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The Rise of The Egocentric Brand and Consumer: The Case of Soulbound Tokens (SBT)

Structured Abstract

Purpose: The development of the next web 3.0 digital generation will be built on a decentralized society and blockchain technologies such as Non-Fungible Tokens (NFTs) and “Soulbound Tokens” (SBTs). These technologies will enable a digital proof of personhood that would make it possible for people to differentiate themselves through their unique credentials and reputation. SBTs can include unique information relating to the user’s identity that can enhance consumer’s self-perception, uniqueness, and reputation building. The literature remains scant on the underlying consequences of SBTs from a consumer behavior perspective, and consequently the implications for brands given rising egocentric consumer needs which this study addresses.

Methodology: This study adopted an exploratory approach using in-depth interviews with experts to increase our understanding related to SBTs, and their potential impact on consumers’ behaviors and brands’ marketing strategies.

Findings: The findings unveiled an SBT-led egocentrism cycle comprising the following stages: (1) penetration and proliferation of SBTs, (2) consumers’ need for uniqueness and differentiation, (3) brand’s reputation, (4) brand’s personality matching, (5) brand-based NFTs’ characteristics, and (6) shift in the competitive landscape for both consumers and brands.

Originality: This research is amongst the first to study SBTs and their potential impact in the web 3.0 environment where digital identities and ownership are decentralized and authentic.

Keywords: SBT; Egocentrism; Web 3.0; NFT; Metaverse; Brands; Self-expression

Introduction

With the wide expansion of web 2.0 that came to be known as the social networking era, users’ digital identities and traceability became a focal point for both brands and consumers (Ramadan, 2018; Ramadan et al., 2024; Farah et al., 2024). The development of the next web 3.0 digital generation will be built on a decentralized society and blockchain technologies such as Non-Fungible Tokens (NFTs), which are unique digital assets that are traded through blockchain technology and can be used to represent specific items, such as videos, photos, audios and other types of digital files (Kelkar, 2021). Blockchain, considered to be the core of nearly all cryptocurrencies, is a shared distributed digital ledger that is used to record transactions and track assets (such as recording NFT ownership) that cannot be altered or hacked (Sung et al., 2023). As

transactions are blocked together in an irreversible chain (hence the blockchain name), blockchain deters fraudulent activities as each block contains a unique identifier, timestamped recent transaction and the identifier of the previous block (Narayanan et al., 2016).

Web 3.0 technologies and namely NFTs are expected to provide the infrastructure that enables a digital Proof of Personhood (PoP) that would make it possible for people to differentiate themselves through their unique credentials and reputation. Such verifiable digital credentials will become possible in online and virtual worlds (such as the metaverse) through “Soulbound Tokens” (SBTs), which will embed publicly visible, non-transferable tokens (Weyl et al., 2022). SBTs are a type of NFT that are purposively non-transferable as they are linked to specific users, hereby souls. SBTs can include unique information relating to the user’s identity (e.g., driver’s license, social security number), certificates (e.g., diplomas, awards, accreditations), medical records, and affiliations (e.g., memberships, brands/companies’ affiliations, community links) (Canales, 2022). The unique ability of SBTs is to represent non-transferable and verifiable reputation indicators. Individuals could use them on LinkedIn for example to confirm their degrees, experience and credentials, while banks could use them to validate credit scoring. Companies and legal entities could also use SBTs to validate certain credentials, affiliations, standards and certifications (Soulbound, 2022). Today, there are no foolproof ways to verify digital credentials, which gives rise to the need to combat credential fraud. While LinkedIn for example have some general guidance in place to identify rising fake credentials on the social platform such as checking the profile’s work email, phone number, content over time, and possible inconsistencies (Hayes, 2022), these approaches remain basic, easy to bypass and are time consuming.

The fundamental change in how people would behave and relate to brands through SBTs will become essential for companies to understand as they integrate their marketing strategies into virtual worlds. The use of digital credentials that enhance self-esteem and provide heightened self-expressive benefits are expected to drastically increase consumers’ need for uniqueness and accordingly drive egocentrism. This new digital landscape will have radical repercussions on the brand-consumer relationship. Brand personality and its differentiating attributes will become the core focus of consumers as the latter develop their desired self-concept, and in turn become more egocentric. While SBTs are expected to fundamentally change how people behave and socially connect to each other and with brands online, no study to date has yet explored this field of interest due to its nascent nature. A significant gap exists today in the marketing literature that calls for a

major exploration of SBTs and their potential effect on consumers' self-perception and the ensuing relationship with brands. Such an examination can be made through the lens of the social comparison theory which encapsulates the innate human inclination to compare themselves against others (such as skills, qualities, and accomplishments), which ultimately drives relational behaviors and self-esteem (Gulas and McKeage, 2000; Suls and Wheeler, 2013). In line with this, consumers' self-perception and brands' personality matching in relation to customers' seeking behavior for uniqueness and the resulting egocentrism within the context of digital credentials should be examined as it is expected to radically change consumers' relationship with brands. Accordingly, this study seeks to explore the underlying consequences of SBTs from a consumer behavior perspective, and consequently the implications for brands given rising egocentric consumer needs through a qualitative approach using in-depth interviews with experts in the marketing and digital field. Consequently, the research aims to answer the following research questions:

(1) How will SBTs shift the digital landscape?

