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Decentralized Brand Economies: The Key to Blockchain Mass Adoption

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Executive Summary

This paper presents the concept of "decentralized brand economies" for the first time and demonstrates how blockchain technology can be leveraged to build an experiential engagement infrastructure. It outlines the set of core principles a brand should follow to deliver value aligned with the needs of Gen Y, Z, and Alpha, and gives a practical implementation approach for a blockchain-based brand community engagement platform.

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Key Points:

- Internet [web2.0] mass adoption did not start with money, and neither will blockchain [web3.0] mass adoption.

- Decentralized Finance (DeFi) will be a fast follower, not a leader.

- As exciting as DeFi is, the tethering of use cases into regulatory frameworks that are not designed for seamless user experiences does not lend itself to rapid blockchain mass adoption.

- Applications that combine the following will enable blockchain mass adoption:

  - Hyper-productivity for Gen Y and Gen Z

  - End-user engagement and incentivization technologies such as AR/VR with AI and blockchain

  - Experiential communities that give people a sense of "belonging"

  - Economic utility and control for end-users

  - Minimal adoption friction

  - Seamless and fun user experience

- More than half (58%) of consumers aged 25 to 34 say they'd be likely to spend more money on a brand's products and services if they are part of meaningful brand communities.

- Decentralized brand (follower) economies targeting Gen Y, Gen Z, and Gen Alpha with no direct bridges to the world of fiat money will bring the first wave of blockchain mass-adoption.

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What is a Decentralized Brand Economy?

A decentralized brand economy is a combination of two elements: brand communities and decentralized marketplaces for brand-related assets.

A brand community is a global group of people who love a brand and its purpose and have organized themselves around one or more aspects of a brand -- social advocacy, special products, brand representatives, special brand stories.

A decentralized marketplace is the digital version of an old-style weekend market where people are free to peddle their different fairs without a central market manager. In combination, when brand communities leverage distributed ledger technology to create a decentralized marketplace, it is called a "decentralized brand economy."

If blockchain is to become the new global fabric for value exchanges and thus value democratization, it is imperative to find a path to rapid mass adoption. How do we get 1 billion+ people utilizing blockchain in their daily lives? Let's be inspired by history—recent history.

Looking back on internet mass adoption, the following three things happened before mass adoption could occur:

1. **Interoperability**
   Through a common data exchange protocol: the TCP/IP network data exchange protocol was forced into mass adoption through the roll-out of Windows 95 by Microsoft.

2. **Easy Navigation**
   Users could easily find and access information and apps through Google Search.

3. **Hyper-Productivity**
   An easy to use killer app that increased productivity (Email) through abundant online services such as AOL, Hotmail, Yahoo Mail, and later Gmail.

Internet era "killer app" characteristics

The internet era killer apps targeted productivity and were end-consumer focused[1]. They achieved greater simplicity, faster delivery, and rapid work replication, e.g., sending one email to many people at once. An important observation for us here is that the focus of those apps was information exchange, not value exchange.

Why?

Because apps with a non-financial focus significantly simplify adoption. Imagine if Know-Your-Customer (KYC) checks by banks were required for everyone before being able to write an email.

We are a far cry from the late 90s. Everything social has taken over as the main driver of the adoption of new technologies and overall societal change. Gen Y and Gen Z—the most relevant generations for mass adoption today—have different demands, mainly community, sharing, and having meaningful experiences. These needs are starkly different from the generational needs that drove internet adoption.

Going forward, the successors of Gen Y and Gen Z, such as Gen Alpha, will only know embedded mobile and ubiquitous connectivity to everyone and everything. The unprecedented generational differences between Gen Y, Z, and Gen Alpha[2], and Gen X drive radical changes in online experiences.

Solutions seeking mass adoption must offer an engaging digital community, sharing, and purposeful experiences from anywhere, at any time on any device.

Another fundamental difference is the rate of change we are experiencing today. The pace of technological advancements preceding and including Gen X was measured in decades—we now measure technological change in years, if not months. The running joke is that one year in the blockchain sector is like ten normal years. Mindsets must quickly shift to manage this rapid, exponential change. This is an enormous undertaking, as evolution has optimized humans to be good at managing linear change, not exponential.

Consequently, humans are highly challenged to both recognize and manage exponential change. We typically miscalculate and do not adequately prepare for and adapt to fundamental change. Yet, despite our exponential change curve, social as an exponential innovation engine has stalled. No considerably large, trendsetting, social network, or any other type of network has emerged since 2011. The sole exception is China's TikTok, which was founded in 2017. Figure 1 displays the largest social media platforms as of January 2019. Most companies in Figure 1 were established between 2000 and 2011.

[1] "Killer Apps Explained - History, Examples, Impacts & Future ...."
https://www.moneycrashers.com/killer-apps-explained-history-examples-impacts-future/. Accessed 5 Dec. 2019.

