# Zero Waste Cycle Mobile Branding Application

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**Abstract**

The purpose of this research is to study and identify the branding design element of the current Zero Waste mobile application platform that is currently active and together with the best medium that is effective in influencing the social cohesion of the new era digital community where it is shifting drastically from traditional method to a digital smart phone. A new realm of social cohesion community where all activity is depend on a single click of smart phone, like a cycle brand-in-hand of an everyday routine towards the Zero Waste lifestyle. A Design Thinking method was selected in developing the Givcycle mobile branded application (MBA) for the Zero Waste community in Petaling Jaya, Malaysia. The exploration of the this study concentrates on discovering the utilization of branding design element in mobile branding applications (MBA) as a brand power to accelerate the brand equity of Zero Waste Cycle as mobile application lifestyle. Providing an effective mobile application platform, improving Givcycle mobile branding applications (MBA) are being recommended. As it is a starting point for the Zero Waste community to galvanize the opportunity of being savvy tech, creating a smart community with a mobilize solution to our current situation. Making it convenient and useful for all users to practice.

*Keywords: Digital Community, Mobile Revolution, Mobile Branding Application, Zero Waste*

## 1. Introduction

We live at a time of vast changes, and Kuala Lumpur is the fastest growing metropolitan area of the country, commonly known as the Malaysian branding city and the population has increase rapidly as the years pass together with the amount of trash being produced. One of the biggest challenges in major cities of developing countries is waste management. An article published in the newspaper TheStar with a headline of "Green ways to manage waste", was being highlighted. It stated that, with a population of over 32 million, Malaysia generates about 38,000 metric tons of waste on a daily basis. Out of the huge amount, waste separation and recycle rate is only at 24% while the remaining 76% goes to the landfill," according to Housing and Local Government Minister (Lim, 2018). Following in September 2019, as seen in Figure 1.1 . The Star newspaper published an article on a campaign run by Ampang Jaya Municipal Council (MPAJ). Where the Ampang residents have become trendsetters in turning trash into cash to promote cleanliness and help supplement income. The residents are encouraged to collect discarded plastics, bottles, paper, cans and other items that can be recycled and sold. "By providing a platform for people to make money out of rubbish, we may succeed in cleaning up Malaysia", said Housing and Local Government Minister Zuraida Kamaruddin (Habibu, 2019).



*Figure 1.1: TheStar article in 2019, Residents turning in trash for cash (source: thestar.com.my)*

We need a more comprehensive waste and recycling platform (Figure 1.2) that can benefit everyone, from collectors to customers and even the waste processors (Othman, 2019). Providing a safe platform for everyone to practice "Zero Waste" efficiently is by harnessing on the digital technology, we can see more and more mobile application that advocates Zero Waste (Roslan, 2019). The time has come, to create a comprehensively helpful application that will enable smart phone or via any devices to empowering influences or platform for a greener solution focusing on waste management.



*Figure 1.2: News Straits Times article, Gargeon mobile application on "Waste management at your fingertips" (source: nst.com.my)*

Towards engaging the social cohesion by creating a shift into a routine like tidying or organizing our household in a daily cycle applying the Zero Waste movement through mobile app, setting our community into a better lifestyle encouraging a greener solution by adopting the recycling attitude to galvanize the users recycling performance and benefit via mobile on the go can be a new movement to our society. In 2019, a Metro News on The Star newspaper with a title of Green Project for a Sustainable Future was published. With positive responses from previous recycling campaign. The IPC Shopping Centre at Mutiara Damansara, Petaling Jaya, kick off with the "Green Hand" campaign, held at the shopping mall's IPC Recycling & Buy-Back Centre located at Level P1, calls for visitors to activate their "green hands" to earn rewards for recycling ("Green project for a sustainable future," 2019). Which resulted another good Green Campaign held on the next following year, 1st June 2020 till 2nd of August 2020, with standard operating procedure following the latest health guidelines. In light of today's current situation with the coronavirus outbreak, has resulted many changes. Where by all community adapting with the new normal, practicing social isolation by staying at home and keeping boredom at bay, a good number have resorted to doing productive activities such as decluttering and organizing home. On 8th April 2020, The Star published an article "Already KonMeri-ed you house? Try the FlyLady technique duing the MCO". Tidying and decluttering interior seem particularly important in the wake of the coronavirus outbreak, with Pinterest reporting a 802% increase in "deep cleaning tips" searches in recent weeks ("Already KonMari-ed your House? Try the FlyLady technique during the MCO," 2020). According to the book "The Life-Changing Magic of Tidying" by Marie Kondo. In essence, tidying ought to be the act of restoring balance among people, their possessions and the house they live in (Hirano, 2014). Following in November 2020, as seen in Figure 1.3. The Star newspaper, a Malaysian IT manager declutters and reorganizes his apartment during the CMCO. It shows that there is a potential for the community to shift and act, find balance, contentment in one space by putting the house in order with information and knowledge accessible through online platform.

*Figure 1.3: TheStar article in 2020, Malaysian IT manager declutters and reorganises his apartment during the  CMCO (source: thestar.com.my)*

Those societies that lack science must either remain deprived of technological innovations or simply  copy them form societies that have developed them (Gardner, 2007). With this, it is time for the Malaysian to  shift their minds to educate and apply the "Zero Waste Cycle" using the mobile application tools as a daily routine,  habitual activity as a cycle for a better lifestyle by reducing waste through recycling, reusing & donating to the  community. The ability to knit together information from disparate sources into coherent whole is vital today  (Gardner, 2007). Greater convenience with endless data information and communication technologies as a result  of the contribution of mobile technologies ranging from mobile phones to laptops, including personal digital  assistants (also known as handheld personal computers) with wireless connection. Limitations before this  technology became mainstream like real time communication, opportunity to access various information, be it

private or public, cater to an expandable amount of services is greatly reduced. In addition, cheap and ready-for use mobile devices have removed existing barriers and have empowered citizens to connect with the aim of  accessing a wide range of information and services.

Within the span of years, mobile technology has progressed to what is now a primary device most  commonly used, contrary to what it was before, which is only for those who need it or have had the privilege of  mobile (smart) technology. As the use increases, parallel to the advancement of the digital era, mobile phones or  smart phones have begun to be an alternative of have completely replaced default fixed lines as seen with many  developing countries. Nowadays, mobile communication technologies are diffusing around the world faster than  any other savvy technology to date. The new smart phones with a new built-in functions and plethora of mobile  applications, is the new trending and in high demand products, like a "brand in hand". The digital gap between developed and developing countries is being diminished due to this technology becoming more and more  economical for the public, resulted from the expansion of mobile Internet and costs reduction of mobile devices.  The urban society of Kuala Lumpur are indivisible from their advanced mobile phones and the satisfaction of  utilizing their portable advances to get to various types of data gives the power of knowledge at the tips of their  fingers. The power of science and technology and the inexorability of globalization. These changes call for new  educational forms and processes (Gardner, 2007).

In line with the global digital insights of the Malaysian data report on Digital 2020 from We Are Social  & Hootsuite (2020), there is an increasing amount usage of digital adoption where 40.69 millions of mobile  subscriptions and 26.69 millions of internet users (median age of 30 years old) showing a penetration of 83%  compared to the data report on Malaysia Digital 2019 (Hootsuite, 2020; We Are Social & Hootsuite, 2019).  Previously on digital growth year 2019, according to the data report on January 2019 the digital growth in  Malaysia with a result of mobile subscriptions of 40.24 million, and penetration of 80% of internet users where  median age are 29 years old (We Are Social & Hootsuite, 2019). The data conclude that between 2019 and 2020,  most of the internet users are between median age of 29 to 30 years old with the total of population in the Malaysia  are 76% urban community (Hootsuite, 2020; We Are Social & Hootsuite, 2019). Out of 32.25 millions of  Malaysian population, most of the digital users are among the Millennials generation. Millennials generation of  people born between the early 1980's and leading up to 2000, they are generation Y (Gen-Y) and generation Z  (Gen-Z). With this, it appears that the Malaysian millennials are generally making greater use of the digital  technology. The number of Internet users are growing causing the shift to mobile data, which is proportionately  reinforced by the increase in quantity of smart phones as well as tablets recorded. Mobile users, who will spend  countless hours throughout the day due to being given the freedom of new and various uses for mobile  applications resulting

in the need for significant upgrades of networks, higher Internet (mobile data) speeds and a wider range of development that is essential to this phenomenon. Certain categories of apps seems to be favoured by most people. Games, navigation apps, news, social networking and music are the most apps being downloaded which suggest that these types apps are the most popular and are growing exponentially each year. Approximately 1.021 billion number of mobile apps downloaded during full year of 2018 and recorded the total consumer spending on mobile apps during 2018 estimated $348.4 million Dollars (We Are Social & Hootsuite, 2019). That shows an average daily time spent consuming and interacting using the internet with the amount of full 8 hours purely focusing on to digital screening via any device. One thing that is certain about the future of mobile apps, that is the mobile apps business shows no sign of slowing down anytime soon.

