



Upcycling and the Hipster Cafe: A Case Study in Penang

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Date of Submission: 16-12-2021

Date of Acceptance: 31-12-2021

ABSTRACT: Upcycling is one of the preferred options as it only requires the creativity of an individual with or without professional knowledge. This is unlike recycling that requires the process of breaking down an object to create a new one. Upcycling is a combination of reuse, reduce and recycling as well as upgrading the unwanted item which preserves the original form and story of the object. However, this effort is not frequently adopted by individuals. With the emerging trend of hipster cafes, upcycling materials and components are normally used as part of the interior design, whether it is an upcycled furniture or as a decorative item to achieve the ambience of being hipster. The objectives of this research paper are to study the materials used in hipster cafes and to delve the relationship between upcycling and the hipster cafe. Data collection was conducted by interviewing several representative respondents of hipster cafes in Penang. It was found that the upcycled materials that were frequently used as the interior design of such cafes greatly influenced the business in depicting its identity.

KEYWORDS: hipster café, upcycling, interior design, waste.

I. INTRODUCTION

[1] According to Sustainable Development Goals (SDG), goal number 12 concerning the responsible consumption and production, indicated that people have overwhelmed nature with pollution to the extent that it can no longer accommodate the abuse. Management of waste has been a pressing issue for every country due to population growth and the inevitable development of the economy which leads to the tremendous generation of waste. [27] A developing country like Malaysia, with a population of around 32 million (Malaysia's Population Rises 0.4 Pct to 32.69 Million in Q3 - Xinhua | English.News.Cn, n.d.), would result in a substantial output of waste. More than 2.8 million

tons of solid waste was expected in 2020 in just Kuala Lumpur itself, the capital city of Malaysia.

[11] An act of upcycling would reduce waste that is destined for the landfills. The term upcycling emerged in the 1990s. [38] Upcycling is a simple act of upgrading an unwanted item through one's creativity that does not require any professional skills, as in that for recycling. Recycling involves the process of breaking down objects such as plastics and papers that can be transformed into new items of different value. [28] The practice of reduce, reuse and recycle can sometimes account for, ironically, the usage of raw materials. In contrast, upcycling synthesizes the process of reducing, reuse, and recycle, thus lowering the consumption of resources. [17] By means of upcycling, unwanted items or discarded objects are given a second chance to be upgraded and transformed into something new with additional and aesthetic values.

[31] Unlike recycling that involves decomposing or degradation of the materials, upcycling is considered a type of creative reuse of oft-considered unwanted objects. [12] It is widely accessible to individuals with or without professional knowledge to be able to execute the activity. Giving a second life to an unwanted object extends the lifespan as well as the versatility of the item. [16] With the influence of modernization, a combination of creative ideas emerges. It is a common urban sight to have hipster-themed cafes with numerous adornments of upcycled products and materials within them.

Thus, one of the salient problems is the environmental issue due to inefficient waste management. To mitigate, the upcycling movement can be seen in the minority of the community as the rising trend in cafes that reuse worn-out and unwanted items as part of their interior design that exudes a unique ambience best described as 'hipster'. This study would raise the questions: i)



what is the upcycle material used in the hipster cafe, and (ii) what is the relationship between upcycling

in the hipster cafe and (ii) to investigate the relationship between upcycling and the hipster cafe.

For this research paper, interviews were conducted to collect the necessary data to fulfill its objectives. Seven (7) representative respondents of hipster cafes in Penang, based on the identities of their interior designs, were selected as interviewees. The questionnaire was divided into two parts: Section A consists of the general information about the hipster cafe, Section B of questions regarding the use of upcycled materials in the establishments and the relationship between upcycling and the hipster cafe.

II. LITERATURE REVIEW

Upcycling

[39] Depletion of natural resources is caused by people who consistently drain them without proper management and transforming them into monetary items. However, these items at the end of their use would eventually be considered trash and most likely end up in landfills. To address this issue, upcycling is the sustainable option to combat increasing waste. [30] Upcycling is the term of making waste to worth, [41] extending the lifespan of things through the process of transformation from one's creativity.