[2] "Generation Alpha: The Children of the Millennial." 18 Dec. 2018,
https://interestingengineering.com/generation-alpha-the-children-of-the-millennial. Accessed 4 Dec. 2019.
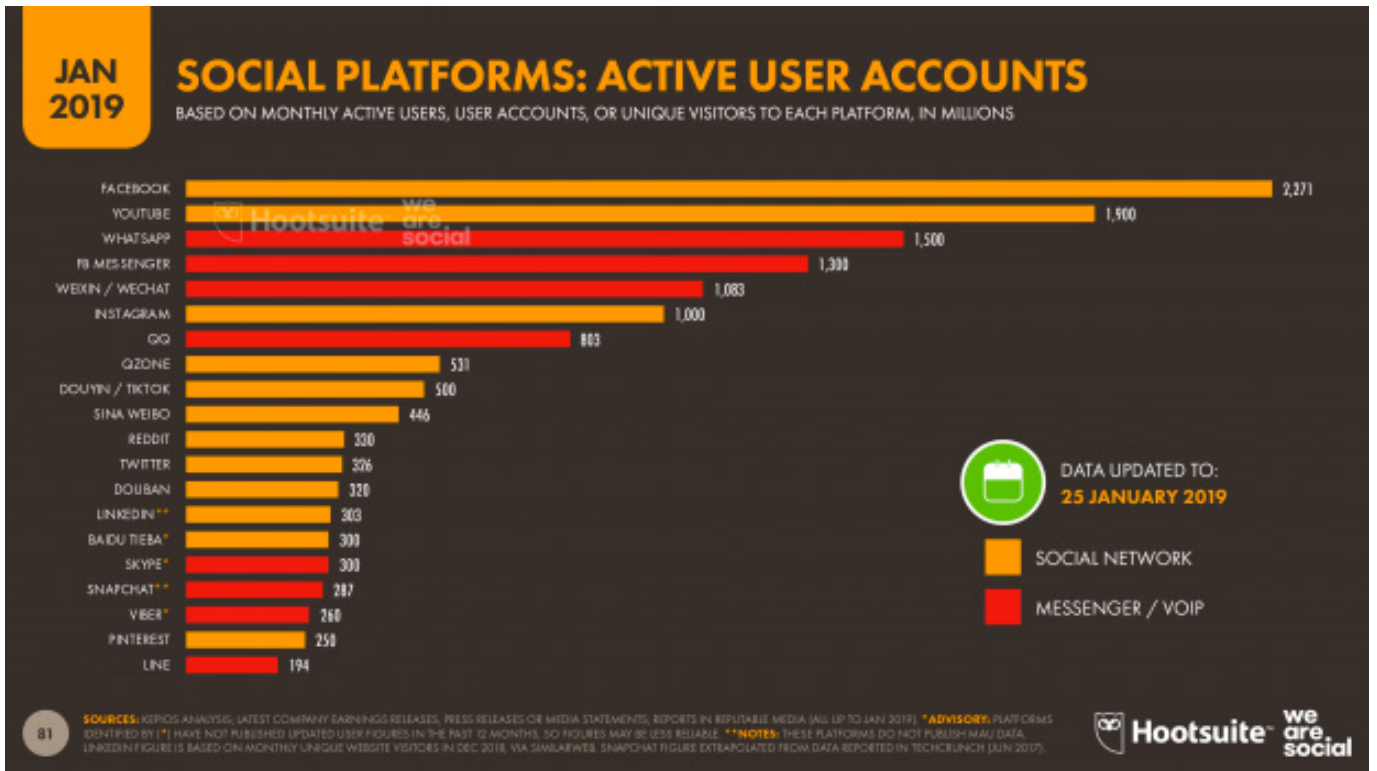
Figure 1: Size of Social Media Platforms as of January 2019, Hootsuite (2019)

The reality is that social media and e-commerce giants such as Facebook and Amazon are firmly entrenched, generating huge revenues through rent-seeking on the "new oil of the digital economy." Data.

The Net-Net of all of this? Given where we are right now as a species, both psychologically and technologically, new, truly disruptive innovations will have not only to target things people utilize daily to deliver value, but also provide hyper-productivity and an experiential community while having little adoption friction[3]. And even then, these innovations need to be self-disruptive, if not by design then by intent, to stay relevant and keep up with the exponential change curve.

[3] "Hyper-productivity: No. 2 Reason Ecosystems are the Future!." 7 Feb. 2016, https://www.thenextevolution.com/2016/02/07/hyper-productivity-no-2-reason-ecosystems-future/. Accessed 4 Dec. 2019.

"Belongingness is one of our basic human needs. We are motivated to both assert our group identification and our individuality.

Brand communities can allow us to fulfill these motives. People will stay loyal to brand communities that provide a unique experience, allow us to express our self-concept, and engage us with a meaningful community."