(2) How will social comparison and the use of SBTs affect consumer's self-perception and their relationship with brands?

The paper starts first with a literature review that introduces SBTs, discusses the social comparison theory alongside the ensuing consumer behavior and brand relationship changes. This section is then followed by the methodology and discussion of the findings. Scholarly, managerial, and societal implications are then presented. The study concludes on the present research originality, its limitations and future prospect in the field of SBTs.

Literature Review

Soulbound Tokens (SBTs)

The concept of Soulbound tokens was formalized by Weyl et al. (2022) who presented a groundwork for a decentralized society that would encode social relationships of trust. In their seminal paper, the authors argued that through SBTs, users will be able to validate their identities, include personal attributes, and hence track reputation across the online and virtual realm.

Considered as a new non-transferable digital token, Soulbound is publicly visible and verified, and illustrates the individual's social status on web 3.0 platform. These tokens serve as a

representative of a digital extended resume on the web 3.0, holding individually certified information and the person's accomplishments and reputation (Canales, 2022). This information could include credentials, affiliations, commitments, and memberships. The concept behind this new non-transferable NFT goes back to the World of Warcraft video game, where players purchase items that cannot be traded or sold to other characters and players (Soulbound, 2022). While these were not SBTs by themselves, they are considered to be an early manifestation to the idea of Soulbound items. An NFT enables an interested customer to own that original, virtual artifact, and a built-in authentication acts as evidence of their ownership. In the digital realm, NFTs have unique properties, as they can be purchased and sold like any other piece of property, but they have no physical structure ("What are NFTs", 2021). NFTs are stored on a blockchain, which is a decentralized public ledger that keeps track of transactions. As a result, it is regarded to be majorly protected from hacking, manipulation, or changes, as recorded data cannot be changed without first changing all registered former blocks (Narayanan et al., 2016). In 2025, NFTs are expected to reach \$400 billion (Hackl, 2021), where they will provide wide avenues for brands and individuals alike.

The NFT nontransferable "Soulbound" can certify that the user's social identity and status are untradeable on the web 3.0 ecosystem. The inability to trade or transfer the NFT permits to recognize the wallet holder on the blockchain (Wright, 2022). The unique characteristic of the Soulbound NFT is that it is permanent and cannot be given away from the user's private wallet (Exmundo, 2022). The accounts or wallets holding the nontransferable tokens are referred to as "Souls". Through the blockchain account, users can translate their verifiable information and records by these reputation tokens such as achievements, work history and experience, professional awards and credentials (Weston, 2022). SBTs can store permanent records of unique profiles, developing and shaping the user's identity and reputation as a proof of character (Mattu, 2022). SBTs can also pinpoint personal information, traits and features such as a user's medical history, birthday, and nationality (Exmundo, 2022).

Similarly, an institution or a company can also be represented as a Soul. For example, a university's "Soul", in other words, its private wallet, can validate and grant the user's SBT an education degree or affiliation. In this way, SBTs can also serve as a proof of membership (Weyl et al., 2022). As a result, SBTs can decrease the reliance on the financialized characteristic of the

web 3.0 environment and empower untradeable relationships of trust while ensuring integrity, credibility, and provenance (Owens, 2022).

The growth of web 3.0 brings the importance and focus of trust in this ecosystem, considered as the most critical issue (Onete et al., 2017). Since all business and user interactions are based on trust in this landscape, it is important to shed the light on privacy, trustworthiness and anonymity issues. From this point, the Soulbound tokens can be considered as a promising tool to fill the trust gaps in the web 3.0 ecosystem. The non-tradeable nature of the SBTs ensure that these self-certified reputation tokens translate a digital social identity representation of an individual based on trust and privacy (Weston, 2022). Although NFTs act as an instrument for proving wealth and asset, however, SBTs are non-transferable and serve as a tool for confirming the reputation and credentials of an individual, making it a proof of identity (Canales, 2022; Mattu, 2022). SBTs can also act as an observational tool before conducting business-related activities. For example, companies can use SBTs for work experience verification of potential candidates before recruiting them (Weston, 2022). Thus, the promising potential of these new non-transferable tokens will help decrease reliance on a centralized-society and act as the main building block for achieving a decentralized society (Canales, 2022; Weston, 2022; Wright, 2022).

The Theory of Social Comparison and SBTs

SoulBound tokens can reflect credentials, affiliations and commitments of the Souls and thus establish trust networks based on social reputation and provenance, shaping the real economy. SBTs have the potential power to establish an irreplaceable social identity on web 3.0 and democratize a decentralized system (Canales, 2022). Through trustable digital credentials, consumers are expected to start shifting their focus towards an ideal self that they would want to establish in the virtual world through social comparison. The examination of social comparison processes reveals their potential impact on the formation of group identification whether between individuals or within brand-based communities. This phenomenon of comparing oneself to others is deeply ingrained in human nature and plays a significant role in shaping social identity (Aw and Chuah, 2021).