[13] McDonough wrote the book 'Cradle to Cradle' to spur designers to restructure the mores of design, to think and design with sustainability, by doing better while achieving 'less bad' in the fruit of their works. [37] These eco-friendly approaches encourage individuals to act with minimal damage to the environment. [5] Upcycling is also described as a technical cycle whereby the products created as a crucial asset could orbit back into its originality through the metabolism of the industry. It acts as a guideline to urge individuals to foresee the possibility of being eco-friendly as well as to the industry that caters to the well-being of people.

[9] Designing is one of the many ways to infuse a person's creativity into production. [7] It is frequently associated with the idea of thinking out-of-the-box. [11] In the 1990s, the term upcycling emerged conveying the meaning of reusing unwanted items or materials to produce an item that provides additional value and quality compared to the original. [22] The process involves human creative thinking on how to work with

and hipster cafe. This will lead to the objectives of this research: i) to study the upcycled materials used

available resources.

[18] Upcycling strives to offer a transitional solution through the optimization of the lifespan of unwanted items in a sustainable approach. [4] It is an asset towards sustainable living, having only a nominal long-term impact on the environment. In addition, the reuse of a discarded object is a significant method that can help economic sustainability in terms of cost-saving and viable opportunities. [5] From upcycling efforts aesthetic values can be improved, adding uniqueness of design and increasing the value or quality by way of refurbishing, repairing or reinforcing them. [34] It is one of the most crucial methods to accomplish material efficiency of an economy while reducing energy consumption.

Hipster cafe

[29] The hipster cafe is a combination of young and old. It is a unique coffeehouse that differs from others. [32] Its identity reflects an interior trait of contrasts where old and used items present an unusual decor. [36] Based on The Trend Forecaster's Handbook by Martin Raymond, the trend could be defined as an impetus towards a certain direction. It can sway public opinion of what a mainstream trend can be. [32] Shaare in 2020 also believes that hipster is a term that can be applied to an individual and object. Infusing the creativity of individuals, this type of cafe is moulded to project its own identity to be commercialized. These establishments have become trendy and such enterprises have mushroomed in Malaysia.

[19] The design of a space greatly affects the ambience and makes a significant impression on its occupants. Ambience is referred to as the surrounding atmosphere of a space allowing people to feel and immerse themselves within the space. The ambience of the hipster cafe comprises the aesthetics, its layout design as well as the attitude of the employees. [6] The right ambience plays greatly on the senses of occupants, sans it would be otherwise. The decor has the ability to improve the atmosphere with the amalgamation of features like colour, aroma, music, and lighting. The clientele's mood is substantially influenced by the aura of the environment, emotional or physical. [15] Felton in 2021 mentioned that people who routinely visit cafes do so not merely for the beverages but more so for the atmosphere within. This was the



predominant reason for revisiting a particular cafe

[2] The growth of hipster cafes with special menus stride beyond boundaries of the conventional. Through modernization, hipsters' food has become a new culinary culture, an array of fusion food outside the norm or mainstream. [16] [32] The identity attached to this has evolved into an influential factor that draws customers. [26] Therefore, expectation of food quality at hipster cafes gradually increases with the growth of high-income population in a town. Today, people tend to focus on a quality menu that would interest them to visit or revisit the establishment.

The relationship between upcycling and the hipster cafe

[14] A coffeehouse is often regarded as a social hub where patrons can sometimes interact. [2] The rapid growth of hipster cafes in urban areas have captured people's attention given their unique interior design, different from the norm. [8] An extraordinary environment tends to attract customers differently. [2] Care and food are a synergy and a benefit to each other; hence, the menu is a strong lure in spite of cultural differences. [24] The hipster premises offer people a platform to dine and 'hang out', and is also known as the third space besides that of the workspace and home.

[23] Leong in 2018 found that aesthetics is a prominent factor in drawing customers to the cafe. Such encompasses the wall décor, displays, furniture, and colour that evoke the senses and behavioural intention. [20] Props like upcycled chairs of perceived low value may instead have the patrons form an advantageous opinion. [32] Diners will credit the establishment for making a conscientious effort as the business's contribution towards being eco-friendly.