Dr. Charles Seger
School of Psychology, University of East Anglia

If social has stalled out as an innovation driver, what will step into its place? To answer this question, we need to look at the impact of social and mobile.

While connecting people globally like never before, social media has also fostered isolationism:

- 89% of people used a cell phone during their last social interaction. 82% felt it degraded the conversation.[4]

- 40% of Americans identify as lonely, up from 1 in 10 in the 1970s.[5]

- One in four Americans have no trusted confidante; up from 1 in 10 in 1985.[6]

- Less than half of American kids live in a traditional family home, a significant decline in family households since the 1970s.[7]

- There has been a 40% decline in standard measures of empathy since the 1990s.[8]

- There has been a 24% rise in suicides between 1999 and 2014.[9]

- Only about half of Americans trust their neighbors, and even fewer younger and more urban people trust their neighbors.[10] (Fast Company, 2018)

Engaged brand communities that step into this void to forge meaningful connections and experiences win deep customer loyalty. Rapha's RCC, Crossfit, the Playstation Community, SoulCycle around fitness, Sofar Sounds, OfferUp, Starbucks, Summit, or Apple with "Town Squares" demonstrates that the best brands build belonging.[11]

More than half (58%) of consumers aged 25 - 34 report that they'd be likely to spend more money on a brand's products and services if they are part of brand communities. This is far higher than the average across all age groups, which was still a creditable 40%, pointing to a tangible return on investment through fostering brand communities across the board.

However, millennials consistently come out as the age group that is most committed to these communities. Some 51% also agree that they are more likely to stick with a brand than switch to competitors if they are part of a brand's community. (Archant Dialogue, 2017)

[4] "Americans' Views on Mobile Etiquette | Pew Research Center." 26 Aug. 2015, https://www.pewresearch.org/internet/2015/08/26/americans-views-on-mobile-etiquette/. Accessed 4 Dec. 2019.

[5] "Chronic Loneliness Is a Modern-Day Epidemic | Fortune." 22 Jun. 2016, https://fortune.com/2016/06/22/loneliness-is-a-modern-day-epidemic/. Accessed 4 Dec. 2019.

[6] "Rekindling Human Contact in the Digital Age - Opinionator." 8 May. 2015, https://opinionator.blogs.nytimes.com/2015/05/08/human-contact-for-the-digital-age-loner/. Accessed 4 Dec. 2019.

[7] "Fewer than half of US kids live in 'traditional' family | Pew ...." 22 Dec. 2014, https://www.pewresearch.org/fact-tank/2014/12/22/less-than-half-of-u-s-kids-today-live-in-a-traditional-family/. Accessed 5 Dec. 2019.

[8] "Review Personality and Social Psychology - iPEAR." https://www.ipearlab.org/media/publications/Changes_in_Dispositional_Empathy_-_Sara_Konrath.pdf. Accessed 5 Dec. 2019.

[9] "Increase in suicide in the United States, 1999–2014." 1 Apr. 2016, https://www.cdc.gov/nchs/data/databriefs/db241.pdf. Accessed 5 Dec. 2019.

[10] "Americans divided on how much they trust their neighbors ...." 13 Apr. 2016, https://www.pewresearch.org/fact-tank/2016/04/13/americans-divided-on-how-much-they-trust-their-neighbors/. Accessed 5 Dec. 2019.

[11] "The Best Brands Are The Ones That Build "Belonging"." 20 Feb. 2018, https://www.fastcompany.com/40530846/the-best-brands-are-the-ones-that-build-belonging. Accessed 5 Dec. 2019.

Brand Community Insights
Trends from the Sports Industry

Let's take a look at some of the relevant broader trends in brand community engagement. The sports industry is a great example, as it has been, and still is, building active digital brand communities around its many forms: traditional sports teams, leagues, fantasy, and eSports.

The sports industry was an early adopter of new strategies that support high daily engagement. For this, and many more reasons, the sports industry is an exemplary representative of what other brand verticals are currently going through, and will face in the future.

Learnings from the digitization of the sports industry:

- Trends set to further revolutionize the sports fan experience include:
  - Personalization
  - Interactivity and gamification
  - Real-time fan engagement
    - Creating sporting moments
    - Marketing in the moment Brian Josephs (2019)

- Fan engagement with AR emerges as one of the most promising segments within the sports tech industry. ISPO (2019)

- GDPR presents us with an opportunity to build better relationships with sports consumers who actually desire a relationship. (LiveWire Sport, 2018)

- OtherMedia (2019) succinctly summarized that the right innovation:
  - Makes experiences shareable to maximize social media impact
  - Ensures the means to share – be that apps that connect easily with social media or providing a fast, free internet connection
  - Listens to their fans
  - Acknowledges, thanks, and rewards fans
  - Collaborates with partners, such as sponsors, ancillary service providers
  - Gathers data and uses it to tailor what brands can offer to their fans' needs