Social comparison theory, pioneered by Festinger in 1954, elucidates how individuals gauge themselves against peers across various dimensions such as abilities, achievements, beliefs, attitudes, and appearances, subsequently influencing their self-esteem. The social comparison

theory helps understanding self-evaluation and the functions of reference groups, including pressures towards conformity versus the need for uniqueness (Goethals, 1986), alongside self-esteem (Sheeran et al., 1995) and consumption behavior (Argo et al., 2006). Factors influencing social comparisons include adaptiveness, egocentrism, projection tendencies, approaches to belief formation, and critical appraisal of beliefs (Suls and Wheeler, 2013). Comparisons can range from lack of self-appreciation and interpersonal conflict to motivation and gratitude (Goethals, 1986).

Social comparison in virtual worlds, whether with other individuals or brands, can hence be considered as the underlying theoretical framework to study SBTs. As SBTs will greatly increase social comparison, the rise of the need for uniqueness and egocentrism will ensue as they are considered as core influencing factors in the comparison process (Suls and Wheeler, 2013). Similarly, consumers will switch their interest to the brand personality and attributes that might elevate and enhance reputation (Aaker, 1997; Malär et al., 2011; Matzler et al., 2011) within that context. Indeed, the theory of consumers' need for uniqueness stipulates that people would actively look for social image enhancers, and coupled with the theory of brand congruence, consumers would select brands that are likely to make them perceive a better ideal self-image (Dolich, 1969; Sirgy, 1982; Alpert and Kamins, 1995). With SBTs, egocentrism is expected to rise due to the showcasing of a trustable digital social identity that can fundamentally enhance self-esteem.

The Need for Uniqueness

The need for uniqueness is defined as “*an individual's pursuit of differentness relative to others that is achieved through the acquisition, utilization, and disposition of consumer goods for the purpose of developing and enhancing one's personal and social identity*” (Tian, Bearden, and Hunter, 2001, p. 50). People are inherently driven by the motivation to establish a distinct and unique self-identity in relation to others (Vignoles et al., 2000). Individuals characterized by a high need for uniqueness tend to experience discomfort when they perceive similarities with others and actively seek divergence from the group in order to set themselves apart (Snyder and Fromkin, 1977). Consequently, it is a natural inclination for people to aspire to maintain a degree of distinctiveness to enhance their self-image, which they desire others to recognize (Tian et al., 2001).

The core concept of the need for uniqueness fundamentally revolves around nonconformity, as individuals with high need for uniqueness tend to deviate from the norm within

their peer groups. In fact, feeling distinct from others significantly influences consumer behavior (Chan, Berger, and Boven, 2012). Such behavior manifests as a deliberate avoidance of resemblances with others, leading to a diminished interest in products or brands commonly adopted by the masses. This conduct represents a departure from shared norms with the intention of reestablishing one's uniqueness and distinctiveness (Snyder, 1992). Consumers experiencing incidental pride are more inclined to seek uniqueness through brands that showcase similar traits (Huang, Dong, and Mukhopadhyay, 2014). The need for uniqueness is closely tied to the level of knowledge and involvement individuals invest in a brand. The more they relate to and feel positively about a particular brand, the stronger their inclination to purchase it to further enhance their uniqueness (Bhaduri and Stanforth, 2016).

People strive to strike a balance between similarity with others and uniqueness (Lynn and Harris, 1997). As the innate inclination of individuals is to establish and maintain social connections with others, the need for uniqueness may be constrained by the desire for social acceptance and integration (Abosag et al., 2020). While consumers who perceive themselves as highly unique and different from their social group may increase their interaction with their peers to sustain relevance and self-identification, those who perceive significant similarity with others tend to adopt behaviors that enable them to differentiate themselves (Brewer and Pickett, 1999; Abosag et al, 2020). The sensation of being excluded from social groups may trigger a need for affiliation, but the desire for uniqueness would still compel consumers to engage in self-evaluation which would significantly influence their need for uniqueness and subsequent brand-related behavior (Lynn and Snyder, 2002). NFTs are expected to serve and support consumers' need for uniqueness as they act as a differentiator in virtual worlds due to their digital value and scarcity (Chohan and Paschen, 2023). Through their digital exclusiveness, these tools would help individuals increase their distinctiveness while showcasing their unique social identity.

Brand Congruence

Just like human beings, brands develop their own personalities. For several years, researchers had discussed the allocation of human personality attributes to brands, in which physical objects are designated by traits that are found in humans. This relationship of human-personality attributes with brands encourages consumers to perceive brands as their friends or partners (Fournier, 1998). In order to be differentiated from other brands, companies need to produce brand experiences

through which consumers will associate with the personality that it brings, and that is when they will start building strong bonds with the brand (Ramaseshan and Stein, 2014; Ramadan, Farah, and Al Rahbany, 2023). Just like the first impression that is created when meeting someone, a brand's personality is the first reaction consumers are prone to make when they happen to be in contact with the brand. As defined by Aaker (1997), brand personality is the assignment of human qualities and attributes to a brand in order to be differentiated from competitors and be able to affect the consumer's behavior in the marketplace. Everything people possess is a reflection of their identity and is therefore considered as a part of the self (Belk, 1988).

