



## Design and Development Souvenir Snack Packaging Design for Generation Y: A Case Study of Koi Kei Bakery

Kexuan Luo<sup>1</sup> and Noppadol Inchan<sup>2</sup>

Design for Business, College of Social Communication Innovation, Srinakharinwirot University, Thailand

<sup>1</sup>E-mail: 1435677089@qq.com, ORCID ID: <https://orcid.org/0009-0002-1267-7580>

<sup>2</sup>E-mail: noppadoli@swu.ac.th, ORCID ID: <https://orcid.org/0009-0007-1962-8702>

Received 08/05/2025

Revised 11/06/2025

Accepted 16/07/2025

### Abstract

**Background and Aims:** Koi Kei Bakery, a traditional souvenir brand in Macau, has faced a decline in sales due to outdated packaging that fails to resonate with Generation Y consumers. This study aims to (1) analyze the Koi Kei Bakery souvenir snack packaging, (2) study the satisfaction and demand of Generation Y regarding this packaging, and (3) develop and design a new style of souvenir snack packaging that meets the preferences of Gen Y consumers for Koi Kei Bakery.

**Methodology:** A mixed-methods approach was employed, integrating quantitative and qualitative techniques. The study analyzed existing packaging, surveyed 400 Generation Y consumers about their preferences, and conducted expert interviews to identify design weaknesses and propose improvements. Data analysis involved content analysis and descriptive statistics.

**Results:** Koi Kei Bakery's packaging is less effective than competitors such as Yeng Kee and Choi Heong Yuen in integrating traditional and modern design elements and utilizing color for brand recognition. Generation Y consumers expressed satisfaction with packaging materials but indicated that color, shape, and font size had limited impact on their purchase decisions. Experts recommended adopting more vibrant, eco-friendly, and contemporary designs, including enhancements to color schemes, materials, and typography. A redesigned packaging solution was developed accordingly.

**Conclusion:** The findings underscore the necessity for Koi Kei Bakery to update its souvenir snack packaging to better engage Generation Y consumers. Current packaging lacks cohesive modern-traditional integration and a clear brand identity. Consumer and expert feedback reveal opportunities to improve color, shape, materials, font size, and information clarity. The redesigned packaging offers a modern, sustainable, and visually appealing approach, strengthening brand identity and market appeal among Generation Y.

**Keywords:** Koi Kei Bakery; Generation Y; Consumer Preference; Packaging Design



## Introduction

In the era of globalization, Generation Y (born between 1981 and 1996) has emerged as a key demographic in the consumer market, displaying distinct purchasing behaviors shaped by digital platforms and social media (Bolton et al., 2013). This generation is characterized by diverse consumer preferences, ranging from quality-conscious buyers to pleasure-seekers, and demonstrates heightened awareness of environmental sustainability, favoring brands that emphasize ethical production and social responsibility (Sharma & Srivastav, 2023). According to the Theory of Planned Behavior (Ajzen, 1991), individuals' intentions and behaviors are influenced by attitudes and perceived behavioral control, which aligns with Generation Y's critical evaluation of packaging and ethical considerations. Thus, packaging design plays a critical role in influencing their purchasing decisions, with Generation Y consumers valuing sustainability, visual appeal, and practicality. Businesses that align their packaging strategies with these preferences can maintain competitive advantages by integrating traditional and contemporary design elements.

Effective product packaging is a decisive factor in attracting Generation Y consumers and shaping their perceptions of brand value. Poorly designed packaging—such as that lacking originality, featuring inappropriate color schemes, or containing errors—can lead to distrust in product quality and brand credibility (Ahmad et al., 2012). Research has found that Generation Y consumers actively evaluate packaging before purchasing, with substandard designs influencing them to seek alternatives from competing brands (Waheed et al., 2018). Conversely, well-executed packaging strengthens brand identity, communicates quality, and fosters consumer engagement, making it a key determinant of purchasing behavior and long-term brand loyalty (Duarte et al., 2024). This phenomenon is supported by design theory, such as Bloch's (1995) model of product form and aesthetics, which explains how visual design elicits affective and cognitive responses that influence consumer choices.

A notable example of these challenges is Koi Kei Bakery, a traditional souvenir snack brand in Macau. Despite its strong market presence, the brand's packaging design has struggled to resonate with Generation Y consumers, leading to a decline in sales over the past five years (Zhou & Wang, 2021). In 2018, Koi Kei held a 76% market share with sales reaching MOP 9.106 billion, but by 2023, its market share had dropped to 48% amid growing competition and shifting consumer expectations (TVB Drama Review, 2023). A recent survey indicates that 41% of Generation Y consumers find Koi Kei's packaging outdated, with additional concerns over its lack of eco-friendliness (16%) and perceived health benefits (19%) (Gu, 2023). Framing Koi Kei as a representative legacy brand facing the challenge of adapting to modern design expectations aligns with strategic design management perspectives, such as those proposed by Lockwood (2010), emphasizing the need for innovation in brand packaging to sustain relevance.