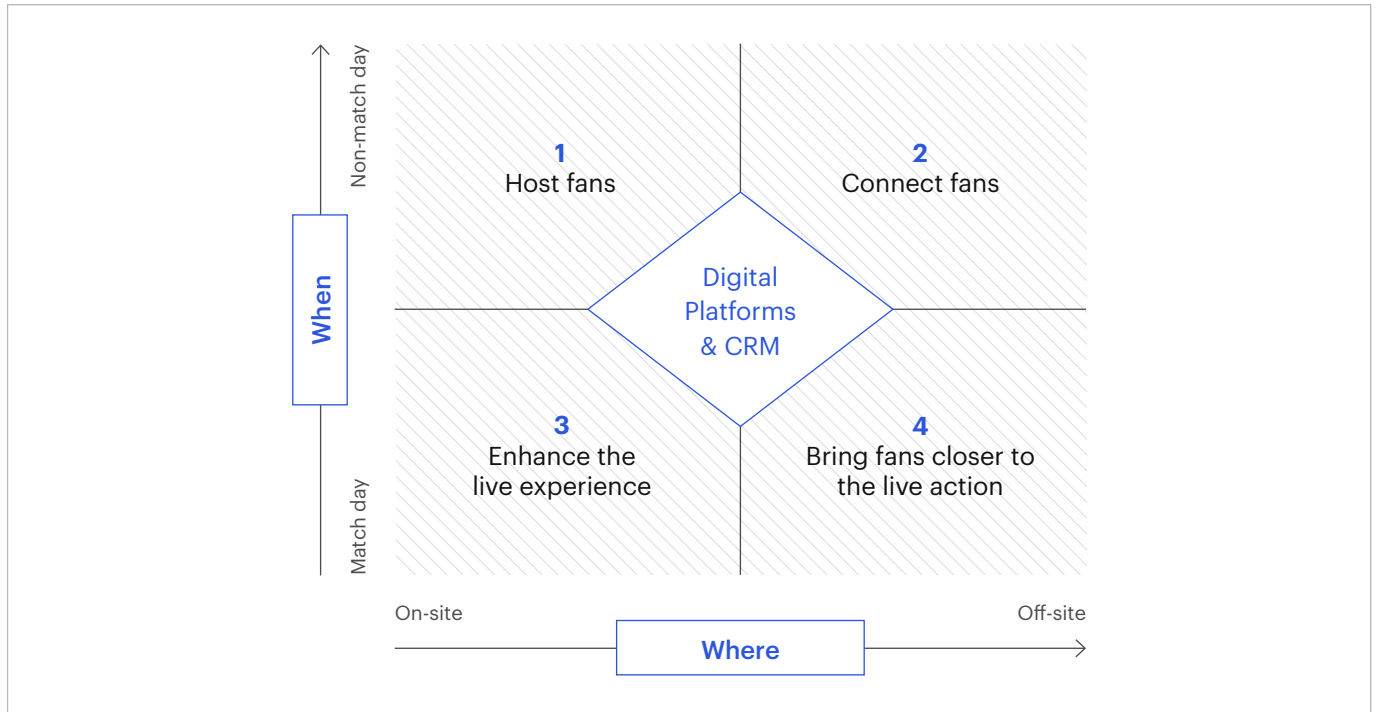These findings can be most easily represented in a visual example:

Figure 2: Engagement Example in Sports utilizing general digital platforms

Decentralized Finance as a leader in blockchain mass adoption?

The dominant thought in the Twitter-sphere is that DeFi will drive blockchain mass adoption. Coinbase, the largest cryptocurrency exchange, has over 30M customers.[12] There are over 100k+ daily users of decentralized blockchain applications (Dapps).[13] These and other such metrics are used to argue this idea. As exciting as DeFi is, and indeed a worthwhile goal to pursue, there are two things to seriously consider when thinking about blockchain mass adoption through DeFi:

1. **There is a reason why the internet did not start with financial use cases.** The tethering of use cases into regulatory frameworks that are not designed for user experience, community, and ease of use does not lend itself to rapid mass adoption.

2. **Challenging the supremacy of banks and nation-states by trying to disrupt financial assets**—their power base—begs the question if they will roll-over to the power of decentralization or will they fight tooth-and-nail to maintain their power? The two likely outcomes are that companies promoting DeFi will either be co-opted (bought-out), or they will be taken out by any means necessary.

DeFi will potentially be a fast follower in blockchain mass adoption, but not a leader. So, if not DeFi, then who?

[12] "Coinbase Crypto Milestone: Amasses 30M Users ... - NewsBTC." 22 Jul. 2019, https://www.newsbtc.com/2019/07/23/coinbase-crypto-bitcoin-users-adoption/. Accessed 5 Dec. 2019.

[13] "Dapp.com." https://www.dapp.com/. Accessed 5 Dec. 2019.