Based on the conducted case research, the researcher has discovered that the existing Zero Waste mobile application in Malaysia are generally acceptable. In terms of the services of the applications are mostly similar to one another, and mainly focusing on recycling and lack of identity or mobile branding application design element. Malaysia need a mobile branding application that focusing on Zero Waste, with a simple design element approach for the users to enjoy and practice the Zero Waste lifestyle with an easier process (Kamal, 2020). As most Malaysian right now are trending into finding other alternative to improve their environment to a healthy, clean, safe and productive apps culture (Kamal, 2020). Previous research, Dewi Tojib and Yelena Tsarenko (2012) mentioned that through mobile application, execute as a central platform in supporting the users acceptance and utilization of versatile advances (Tojib & Tsarenko, 2012).

The transitioning from a normal portal website to a mobile application is about culture more so than technology. According to Sophie-Charlotte Moatti (2016), a mobile veteran from Silicon Valley and a recognized thought leader on mobile, innovation and leadership. Mentioned in one of the published book, there are few company that develop an increasingly amount of volume interaction with a mass of users, creating such impact within the culture that gives a new conversion to the process of communicating by bringing a number of talent acquisitions in order to bring people with experience launching mobile products. One of the few major strategic acquisitions, including Instagram and WhatsApp (Moatti, 2016b). This emerging mobile performance industry is

helping mobile users connecting and reaching the consumers in unprecedented ways, and comes the mobile modernization where it offers to a whole new realm of digital economy, where the sharing economy raise among the entrepreneurs of the millennials endowment. Between user and a mobile application, there are necessary component of a solid relationships that build trust, respect, and familiarities established after a period of time. In light of the above, understanding of the application as "brands in hand" which gives the mobile application a connection of limitless entryways for establishing communication with the users is achieved according to Lara Stocchi, Nina Michaelidou and Milena Micevski (2019) (Stocchi, Michaelidou, & Micevski, 2019). This strategic shift seems justified that mobile branding is the key strategy by utilizing brand power to accelerate success in the online sphere. Just like the local app, Malaysia's very own Grub Cycle (Figure 1.3), an app that allows consumer to browse for deals of unsold food from restaurants and cafes daily at half the price. Grub Cycle is a social enterprise that aims to place the lost value back onto food, by making surplus food accessible to buy at a bargain price, dedicated to reducing food waste in Malaysia.



*Figure 1.3: An overall of the Grub Cycle mobile application*

*(source: Google Play Store)*

As food waste is the highest composition of solid waste generated in Malaysia (Perbadanan Pengurusan Sisa Pepejal dan Pembersihan Awam (SWCorp), 2019). According to Innocent Jereme, Siwar Chamhuri & Md Mahmudul Alam (2014), for Malaysia to achieve the target of 20% recycling rate 2020, more proactive measure has to be taken by making waste separation compulsory at household level and with the imposition of fines for failing to separate their waste (Jereme, Chamhuri, & Alam, 2014).

The social changes identified with versatile transformation and the technology communication as the main contribution to this impact that have or may have significant ramifications for the sustainability perception and understanding. As mentioned in an article published in TIMES magazine October 2012 (Figure 1.4), former President Bill Clinton stated that "Smart phones help restart the lives of many individuals, but they also help millions of individuals help restart lives of others. We have seen how technological advances have democratized charitable giving as never before, allowing people to make a difference even if they don't have much time or money to give (Clinton, 2012).



*Figure 1.4: TIME magazine published an article, on The Case for Optimism by Bill Clinton (source: time.com)*

Through mobile application, the technology information can be expanded fully equip with special tools that can be developed for recycling and controlling waste management, creating platform for interconnectivity and information exchange can be access by the users. Simultaneously, it will give the advantage of educating our Malaysian citizens through informative applications. Technology and mobile phone can be great allies to increase the recycling rate here in Malaysia. A new pedagogy for the Zero Waste lifestyle to foster the new tech savvy urban generation towards a greener action, with this it can help to instil a humanity value within our society.

This call for identifying the mobile branding design element in "Zero Waste" mobile application concept for the Malaysian community, through reusing & donating method. Roslan (2019) further added that, this is achievable if more apps are designed with new ideas and new concepts to keep sustainable living possible to everyone despite their circumstances. These act as an important tools to allow the transition to Zero Waste living to be easier of course if everyone make full use of the multitude of apps that are available. By determining the effectiveness deliverability of the "Zero Waste" mobile application lifestyle as a consumer's brand in hand will help to develop a prototype that suit with millennials community to engage with a perceptible layout. This research aim to establish the utilization of branding design element in mobile app as a brand power to accelerate the brand equity of "Zero Waste" mobile application lifestyle. With this it will demonstrate the important of consumers perception on projecting the "Zero Waste" mobile branding application as a brand cycle.

## 2. Mobile Revolution

The development of the ever more sophisticated frameworks and technologies for social communication, including the advertising industry, media, and the internet with its various medium, forms and formats that is available now days is unstoppable. Mobile applications, or commonly known among the smart phone users as "Mobile Apps". According to Jérémie Avérous (2011) the engine of the Fourth Revolution is the long distance communication and collaboration that lead the new technologies that empower our communities to moving forward. Observation of the previous Revolutions show the increase in the frequency and the decrease on the duration of the act of implementation on creating an impact on the world today that will always be needed for transitions, because of the accompanying changes of mindset required (Avérous, 2011). Through this Revolution and the collaborative age will shape the new generation that will lead the world, where most population are constantly active in exchanging information and transmitting data with the entire globe through a single device within just a minute, the technology of a mobile phone or a computer is readily accessible for such information. Thus, resulting an estimated 70,000 mobile application are available (Sheehan, 2010) and the mobile communities that operate by sharing information via mobile application the density of specific input or information maintained over such period is exceptional, relatively uncharted territory (Moatti, 2016a).

Previous researchers, (Sheehan, 2010) and (van Noort & van Reijmersdal, 2019) define the mobile applications help deliver new online functionality that are creating a revolution in interactive marketing and mobile transmission. Multiple authors agreed with the emerging on mobile performance, user behavior and technology changes at an incredible rapid pace with access to greater volume of information positioning the new era of the internet realm growing, leaning to a much complex and sophisticated lifestyle (Brown, 2009; *Harvard Business Review on Greening Your Business Profitably*, 2011; Moatti, 2016a). The mobile revolution is giving birth to an entirely new economy, called the sharing economy (Moatti, 2016a).

## 3. Mobile Branding Application

Recently, Lara Stocchi, Nina Michaelidou and Milena Micevski (2019) describe the "brandification" of apps as the process of substituting the more simplistic functions available on mobile devices, such as messaging, camera and music players with customs-build apps (Stocchi et al., 2019). Specifically, branded apps have fundamentally changed the way a firm connects with its customers (R. J. H. Wang, 2020). A functional building block to a whole new archetype of communication is through mobile phone application, where the omnichannels approach with an actively engaged devices in implementing new strategies and unfolds the implementation of mobile design branding element in this leading dimension. According to Zhenzhen Zhao and Christine Balagué (2015) the branded app is a new paradigm to the mobile application platform, predicts that the development of mobile strategies will continue to be a major challenge and that branded mobile application (brand apps) will be wide adopted in the coming years (Zhao & Balagué, 2015). Since 2014, there have been more mobile devices in the world than desktop computers, and people spend more time browsing the Internet on their smartphones than on their desktop (Moatti, 2016a). The growth of mobile application adoption among the "Apps Culture" or the consumers, suggests that research in this area will be increasingly important.