[11] As a medium to promote environmental concerns, the symbiosis of upcycling and the hipster cafe can be studied through interviews with their employees. [8] Every cafe has its own style to attract customers. [32] The ambience of the premises is crucial to this and allows the opportunity for employees to interact with its patrons. [11] Upcycled items within would be captivating and interesting to visitors to imagine great possibilities of what an unwanted item can bring about.

[2] Furthermore, the research conducted by Aboo in 2021 mentioned the framing concept for competency among the hipster cafes. One vital element for them is framing food as the highlight of

over another.

the place via menu presentation, label, style and interior design to gain customers' attention and increase patronage. [32] Attributes such as the freshness of food and its presentation are very important and play greatly to satisfy customers. [33] Shaharudin in 2011 also stated that a well-presented dish can enhance the perception of quality and leave a good impression on the hipster cafe.

III. FINDINGS AND DISCUSSION

Table 1

<i>"What inspired you to use upcycled material for the interior design of your hipster cafe?"</i>	
Gudang cafe	- Current trend - Freedom of design - Aesthetic value
Wheelers	Current trend
Tribute Retro cafe	Resources were easily obtainable Inexpensive
Pik Nik	Current trend Freedom of design Inexpensive
Whisk	To create a retro ambience of being in the 1950-60s era
China House	Personal interest of owner in collecting old items and reuse them as part of decor
Narrow Marrow	Resources were easily available, inexpensive and could be foraged from flea markets or dumpsites.

Table 2

<i>"What are the main upcycled materials used for furniture and adornments in your cafe?"</i>	
Gudang cafe	Timber, steel, and iron
Wheelers	Timber
Tribute Retro cafe	Steel, iron, stone, and masonry
Pik Nik	Timber, steel, and iron
Whisk	Wooden chairs and desks from schools
China House	All kinds of material ranging from antique mirrors, paintings, old furniture from heritage houses.
Narrow Marrow	No specific materials. If an item is deemed valuable, it is repaired and upcycled for use..



Table 3

<i>“Can you estimate the general cost difference between upcycled items and that of new products or materials sold in the market in your hipster cafe design?”</i>	
Gudang cafe	20-30% more expensive than new materials About 30% more expensive than new materials
Whealers	10-30% cheaper than new materials
Tribute Retro cafe	10-30% cheaper than new materials
Pik Nik	10-30% cheaper than new materials
Whisk	Free or cheaper than new materials
China House	As costly as antiques
Narrow Marrow	Relatively cheap or less costly

Table 4

<i>“How do the upcycled items benefit your business?”</i>	
Gudang cafe	Material durability & competitive advantage
Whealers	Reduce design cost
Tribute Retro cafe	Low design cost, attract customers, material durability
Pik Nik	Reduce design cost, attract customers, material durability
Whisk	As customer attraction
China House	In terms of competitive advantage, a different layout design is offered in the existing heritage shophouse. Being long, it is demarcated into cafe, bar, cocktail bar and semi dining area.
Narrow Marrow	It helped to portray the identity that was conducive for interaction with patrons.

Table 5

<i>“How does upcycling benefit the interior design of your hipster cafe?”</i>	
Gudang cafe	Fulfill design criteria such as functionality and comfort. Fulfill space requirements such as shape and size of the furniture.
Whealers	Fulfill design criteria such as functionality and comfort.
Tribute Retro cafe	Fulfill design criteria such as functionality and comfort Fulfill design style such as current trend, customer interest etc Fulfill space requirements such as shape and size of the furniture Fulfill the menu and services offered in the cafe Fulfill ambience of a hipster cafe.
Pik Nik	Fulfill design style such as current trend, customers’ interest Fulfill ambience of a hipster cafe
Whisk	Achieve the desired ambience of a comfortable environment for optimal dining experience.
China House	It is complementary to the menu offered and accommodates a fulfilling dining experience in the hipster atmosphere.
Narrow Marrow	It is inexpensive and easily obtainable given that there would be financial constraints if it had been an ambitious business plan; so, upcycling was a convenient way to accomplish this for the establishment.