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Decentralized Brand Economies Focused on Community Will Drive Blockchain Mass Adoption

Based on our insights from the internet age and brand communities above, we predict that truly viral blockchain applications must target the daily activities of Gen Y and Gen Z, offer frictionless onboarding, hyper-productivity, and a vibrant, experiential community that brings a sense of belonging. Our insights also indicate that these viral applications will likely emerge around brands, be it companies or individuals, that engage their followers on a personal level.

Virality also generates network effects–an exponentiation of created value through many-to-many value exchanges. This brings additional benefits for both brands and followers, such as:

- Brands that expertly combine their vision and purpose with deeply personalized content, while offering experiential approaches to community activation will entice existing and new partner brands to engage in this approach, creating intra-brand network effects.

- Allowing followers to create their own brand within and across other brand universes will enable connected monetization opportunities for followers and brands, further extending intra-brand network effects.

Network-effects explained

If your stride is 1 meter, 30 linear steps will take you 30 meters from the starting point.

1m   30m

With a 1 meter stride, 30 exponential steps will take you 26 trips around the world!

x26
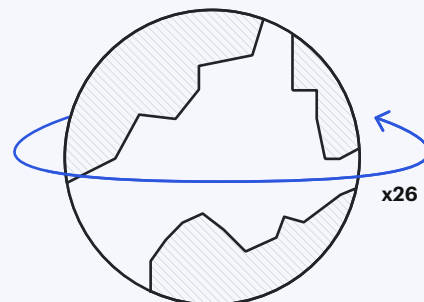
To understand where to apply the above principles and find those use cases, we need to first understand how followers engage with brands today.

How Brand Followers Engage Today Across Platforms and Verticals

Live game viewership · Consume Non-Game Programming · Esports · Physical Merchandise · Event Attendance · Nano Influencers · Video Games · Fantasy Sports · Follower-to-Follower engagement · Membership · Gambling · Digital Products · Digital Merchandise · Social Media · Celebrity Meetups · Use Sponsor Products · Social Good Campaign · Celebrity Video Gaming Community Viewing

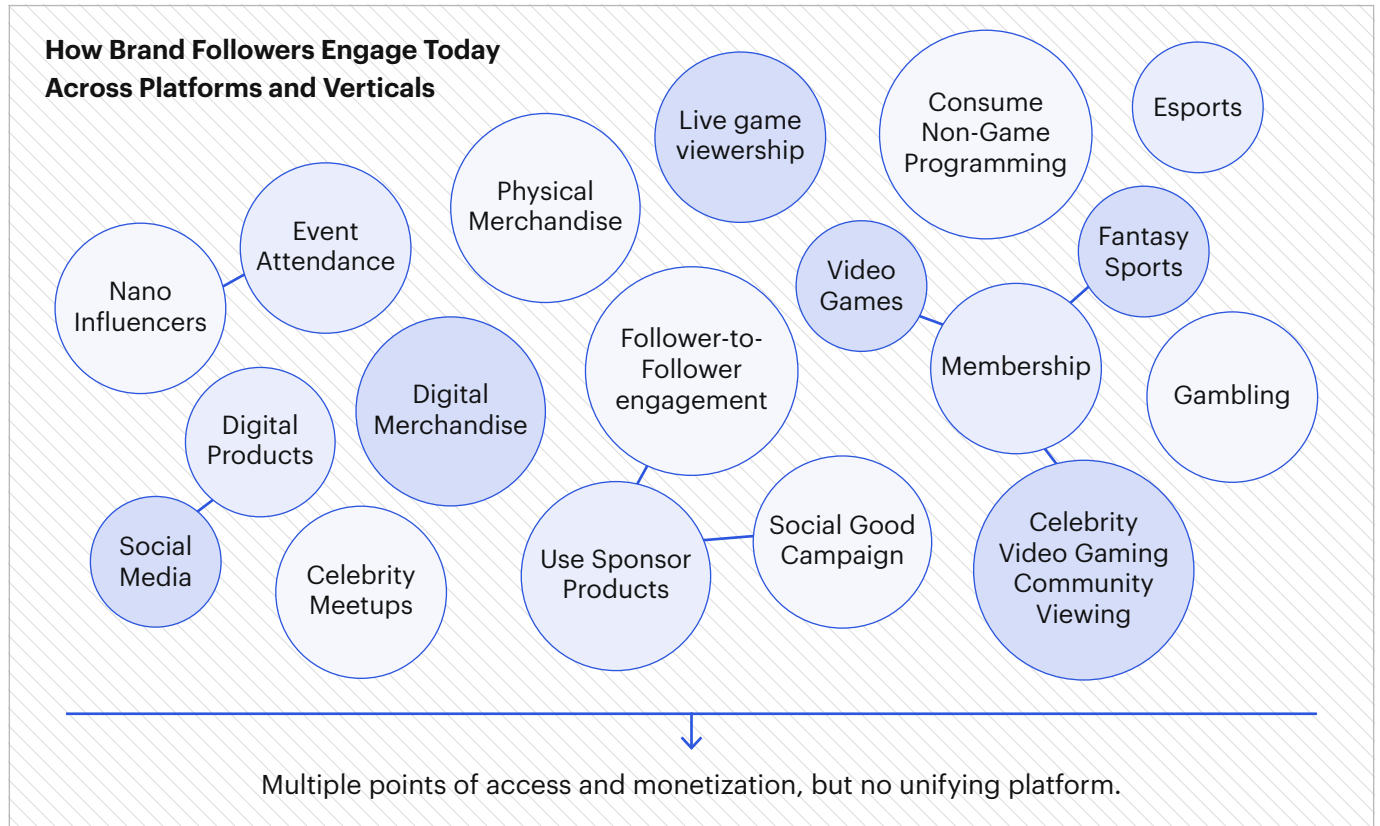Multiple points of access and monetization, but no unifying platform.