Becky Wang, Su Jung Kim and Edward C Malthouse (2016) define that mobile platforms and branded apps offer new ways and opportunities for brands to influence awareness, recall, attitudes, preferences, and ultimately, decisions during their learning and buying process (B. Wang, Kim, & Malthouse, 2016). Various of studies have examined the implementation of mobile application onto a wireless devices called the smart phone, whereas all business engagement, connection and transaction come into existence (Confos & Davis, 2016; Elikan & Pigneur, 2019; Stocchi et al., 2019; Taylor & Levin, 2014; R. J. H. Wang, 2020; Zhao & Balagué, 2015). Therefore, an increasing amount of users in Malaysia reported as of January 2019 data report (Figure 2.1) on numbers of mobile apps downloaded and installed during full year of 2018 in Malaysia are a total of 1.021 Billion and a total of 348.4 Million of consumer spending on mobile apps during the same year (We Are Social & Hootsuite, 2019).
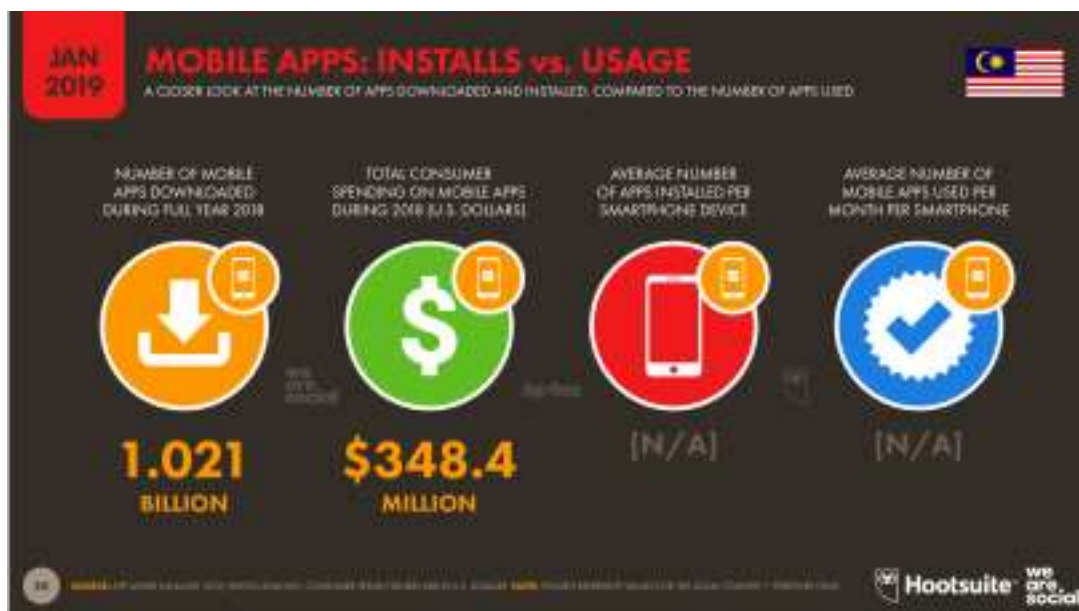


*Figure 2.1: Data report on Malaysian users mobile apps, in January 2019*

Source: *We Are Social & Hootsuite*

Which indicates a reflection of the Malaysian consumer, contribute their valuable time with a frequency of internet access via any device throughout daily basis of 83% (We Are Social & Hootsuite, 2019). In extend, the potential of mobile branding application as a contemporary channel in Malaysia's urban community is precisely being established.

### 3.1 Basic Component of Mobile Branding Application Design

Mobile branding application is a channel that enhance and promote brands (Seitz & Aldebasi, 2016), as well as Dina Elikan and Yves Pigneur (2019) believes that organisation's brand identity is central to a brand's strategic vision and that is supports the purpose and meaning of an organisation's brand (Elikan & Pigneur, 2019). Similarly, another studies on mobile branding application suggest that interacting with a branded app enhances affective and cognitive response (van Noort & van Reijmersdal, 2019), which proves that "Branding" is the process of recognizing, building, and executing a particular brand with a coherent element of brand equity (Barry, 2008). Therefore, as Rabecca Jen-Hui Wang (2020) highlight, suggesting that releasing a well-

designed branded app and encouraging its utilisation is an essential strategy, as it can complement other digital platforms and marketing efforts (R. J. H. Wang, 2020). Accordingly, more insights concerning mobile branding application are needed, as up to this year there is no studies have identified the features that companies can use to develop a branding application strategies (Zhao & Balagué, 2015).

Evidence suggest that, the attached brand name may prompt loyalty customers to repeatedly use the app because of the close relationship with the brand (Li & Fang, 2019). Much of the initial research on brand equity was highlighted based on the perspective of the marketing theory book, which consistency with the origins of branding in American Marketing Association (AMA) (2004) definition of the brands characteristic encompasses all element consist of *"name, term, design, symbol, or any other feature that can help to visually recognize and identifies one sellers good or service as distinct from those of other sellers"* (J. Baker & Saren, 2016) (as cited in J. Baker & Saren, 2016 p347). Design therefore appears to be an essential component of a brand (Hemonnet-Goujot & Manceau, 2016). It can be determined, that design plays an important role in branding identity as fundamental. It is proposed, with several majority support from an extensive literatures stating that utilisation of these four (4) element such as brand name, brand logo, brand design & brand content is relevant and will help to establish a positive brand experience in building a brand image (Belén Del Río, Vázquez, & Iglesias, 2001; Bellman, Potter, Treleaven-Hassard, Robinson, & Varan, 2011; Kaur & Kaur, 2019; Keller, 2013; Rondeau, 2005; Seitz & Aldebasi, 2016). A brands exclusivity is corelated with its design. Design enhances brand identity and uniqueness by focusing on brand values facilitated by visual translation and visual manifestation of brand meaning and position (Hemonnet Goujot & Manceau, 2016; Lockwood, 2010a). Forming an overall mobile MBA design (Figure 2.2), it incorporates four main key component that act as a groundwork of the brand cycle.
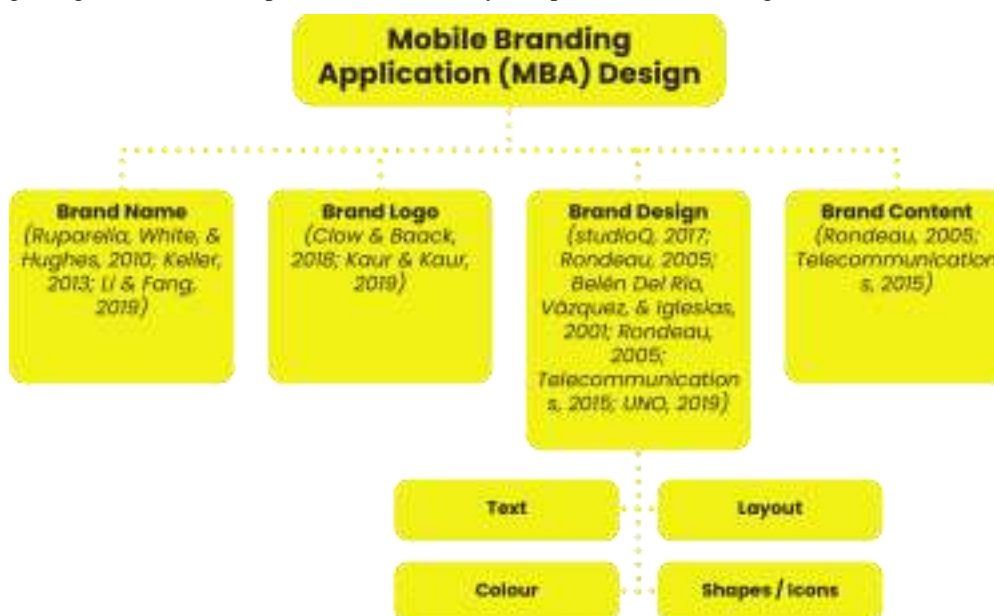


*Figure 2.2: Mobile Branding Application (MBA) Design Framework*

### 3.2 Categories Of Mobile Branding Application (MBA) Design

To establish the categorisation within the mentioned topic above, furthermore each element will be discussed individually and describe on the practicality usage. Following will explain the element of Mobile Branding Application (MBA) design:

**Brand Name**

Much of the research that has been conducted in this field of brand name, has led to a crucial part of constructing a brand identity. According to Nimisha Ruparelia, Lesly White and Kate Hughes (2010) research, stated that brand name is known to be positively related to perceived levels of brand trust (Ruparelia, White, & Hughes, 2010). The choice of a brand name may also affect the favourability, strength, and uniqueness of brand associations (Keller, 2013). Moreover Kevin Lane Keller (2013) stated that, the suggestiveness or meaningfulness of the brand name should affect how easily brand associations are created. Evidently, it is align with Chia-Ying Li and Yu-Hui Fang (2019) research on the attached brand name may prompt loyal customers to repeatedly use the app because of the close relationship with the brand (Li & Fang, 2019).