Table 6

<i>"In your experience of cafe operations, what are the patrons' acceptance towards upcycled materials as part of the decor?"</i>	
Gudang cafe	Comfort and ergonomic Unique
Wheelers	Practical
Tribute Retro cafe	Attractive, comfortable and ergonomic, practical, unique, new experience
Pik Nik	Attractive Unique A novel experience
Whisk	A <i>deja vu</i> experience for customers of school days.
China House	Interior design of cafe is unique compared to others as the layout style would be periodically changed according to owner's preference.
Narrow Marrow	Never thought of this as upcycling was not incorporated for its sake per se. If such items have evoked pleasant memories for patrons then the effort has been serendipitous.

Table 7

<i>"What are the main reasons customers come to your cafe?"</i>	
Gudang cafe	Food, hospitality, interior design, price
Wheelers	Food, hospitality
Tribute Retro cafe	Food, hospitality, interior design
Pik Nik	Food, interior design
Whisk	Food, interior design
China House	Food, interior design
Narrow Marrow	Food and ambience

Table 8

<i>"What are the main reasons for choosing upcycled materials as the interior design of your hipster cafe?"</i>	
Gudang cafe	Awareness of the green concept and sustainable design To reduce waste Design style
Wheelers	To reduce waste
Tribute Retro cafe	Design cost Awareness of the green concept and sustainable design Design style
Pik Nik	Design cost Awareness of the green concept and sustainable design To reduce waste Design style
Whisk	Personal interest, do not want to waste resources available from a closed-down school
China House	It is the owner's hobby to collect old and worn-out items for personal interest or the purpose of reusing unwanted furniture from heritage houses.
Narrow Marrow	Mostly because they were easily obtainable from places like dump sites, flea markets and houses where people have moved out of. These items would again be used even if the business were to relocate elsewhere.

As mentioned in the literature review, the boom of hipster cafes has become a trend providing business opportunities. Thus, upcycled materials can be capitalised upon and utilized as the decor of hipster cafes in the current norm. The term 'hipster' carries the meaning of trend while being outside the mainstream. The hipster style offers freedom to individuals to pursue a desired design that portray their own identity. Moreover, such items are easily obtainable as they are often regarded as unwanted or discarded things. In truth, upcycling involves reusing antiques or old inanimate objects which may form part of a costly collection depending on an individual's personal interest and financial capability. The nature of things often used in hipster cafes are timber, steel and iron, commonly in the form of furniture items and props.

Considering most upcycled materials are worn-out and old objects, several of the interviewed respondents cited that they are usually relatively cheaper than new materials. However, some items can be more expensive than new materials because of their high value such as furniture from heritage houses vacated by people,



display items and antiques that had been part of a personal collection.

This research also studies how upcycled materials benefit business. When these items are repaired, restored or refurbished prior to use, they become more durable and their lifespans are extended. They are a paradox, being a unique combination of old and new, retro and trendy, and yet fascinating to customers. Another boon is the low design cost cited and this provides a competitive advantage. A hipster cafe has its own prominent identity which is easily recognizable by people, it has a stand-alone and visually-pleasing allure.

The use of upcycled materials as part of a hipster cafe's interior design is to maximise the patrons' dining experience. These items fulfill the design preferences in terms of functionality, comfort, shape, and size of the furniture. The distinctiveness of such objects incorporated in the decor, together with a complementary menu, offer diners an ideal cosy and indulgent experience. The usage of upcycled materials are a low-cost initial investment to the creation of a hipster cafe with the necessary 'feel'. To surmise, upcycled materials benefit the interior design of the establishment by maximizing a dine-out experience, an influential factor in encouraging customers to revisit and ultimately contribute to the viability of the business.

