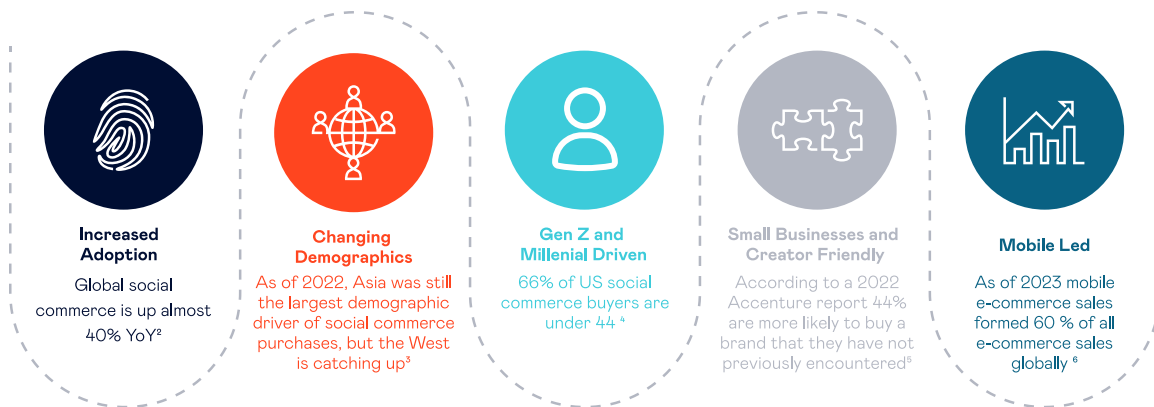
Social media platforms, which began as communal spaces, transformed into valuable asset tools for business brand engagement. 2005 marked a pivotal shift with the introduction of social commerce, and the use of social media platforms to facilitate online buying and selling of products and services. Platforms like Facebook, Instagram, and Twitter began enabling products and services to be bought and sold directly within their ecosystems. More recent tools allow businesses to set up digital storefronts directly within the platforms, enabling users to discover products, interact with brands, and purchase products without ever leaving the platform.

As of 2024, over 5 billion people are active on social media <sup>1</sup>, presenting an opportunity for businesses to drive sales directly through social interactions. The high volume in social commerce activity can be attributed to a combination of factors, such as a pandemic-driven push for social commerce, a shift in shopping behaviors, increased social media usage, the rise of influencer-driven content, and easier payment options. Users can discover products, read reviews, interact with other shoppers, and make purchases all within their favorite social media platforms.

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<sup>1</sup> <https://sproutsocial.com/insights/social-media-statistics/>

## Social Commerce – Characteristics



## Four Phases of the Social Commerce User Journey

The social commerce user journey can be broken down into four key phases: **discovery**, **trust**, **purchase**, and **brand affinity**.

During the **discovery phase**, features like influencer- and user-generated content (UGC) and shoppable content allow users to find new products through engaging content and seamless checkout links.

In the **trust phase**, social proof elements such as followers, product reviews, and post frequency help build confidence in the brand.

The **purchase phase** is optimized through in-app checkout, offering a streamlined transaction process within the social app to reduce cart abandonment and increase conversions.

Finally, in the **brand affinity phase**, personalized future engagement initiatives like tailored messaging and loyalty programs maintain customer relationships and encourage repeat purchases.

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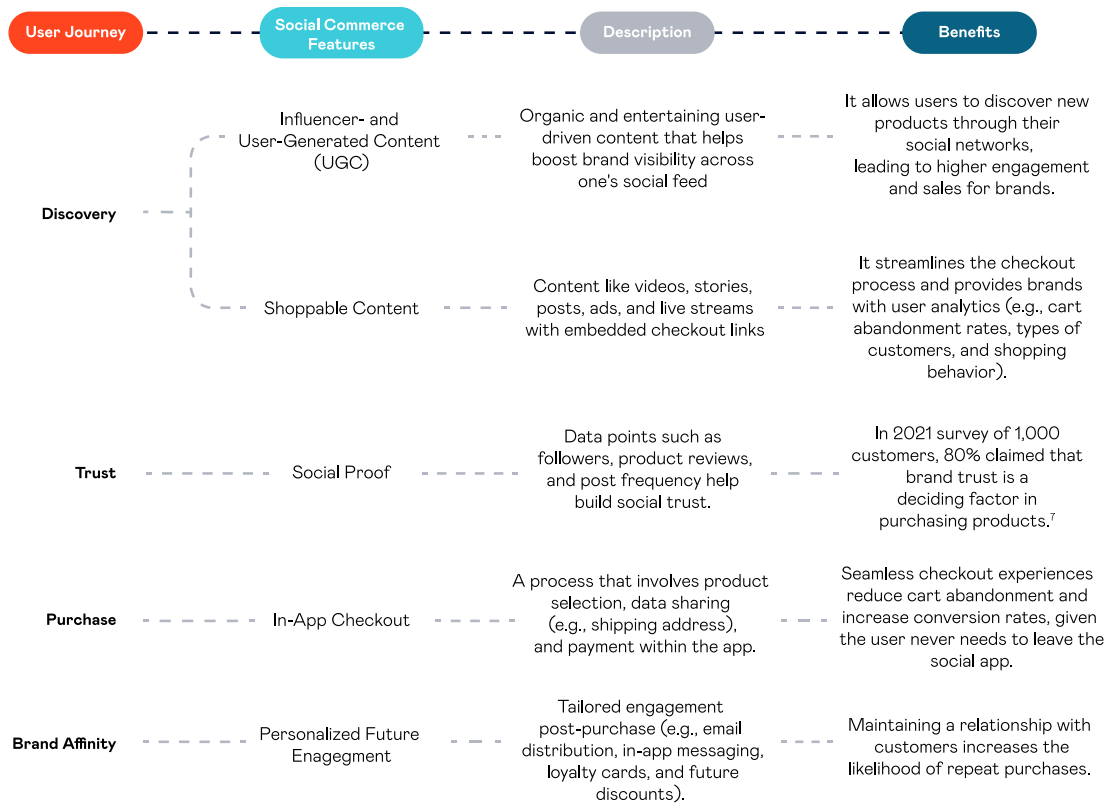
<sup>2</sup> <https://offers.hubspot.com/social-media-trends-report>