This study aims to explore new style packaging design strategies for Koi Kei Bakery that align with the aesthetic and functional preferences of Generation Y consumers. Through consumer research in Macau and surrounding markets, the study seeks to provide theoretical foundations and practical guidance for enhancing packaging elements such as color, shape, materials, font size, and printed information. By integrating modern design concepts while preserving the brand's cultural identity, this research contributes to the advancement of Koi Kei's packaging strategy, ensuring its competitiveness and market revival in the digital age. Moreover, this study fills a theoretical gap by linking cultural identity with contemporary packaging design within the context of Generation Y consumer behavior in Asia, thereby extending existing literature on design strategy and consumer engagement.

## Objectives

1. To analyze the Koi Kei Bakery souvenir snack packaging.
2. To study the satisfaction and demand of Generation Y on Koi Kei Bakery souvenir snack packaging.
3. To develop and design a new style of souvenir snack packaging that meets the preferences of Gen Y consumers for Koi Kei Bakery.

## Literature Review

### Background of Koi Kei Bakery

Koi Kei Bakery, established in 1997, is a leading traditional Chinese pastry brand in Macau, renowned for its high-quality almond cookies and egg rolls. Between 2002 and 2017, it dominated Macau's souvenir food market, with a peak market share exceeding 70% (Koi Kei Bakery, 2017). Its success was largely driven by product quality and strong tourism-driven demand. In 2018, Koi Kei reported MOP 9.1 billion in revenue, with souvenir food purchases contributing 27.1% of tourists' total shopping expenditures in Macau (Bing, 2022; Macau Statistics and Census Service, 2018).

However, since 2018, Koi Kei has experienced a steady decline in sales and market share, dropping to 48% by 2023 (TVB Drama Review, 2023). This decline correlates with shifting consumer behaviors and evolving design trends, particularly among younger consumers who increasingly prioritize innovative and aesthetically engaging packaging (Zhou & Wang, 2021). Competitors such as Yang Kee Bakery and Choi Heong Yuen Bakery have leveraged bold, interactive, and eco-friendly packaging strategies that resonate better with Generation Y's psychological preferences for novelty, sustainability, and visual appeal.





Koi Kei continues to maintain a diverse product portfolio, integrating Macau's cultural heritage into its packaging—for example, featuring landmarks on Black Sesame Almond Cookie boxes and Portuguese-inspired designs on Portuguese Cookies (Li & Han, 2024). While this cultural packaging strategy underscores tradition and product quality (Ren, 2018), academic research suggests that traditional design approaches may have limitations when targeting younger demographics, who favor packaging that communicates modernity and aligns with their lifestyle values (e.g., visual communication theory; emotional design frameworks).

To reverse its market decline, Koi Kei must critically reconsider its packaging approach by blending its strong cultural identity with contemporary design trends. This integration should strategically address Generation Y's aesthetic sensibilities and psychological needs, such as the desire for authenticity, environmental consciousness, and interactive consumer experiences (Zhou & Wang, 2021). This balanced approach could help Koi Kei better compete in a marketplace increasingly driven by design innovation and consumer engagement.

### Theoretical Foundation

This study integrates Perceived Value Theory, Information Processing Theory, and User Experience (UX) Design Theory to provide a comprehensive framework for understanding how packaging design influences consumer behavior. Perceived Value Theory posits that consumers assess a product's value based on direct experiences and indirect influences, such as social recommendations, with packaging playing a crucial role in conveying quality, cultural significance, and sustainability (Duarte et al., 2024; Agrawal et al., 2015; Tassawa & Khumhome, 2023). Packaging elements—including color, design, material, font size, and printed information—serve as signals that shape consumer perceptions of value, ultimately influencing their purchasing decisions. In parallel, Information Processing Theory highlights consumers' cognitive limitations when processing product information. Overly complex or unstructured packaging designs can contribute to cognitive overload, diminishing consumers' ability to quickly and effectively evaluate products (Wyer, 2019; Sandova & Ferdaous, 2015). By optimizing visual hierarchies and strategically presenting key information through elements such as color, text, and imagery, brands can enhance consumer decision-making efficiency and engagement (van de Sand et al., 2020). Furthermore, UX Design Theory underscores the importance of holistic user engagement, emphasizing the interplay of usability, emotional appeal, and aesthetics in shaping consumer experiences (Marcus, 2011). Research indicates that tactile materials and interactive packaging elements can foster stronger emotional connections with consumers, reinforcing brand identity and purchase intention (Feng et al., 2017).

By synthesizing these theories, this study aims to evaluate the effectiveness of Koi Kei Bakery's current packaging strategy and identify opportunities for improvement. The findings will





contribute to a deeper understanding of how traditional brands can leverage modern packaging design principles to align with contemporary consumer preferences, enhance perceived value, streamline information processing, and elevate user experience.