**Brand Logo**

A brand logo is the symbol used to identify a brand (Clow & Baack, 2018). A brand logo designed to distinguish a brand name, which consistent with the research conducted by Harsandaldeep Kaur and Kanwalroop Kaur (2018) where the study provide a novel outlook on brand logo relationship with brand image and, an argument has been made that the brand logo has a significant impact on brand image (Kaur & Kaur, 2019). Furthermore, the effect of brand logo on brand image may be higher when consumers have positive brand personality judgements, as suggested that brand logos are instrumental in building brand image (Kaur & Kaur, 2019).

**Brand Design**

The brand design is more than a logo. It consists of characteristic elements such as colours, typefaces and structure to help layout pages, such as the grid. Only the combination of all these elements will result in an optimum brand recognition (studioQ, 2017). As mentioned in one of the journal article exploring the intricacies of the relationship between branding and the design of mobile application, it is agreed that the best way to establish a brand is to create a positive direct experience that can only be achieve through the design of the application (Rondeau, 2005). Visual design element such as colour, line, shape, and font can be used not only to increase aesthetic attractiveness, but also to enhance usability (Rondeau, 2005). Furthermore, few other research journals stated the consideration of using of *typefaces*, *colours*, *shapes* and *layout* to represent a certain brand is highly recommended, as it enables the online recognition for the overall layout (Belén Del Río et al., 2001; Rondeau, 2005; Telecommunications, 2015). Recently in an article of a magazine called "Consumer and brands: A new era" (2019), a journalist and former Director of ABC and El Correo from Spain, José Antonio Zarzalejos mentioned of brand design :

*"Brand design, colour and image are all part of the visual culture and sound trademark (which are on the rise) – an adaptation to progressive digitization – contribute decisively to modern societies' creative heritages and are an inseparable part of their artistic manifestation."* (UNO, 2019)

Therefore, throughout extensive literature on this specific field it proves that the brand design is relevant and an impactful to the users.

**Brand Content**

Furthermore, the journal research stated that, brand content differs from brand design in a significant way: design is consistent and constant, while content changes regularly to reflect the brand image (Telecommunications, 2015). According to a journal article called Mobile Applications, Branding is Experience" by David B. Rondeau (2005), mentioned that branded content, like merchandising and advertising, would also be integrated into the application (Rondeau, 2005).

With the categories of brand name, brand logo, brand design and brand content consisting of further design elements that will help to establish a MBA design, allowing a positive brand experience and positive outcomes for the brand identity Below (Table 2.1), brand explanation on the link between each branding category including brand continuity/coherence, the functionality and previous research from literature.

| Brand category | Brand Continuity/ Coherence | Functionality | Previous research from literature: User impacts |
|---|---|---|---|
| Brand name | Consistent | The brand is strengthened when a consumers self-image is consistent with a brand image (Li & Fong, 2019).<br><br>Different marketing tactics with same strategic goals, is effectively integrated, can create multiple links to core benefits or other key associations, helping to produce a consistent and cohesive brand image (Keller, 2013). | The attached brand name may prompt loyal customers to repeatedly use the app because of the close relationship with the brand (Li & Fong, 2019).<br><br>A familiar brand with a positive brand image can also yield licensing opportunities (i.e. the brand name is used by another firm on one of its products) and support brand extensions (i.e., a firm uses an existing brand name to introduce a new product or services) (Keller, 2013). |
| Brand logo | Consistent | Logo design characteristics have a positive effect on brand personality dimensions (sincerity, excitement, competence, sophistication and ruggedness) (Kaur & Kaur, 2019).<br><br>A brand logo has a significant impact on brand image (Kaur & Kaur, 2019). | The study revealed that the corporate logo of a company significantly impacts company's image (Kaur & Kaur, 2019).<br><br>The effect of brand logo on brand image may be higher when consumers have positive brand personality judgements, as suggested that brand logos are instrumental in building brand image (Kaur & Kaur, 2019). |
| Brand design | Consistent | Visual design element such as colour, line, shape, and font can be used not only to increase aesthetic attractiveness, but also to enhance usability (Rondeau, 2005).<br><br>Furthermore, few other research journals stated the consideration of using of typefaces, colours, shapes and layout to represent a certain brand is highly recommended, as it enables the online recognition for the overall layout (Belén Del Rio, Vázquez, & Iglesias, 2001; Rondeau, 2005; Telecommunications, 2015).<br><br>the brand design is more than a logo. It consists of characteristic elements such as colours, typefaces and structure to help layout pages, such as the grid. Only the combination of all these elements will result in an optimum brand recognition (studioQ, 2017).<br><br>Recently in an article of a magazine called "Consumer and brands: A new era" (2019), a journalist and former Director of ABC and El Correo from Spain, José Antonio Zarzalejos mentioned of brand design:<br><br>"Brand design, colour and image are all part of the visual culture and sound trademark (which are on the rise) – an adaptation to progressive digitization – contribute decisively to modern societies' creative heritages and are an inseparable part of their artistic manifestation." (UNO: 2019) | The best way to establish a brand is to create a positive direct experience that he best way to establish a brand is to create a positive direct experience that can only be achieved through the design of the application (Rondeau, 2005).<br><br>The design: the morphology of all the sales points is a translation of brand strategy to brand experience, which the brand delivers at all its points of contact (UNO, 2019). |

*Table 2.1: Explanation on Brand Category, Brand Continuity/Coherence, Functionality and Previous Research From Literature.*

Application with an informational creative style, which focuses attention on the user, and therefore encouraged personal connections with the brand, were more effective at shifting purchase intention, according to the journal called "The Effectiveness of Branded Mobile Phone Apps" by Steven Bellman, Robert F. Potter, Shiree Treleven-Hassard, jenifer A. Robinson and Duane Varan (2011) (Bellman et al., 2011). With an essence of creative execution style, will increase the concentration or focus attention span on the user which will lead to a better bridge of communication with the brand effectively.

## 4. Zero Waste Cycle Mobile Application

Most generation these day are aware of the nature utilising the benefit of mobile application which allow the exposure to the brand experience directly and immediately, with a single click to the interface of the mobile screen will provide the users to accomplished such daily task. A combination of overpopulation and overconsumption with the technology and all surrounding nature, is using up the planet's resources at an ever increasing rate. With the existence of mobile technology an initiative to help the modern community or society, enforce creating ways that functions in reducing waste to improve the Zero Waste 2020 such as mobile

application are now a useful instruments that persuade and facilitate a learning process to form a new consumption habits that reinforce an existing engagement cycle of the users.

As the usage of the mobile application increase rapidly, it is noticeable that mobile application can be seen in various type that are now slowly emerging building a more sustainable community through recycling concept with various purposes. Types of mobile application can be seen as Tool-Centric App, Game-Centric App, Social-Centric App, M-Commerce-Centric App and Design-Centric App (Zhao & Balagué, 2015). Below are few sample of mobile application that adopt the Zero Waste concept which forms into a community that help and change the lifestyle and practices to emulate a sustainable cycle. Few examples representing from the internationals and locals mobile applications, where both pursuing towards the same goal Zero Waste concept.