The theory of brand congruence posits that consumers exhibit greater comfort and satisfaction with products or brands that align with their actual or desired self-concept (Sirgy and Su, 2000). Previous research has shown that consumers purchase brands that can reflect their own personality or identity (Aaker, 1997). When shoppers encounter desired stimuli that are brand-related, they shape favorable judgements of that brand's personality and tend to assess a brand through representative attributes with their self-concept (Aaker, 1997; Ramadan et al., 2023).

Self-esteem affects brand congruence through social comparison as it drives consumers to enhance their self-image's uniqueness through comparing, identifying and using a brand they deem to be similar to them (Alpert and Kamins, 1995). In parallel, consumers with a high need for uniqueness are more inclined to prioritize the attainment of an ideal image by avoiding brands that, while congruent with their self-concept, are commonly embraced by others (Abosag et al., 2020). Unless a brand actively supports consumers' need for uniqueness, it risks becoming just another ordinary product in the market (Puzakova and Aggarwal, 2018). Perceptions can differ among various social groups, such as consumers who make purchases for hedonic or utilitarian reasons. Hedonic purchases are perceived as driven by unique preferences compared to utilitarian ones, as consumers seek products tailored to their individual pleasures rather than those serving a general purpose (Whitley, Trudel, and Kurt, 2018).

Research shows that giving a brand unique human attributes and qualities by personifying it will boost the connection between consumers and the company. Consumers are well-grasped of the personification concept because of "anthropomorphism", which is defined as the assignment of human attributes to non-living objects (Ramadan et al., 2019; Ramadan, 2021). When consumers put their trust in a brand, allowing it to reflect their own self-identity, it shows their loyalty and connection to that certain personality of a brand (Mrad et al., 2022; Ramadan, Farah,

and Bekdache, 2023), which leads to a better brand-consumer relationship. The establishment of these relationships and emotional connections is of high importance especially in the web 3.0 era as consumers are not passive recipients anymore; they have become content creators themselves and would refer to products and brands that can reflect their own identity (Onete et al., 2017). The conversations that occur on social platforms aid brands in connecting with their consumers, as well as showing their real personality and innovating with them (Ramadan and Abosag, 2016; Ramadan, Abosag and Gadalla, 2023).

Egocentrism and Self-Centeredness

In a Freudian definition, ego is the conscious fragment of personality that proceeds and behaves in regards to the real world as it compromises between the needs of the superego and the thrust of the id (Leary et al., 2009). The ego allows the preparation of the reference that the human being utilizes to arrange and give an explicit meaning to experience (Helson and Roberts, 1994).

Most researchers during the last 50 years focused on considering the ego as a personality feature that manages behavior or as a person's self-esteem and self-image (Leary et al., 2009). In fact, the literature has clearly equalized ego threats with self-esteem threats, by applying the terms in the same context or by designating ego threats as a threat to the self-esteem (Meyer, 2000; Leary et al., 2009).

However, earlier research revealed that after facing a threat to one's self, people that have a high level of self-esteem are perceived as less friendly by a potential partner, while those who have a low level of self-esteem are regarded as more amiable (Heatherton and Vohs, 2000; Vohs and Heatherton, 2001). In addition to that, self-esteem is considered to be a psychological need of either esteem for oneself or the desire of having a status or a prestige. Clearly, ego threat in most cases is prone to be about the public image discerned rather than the private self-esteem (Flett et al., 1994-1995). In virtual worlds, NFTs and SBTs provide exclusive benefits that help individuals in building a given image that would heighten one's self-esteem, status and accordingly egocentrism and self-centeredness (Aw and Chuah, 2021). These digital credentials would consequently alter how people are perceived on digital platforms.

In many cases, disapproval, negative judgments, and abandonment undoubtedly endanger people's egos in a manner of negatively affecting their self-esteem or self-image (Leary et al., 2009). According to research, the most logical simplification of the effects of such negative

circumstances that include public embarrassment, disagreement or dismissal is that they are caused by the people's interpersonal worries about their public image, social acceptance or even self-acceptance instead of an intrapsychic ego threat (Leary et al., 2009). Since the ego is capable of affecting every decision a human being takes, it is indirectly influencing their personality traits and qualities, which are features or characteristics that differentiate one's persona, point of view, and actions. In other words, they are the representation of humans in terms of steady patterns of ideas, attitude, and feelings (McCrae and Costa, 2003).