<sup>3</sup> <https://www.tidio.com/blog/social-commerce-statistics/>

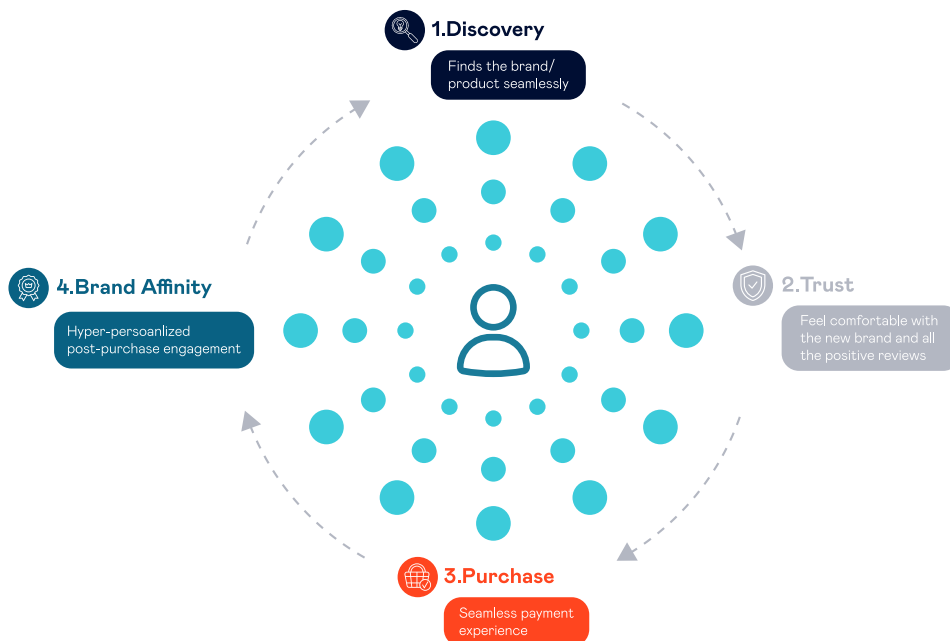
<sup>4</sup> <https://www.emarketer.com/insights/social-commerce-brand-trends-marketing-strategies/?secureweb=WINWORD>

<sup>5</sup> <https://www.accenture.com/us-en/insights/software-platforms/why-shopping-set-social-revolution?secureweb=WINWORD>

<sup>6</sup> <https://www.statista.com/chart/13139/estimated-worldwide-mobile-e-commerce-sales/>



Ideally, the four-step journey enables a seamless process, boosting sales and enhancing brand engagement. This is a repeatable process, as effective brand affinity and loyalty further drives discovery of products of that specific brand; the cycle repeats itself.



<sup>7</sup> <https://hbr.org/sponsored/2023/06/3-ways-marketers-can-earn-and-keep-customer-trust>

However, the four-step journey contains numerous friction points that lead to drop outs and cart abandonment, which ultimately leads to a product not being purchased.

## User Journey Friction Points

Meet Emma, a 21-year-old university student who spends much of her free time scrolling through social media to interact with her friends. One day, she notices a product reshared by an influencer she follows that piques her interest. Here are some friction points Emma might encounter along her journey:

**Discovery phase:** While users may find what they are looking for, they often worry about how their data is used to determine their feed. Additionally, social media platforms control the algorithms (algos) used, and any changes to such algos can impact product visibility and discovery, leading to an inconsistent experience for Emma.

**Trust phase:** Users need to feel a certain level of comfort with a brand before proceeding to make a purchase. Social platforms often attract smaller, lesser-known brands and sellers making trust generation crucial. One of the biggest concerns for users in social commerce is that the seller might not be trustworthy<sup>8</sup>. At this phase, Emma may actively seek trust signals by scrolling through comments, checking the brand's social page, and evaluating data points like follower count. If Emma doesn't feel comfortable, she will likely abandon her cart and continue scrolling through her feed.

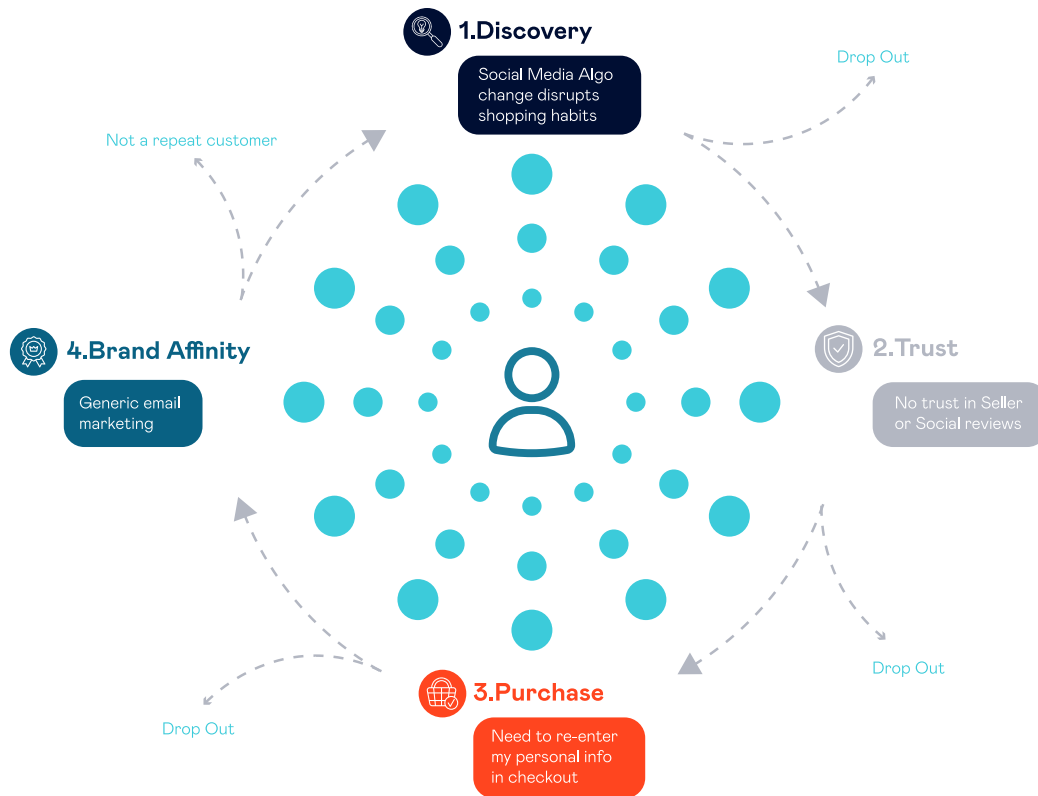
**Purchase phase:** If users are redirected to an external website, they might feel uneasy and abandon their cart. Additionally, repeatedly entering personal details for every purchase adds friction. For instance, Emma is asked to enter her shipping address and student number at checkout for a discount. Nearly four in 10 users hesitate to shop on social media due to concerns about how platforms manage personal data<sup>9</sup>.

**Brand affinity phase:** Maintaining user relationships often involves adding users to email lists and sending generic content. This impersonal approach can overwhelm users, leading them to unsubscribe. Emma unsubscribes from brands that send her repetitive emails, despite previously shopping with them.