## 4.1 International Zero Waste concept Mobile Application:
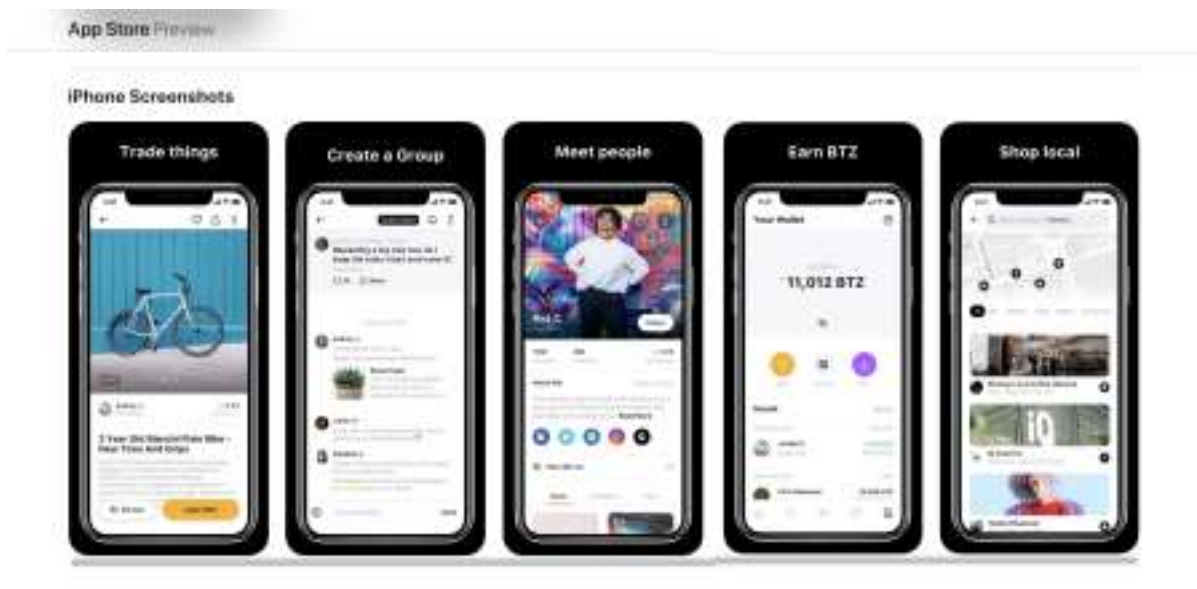
### 4.1.1) Bunz Mobile Application



*Figure 3.1: Bunz mobile applications on App Store Preview*

Source: https://apps.apple.com/us/app/bunz-build-your-community/id1068061556

Bunz mobile application (Figure 3.1) has the feature of a social-centric app, that includes camera and location awareness. Where the social features of the apps are user-generated content, social annotation, online chat, follow or unfollow people and share with external social networks. The Bunz mobile app started off with Facebook group, that trades good items and soon began the idea of a cashless

culture emerged and form into a community. One of the example that Bunz mobile application create an impact within the society by building a sustainable future through the power of system barter and human connection. Bunz mobile application encourage the users by providing services, earn and spend token BTZ (Bunz Trading Zone, pronounced "bits") through trades with fellow users, or retail partners for coffee, food, clothes and much more. Providing an opportunity for the local entrepreneur and community to stay connected and create a social cohesion through trading and recycling habits. Also the review of the mobile application on the Apple.com shows a good feedback from the users. Below, an overview on Bunz Application from SimilarWeb (Figure 3.2).
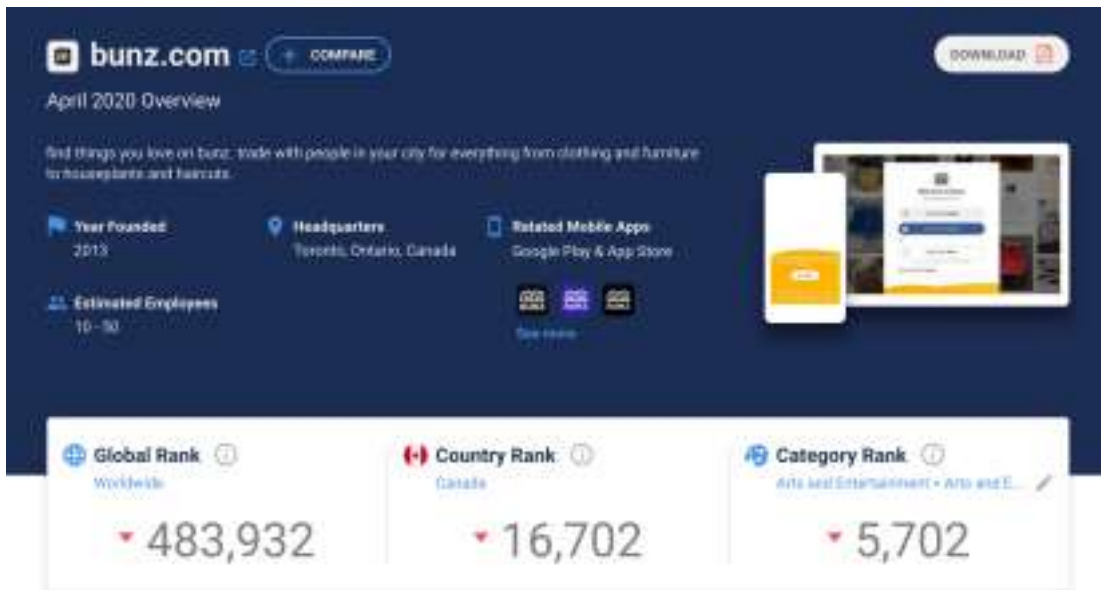
*Figure 3.2: An overview of Bunz mobile applications on SimilarWeb* Source: https://www.similarweb.com/website/bunz.com

The quality of the user interface are some of the key attributes that add to the focus on individualizing quality of the look and feel of the app. Maintaining a minimal colour scheme to black and white consistent with the logo (Figure 3.3) itself, keeping the content to a minimum information and together with a minimum amount of interface elements, makes it easier for the user to manoeuvre and navigate the app for its services and reflecting the branding identity. The interface reveals more options



*Figure 3.3: Bunz logo mobile applications*

Source: https://apps.apple.com/us/app/bunz-build-your community/id1068061556

after interaction. Such as familiar screens are screens that users see in many apps, which allows users to use prior experience to interact with the app with no learning curve (Nick Babich, 2018).
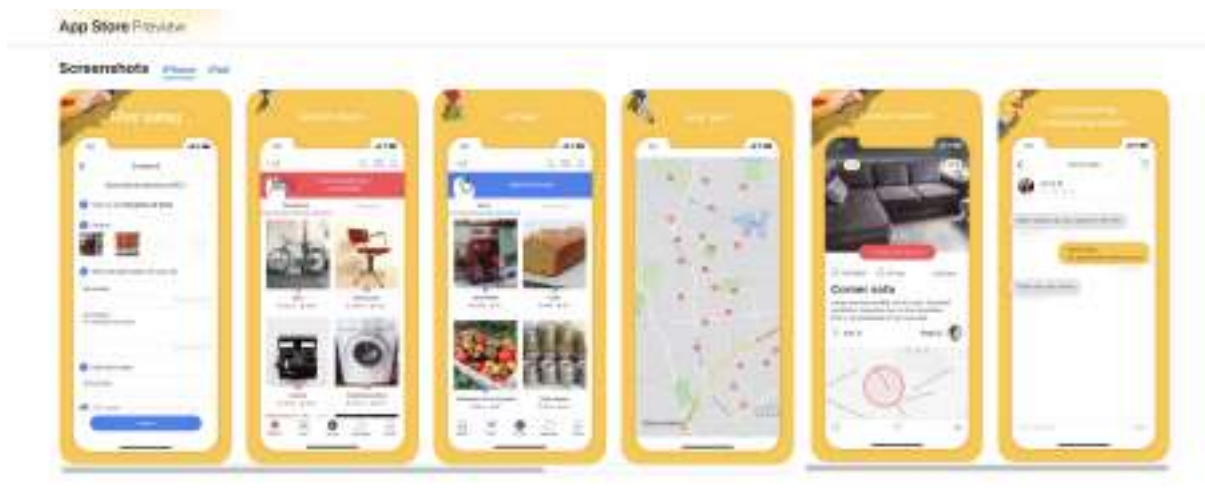
**4.1.2) Geev Mobile Application**



*Figure 3.4: Geev mobile applications on App Store Preview*

Geev mobile application (Figure 3.4) has the feature of a tool-centric app, that includes camera, location awareness and mobile video recording. Where the tool features of the apps are available for sharing with external social networks, in-app chat, intuitive search and map, plus create alerts, and enriched user profile with gamification board such as levels, badges, points and ranking. For any transaction or activity, the user will gain points to enhanced the user experience. The Geev mobile app is one of the platform that allow the users to donate objects and food, as an alternative for a sustainable solution towards Zero Waste movement. It is an eco-friendly mobile app that form a new cycle of habit by giving other people an opportunity to exchange items. Allowing its user to donate objects, foods, or to collect various item for free, where it embeds all features to easily discuss, meet and give a second life to its objects or items.