Methodology

This study adopted an exploratory approach using a qualitative methodology to increase our understanding related to SBTs, and their potential impact on consumers' behaviors and brands' marketing strategies. The interview questions were designed to delve into participants' experiences and accordingly followed constructivism as its interpretive framework through the focus on grounded theory (Charmaz, 2014). The use of in-depth interviews allowed the exploration of how consumer behavior will change as SBT usage expand in virtual worlds, how it will affect the consumer-brand relationship alongside the ensuing implications of a rise in egocentrism. Accordingly, due to the novelty of SBTs and the scarcity of research in that area, 33 in-depth interviews with experts in the fields of marketing, NFTs and Blockchain were performed using purposive sampling. The experience of the respondents ranged between 5 and 17 years. As for their age, it was between 25 and 47 years old with a gender split of 52% females and 48% males. The sample of experts was selected to provide diverse experiences and perspectives on this area of study. A snowballing convenience sampling approach was used through different connections with leading companies using a criterion-based sampling technique (knowledge about the topic, experience in the field of study, seniority in job, and a span over different industries) (Creswell, 1998). Table 1 lists down the sample's jobs positions and years of experience.

INSERT HERE: Table 1 – Interviewees' Positions and Years of Experience

The interviews started first with the background information about the respondents and their experience, followed by a first batch of general questions around NFTs, the metaverse and SBTs. The interview then delved into the potential of SBTs, their expansion into virtual worlds

and the expected cycle that would ensue in such a new landscape. Discussions followed on the particular influence of SBTs on consumer behavior and brand relationship. A series of questions then tackled SBTs in relation to their current and future business potential, their impact on consumers' lives, the pertaining marketing strategies in an SBT based landscape, and the opportunities and threats of such solutions. The interviews lasted on average for 47 minutes and were conducted using either Zoom calls or face-to-face meetings.

While saturation was achieved in the 31st participant, two additional interviews were conducted in order to ensure that no additional insight is missed from the data (Creswell, 1998). Saturation was deemed reached when no new information was added to the body of the gathered insights. Indeed, following the last 10 interviews, there was a sharp decline in new information alongside having no new themes to be extracted. On the 31st interview, there was absolutely no new information to be added. Following a conservative approach via adopting a zero percent threshold in new information (Guest et al., 2020), two more interviews were conducted to confirm the state of saturation whereby there was no new information or themes to be further extracted.

The interviews were recorded following the participants' consent, transcribed then analyzed using the NVivo software. An inductive thematic analysis followed the fieldwork and transcription of the semi-structured interviews in order to identify and extract the relevant themes and patterns pertaining to the data (Braun and Clarke, 2006). Three researchers (faculty members) who were not affiliated with this study coded individually the data in order to ensure the reliability and validity of the extracted themes (Neuman, 2003). Figure 1 depicts the thematic analysis and the four extracted themes.

INSERT HERE: Figure 1: Thematic Analysis

Discussion of the findings

The objective of this study is to provide an early understanding on the upcoming SBT, which are expected to drastically change consumers' lives and behaviors, and alongside it companies and brands' marketing strategies. The emergence of SBTs promises to revolutionize the online landscape, particularly how consumers interact with brands and construct their digital identities.

Following the analysis of the data, the findings unveil an SBT cycle comprising the following stages with social comparison at its core as the underlying motivator: (1) penetration and proliferation of SBTs, (2) consumers' need for uniqueness and differentiation, (3) brand's reputation, (4) brand's personality matching, (5) brand-based NFTs' characteristics, and (6) shift in the competitive landscape for both consumers and brands.

Through a comprehensive analysis of SBTs, this study explores the multifaceted dynamics underlying the adoption and proliferation of SBTs, highlighting pivotal stages from initial penetration to a transformative shift in the competitive landscape. The findings underscore the interplay between consumer needs, brand strategies, and technological advancements, shaping the cycle of SBTs within the evolving digital ecosystem. The cycle ensuing from the four initially identified themes is depicted in figure 2. The ovals in the figure represent the initial themes alongside the title of each in the respective featured grouping.

INSERT HERE: Figure 2: The Cycle of SBTs

The SBT cycle delineates a progression marked by distinct stages, each intertwined with consumer motivations, brand dynamics, and technological developments. The initial phase of penetration and proliferation hinges on establishing transparent procedures and fostering consumer trust, crucial for catalyzing widespread adoption. Concurrently, brands' readiness to integrate SBTs into their marketing strategies serves as a catalyst for market expansion, underscoring the symbiotic relationship between technological innovation and brand strategy. The overall cycle is shown to be driven by the innate drive of consumers to socially compare themselves to others whereby it acts as a key underlying motivator for SBT usage and integration into consumers' digital lives. The following section delves into each stage of the cycle.

(1) Penetration and proliferation of SBTs

The first stage of the SBT cycle is based upon the final development of SBTs and their first usage by early adopters. With the increase of digital identifiers' ownership and awareness by the public and companies, demand for this type of NFT is expected to grow exponentially. The key drivers for this stage would be the set-up of clear and transparent procedures that would lessen any confusion or concerns by potential users.

“If the process in using an SBT is complicated, then it will have an adverse effect on both companies and users. Users have to know how they will be able to use it, what they can add and even refuse to showcase on their unique digital identifiers” (Blockchain and Crypto consultant, 7 years of experience).

The proliferation of SBTs will also be closely related to the willingness of companies and brands to include such a novel tool in their marketing strategy.