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<sup>8</sup> <https://blog.hubspot.com/marketing/why-consumers-dont-shop-on-social-media>

<sup>9</sup> <https://www.emarketer.com/insights/social-commerce-brand-trends-marketing-strategies>



An intriguing observation from the flow above is that **nearly all friction points arise from the collection, use, and sharing of data**. Most of these data points pertain to aspects of a user's identity. This identity-related data includes social network behaviors, shopping preferences, trust signals, shipping addresses, banking details, and preferred modes of ongoing engagement.

Could there be a new paradigm for more efficient collection and sharing of identity attributes within social commerce flows?

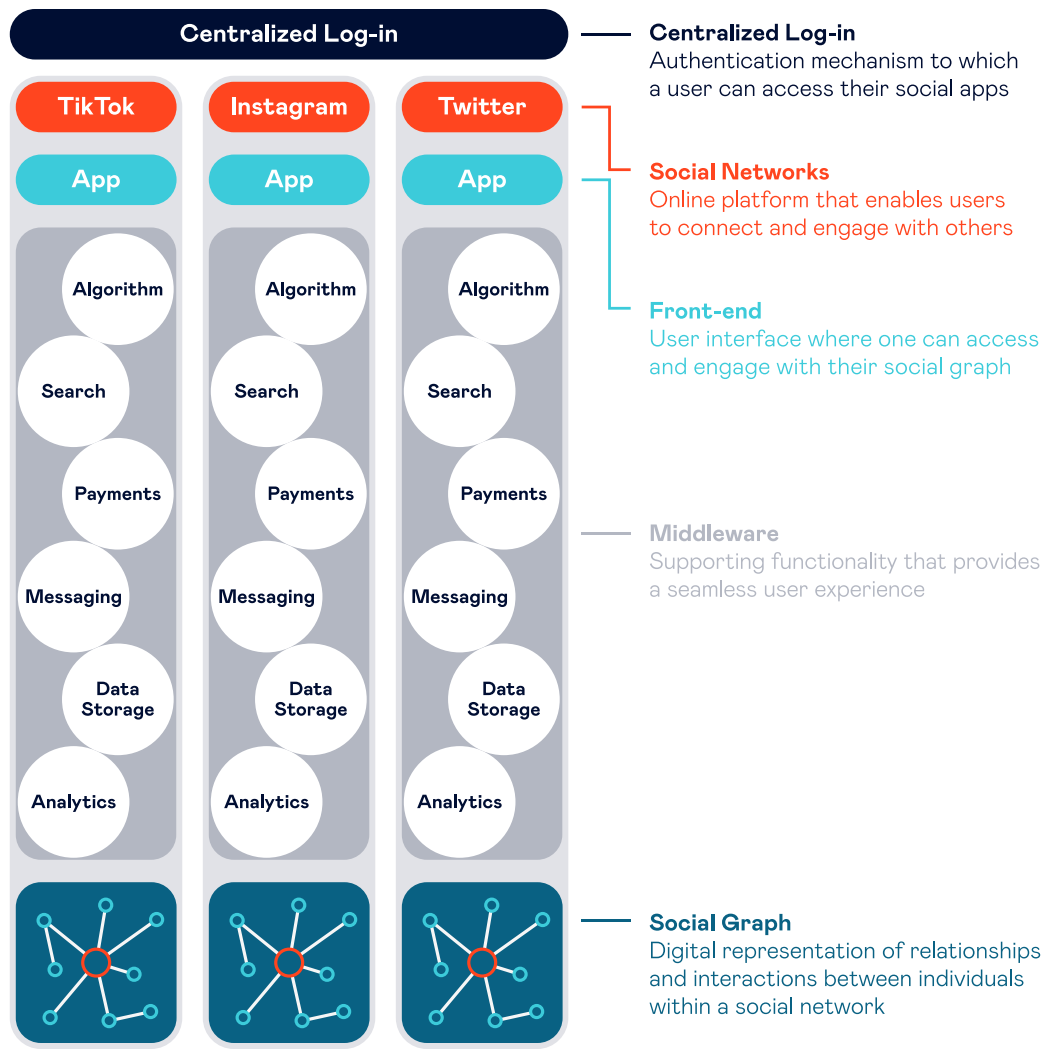
## Web2 Social Stack

Social networks own and control not only the user-facing application but also, to some extent, the middleware and social graph. As a result, the current social stack whereby each social network owns and controls its own tech stack creates technical silos which end up fracturing the user experience across the board.

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*Please note: While this depiction clarifies some of these issues, it does not imply that everyone's social commerce journey is the same. Instead, it aims to illustrate a typical experience and highlight common challenges encountered along the way.*





In the diagram above, each platform features a centralized login system whereby each social network controls the login and identity process, represented by the user's access point at the top. Below the login, each social network is structured into three primary layers: front-end, middleware, and social graph. The front-end consists of the user interface, which is the component most familiar to users due to direct engagement. The middleware layer encompasses various elements such as algorithms, messaging, analytics, search, payments, and data storage. At the foundation, the social graph represents user relationships and interactions within the network, visualizing connections such as friendships, follows, likes, and other forms of social engagement, effectively mapping the network's entire structure.

Web2 social networks achieved scale and adoption due to a combination of factors such as user-friendly interfaces and a sticky algorithm. One advantage of a centralized offering is the ability to tailor the user experience to optimize ease of use and retention. Additionally, reaching a critical mass of users creates a network effect, further solidifying the dominance of Web2 social networks and making it increasingly difficult for users to leave.