Figure 3: How Brand Followers Engage Today (ConsenSys, 2019)

Figure 3 shows that as more organizations use the same social media channels to reach their followers, we have reached a point of oversaturation. We are drowning out one another.

The problem statement of brands and their followers can then be summarized as follows: While brand followers demand personalized and unique experiences anytime, anywhere, an increasingly fragmented and saturated advertising landscape, together with siloed customer systems, prevents brands from effectively reaching, engaging, and understanding their target audience.

In order to address the problem statement, brands must do the following:

- Reach, engage, and monetize more follower relationships — both locally and globally.

- Gain richer follower insights without compromising security, privacy, or causing compliance concerns.

- Build new, unified follower relationship management and community enablement models.

These communities will work if they are:

- Easy to join and use: Users may easily onboard and collect, share, trade, redeem, and communicate in ways that resonate with the key audiences — Gen Y, Gen Z, and Gen Alpha.

- Easy to experience: Followers want to directly and personally experience brands, their events, their content, and their history in a way that resonates with them, and is interwoven within compelling, purpose-driven narratives.

- Easy to experience brand partners: Allowing brand partners to embed interactive activities within promotions allow them to approach end-users in a uniquely personalized way. Interactive branded activities include quests, and competitions such as scavenger hunts around sporting events, celebrity involvement, product roll-outs, and relevant conferences.

- Easy to monetize: Marketplaces complete a virtuous cycle and drive a growing global community and follower-driven decentralized brand economy.

Why has this not been done with our existing systems?

Normal brand interactions with followers through social media, events, and even product sales are typically ephemeral -- they cannot easily be "remembered," connected, evaluated, or tracked by a company without constant interactions between a follower and brand applications.

In addition, centralized follower data aggregation creates additional risk for the company. Finally, existing centralized platforms are typically siloed; they do not allow a business to create brand communities easily.

Leveraging Blockchain Technology to Build Engagement Infrastructure for Brand Communities

How can brands leverage blockchain technology to build an engagement infrastructure for viral brand communities that give followers a sense of belonging? This is most easily answered by comparing the implementation effort of relevant business features in centralized brand applications vs. brand–communities powered by blockchain technology.

Features for Business Advantage	Cost Reduction	Revenue Lift	Centralized Systems	blockchains
Common Secure Infrastructure	x	–	Hard	Easy
Value Network Effects	x	x	Hard	Easy
Anyone-2-Anyone Value Exchanges	x	x	Hard	Easy
Transparency & Customer Insights	x	x	Hard	Easy
Data Privacy & Security	x	–	Hard	Easy
Risk Management (Value & Data)	x	–	Hard	Easy
Business Interoperability	x	x	Hard	Easy

Table 1: Key Business Feature Comparison of Centralized Brand Systems vs. blockchain Infrastructure (ConsenSys 2019)

To summarize, blockchain is a safe, secure & interoperable tool that solves the above infrastructure challenges because:

- it enables privacy while giving deep insights into follower and community behavior and their preferences to create personal experiences;

- it "remembers" everything that happened in the ecosystem for as long as it runs;

- it enables seamless community sharing & trading and value-driven network effects enhancing brand value and reducing costs since the brand is no longer in the middle;

- it breaks system and brand silos enabling cross-brand interoperability, simplifying brand reward accounting, while enabling new, larger follower economies.

A blockchain-based engagement infrastructure yields lower costs through transparency and simplification while generating higher revenues through network effects.

Practical Implementation Approach for a Blockchain-Powered Brand Community Engagement Platform

Bringing an experiential, engagement-based decentralized brand community economy to life:

Engagement is about activation, and blockchain by itself is not a great activation technology. However, it is an excellent incentivization technology. A brand would, therefore, need to combine blockchain technology with an activation-friendly technology such as AR/VR, and audio combined with Machine Learning/AI to create an experiential end-consumer focused platform.