As mentioned in literature review, the hipster cafe is a good platform for creating environmental awareness. As such, the clientele's acceptance towards upcycled materials is studied for this research. Representative respondents of the hipster cafes opined that the upcycled materials provide comfort and are ergonomic in nature. The setting with such items in one such particular cafe with old wooden chairs and desks obtained from a closed-down school, was an attraction to diners as they became nostalgic about their days in school. Furthermore, the reason to upcycle is not superficial in some cases. Respondents from the Narrow Marrow Cafe mentioned that the items they upcycled contained memories, upcycling them have lengthened their lifespans without losing their value.

Incorporated and displayed in the premises, they are appreciated by customers who in turn might be enlightened to do likewise for themselves. Respondents also noticed that food and decor are crucial factors to the popularity of the cafe. They were vital to getting regular patronage and considered a vital long-term marketing strategy. Customers who revisit the hipster cafe are greatly influenced by the overall ambience and a

quality menu. Apart from this, hospitality in the establishment is another marked consideration by customers - a good impression will interest customers to come again.

The reasons for choosing upcycled materials as the decor for a hipster cafe vary. These cafes are keenly aware of the concept of a green and sustainable design whilst reducing waste that is detrimental to the environment. However, it could also be a personal interest when deciding to use upcycled materials to design the hipster cafe. It needs the right person to appreciate the value and possibility of a discarded object. Upcycling gives discarded objects a chance to be repurposed and to regain their value instead of ending up in landfills. Additionally, upcycled materials offer unique hipster vibes that is intrinsic and distinctive to the hipster cafe.

IV. CONCLUSION

Rapid urbanization has caused a significant negative impact on the environment, a problematic issue starkly noticeable today. People need to be aware of how pressing and distressing this matter is to the environment and the looming, if not already, dire consequences. Upcycling waste is a conscientious and opportune approach by a community towards saving the environment while encapsulating history and memory.

The hipster cafe is a significant contributor and an excellent example how a community can synergise and be a viable enterprise while mitigating the environmental issue. It is hoped that this research paper would enable the community to understand upcycling and its influence whereby the community themselves can reconsider the potential value of the waste generated in their daily lives. By adopting imagination and creativity, individuals would have the capability of transforming trash into treasures, relics to be relished and cherished. The act of upcycling does not limit to merely extending the product life of certain objects but also carries the memory and story within.

Big things start small. The upcycling movement can be carried out anywhere, anytime, and for a lot of things. Even if it is just for a single-use plastic bag, this can be transformed into an item that is far more valuable than what it was originally.

ACKNOWLEDGEMENT

This study expresses its deepest gratitude to the guidance of lecturers under the course of RDL 470 Interior Architecture Topical Studies



conducted in Year 4 Interior Architecture programme in Universiti Sains Malaysia, as well as to other parties that have significantly contributed to its research.