“The success of SBTs will rely mainly on companies’ readiness to use it as a marketing tool. I’m hopeful that some pioneering big brands will experiment with it as it will give them the advantage of the first mover” (NFT entrepreneur, 8 years of experience).

Furthermore, the market reputation of NFTs themselves and consumers’ trust in this technology will have a central influence on the proliferation and penetration of SBTs as they are expected to provide trust in the new digital ecosystem of web 3.0. The potential of web 3.0 can indeed transform societies and offer a greater trust and cooperation level (Weyl et al., 2022).

“SBTs are part of the overall NFT family. If NFTs are perceived as untrustworthy due to the latest market shifts, then SBTs will suffer from that spillover effect” (NFT designer, 5 years of experience).

Moreover, the innate nature of consumers to socially compare themselves with others (Suls and Wheeler, 2013) will have a driving force for the adoption and early use of SBTs.

“We know for a fact that people in general like to compare themselves to others. This is a driving force in marketing. I personally think that this human need will organically help SBTs to be adopted fast” (Digital marketing consultant, 14 years of experience).

(2) Consumers’ need for uniqueness and differentiation

As SBTs start gaining awareness and momentum, consumers will be motivated to adopt them following their peer groups and into larger communities. Users would start by ascribing personal, local, and cultural attributes to their SBTs as a mean to set their basic credentials and proof of personhood. Such identifiers will be used for self-expression whereby SBTs will start acting as live replicas of people in the digital and virtual realm. Indeed, with the ability of SBTs to store

permanent records of unique identifiers, individuals will be able to shape their own digital identity and reputation (Mattu, 2022; Exmundo, 2022; Ramadan, 2023).

“SBTs provide unique identifiers that users can highly personalize. It’s like a live CV or social profile that can be verified and that is unique” (IT consultant, 14 years of experience).

“SBTs are like avatars but from a digitally certifiable written form. They will become highly in need once the metaverse will be up and running as people would want to express their real selves in the virtual world” (Digital marketing consultant, 16 years of experience).

The expected use of SBTs in the metaverse will turn into a large scale of gamification of life and self-representation as users will start to actively seek and add identity enhancers to their digitally verifiable credentials. With the aim to stand out and differentiate oneself, users will develop a high need for uniqueness and will accordingly seek companies, brands and organizations who could help them achieve that. As the need for uniqueness is based on nonconformity (Abosag et al., 2020), consumers’ behavioral shift will be focusing on brands that provide them with an established distinctiveness (Huang, Dong, and Mukhopadhyay, 2014) when comparing themselves with others (Goethals, 1986), and accordingly a stronger relationship with and inclination to purchase that brand (Bhaduri and Stanforth, 2016).

“SBTs can be considered to be the next marketing frontier; it’s consumers’ self-expression on steroids. Consumers would want to show-off and stand out in the virtual world. Metaverse or the virtual world will itself act as a big game where people will socialize and earn trophies, awards, achievements that would act as enhancers to their SBTs” (Brand manager, 6 years of experience).

“Brands are consumers’ partners in this environment. They will seek to help consumers in a profitable way with their self-expression needs in the digital realm. Brands could play a key existential role for its consumers, and that is priceless” (Marketing director, 10 years of experience).

(3) Brand’s reputation

The developing web 3.0 landscape and the shift of consumers' needs towards reputational benefits will put higher pressure on brands to deliver on the quality of their products and services as well as on their social responsibility and image. The brand's reputation, formed by its functional benefits and quality performance, alongside consumers' trust will be the first qualifying criteria that users will take note of before pairing themselves with a brand. Indeed, brand trust and reputation are considered in the extant literature as key relational attributes that directly affect consumer behaviour and perceptions (Berry, 1995). Providing consistent brand satisfaction through integrity and heightened confidence in the output of a brand are fundamental in the brand-consumer relationship (Bowden, 2009; Ramadan, 2018).

“It goes back to the basics – companies have to first deliver on their promise and have consistent quality in their functional output. Reputation is formed on that first basic level then it goes up when trust is formed over time” (Brand manager, 8 years of experience).

Customers' reviews are fundamental in this context. Moreover, brand sabotaging will be of great concern as companies will be competing for high reputational scores that would enable the brand to be selected by consumers as a potential enhancer.

“Customer reviews will take the front seat in web 3.0 as consumers will be using them to scrutinize the brand's reputation. Nevertheless, this system is not flawless as we have seen in the current web 2.0 era that reviews can be faked and used by competing brands to sabotage their competitors” (Digital marketing consultant, 16 years of experience).

(4) Brand's personality matching

As the basic thresholds of functionality and quality are delivered consistently, consumers will turn their focus on a higher-order brand identity level: its personality. Consumers will be looking for brand attributes that would have the potential to enhance their identity and SBT in the social comparison process (Suls and Wheeler, 2013). Following the theory of brand congruence, consumers will be expected to relate closer to brands that align with their desired self-concept (Sirgy and Su, 2000). Brands that could effectively match consumers' desired self-concept through their set identity traits would benefit from a heightened brand loyalty (Aaker, 1997).