The interface incorporates game-like elements, where any interaction from the users will earn a banana as a credit that users can access an additional credits either buying them or giving away items. Any activity within the app the users will either gain or lose banana, and the total credits will accumulate at the end of the activity by accomplishing a certain level and badges. As for the layout of the Geev mobile application, is ease of use. Where the simplicity of the placement for each info and visual, are balance and giving the eye level of the user at ease. An easier way to manoeuvre the app, makes it effortless for the user to navigate the app for its services. With a minimum of colour usage, such as the Geev logo (Figure 3.5) and with a background colour of each screen is represented in Geev's app,



*Figure 3.5: Geev logo mobile applications*

allowing a stronger identification of its branding. Above are overview on Geev Application from Google Play (Figure 3.6).

Below (Figure 3.7) are the traffic overview for both mobile applications, comparisons of Bunz and Geev on desktop and mobile web for the last six (6) months. Demonstrating such contrast of the platform based from the users interaction within such period of time, between November 2019 and April 2020. The engagement of an outcome of a 97.15K amount of total volume visitors viewing Geev mobile application compare to Bunz mobile application, 38.49K viewers. Establishing a majority of mobile application users are more stimulated with Geev interface, with an average visit duration of six (6) minutes for both mobile applications. Resulting an impressive high volume of interaction favouring the services that Geev is offering. It is certain that Geev mobile application deliver a better experience for the users and along with the services, contributing towards building a better mobile branding applications.
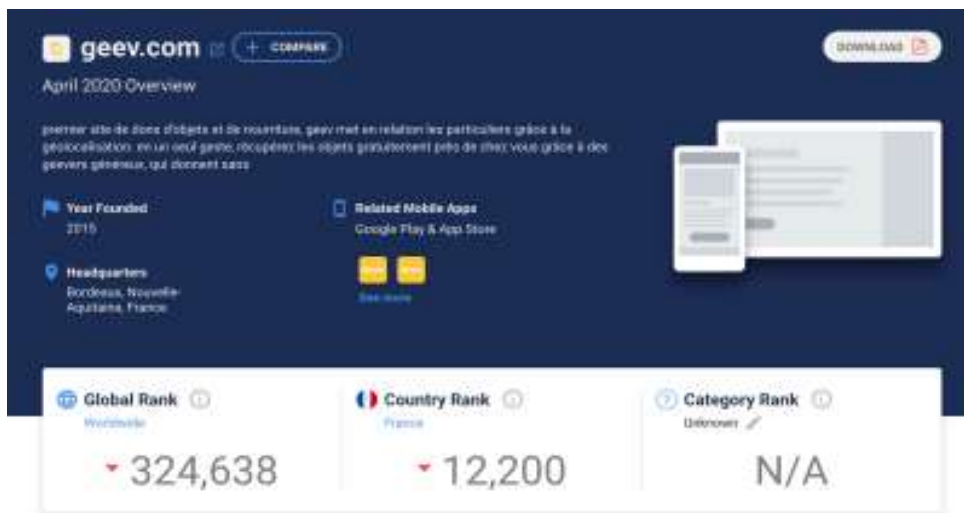


*Figure 3.6: An overview of Geev mobile applications on SimilarWeb*

*Figure 3.7: An overview for both mobile application, Bunz and Geev on desktop and mobile web for the last six (6) months on SimilarWeb*

Source: https://www.similarweb.com/website/bunz.com?competitors=geev.com

**4.2 Local Zero Waste concept Mobile Application:**

As for the locals Zero Waste mobile application (Figure 3.8) there is three (3) mobile applications that is available here in Malaysia, one (1) Grub Cycle mobile application, two (2) Trash2Treasure mobile application and lastly three (3) GarGeon mobile application. All three are local anti-waste platform that focuses on Zero Waste 2020 movement, to support the Malaysian governments mission on encountering the massive wastage issue here in Malaysia. These platforms carter different services, where by the Grub Cycle mobile application allows the community to purchase an array of tasty dishes from a variety of restaurant, all for a bargain price. Mainly focusing on food wastage. Second, Trash2Treasure mobile application focus on encouraging the community to recycle by

*Figure 3.8: Local Malaysian Zero Waste platform, such as Grub Cycle, Trash2Treasure and Gargeon mobile applications*

Source: From Google Play Store

providing a platform to earn money from the recycling collection. Lastly, third mobile application called Gargeon. Gargeon mobile application is the only cloud based waste and recycling management platform, an application that offers recyclable collection services carter for companies or larger scale wastage management. Unlike Grub Cycle

and Trash2Treasure mobile applications, both platforms are targeting on a household level where most contribution of the wastage is produce.

Grub Cycle mobile application is a social enterprise that aims to place the lost value back onto food, by making surplus food accessible to buy at a bargain price, dedicated to reducing food waste in Malaysia. By far, it is the only active platform in Klang Valley. Another initiative in 2019 from Grub Cycle selling to the community by opening a booth in the neighbourhood called, the Grub Mobile that sells surplus vegetables and fruits directly form the supermarkets to the PPR (low cost) flats' communities every

Saturday morning in Lembah Subang, Selangor. These are one of the concept that is trending in Europe, where restaurant and cafes believe in the concept of saving food. Below are the explanation and review on the active platform for the local Zero Waste mobile application.

### 4.2.1) Grub Cycle Mobile Application

*Figure 3.9: Grub Cycle mobile applications on App Store Preview*

Source: https://apps.apple.com/my/app/grub-cycle/id1403717766

Grub Cycle mobile application (Figure 3.9) has the feature of a M-commerce-centric app, equip with camera scan barcode/QR code, location awareness and mobile payment gateway. Where the core of the social features are product personalization, share with external social networks. Subsequently every purchase or any transaction, the user will be able to check the performance of the statistics on food and money they have saved using the Grub Cycle mobile application. With this, it helps creating the user conscious awareness on saving food will stimulate the user experience on a daily cycle habits towards

*Figure 4.0: Grub Cycle logo mobile applications*

Source: https://apps.apple.com/my/app/grub cycle/id1403717766

anti-food wastage.

The interface assimilate ecommerce-like elements, where any interaction from the users will calculated into the mobile app, and accumulate all the transaction that has been done and users can redeem an additional vouchers either from the app to the Grub Cycle Partners. Any activity within the app the users will gain more savings, and the total foods save will stimulate the users to achieve more interactions. As for the layout of the Grub Cycle mobile application, is user friendly and the goal is to

sell products. With its layout similar with other mobile application such as an e-hailing Grab mobile application, makes it easier for the user to recognise with the familiarity of using the app.

### 5. Issues on Zero Waste awareness in Malaysia

In prior literature on issues related to Zero Waste, varying challenges has been issued and discussed by scholars, responding to the impact to waste generated. Christine Cole (2014), explained the concerns of volume wastage generated, long term resource depletion and the environmental impact of waste has seen many drivers for change encouraging a movement towards more sustainable household waste management practices including waste prevention and increase recycling (Cole, 2014). These include an article in Malaysia from the News Straits Time in February 2020, stated that the efforts by the Solid Waste Management and Public Cleansing Corporation (SWCorp) to encourage households to separate their waste has begun to bear fruit (Mohamed Radhi, 2020). This shows, there is a progress from the community on moving towards achieving the national recycling rate by 2030.