### **Key takeaways from part one**

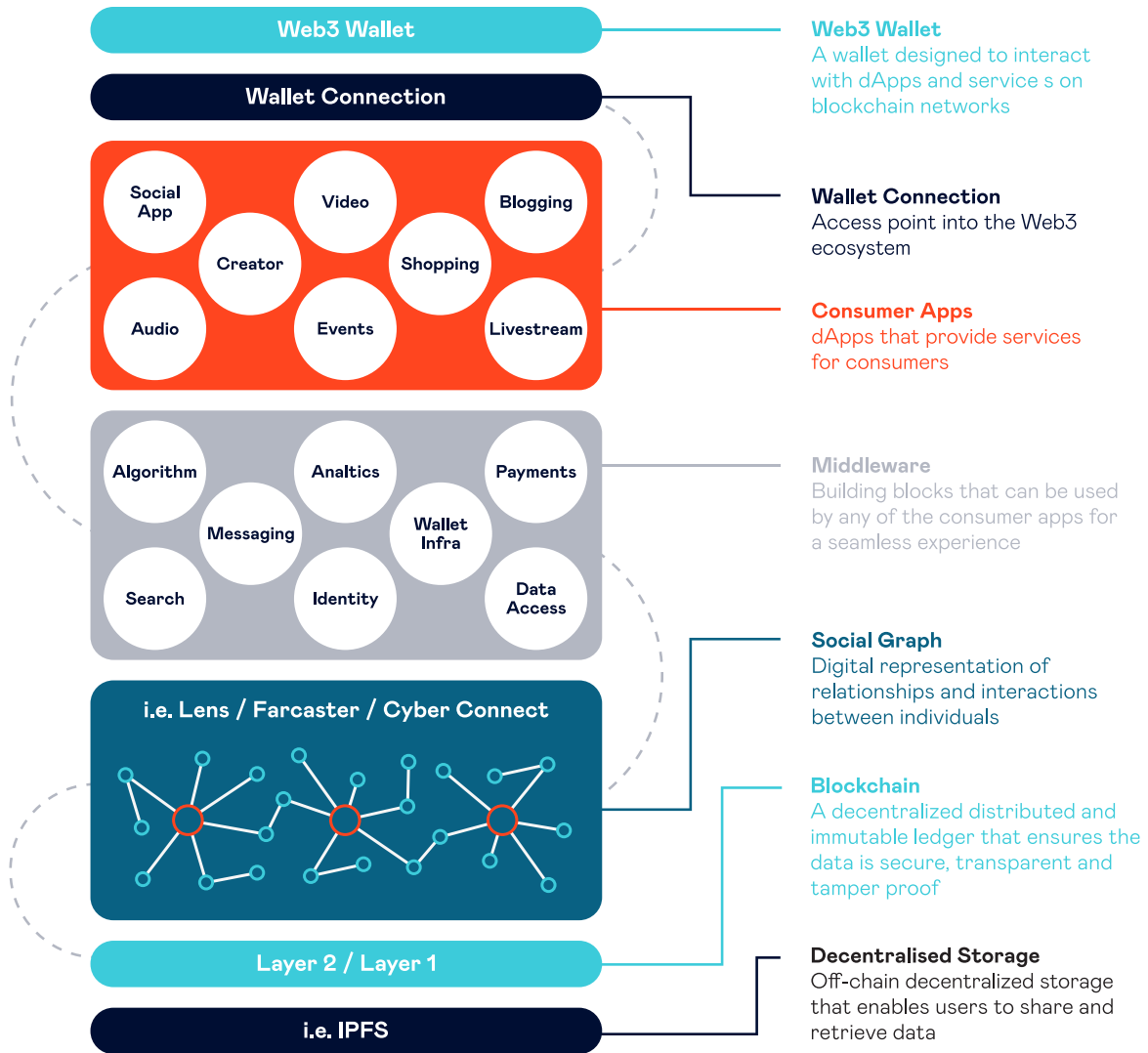
- Social commerce has been and will continue to be a rising trend.
- There are four phases within the social commerce user experience: discovery, trust, purchase, and brand affinity.
- Numerous friction points exist within the social commerce journey, most of which are related to the collection, use, and sharing of one's identity attributes.
- Web2 social networks create silos which results in a user's identity only being relevant within that ecosystem.

# Paradigm Shift To From Web2 To Web3 – Social Graphs, And Digital Identity

## Web3 Social Stack

Web3 is often described as the next evolution of the web, characterized by its decentralization, openness, modularity, interoperability, and blockchain foundation. The key difference between Web2 and Web3 is the ownership model – with the Web3 user in the control as opposed to centralized Web2 parties. For instance, creators in Web3 own the content they create and take it with them from one dApp (decentralized application) to another. This is a significant shift from the Web2 model whereby the underlying social network owns the content. In Web3 users have more power to own their identity, data, and other information related to them.

Web3 social networks represent a fundamental shift from current Web2 social platforms. Developers can select which building blocks across the stack to incorporate into their offerings, allowing for greater flexibility and innovation in creating decentralized applications.



## Web3 Wallets:

Web3 wallets are digital wallets designed to interact with blockchain networks and dApps<sup>10</sup>. Acting as the gateway to the Web3 ecosystem, these wallets enable users to access a wide range of consumer applications. Each Web3 wallet has a unique public address, an alphanumeric string (e.g., 0x58vj3v8...), which is essential for identifying and interacting with other wallets and users.

Recent technological advancements such as smart accounts have greatly streamlined the wallet setup and usage processes to create a more favorable user experience. Users can create wallets with just their email address without needing to memorize or write down non-user-friendly seed phrases.

<sup>10</sup> [https://medium.com/@jacob.k\\_20195/web3-social-unpacking-the-stack-fb093ca7a0e2](https://medium.com/@jacob.k_20195/web3-social-unpacking-the-stack-fb093ca7a0e2)

## Consumer Applications:

As further discussed below, consumer applications in Web3 are accessible to users much like the apps we use today while introducing opportunities to enhance interconnectedness and create more personalized user experiences. These advancements allow developers to be more innovative, integrating various components to create entirely new user experiences.

Popular examples of consumer dApps:

- **Social networking:** Applications like Warpcast, Supercast, Phaver, and Yup demonstrate the social networking capabilities of Web3, offering innovative ways for users to interact and share content.
- **Blogging:** Platforms such as Paragraph.xyz and Mirror.xyz function as Web3 counterparts to Substack or Medium, enabling users to read the latest blogs and publish their own content.
- **Music:** Sound.xyz serves as a Web3 alternative to Spotify, allowing users to discover new artists and listen to their favorite songs.

A key functionality of consumer dApps is the ability for users to “collect” their favorite content. This process is similar to a subscription, but with a crucial difference: unlike traditional subscriptions, where access often ends once the subscription expires, collected content in dApps remains accessible. When users collect content, such as a blog post or music, that content is bound to their wallet’s address on the blockchain and is owned by the holder of that wallet.

## Middleware:

The middleware layer enhances the functionality of front-end applications by abstracting the complexities of the underlying infrastructure. This layer includes components such as open algorithms, analytics, payments, messaging, search, identity, and data access.

Marketplaces, social apps, and other consumer applications can utilize open and accessible algorithms to facilitate social discovery, such as feed curation, content discovery, and friend suggestions.

## Social Graphs:

Web3 social graphs are conceptually similar to Web2 social graphs, but with the significant distinction of being open for wider use across multiple consumer applications. Farcaster and Lens Protocol are notable examples of Web3 social graphs that have

seen substantial growth over the past year, attracting new users and fostering the development of social applications such as Warpcast, Supercast, Phaver, and Yup.

Both Farcaster and Lens Protocol have introduced new functionalities that empower developers to create applications enabling users to interact directly with the blockchain. For example, Lens Protocol's "open actions" feature allows users to collect blog publications directly into their Web3 wallets from within their social feed. Similarly, Farcaster's "frames" functionality transforms any post (referred to as a cast) into an interactive mini-application, enabling users to collect content, engage in blockchain-based games, earn loyalty badges, and sign up for new projects—all from within their feed.