“The brand’s personality and personification will have more important roles in the presence of SBTs as consumers will try to match themselves with likeminded brands to further build their digital identity” (Marketing director, 14 years of experience).

The product and service category the brand operates in will have an encompassing effect as well. Luxury brands for example will be expected to have a different set of attributes and identity enhancements with particular segments of the population versus a fast-moving consumer goods brand. Similarly, the rate of innovation and trendiness the brand can provide will overwhelmingly be influenced by its own category.

“Not all brands will be equal in that environment; a Ketchup brand will not be able to enhance much a consumer’s SBT like a luxury fashion brand for example” (Digital marketing consultant, 16 years of experience).

(5) Brand-based NFTs’ characteristics

The ensuing tangible output that consumers will be looking at in the web 3.0 environment will be the NFTs that brands will be issuing. In an SBT context, consumers will be able to showcase earned NFTs for self-expression. These NFTs could ascribe exclusive ownership of a product and/or particular characteristics to a consumer, such as being a top fan, a collector, an influencer or opinion leader in a category.

“NFTs that are focused on exclusivity and collectors’ items will become the key marketing deliverable consumers will be waiting for. Brands could as well issue status related NFTs such as denoting a consumer as a top fan or influencer that it recommends people to follow” (NFT entrepreneur, 8 years of experience).

Exclusivity of the NFTs and the unique benefits they provide such as a members-only communities that gives access to unique collectors’ items are expected to increase consumers’ egocentrism in the virtual world where social comparison is heightened (Aw and Chuah, 2021). Consequently, in that same cycle, this would put pressure on brands to follow suit in providing such egocentric driven NFTs.

“It’s all about the ego; human beings want to stand out in the crowd and want to feel that they are important. NFTs and SBTs are addictive tools that would enable this human need to satisfy the ego” (NFT designer, 5 years of experience).

“It’s going to be a vicious cycle: when companies are going to see an increasing demand for such NFTs, brands will have to follow suit and play the game. The problem with this, is that brands will become by themselves egocentric by building this image for themselves and issue NFTs that reflect this status” (Brand manager, 9 years of experience).

(6) Shift in the competitive landscape for both consumers and brands

The proliferation of NFTs and wider usage of SBTs will develop into a cycle of higher demand and supply of digital tokens. Furthermore, through such a gamification of identity and reputation, companies will be able to have a much more efficient and effective ad targeting due to the wealth of information, affiliations, reputational scores and attributes (Ramadan, 2018) consumers would be holding in their SBTs. The landscape will start shifting towards a decentralized one-to-one marketing basis versus centralized platforms (such as social networking sites).

“The web 3.0 era is very promising in its marketing potential as we will shift from centralized platforms to decentralized ones where the marketer will talk directly to the consumer who will share a wealth of data on herself/himself” (Digital marketing consultant, 16 years of experience).

On the other hand, SBTs provide companies and brands the potential to own such a token for their entity. Such corporate owned SBTs could feature ISO certifications, ratings by governmental agencies, awards and CSR verified initiatives. These initiatives would enhance the competitiveness of companies and prepare them for the highly competitive web 3.0 decentralized marketplace.

“The possibilities are limitless with SBTs. Companies and brands could even own one and could feature their own certifications, ratings and confirmed CSR initiatives. SBTs are poised to become a core marketing component under the decentralized web 3.0 environment” (NFT entrepreneur, 8 years of experience).

The SBT cycle suggests a considerable shift in the competitive landscape as consumers leverage SBTs for self-expression and status building. Brands will accordingly have to adapt their

marketing strategies to cater to the heightened need for uniqueness and personalization. Indeed, the emphasis on brand reputation and personality alignment necessitates a shift towards brand authenticity and value-driven communication. In the era of web 3.0, where decentralized platforms redefine marketing dynamics, the SBT cycle emphasizes the dynamic interplay between brand personality, consumer self-expression, and the gamified environment fostered by SBTs. This is mainly driven by the social comparison of consumers which effectively accelerates the adoption of this emerging technology.

Implications

From a scholarly perspective, this study fills a major gap in the marketing literature pertaining to the advent of SBTs and their impact on consumer behavior and relationship with brands. Within this particular context, the brand will become a key differentiator factor due to the changing competitive landscape (Keller and Lehmann, 2006). As consumers' needs and wants will evolve drastically, the differentiating value of the brand will become its main distinguishing feature (Chun and Davies, 2006) that would retain customers and build loyalty. This will be based on egocentric needs and drivers, which seem that they will have a large influencing effect on both consumers and companies alike. Building on the foundational works of Sirgy and Su (2000) on brand congruence and Aaker (1997) on brand personality, the proposition that consumers will seek brands that match their desired self-concept through SBTs is strengthened. Furthermore, the research by Berry (1995) and Ramadan (2018) on brand reputation and consumer trust reinforces the significance of brand image within the SBT cycle. Additionally, the concepts of need for uniqueness and brand congruence (Abosag et al., 2020) provide valuable context for understanding the potential for SBTs to incentivize consumer engagement and brand interaction. Finally, the social comparison theory offers an overall integrative approach to the SBT cycle as it constitutes the underlying motivating factors in the SBT cycle such as the need for uniqueness, self-esteem, egocentrism and the ensuing consumption behavior (Goethals, 1986; Sheeran et al., 1995; Argo et al., 2006; Suls and Wheeler, 2013; Abosag et al., 2020).