Previous research in the field also discussed on the effectiveness of designing branded mobile application that have great potential in this new digital platform that is currently trending. While Zhenzhen Zhao & Christine Balagué (2015) stated that "Branded apps can support open innovation by allowing users to generate new ideas for products; for examples, it can build a community for the sharing and rating of ideas, with the most highly rated idea often being rewarded and adopted by the brands". Involving this new experience and interaction models for users with a whole set of capabilities including all the social features of the app will give a better engagement toward the mobile branding application (MBA). Where it can benefit the community and users to have a trusted platform for daily needs in this collaborative age, by enhancing knowledge and exchanging network on new digital services platform simultaneously makes it easier for the users to activate and communicate creating a consistent social cohesion

in the online sphere.

## 5.1 The Current Practice and medium in Zero Waste

Defining the current practice and medium in Zero Waste applied for the community awareness provides the opportunity for considerable debate. Even though it seems clear that in the field of Zero Waste and digital mobile application platform context growing recognition of this topic. With support from Chuen-Khee Pek and Othman Jamal (2011) stated that, "The Malaysian government has continuously increased its campaign to promote public awareness on the importance of waste minimization and waste recycling". Currently in Malaysia, most waste are disposed into poorly managed "controlled tipping" systems with little or no pollution protection measures (Pek & Jamal, 2011).

However, new contemporary method is being adopted in the recent years where the initiative of running towards Zero Waste movement is being embrace by most Malaysian. As stated in the newspaper TheStar, "An increasing number of individuals and pockets of society doing for the mother Earth" (Li Za, 2019). Influencing the communities with waste-free by setting up a bulk store, selling pet food, household detergents, natural insect repellents and other lifestyle items. Another metro news, raising awareness and educating with proper guidance on recycling by rewarding for any clean recyclable items through e-wallet (Aqilah, 2020). The following month in March 2020, a recycling corner in Ipoh has encouraged its residents to segregate their waste and improve waste management within the neighbourhood and stated that, "Improving waste management via recycling is one of the best management practices that the residents can adopt to increase the effectiveness" (Loh, 2020). Changing mind-sets is far more difficult than changing habits, and that is why we need our best communicators to help us achieve Zero Waste (Connett, 2013).

Recently in April 2020 during the movement control order (MCO) due to the pandemic Covid 19. It was reported that one of the recycling centres turned dumpsite by dumping all unwanted items at recycling centres as the restriction movement is applied to all Malaysian citizen, and with the MCO in place and throughout its extension, all activities at the centres have been suspended for the duration and will resume the operation when the MCO is lifted (Yeen, 2020). This shows there is still a gap in improving and providing a better services, cater to Zero Waste platform other than practicing the traditional way of recycling by going to the recycling centre. The importance of Zero Waste in literature, according to Paul Connett (2013) is that we need to draw on all our creativity and communication skills to transform our society.

## 6. Method

Design Thinking method has been selected in developing the Givcycle mobile branded application (MBA) for this study research method framework, as reference, below are the visual frameworks used in this paper:

*Figure 3.1: Design Thinking Framework*

This mobile branded application (MBA) was develop with new features that will help the recycling community to have an accessible information at hand. A prototype was developed using Adobe Illustrator and Adobe XD for an iPhone operating system (iOS) mobile device. In order to test the design and functionalities of the prototype against the identified requirements, this research project had conducted. All collected empirical evidences for the research project to evaluate learners experiences of using the Zero Waste Cycle prototype to support the learning activities informal and non-formal contexts.

Technique used in this study are qualitative research. Design thinking is essentially a human-centered innovation process that emphasizes observation, collaboration, fast learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis, which ultimately influences innovation and business strategy (Lockwood, 2010b). Design thinking consist of five (5) phase; Empathise, Define, Ideate, Prototype and Test. The goal is to gain the deepest understanding of the users and what their ideal solution/product would be ("Design Thinking," 2019). Through this qualitative analysist, it involves redesigning and organizing work tools. Below (Table 3.0) are the five (5) phase to designing using the Design Thinking Framework (Figure 3.1):

Prototype and mock-ups were prepared, in order for the Researcher to get feedbacks from users. Cards used to assist users who are not familiar with design practice as a medium of compiling and arranging data. Which for the study interview was selected as the research instrument for constructing the narrative version of the social world through an exclusive interaction between the interviewer and using the Design Thinking. This is similar

*Table 3.0: Description of Design Thinking*

with design thinking approach, conducted by Teja Srinivas (2019) on India's waste management app (Srinivas, 2019). Below (Figure 3.2) are the visual on the process design that has been taken into action:

Since this research selected a qualitative approach, an interview was chosen as the research instrument. The interview questions were constructed in reference to the research questions which emphasized the importance of consumers perception on projecting the Zero Waste mobile application as a brand cycle as well the use of digital mobile platform.

*Figure 3.2: Visual Process Design*

The researcher expose to new knowledge from applying an interview as the research interview which offered an in-depth insight on the respondents perspectives regarding the significance of Zero Waste awareness through mobile application platform. Each phase include a need analysist and evaluation respectively that will be discussed in Chapter 4. The content was developed through 4 phases in the model which are; (1) connect, (2) understand, (3) create and (4) deliver (Participate.org, 2020).

## 7. Design and Development Phase

At this phase, visualizing and digitalizing operation take place to produce prototype of the Zero Waste Cycle mobile application. Most of the process in this stage were done in computer software, such as Adobe Illustrator, Adobe Photoshop and Adobe XD. Nevertheless the most important part of this stage, where manual sketches of wireframe are done in the early point of the development.

## 7.1 Wireframe and Sketches

There are two stage in making the wireframes which are Low Fidelity and High Fidelity. After high Fidelity wireframes was created which act as a blue print that represents on how to maneuver the mobile application itself that will lead the designers to achieve the learning objectives.

*Figure 4.1: Wireframes Sketches*

Source: The Researcher

*Figure 4.2: High Fidelity Wireframe*

Source: The Researcher

**7.2 Design Development**

The design phase deals with scope of the content, media selection such as tools and software used in editing and sketching the wireframe interactions that will occur within the content. The development phase is where all assets, content and input was assembled and processed to be integrated later in implementation phase. Givcycle is a mobile applications was develop using all three (3) Adobe Software: 1) Adobe Illustrator, 2) Adobe Photoshop and 3) Adobe XD. All basic design for the mobile branding element (MBA), brand name, brand logo, brand design, brand content, and wireframes created using the Adobe Illustrator and Adobe Photoshop. As for the prototype and wireframes of the mobile application, Researcher developed using the Adobe XD. The project is reviewed and revised concurring to any input given.

*Figure 4.3: Givcycle*

*User Interface*

Source: The Researcher

*Figure 4.4: Givcycle*

*User Interface*

Source: The Researcher

*Figure 4.5: Selection of colours*

Source: The Researcher

The colour (Figure 4.3 and Figure 4.5) selection for the mobile application to set the mood impression  of growth, environment,

productivity, self-control, harmony, clean and balance to establish the branding for the Zero Waste Cycle mobile application, secondary colour Green has been chosen for Givcycle Apps. Creating a low contrast, the green colour as the main colour selected is a shades of blue. Adding white colour to most of the screen layout considered as "cool" colour, giving it as a clean and simple approach. Designing Interface (2020) book stated that, strong contrast evokes tension, strength, and boldness, but the interface that are more on low contrast it is more soothing and relaxing (Tidwell, Brewer, & Valencia, 2020).

Tone and voice of the icon design (Figure 4.4) selected in the Givcycle Apps is Lineal Style (sets of lines icon), clean and simple layout. Font (Figure 4.4) for the selected mobile apps is Poppins, san serif typefaces, leading to an urban and modern standard. Meeting the requirements of the current users where median age are between 29 to 30 years old, are the main target audience to get the apps engagement on track.

*Figure 4.6: The idea behind the logo of Givcycle*

Source: The Researcher

Explanation for the Givcycle logo, it is a combination of three main important key point of the mobile apps itself, which is 1) Location , 2) Cycle and lastly 3) Giving help. With that intention, the development of the logo and icon using the Adobe Illustrator software and few sketches along the way, the outcome of it as shown below in Figure 4.7 and Figure 4.8. The font that has been utilise for the logo and icon Givcycle, Researcher used the same typefaces as the rest of the layout, that is Poppins Extra Bold.