The next step is to figure out what is the engagement and economic fabric of stories, quests, collectibles, loyalty points, and marketplaces that enable economic utility for brands and their followers and how this fabric could be stitched together. This brings us to the user value proposition.

Core principles a brand should follow to deliver value aligned with the needs of Gen Y, Z, and Alpha:

- **Unique, Secure & Private Identity:**
  Brand followers and influencers and expect to have a unique, digital, fraud-resistant identity that collects each experience - both physical through, e.g., exclusive memorabilia and digital through, e.g., unique digital collectibles.

- **Personalized Experiences:**
  Brand influencers and followers expect to have access to personalized experiences, exclusive content, and select merchandise based on different levels of behavior and affinity from the brands they love.

- **Safe Communities:**
  A Blockchain-based engagement infrastructure empowers users to safely trade within the community by encoding trust and transparency into the marketplace infrastructure.

  Examples of safe community trades:

  - P2P trading of valuable brand collectibles and loyalty points

  - Quests at events around "legendary" brand assets and Global sharing of unique, personalized rewards

  - Secure and trustworthy reputation badges indicate the level of engagement and trust other followers
    can have in fellow badge holders

These core principles, when woven together with the four blockchain-enabled economic cornerstones, can bring an experiential, engagement-based decentralized brand (follower) economy to life:

Blockchain-enabled economic cornerstones:

Digital Collectibles: A user may receive a digital collectible based on brand follower engagement milestones. This enables gamification through sharing, trading, and redemptions.

Experiential Quests: Longer running storylines drawn on a digital creativity canvas drive deeper engagement than independent tasks, as evidenced by the successes of online role-playing games such as World of Warcraft. This interactive style creates the opportunity to engage more often, trigger rewards, collectibles, and gives followers the chance to reach influencer status.

Reward Points: A customer may accumulate "Reward Points" by attending or watching events, through on-platform/ecosystem purchases, etc., and exchange them for collectibles, personalized experiences, and/or merchandise.

Decentralized Marketplaces and Brand Teams: Brand followers bring the community to life through sharing, trading, and redeeming digital collectibles and rewards points within and across brands. This creates network effects that will drive decentralized brand community economies.

"Engagement is about activation, and blockchain by itself is not a great activation technology. However, it is an excellent incentivization technology"

Dr. Andreas Freund
The Blockchain Swiss Army Knife at ConsenSys

Decentralized Economies Powered by Brand Communities: A Thought Experiment

Let's contextualize the above-mentioned framework and key elements. Imagine that we have an avid FC Liverpool fan from Germany, Oliver, who loves the UEFA Champions League and attends all Liverpool games. What would an experiential brand engagement journey—a quest—look like for him?

Oliver is a huge Liverpool FC fan.

Because Oliver travels for every game, he finds the collectibles that uefa has hidden in every city around the Liverpool games.

To Oliver's delight, Liverpool makes it to the UEFA Champions' League Final.

He goes to every one of Liverpool's Champions' League games, home or away.

Through Kapture, UEFA sets up a scavenger hunt for fans to participate in on away trips.

Because Oliver participated in every scavenger hunt, he ranks as the #1 Liverpool Champion's League fan on Kapture.