These features, "open actions" and "frames," act as Web3 gateways and offer users seamless access to the broader Web3 ecosystem directly from their social applications – introducing significant implications for the future of content monetization and brand engagement. The purchasing of on-chain content, subscribing to an on-chain blog and claiming an on-chain loyalty token can all be done from within a social feed.

## **Blockchain and Decentralized Storage:**

The blockchain layer serves as the foundation for the entire architecture of Web3 social graphs. However, due to their decentralized nature, blockchains are generally unable to handle the high volume of transactions and large amounts of data required for social applications. To address this challenge, Farcaster and Lens Protocol employ a hybrid approach that combines blockchain with off-chain decentralized storage in an effort to reduce gas fees (transaction fees). On-chain transactions are performed only when security and consistency are crucial. By minimizing on-chain transactions, they effectively reduce costs and enhance performance, ensuring the system remains both efficient and scalable.

## **Digital Identity**

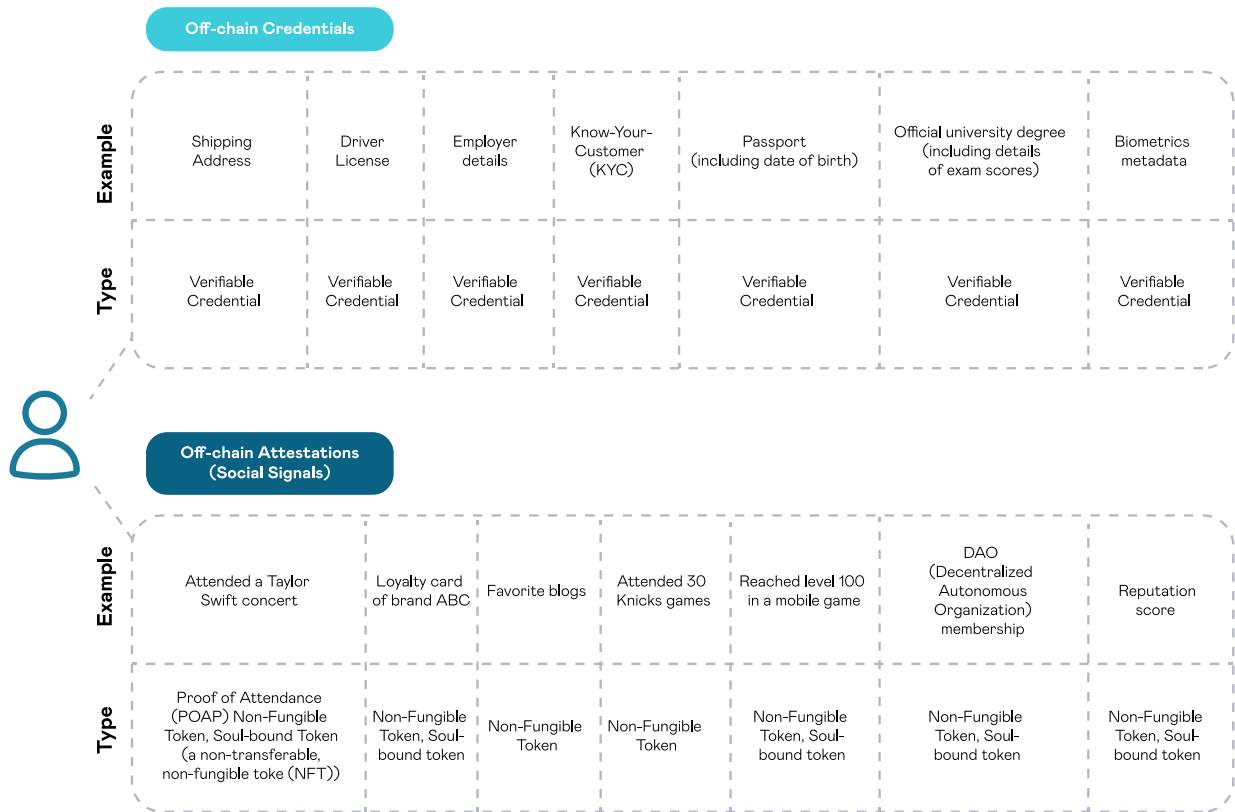
Digital identity refers to how an individual or organization is identified and represented online or in the virtual world. It includes attributes that constitute a legal identity, such as name, date of birth, etc. These attributes are often encapsulated in the form of verifiable credentials, whereby personal data within each credential typically remains off-chain. Users share their verifiable credentials (VCs) as verifiable presentations (VPs) which in essence is a proof of a VC. For an introduction to digital identity, please refer to our [previously published article](#)<sup>11</sup>.

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<sup>11</sup> <https://www.jpmorgan.com/onyx/digital-identity-web3-building-blocks.htm>

However, holistic self-expression extends beyond legal names, addresses, or other similar attributes. To fully express themselves online, individuals can link their “social signals” (e.g., followers from their social graphs, digital art they have created, and their favorite blog collections). These types of identity attestations are kept on-chain, meaning that when someone looks up a public wallet address, they can see all the social signals linked to that identity. Keeping these signals on-chain allows individuals to express their interests, passions, and identity, such as proudly sharing with their community that they are a Taylor Swift fan or a Knicks supporter.

This approach ensures that digital identities in Web3 are comprehensive, reflecting both private attributes and social signals, thus enabling a richer and more authentic online presence.



For more information on decentralized identifiers (DIDs), verifiable credentials (VCs), verifiable presentations (VPs), non-fungible tokens (NFTs), and other related topics, please feel free to read our [prior publication](https://www.jpmorgan.com/onyx/digital-identity-web3-building-blocks.htm) <sup>11</sup>.

<sup>11</sup> <https://www.jpmorgan.com/onyx/digital-identity-web3-building-blocks.htm>