REFERENCES

- [1]. A M Akil & C S Ho (2014). Towards Sustainable Solid Waste Management: Investigating household participation in solid waste management, IOP Conference Series: Earth and Environmental Science, Vol 18.
- [2]. Aboo, K., Khalid, T., Helmy, M., Gapar, A., Ismail, R., & Isa, S. M. (2021), Hipster foods and cafes: Framing cohesion and identity, GEOGRAFIA Online Malaysian Journal of Society and Space 2(2), 39–51.
- [3]. Abuthahir, S. B. S., & Krishnapillai, G. (2018), How does the Ambience of Cafe Affect the Revisit Intention among its Patrons? A S on the Cafes in Ipoh, Perak. MATEC Web of Conferences, 150.
- [4]. Ali, N. S., Khairuddin, N. F., & Zainal Abidin, S. (2013), Upcycling: Re-use and recreate functional interior space using waste materials, Proceedings of the 15th International Conference on Engineering and Product Design Education: Design Education - Growing Our Future, EPDE 2013, September, 798–803.
- [5]. Amar, M., Pajilimi, H., & Zulhumadi, F. (2019), Sustainability of upcycling: student acceptance in uum, Journal of Technology and Operations Management: Vol. 13, Number 1, pp. 55-66.
- [6]. Ayad, S. (2016), Impact Of the Restaurant Atmosphere on Consumer Decision: Evidence from A Case Study of Algerian Consumers, International Journal of Scientific Management and Development, 159., 4(5), 159–166.
- [7]. Beghetto, R. A. (2019), Structured Uncertainty: How Creativity Thrives Under Constraints and Uncertainty, Creativity Under Duress in Education? (pp. 27–40). Springer, Cham
- [8]. Beh, W. W., Leong, Y. Y., Wong, S. Y., & Yap, C. Y. (2014), Influence of Service Quality and Servicescape on Customer Satisfaction Towards Behavioural Intentions in International Coffee Chains. 1–161. eprints.utar.edu.my.
- [9]. Biskjaer, M. M., Dalsgaard, P., & Halskov, K. (2017), Understanding creativity methods in design, ACM Conference on Designing Interactive Systems, 839–851
- [10]. Bramston, D., & Maycroft, N. (2013). Designing with Waste, In Materials Experience: Fundamentals of Materials and Design (pp. 123–133). Elsevier Inc.
- [11]. Bridgens, B., Powell, M., Farmer, G., Walsh, C., Reed, E., Royapoor, M., Gosling, P., Hall, J., & Heidrich, O. (2018). Creative upcycling: Reconnecting people, materials and place through making. Journal of Cleaner Production, 189, 145–154.
- [12]. Calvo, S., Morales, A., Núñez-Cacho Utrilla, P., & Gaita Martínez, J. M. (2020). Addressing sustainable social change for all: Upcycled-based social creative businesses for the transformation of socio-technical regimes. International Journal of Environmental Research and Public Health, 17(7)
- [13]. William McDonough (2002), Cradle to Cradle: Remaking the Way We Make Things, Retrieved May 7, 2021, from <https://mcdonough.com/writings/cradle-cradle-remaking-way-make-things/>
- [14]. Desbiolles, F. (. (2015). A taste of sustainability: Case studies os sustainables cafes in Australia. Le Cordon Bleu–University of South Australia Grants Scheme, c, 2–6.
- [15]. Filtered: Coffee, the cafe and the 21st-Century City - Emma Felton - Google Books. (n.d.). Retrieved May 7, 2021,
- [16]. Hairon, S. (2017). Overview of Hipster food culture development in Malaysia. Journal of Tourism, Hospitality & Culinary Arts, 9(2), 481–492.
- [17]. Han, S. L. C., Chan, P. Y. L., Venkatraman, P., Apeageyi, P., Cassidy, T., & Tyler, D. J. (2017). Standard vs.