UEFA & Liverpool rewards Oliver with a free ticket to see his favourite club play in the Champion's League Final!
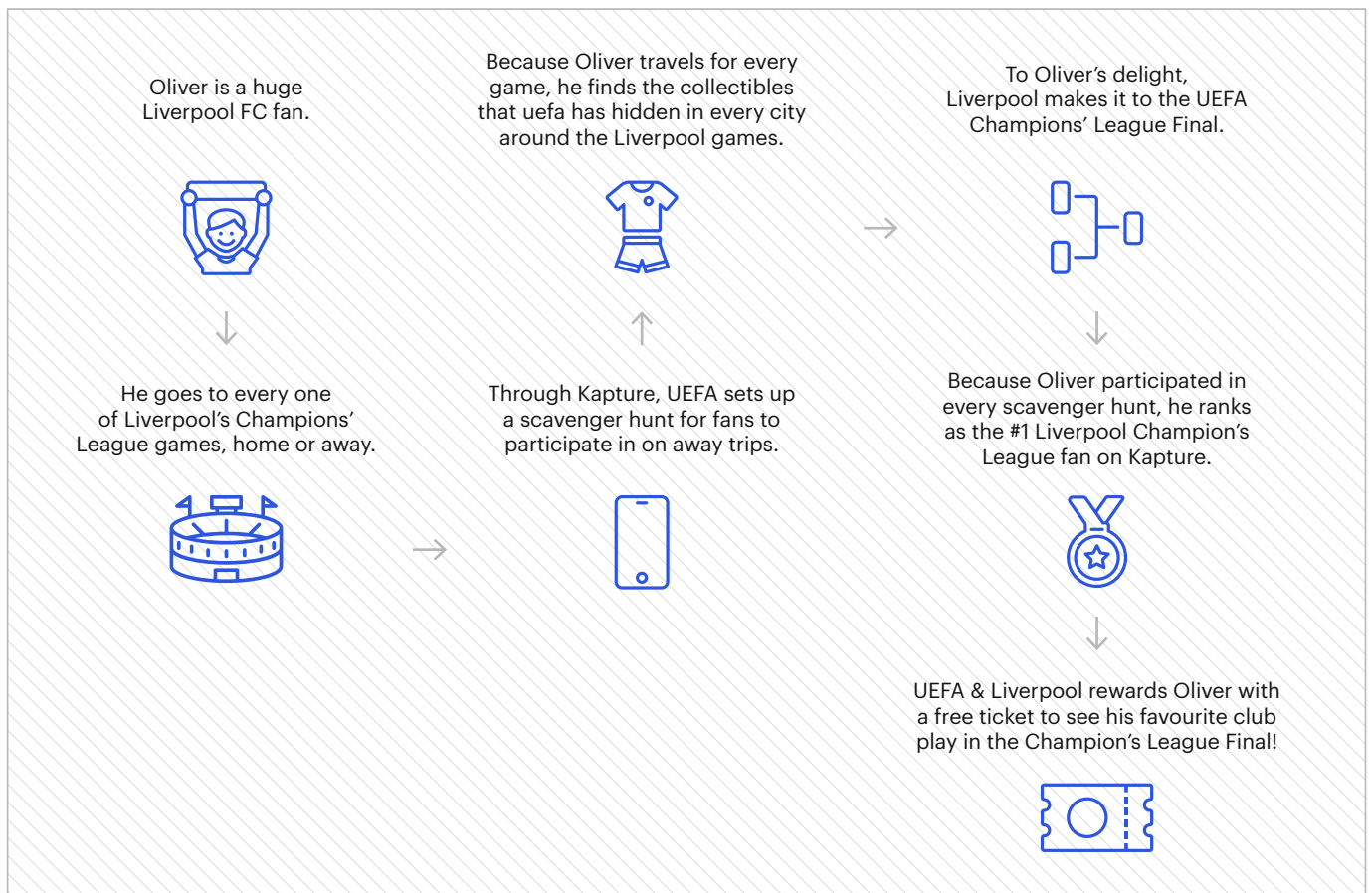
Figure 4: Oliver's FC Liverpool Fan Quest

Quests provide great means to create unique, often highly-personalized experiences that reward fans for their loyalty, as demonstrated in Figure 4.

A quest that incorporates reward points and collectibles is the important first step on the path to an experiential decentralized brand economy.

However, economies need network effects, and network effects need community. Individual players and entire communities gain economic utility through the sharing, trading, and redeeming of digital collectibles and loyalty points.

Figure 5: Example of a decentralized UEFA Champions League Collectible Marketplace for fans and players

Figure 5 demonstrates a collectible won during one of Liverpool's Champions League quests that could be traded on user-driven, brand-curated marketplaces.

These brand-curated marketplaces enable brands to reach beyond the initial followers (value prop for the brand) while giving community members economic utility through the collectibles and rewards they earned (value prop for the user).

Teams catalyze brand fellowship and enable economic network effects and value-offering to followers by:

- **Attracting and tracking new followers through purposeful community activity recognized by a brand.** For example, a team could organize a beach clean-up where participants are rewarded with limited edition brand collectibles created by their favorite team. Or, participants could be awarded loyalty points. The team itself could be rewarded through brand badges or loyalty points by the brand for its efforts.

- **Collecting and co-owning collectibles and reward points.** For example, a follower team completes and possibly wins a global brand quest competition, or a team can trade co-owned collectibles on a collectible marketplace.

- **Creating a sanctioned "brand within a brand."** This could attract new followers to the team's brand and by extension, to its parent brand. This gives further status and economic utility to teams.

These are a few examples of the countless opportunities enabled by the outlined approach of how to curate an experiential decentralized brand (follower) economy.

ConsenSys has built Kapture, a platform incorporating the above-outlined approach and critical economic and engagement elements. Kapture is an AR and blockchain-based experiential brand engagement platform that enables new, unique brand marketing and engagement by making followers and brands, "good friends."

With Kapture, any brand, be it a company or individual, can create personalized, socially connected, and monetizable experiences for their followers. Brands may connect with each follower on a personal level, involve them in the community, and incentivize each follower to become a "super fan" — all at 10x lower costs than other solutions.[14]

If you would like to know more about decentralized brand community engagement and how Kapture could benefit your brand, please feel free to reach out — andreas.freund@consensys.net.

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[14] "Why the Best Conversion Rate for Mobile App Downloads Isn't ...." 27 Dec. 2018, https://clevertap.com/blog/best-conversion-rate-for-mobile-app-downloads/. Accessed 5 Dec. 2019.