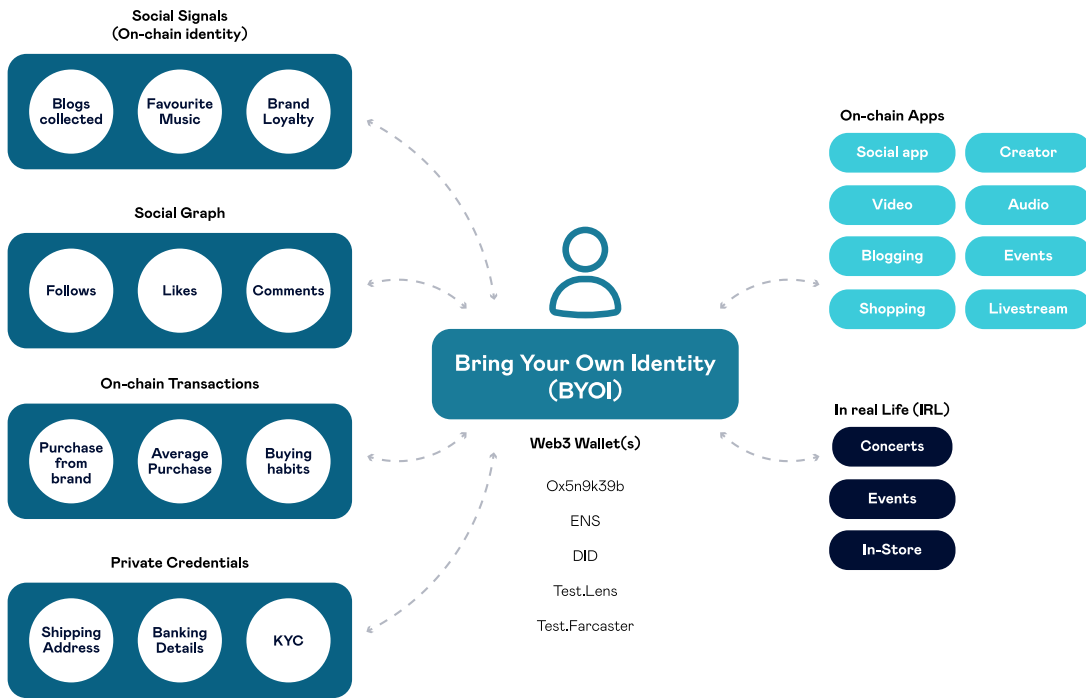
## Bringing It All Together

The diagram below illustrates the concept of “Bring Your Own Identity” (BYOI) within the Web3 ecosystem, highlighting the integration of various identity components into a Web3 wallet.

At the center is the user’s Web3 wallet connected to open social graphs such as Farcaster and Lens. Users may have one or multiple wallets to access, claim, collect, and share verifiable credentials, verifiable presentations, NFTs, and soul-bound tokens. Social signals can also be stored in the same wallet as a user’s digital identity verifiable credentials.

On the left side of the diagram, the user’s identity attributes are showcased. In addition to social signals (on-chain identity) and verifiable credentials (off-chain identity), the diagram includes social graph activity (e.g., follows, likes, comments, reposts) and transaction activity (e.g., buying habits).

The right side of the diagram presents the applications, brands, marketplaces, and real-life experiences that a user can interact with. Connecting one’s wallet to these platforms provides a personalized experience based on a comprehensive view of the person’s identity.





Personalization is a key feature of Web3 and unlocking its full potential requires on-chain attributes. This shift fosters community building and connecting people with similar social signals and interests who might not have met otherwise. From a privacy standpoint, users can hold some of their identity attributes off-chain and only share proofs of those attributes on-chain, thus enabling better privacy while still showing on-chain signals.

### **Key takeaways from part two**

- The paradigm shift from Web2 to Web3 allows users to maintain holistic identities across applications (on-chain and off-chain) and own the content they create, fostering greater innovation and personalization.
- Brands can utilize users' on-chain data to provide curated experiences.
- As Web3 continues to evolve, its open, modular architecture will help drive the growth of a more interconnected and user-centric digital ecosystem.

# Web3 Social Commerce

## Web3 Social Commerce – Ecosystem

Web3 commerce utilizes blockchain infrastructure to facilitate direct transactions without intermediaries, enhancing efficiency, transparency, and user-centricity through smart contracts and on-chain data <sup>12</sup>. Prominent players in this sector include Coinbase Commerce, Thirdweb, Stripe, and Shopify, which offer payment solutions, product inventory integrations, loyalty programs, developer tools, and more.

Web3 social commerce integrates Web3 commerce functionalities within social media platforms, enables users to discover, share, build trust with brands, purchase products, and engage with brands in a more personalized and engaging manner through social interactions and community-driven content. By leveraging one's digital identity and open social graph, Web3 social commerce personalizes the shopping experience.

Although still nascent, several social network players are developing infrastructure to support social commerce in Web3. The Farcaster ecosystem, particularly with its Frames functionality, is emerging as a testing ground for shops to set up storefronts and explore this space. Farcaster Frames can be compared to shoppable posts in Web2, offering dynamic, interactive shopping experiences embedded within a post or frame. Several startups are also developing Shopify apps to bridge commerce with Web3 social media, allowing users to view storefronts within their feed and checkout seamlessly, akin to Web2 social platforms.

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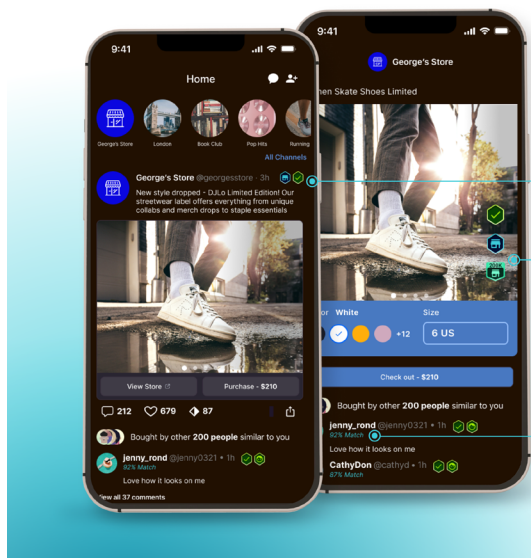
<sup>12</sup> <https://webisoft.com/articles/web3-ecommerce/>

## Leveraging the Web3 Building Blocks For a New Social Commerce Experience

The following scenario illustrates the potential of Web3 social commerce.


In this hypothetical scenario, Emma signs up for a Web3 social platform without initially needing a Web3 wallet. Later, she creates a Web3 wallet with a single click within the application. As Emma scrolls through her feed, she can switch to another application effortlessly, retaining her identity and social profile.

During her exploration, Emma discovers a new brand (George's Store) liked by her open social graph. She trusts the brand thanks to the "Proof of Store" badge that was previously issued to the brand's wallet by a third party. Emma sees product reviews from jenny\_rond, who are not part of her social graph, but she trusts their reviews because she sees a loyalty badge and a proof of humanity badge next to their profiles. This gives her confidence that they are not bots, and that they are both repeat customers of George's Store. Emma selects her t-shirt size, color and proceeds to checkout.