- Upcycled Fashion Design and Production. *Fashion Practice*, 9(1), 69–94.
- [18]. Han, S., Tyler, D., & Apeageyi, P. (2015). Upcycling as a design strategy for product lifetime optimisation and societal change. *Product Lifetimes and The Environment*, 130–137.
- [19]. Jalil, N. A. A., Fikry, A., & Zainuddin, A. (2016). E-Atmospheric Effects on Youth Intention to Revisit a Cafe. *Procedia Economics and Finance*, 37(16), 497–503.
- [20]. Jing, W. (2018). Upcycling Through Crafts Uncovering Methods for Craft-Based Upcycling Design. 1–62.
- [21]. Kirk, D. S., Nabil, S., Talhouk, R., Trueman, J., Bowen, S., & Wright, P. (2018). Decorating public and private spaces: Identity and pride in a refugee camp. *Conference on Human Factors in Computing Systems - Proceedings*, 1–6.
- [22]. Kushwaha, S., & Swami, C. (2016). Upcycling of Leather Waste to Create Upcycled Products and Accessories. *International Journal of Home Science*, 2(2), 187–192.
- [23]. Leong, C. K. (2018). Trying out new cafes in town: assessing the impact of physical environment on visit intention. *Journal of Tourism, Hospitality & Culinary Arts (JTHCA)*, 10(2), 35–46.
- [24]. Lukito, Y. N., & Xenia, A. P. (2018). cafe as third place and the creation of a unique space of interaction in UI Campus. *IOP Conference Series: Earth and Environmental Science*, 99(1), 0–8.
- [25]. Malaysia's population rises 0.4 pct to 32.69 million in Q3 - Xinhua | English.news.cn. (n.d.). Retrieved May 7, 2021, from http://www.xinhuanet.com/english/2020-11/12/c_139510858.htm
- [26]. Nor Azureen, R., Shahril, H., Ashraf Siddik Khan, A. R. S., Putri Dahlia, A. R., & Noor Saliza, S. (2016). The Influence of Food Quality on Customer Satisfaction in Fine Dining Restaurant: Case in Penang. *International Academic Research Journal of Business and Technology*, 2(2), 45–50
- [27]. Norsa'adah, B., Salinah, O., Naing, N. N., & Sarimah, A. (2020). Community health survey of residents living near a solid waste open dumpsite in Sabak, Kelantan, Malaysia. *International Journal of Environmental Research and Public Health*, 17(1).
- [28]. Ordonez Pizarro, I. (2017). Designing out waste: exploring barriers for material recirculation. PhD Thesis, Chalmers University of Technology, Sweden. ISSN 0346-718X.
- [29]. Pozos-Brewer, R. (2015). Coffee Shops: Exploring Urban Sociability and Social Class in the Intersection of Public and Private Space, *Sociology / Anthropology Senior Thesis Professor Farha Ghannam May 2015 Contents*. Thesis, May.
- [30]. Richardson, M. (n.d.). Design for Reuse: Integrating Upcycling into Industrial Design Practice. Retrieved May 6, 2021.
- [31]. Rose, C. (2019). Systems for Reuse, Repurposing and Upcycling of Existing Building Components. Thesis, Doctorate of Engineering, University College London.
- [32]. Shaare, A., & Muhammad, N. S. (2020). Young Adults' Satisfaction towards Hipster Cafes: The Brewing Factors. *Advances in Business Research International Journal*, 4(2), 41.
- [33]. Shaharudin, M. R., Ismail, A., & Mansor, S. (2011). Innovative food and its effects toward consumers' purchase intention of fast-food product. *Canadian Social*, 7(1), 110–118.
- [34]. Sung, K. (2017). Sustainable Production and Consumption by Upcycling: Understanding and Scaling-up Niche, Environmentally Significant Behaviour. *PQDT - Global*, 284.
- [35]. Teo, C. B. C. (2016). Recycling Behaviour of Malaysian Urban Households and Upcycling Prospects. *Journal of International Business*,



- Economics and Entrepreneurship, Volume I, (1).
- [36]. Martin Raymond (2021), *The Trend Forecaster's Handbook* - Google Books. (n.d.). Laurence King Publishing, ISBN-13: 978-1856697026.
- [37]. Toxopeus, M. E., de Koeijer, B. L. A., & Meij, A. G. G. H. (2015). Cradle to cradle: Effective vision vs. Efficient practice? *Procedia CIRP*, 29, 384–389.
- [38]. Wang, G., Krzywda, D., Kondrashev, S., & Vorona-Slivinskaya, L. (2021). Recycling and upcycling in the practice of waste management of construction giants. *Sustainability (Switzerland)*, 13(2), 1–14.
- [39]. Wegener, C. (2016). Upcycling. In *Creativity — A New Vocabulary* (pp. 181–188). Palgrave Macmillan UK.
- [40]. What is the goal here? (n.d.). Retrieved May 6, 2021, from www.un.org/en/actnow
- [41]. Yi, S., Lee, H., Lee, J., & Kim, W. (2019). Upcycling strategies for waste electronic and electrical equipment based on material flow analysis. *Environmental Engineering Research*, 24(1), 74–81.
- [42]. Yukalang, N., Clarke, B., & Ross, K. (2018). Solid Waste Management Solutions for a Rapidly Urbanizing Area in Thailand: Recommendations Based on Stakeholder Input. *International Journal of Environmental Research and Public Health* 15(7):1302 1–23.