*Figure 4.7: Icon Givcycle* Source: The Researcher

## 7.3 Implementation Onboarding UI

The development phase is where all assets in design was assembled and processed for the implementation phase. This proposed prototype required a collection of media such as visual compilation of selected recycling centre and charity centre. And the location of the venue created based on that, then later the simulated prototype with the selected screen was done using a software named Adobe XD. Moreover, it allows Researcher to create a flow of movement for the users linked with the design elements to match the approved technical and functional specifications.

*Figure 4.8: Splash screen and Coaching screens*

Source: The Researcher

*Figure 5.0: Coaching screens*

Source: The Researcher

Sign up screen (Figure 5.1) before exploring the features of Givcycle Apps, where user have the option of signing up automatically either using social media Facebook platform or Google platform. Both platform has its own advantages for the users to get more engagement with the mobile apps.

*Figure 5.1: Signup screens*

Source: The Researcher

After successfully signing up, user can start logging in and explore the features of the Givcycle mobile apps. The design elements of Givcycle mobile apps are mainly more focusing on the comfort zone of the current trend user, where the familiarity touch point are the same as Givcycle apps does. To get the volume of users, the usability of the app is somewhat similar with Grab mobile app. To fully operate, Givecycle collaborate with Grab as our main logistics to deliver the recycling and donation items. As Grab are getting more volume of audience especially during these pandemic COVID-19, more users are finding ways to an easier solution without compromising the users safety and daily routine. The latest standard operating order (SOP) from the Malaysian government, to prevent and for the safety of the Malaysian community it is strictly advised to stay home. With that approach, for Malaysian to continue a normal routine is by tapping onto a digital platform as a daily basis is the only solution for a "new normal" routine during these era of global pandemic COVID-19.

*Figure 5.2: Log in screens*

After sign in the mobile application, users will be engaged with a progressive onboarding screen (Figure 5.3) which best describe as a introduction to demonstrate or walkthroughs of how the user can navigate the functionality of the mobile app and assist the user on services that is being offered. The progressive onboarding screen will increase the likelihood and securing the phase of ongoing engagement with the mobile app itself. According to an article from Medium.com, UX Collective (2019):

"Onboarding at its core is a learning process, so use education techniques to teach users and build their confidence" ("Why onboarding screens are a must," 2019)

*Figure 5.3: Progressive onboarding screens*

As for the essential part of the Givcycle mobile app, the home screen (Figure 5.5) contained latest feeds and various contents, including users recent activity on recycling and donating status, handy tips on recycling, list of recycling spots, giv-away to the nearest charity centre, giv-rewards and recycling news are accessible. At the bottom of the screen shown menu icons (navigation bar) that direct the user to where a target destination of the associated view as a currently active view. The features such as menu of activities, search or explore, profile notification and current delivery status.

The main features are the map tracker shown on top of the screen where all the certified recycling centre and charity centre nearby are identified. Records of the recycling and donating developments on a daily basis will be shown on the profile page. Next is the recycling news where all the local recycling centre will update their latest information and handy tips on ways to maintain a healthier and greener household lifestyle by organizing and decluttering users current living space where users can participate and take up on the task. The aim of this feature is to stimulate the habit of a greener cohesion among community by recycling and

giving  help through donating to the nearest charity centre. With this, Givcyclers community has the ability to help the  non-governmental organization (NGO) to support the humanitarian issues around the community.

*Figure 5.4: Statistics on e-walet*

Source: www.statista.com

Besides that, next features is Giv-rewards (Figure 5.5). Where all Givcyclers progress activities will accumulate and stamps are given upon completing any task throughout the week. For every recycles or donations  will be given automatically one (1) stamp per services. Upon completing all the stamps, users will earned  rewards from Touch&Go Ewallet, this is a collaboration with Touch&Go to practice a safer and easy transaction.  Where most Malaysian are now own a Touch&Go mobile apps as it is most preferred e-payment platform used  by Malaysian in 2020, given the statistic (Figure 5.4) on major e-payment services used among Malaysian  ("Most popular e-payment services," 2021).

*Figure 5.5: Home Screen*

Source: The Researcher

*Figure 5.5: Recycling News, Handy Tips and Giv Rewards screens*

Source: The Researcher

*Figure 5.6: Recycling Activity screens*

Source: The Researcher

*Figure 5.7: Recycling Centre Screen*

Source: The Researcher

*Figure 5.6: Charity Activity screens*

Source: The Researcher

**8. Conclusion**

Branded mobile application Givcycle enables community to access information and conveniently gives the public access to a greener lifestyle by contributing to good causes anywhere and anytime by just one click away. Users are able to recycle from the comfort of home with the added option of contactless delivery (which is paramount during these COVID-19 pandemic), which gives the users the added benefit of safety. Furthermore, the legitimacy of both donor and receiver can be verified through information provided in the mobile app. For example the user are able to communicate with the charity centre directly to exchange information (website, certificate etc.). With this mobile application, social cohesion of the community can be greatly increase (#kitajakita) during the 2020 pandemic.

Givecycle mobile application was tested by target user from recycling community, professionals and public users as well. User testing was held virtually to collect feedback from user by performing several task. This testing basically evaluates the mobile application's user interface, interactivity, guidance in practicing the Zero Waste Cycle activities. Based from the feedbacks, all users are able to navigate and perceive accordingly throughout the exploration of the Givcycle via mobile branding applications (MBA). To create a more eye catching layout for the users, adding more photos creates a better user engagement. Additionally, more apps awareness can be achieved through tapping on social media platform, in which users can update their activities. As a result the app features and the layout well accepted by the users, thus this mobile branding applications (MBA) was successful. Nevertheless, continued improvement of the mobile branding applications (MBA) is imperative for the sustainability of Givcycle.

The exploration of the this study concentrates on discovering the utilization of branding design element in mobile branding applications (MBA) as a brand power to accelerate the brand equity of Zero Waste Cycle as mobile application lifestyle. Year 2020, the Covid-19 pandemic emphasised the need for a stronger collaboration with a digital world to overcome the impact of pandemic. Mobile applications and other digital platform is increasingly important tool to continue the new norm on a daily basis. As shown in the statistic report on Digital 2020 from We Are Social & Hootsuite (2020), an increasing amount usage of digital adoption where 40.69 millions of mobile subscriptions and 26.69 millions of internet users (median age of 30 years old) showing a penetration of 83% compared to the data report on Malaysia Digital 2019 (Hootsuite, 2020; We Are Social & Hootsuite, 2019). Introduction of technology into the Zero Waste Cycle community will definitely be a good impact, as it can demonstrate the good use of Givcycle mobile branding application (MBA) as a brand cycle cohesion within public reach that will help the Malaysian community to embrace the activity of recycling, donating unused items and waste separation.

Indirectly promoting a sustainable cohesion community and productive apps culture align with the Sustainable Development Goals (SDGs), that can actualize two (2) objectives; 1) Industry, Innovation and

Infrastructure (SDG9) and 2) Responsible Consumption and Production (SDG12). This research provide a platform of an opportunity for a smooth transition on shifting the Zero Waste Cycle activity, educating the users to experience the social cohesion in exercising the recycling and donating activity by tapping on to a digital platform as a branded mobile application. This will help to promote a greener engagement on a daily basis.

Givcycle mobile branding applications (MBA) has a potential to provide future project expansion with an insight that will navigate the community towards the Zero Waste Cycle mobile apps as a brand cycle. Main goal of this project Givcycle mobile branding application (MBA) is for the Zero Waste community to utilize the branded mobile application as a brand power to accelerate the brand equity of Zero Waste Cycle as mobile app lifestyle, such as a productive app culture. This application give an insight and experience on forming a greener social cohesion within the community. With reference to the response from user testing, approximately all participants provide such optimistic feedbacks throughout the exploration of Givcycle mobile branding application (MBA). Where most of the participant finds that Givcycle mobile branding application (MBA) is user friendly, easy to understand and easy to navigate the features. Researcher hopes that this outcome will help to provide the knowledge of executing the mobile branding design element for a better Malaysian digital platform.

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