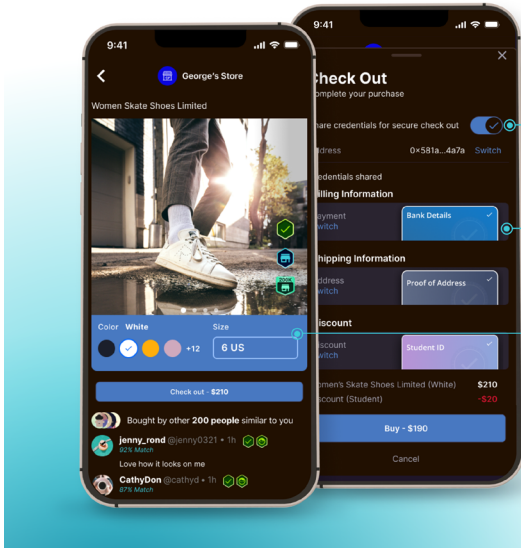


**Increased Discoverability and Trust**

- Brand Discoverability**  
Promote content to the user based on her open social graph facilitates product discovery based on user's interests and preferences (that are made public).
- Verified Proof**  
Brand trust established through the "Proof of Store" badge on its profile that can be verified on chain.
- Build Trust**  
Badges and achievements are earned based on real on-chain activity. Percentages indicate the similarity in Jenny's on-chain affiliations and social graph with the shopper showing potentially similar interests, thus enhancing trust in Jenny's product feedback.



With her verifiable credentials already claimed in her wallet, she shares them privately with the merchant, receiving an immediate student discount upon sharing her proof of address and student ID. Emma's verifiable credentials are securely shared, and payment is processed.



## Seamless Checkout Experience

### Simplified Checkout

The user can privately share verifiable credentials with the merchant. These credentials may contain all of the checkout information and any card or loyalty discounts.

### Integrated Payment Method

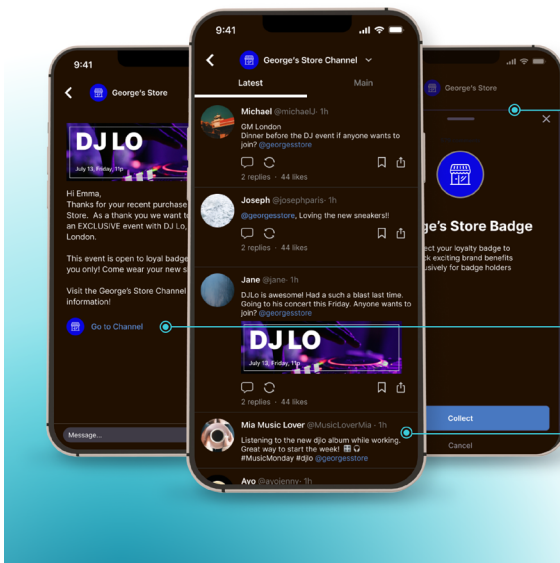
The payment transaction can be executed seamlessly and securely connecting the wallet to the merchant, removing the need to add bank details or redirect to a different application.

### Comprehensive Shopping Experience

Item selection stays within the frame to create a unified user experience. Based on previous preferences, recommendations on size and color could be predefined.



Post-purchase, Emma receives a direct message from the brand inviting her to a local event where she can wear her new t-shirt. George's Store also invites Emma to join a token-gated private channel on the social app; only customers with loyalty badges can join the channel. Token-gating allows Web3 brands to create value for their community by giving holders access to exclusive content, events, and other benefits.



## Deeper Brand Loyalty

### Brand Engagement

Claiming loyalty tokens can unlock exclusive rewards for customers and tailored experiences. For instance, brands can send curated product recommendations to all holders of their loyalty badge.

### Personalized Loyalty

Using social graph brands can tailor rewards and benefits to the user's interest, unlocking further personalized experience

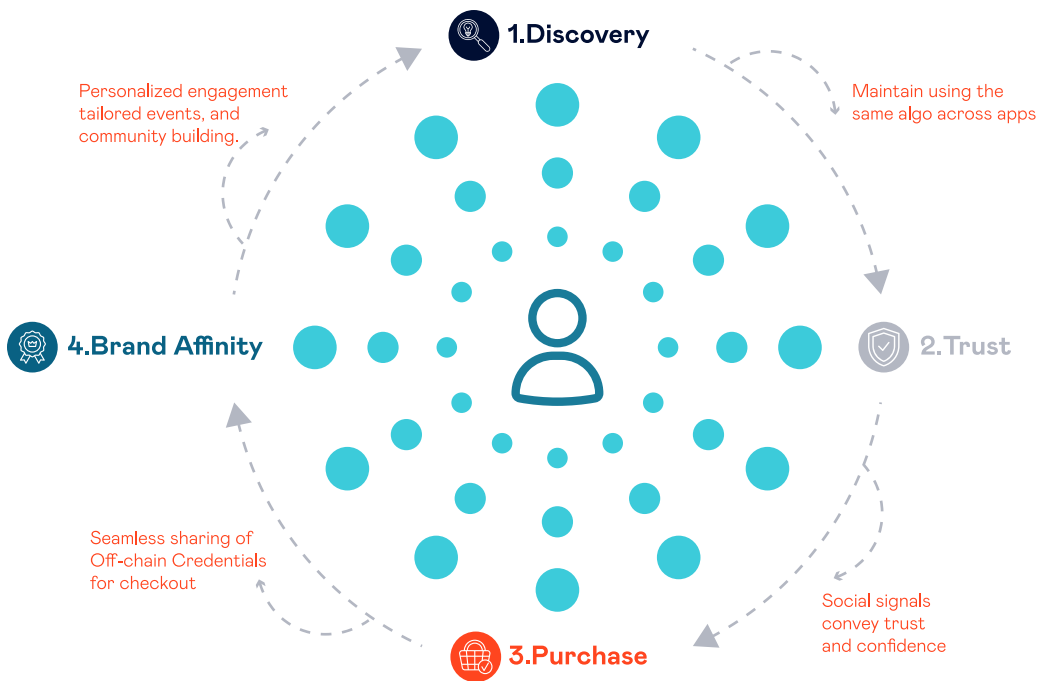
### Community Building

Users with loyalty badges can access the brand's exclusive token-gated channel to view brand events, get early discounts, and engage with the wider community



Within minutes, Emma has discovered a new brand based on her open social graph, made a purchase without being redirected to a separate website, confidently checked out based on trust signals, joined a community, and gotten invited to an event. Emma's shopping experience was not just transactional, it fostered engagement. Emma is invested in her new community and continues to explore new product launches through the channel, extending her discovery journey and deepening her connection with the community.

*Please note that many of the designs described here are purely hypothetical and meant to help convey our message of how Web3 can help with social commerce.*



From a brand's perspective, on-chain data, loyalty badges, and open social graphs offer significant advantages. These Web3 tools enable a brand to curate personalized experiences for users within its ecosystem. On-chain data companies like Bello, Airstack, and Absolute Labs leverage actionable on-chain data and social graphs to provide valuable insights. Brands may want to program personalized discounts and ticket invitations based on on-chain activity. For instance, if a person shops from my brand or my partner brands within a three-month period, I can then airdrop a concert ticket to their favorite artist's concert.