Applying those theories to the SBT component provide an effective and relevant lens on how consumer behavior and brand relationship would change with the wide usage of SBTs in virtual realms. Egocentrism is hereby presented as a key consequence of the usage of SBTs, which

lays the ground for the development of new frameworks that integrate the ego into the marketing and brand-consumer relationship literature.

From a managerial or practical perspective, the proposed cycle shows that a major shift in the competitive landscape is to be expected. Indeed, the SBT cycle highlights the crucial role of brand reputation and personality in attracting consumers within the decentralized space. This necessitates a shift from traditional marketing tactics towards building genuine brand communities and fostering authentic brand stories. Companies could develop strong brand communities that foster a sense of belonging, whereby they could utilize SBTs to reward active community members with exclusive NFTs or early access to product launches. For example, a sustainable clothing brand could issue SBTs to customers who participate in eco-friendly initiatives like clothing swaps or repair workshops. These SBTs could act as badges on their digital identity, attracting environmentally conscious consumers and enhancing brand reputation.

The findings also entail that emotional bonding with brands would decrease, while self-expressive benefits linked to reputation would grow in importance. Furthermore, the brand's functional output (quality) and social identity would gain territory under that realm. Indeed, consumers would start buying and using a brand on the basis of personal enhancement needs and differentiation as they would turn into personal reputation enhancers (Mrad and Cui, 2020). Accordingly, a particular focus should also be made on the importance of catering to consumer needs for self-expression and uniqueness. Brands are hereby recommended to leverage SBTs to offer exclusive experiences and personalized rewards, fostering deeper customer connections. For example, brands could develop tiered loyalty programs based on SBTs whereby consumers can earn unique NFTs for reaching milestones, such as completing purchases or participating in social media campaigns. These SBTs could offer exclusive content, discounts, or early access to new products and would enhance the status of their bearers. Another example would be in the case of a sports outfit brand to issue SBTs that showcase consumers' outdoor activities and achievements, resonating with their aspirations for exploration and adventure.

The findings underscore the potential for SBTs to revolutionize advertising by enabling targeted marketing based on verifiable consumer data stored within SBTs. For instance, a cosmetics brand could create a campaign where consumers earn SBTs representing their unique beauty preferences and receive personalized skincare recommendations based on their digital

profiles. Furthermore, companies could promote their brands' reputational benefits that consumers would have if added on their SBTs. These could be similar to nutritional values for example that could be added on the product or service description. An industry or category score specific could also be developed (similar to energy scores for example) that brands could use to rank their products' SBT related impact. Moreover, and taking into consideration the impact that NFT minting has on the environment in relation to the energy intensive method used, companies could use clean energies in doing so and certifying through its SBT how the NFT was minted. Internally, companies could move their strategy from one that is based on a Unique Selling Proposition (USP) to a Unique Differentiating Proposition (UDP). Such an approach would focus on an altruistic brand direction that drives goodwill and helps a personal positive self-expression.

From a societal perspective, the rise of egocentrism and gamification of reputation might have adverse effects on people's social relationships. As consumers will be looking for drivers of uniqueness, they will be diverging on any similarity factors seen with peers on the metaverse. The virtual world would become characterized by a digital social detachment, failing to bring people closer in such an environment. Furthermore, fears of having governments using SBTs as a rating system for consumers similar to the Chinese social credit system would arise (Ramadan, 2018). Accordingly, the development of SBTs as well as metaverse platforms would have to build in a secure mechanism that would hinder governments in accessing freely and easily people's SBTs.

Conclusion and Future Research

Following the rise and fast penetration of NFTs, SBTs are expected to follow suit, changing how consumers behave and alongside it their needs and expectations from brands. To address the vast gap in the literature related to this domain, this study aimed at exploring further SBTs from a marketing context.

This research is amongst the first to study SBTs and their potential impact in the web 3.0 environment where digital identities and ownership are decentralized and authentic. The paper put forward an SBT cycle showcasing the changes and shifts in the landscape following each presented stage. While the study acts as a first step towards building further our understanding regarding SBTs and their managerial and societal impacts, it is exploratory in nature and focuses on general discussion about the business landscape. Furthermore, it does not focus on a particular industry,

market or culture, and mainly derives its data from experts in the field due to the nascent nature of the topic. Accordingly, future research could develop further this area of study using quantitative methods, alongside focusing on particular brand categories and industries. Future research could also conduct the study from a consumer perspective and blend it with experts once SBTs become widely used. Furthermore, potential research could conduct comparison studies on SBT usage across different cultures, markets, regions, ages and genders. Potential typologies could be then derived on the usage of SBT alongside the behavioral patterns of consumers in the web 3.0 environment.

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