If Emma holds a digital collectible from a music streaming service for a particular artist, a brand can use this information to enhance engagement. For example, they might send Emma a personalized thank you message directly to her wallet, along with an NFT concert ticket for her favorite artist, who will be performing in her city next month. This kind of programmable engagement allows brands to reach users with highly personalized content, ensuring more meaningful and relevant interactions.

## Is Web3 Ready For Social Commerce and Widespread Adoption?

While wallets, Web3 social graphs, and digital identity could have a remarkable impact on a user's shopping journey, the Web3 ecosystem is still gearing up to support a scalable Web3 social commerce ecosystem.

**Wallets and Onboarding:** As of 2023 there were over 4 million unique active wallets that were using dApps daily<sup>15</sup>. While this is exciting, it is miniscule compared to Web2 activity. There is a strong push within the Web3 space to help improve Web3 processes to make it more inclusive and user friendly. For instance, Web3 wallet providers have simplified the onboarding process with innovations such as smart wallets, which can be created and accessed using passkeys (allow users to authenticate without having to enter a username or password). Several dApps have also started adopting a "web2.5" user experience which means users can sign up without needing a wallet and can create a wallet later on. Despite all the novel efforts, much more is needed in order to bring non-Web3 users into the space.

**In-App Experience:** Users must pay a transaction fee, known as gas, for any on-chain activity. If users lack funds in their wallet, additional steps are needed to fund such on-chain activity. Claiming on-chain badges also incurs gas fees, requiring users to ensure their wallet is on the correct network and has the appropriate currency, adding friction to the process. This complexity increases when users interact with different blockchains. Chain abstraction and smart wallets could simplify the process by enabling fees to be paid on behalf of the user to the intended blockchain, making the experience smoother across different dApps.

**Identity Ownership and Management:** Many users have multiple wallets and need a straightforward way to manage their identities. It is essential to control what information is put on-chain and have the flexibility to change privacy settings over time. Users should also be able to combine wallets under one identity to avoid the problem of siloed identities that exists in Web2.

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<sup>15</sup> <https://blockworks.co/news/definitive-guide-chain-abstraction>

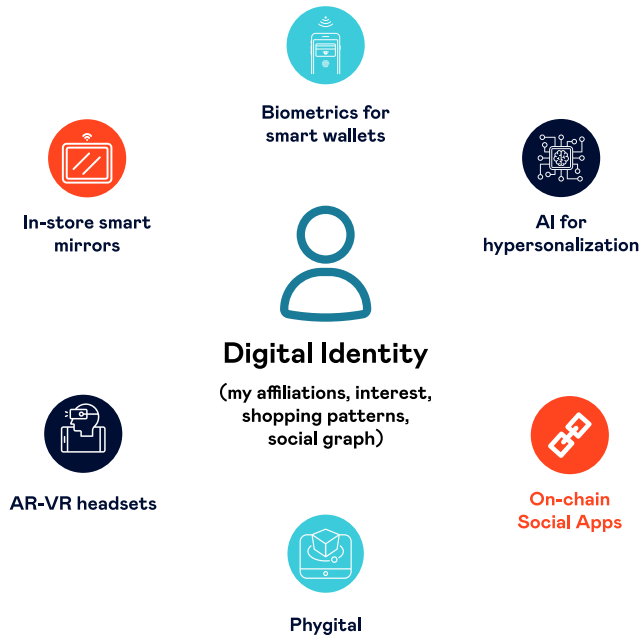
### Limited Web3 Social User Base:

Although there is an increase in active users on both Farcaster and Lens social ecosystems, the user base is still small compared to Web2 social networks <sup>14</sup>. Consequently, the number of brands on Web3 social platforms is much lower than those in Web2. The niche user base, mainly consisting of Web3 enthusiasts, is excellent for those interested in Web3 but may lack diversity for users looking to create communities in other areas. The Farcaster and Lens ecosystems are doing a great job gamifying and opening up the ecosystem to attract non-Web3 users. We look forward to seeing how this space develops over time.

Recent novel developments such as Solana Actions, and Blinks (Blockchain Links) help in bringing the Web2 community over Web3. Blinks enable any website or application (i.e. e-commerce website or traditional web2 social applications) the ability to integrate web3 functionality directly into their platform <sup>15</sup>. Such innovations will hopefully help move the needle towards a wider brand and consumer base interacting on and benefitting from the on-chain ecosystem.

## Future of Commerce – Beyond Web3

Our vision for the future of commerce is one where Web3 wallets and digital identities interoperate harmoniously with other emerging technologies such as artificial intelligence (AI), augmented reality (AR)/virtual reality (VR), and biometrics.



<sup>14</sup> <https://dune.com/blog/farcaster-and-lens>

<sup>15</sup> <https://solana.com/solutions/actions>

**Phygital Goods:** This concept blends physical and digital experiences to unify customer identities, data, and interactions. For example, Pharrell Williams' western-inspired jacket being turned into a soul-bound (non-transferable) NFT creates a digital twin of the jacket. This means the physical object has a digital token representation, and holders of the token can purchase or collect the product via a token-gated website <sup>16</sup>. We foresee token-gating becoming more sophisticated, extending beyond loyalty badges to include products, experiences, social commerce channels and more, based on on-chain data to reward customers and build brand-aligned communities.

**AI-Driven Analytics and Automation:** AI will play a crucial role in hyper-boosting personalization by ingesting large data sets and continuously learning about each customer's buying habits and interests. AI can tailor product descriptions to individual users and predict shopping needs, offering early promotions or specific deals based on those insights.

**Smart Mirrors and VR/AR:** Imagine combining on-chain data with AI personalization tools and AR/VR to help users visualize wearing clothes or products based on their interests and past behaviors. These technologies can sift through numerous brands and choices to handpick what the user might be looking for and show how it might look on them before they order it.

**Sustainable and Ethical Commerce:** Consumers increasingly demand sustainable and ethically sourced products, pushing companies to adopt greener practices and transparent supply chains. On-chain attestations for products can help users trust that a product is sustainable and ethically made. Digital identities for products will become as important as digital identities for humans.

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<sup>16</sup> <https://www.voguebusiness.com/story/technology/louis-vuitton-nfts-are-back-with-a-euro7900-phygital-varsity-jacket>



# Closing Thoughts

We are thrilled about the future of Web3 social commerce and continue to closely monitor ecosystem developments and emerging functionalities to enable the next wave of commerce.

At Onyx, we are committed to fostering innovation within this space. We actively seek new ideas and contribute to driving the next wave of Web3 adoption. Our efforts include sponsoring and leading events like the Digital Identity Hackathon in 2023, which focused on the role of digital identity in the future of commerce. This event saw over 700 developers using our Onyx Digital Identity Open-Sourced SSI SDK to tackle challenges in commerce, payments, and Web3 wallets.

We are excited to be part of this journey and look forward to continuing our support of and participation in the evolution of Web3 social commerce.

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