### Factors Related to Packaging Design

Product packaging serves not only to protect products from damage but also plays a critical role in promoting and shaping brand identity (Raheem, 2014a; Raheem, 2014b). Various theories can help frame the understanding of how packaging design influences consumer behavior, especially among Generation Y.

Firstly, Perceived Value Theory explains that consumers' purchase decisions are influenced by their evaluation of the benefits received relative to costs. Packaging elements such as color, shape, and materials contribute to perceived product quality and brand value (Ren & Tengku Anuar, 2024).

Secondly, Information Processing Theory highlights how consumers interpret and respond to packaging cues. For example, color attracts visual attention through specific hues and shades while conveying implicit product attributes—red often suggests spiciness, whereas blue implies cooling effects (Ahmad et al., 2012). Similarly, font size and printed information serve as critical communicative elements that enhance consumer understanding and trust in the brand (Waheed et al., 2018; Mruk-Tomczak et al., 2019).

Thirdly, User Experience (UX) Design Theory, although originally applied to digital interfaces, offers valuable insights into physical packaging design by emphasizing user-centeredness, emotional engagement, and ease of interaction (Hasibuan & Nuraeni, 2023). For instance, packaging materials that are environmentally friendly and tactilely pleasing (such as glass) not only protect the product but also elevate the consumer's overall experience and brand perception.

While these three theories collectively contribute to understanding Generation Y's packaging preferences, their application in food souvenir packaging requires careful consideration. Perceived Value Theory primarily addresses consumer evaluation but may overlook the emotional and symbolic aspects that UX Design Theory captures. Meanwhile, Information Processing Theory focuses on cognitive responses but may underestimate the role of affective experience emphasized in UX frameworks.

To deepen the conceptual framework, integrating cross-disciplinary perspectives such as semiotics, which interprets signs and symbols in packaging, and consumer psychology, which explores motivational and emotional drivers, would provide a more comprehensive understanding of how design elements influence Generation Y consumers (Ren & Tengku Anuar, 2024).





In summary, packaging design elements—including color, shape, font size, materials, and printed information—work synergistically to influence consumer perceptions and purchasing decisions. This study thus conducts a consumer perception survey focusing on these factors and uses the findings to guide the design and development of new packaging for Koi Kei products, aiming to align with the nuanced preferences of Generation Y.

### Related Research

Recent research on snack food packaging design has focused on innovative strategies to boost consumer engagement and brand differentiation. Sun and Xu (2024) apply biomimetic structures to seafood snack packaging, creating interactive elements that appeal to young consumers. Liu and Liu (2023) highlight the need for aesthetic and functional improvements in packaging aimed at university students. Additionally, sustainability is gaining prominence, with Rodriguez Parada et al. (2024) exploring algae-based biodegradable materials as eco-friendly alternatives. Nemat et al. (2019) stress the importance of user-centered design to promote sustainable behaviors, while Wang and Ab Gani (2022) emphasize the role of emotional design in connecting with consumers and building a green brand image. Furthermore, studies also highlight the impact of visual elements on consumer decisions. Ab Gani (2023) finds that color and imagery are crucial in shaping preferences, while Gavilan and Fernández-Lores (2021) demonstrate that attractive graphic design boosts online purchase intentions.

These studies can be thematically grouped into sustainability, user experience, and emotional branding, which are key trends shaping modern packaging design. Sustainability research emphasizes environmental responsibility and materials innovation; user experience focuses on intuitive, consumer-friendly designs; and emotional branding addresses the psychological connection between packaging and consumer identity. These thematic perspectives are especially relevant when considering Generation Y's distinct cultural values, visual preferences, and purchasing behavior.

However, despite these valuable insights, there remains a notable lack of focused studies specifically addressing Generation Y's packaging preferences for snack foods, particularly within traditional and culturally significant product categories. While studies such as Liu and Liu (2023) and Ab Gani (2023) offer broad observations about consumer trends, they do not thoroughly examine how these preferences translate into concrete design choices for specific snack segments. Moreover, existing literature often overlooks detailed case studies that bridge theoretical frameworks with practical design applications tailored for Generation Y consumers.

Therefore, this study's case focuses on Koi Kei Bakery's snack food packaging, aiming to fill this research gap by providing a critical reflection on how design principles informed by sustainability, user experience, and emotional branding can be systematically integrated and



adapted to meet Generation Y's expectations. Through this approach, the study contributes to both methodological rigor and practical relevance, offering insights into the effectiveness of targeted packaging redesigns in revitalizing traditional snack brands for younger demographics.

## Conceptual Framework

Based on the research objectives, the researchers established the conceptual framework for the study based on Perceived Value Theory, Information Processing Theory, and User Experience (UX) Design Theory, as illustrated in Figure 1.

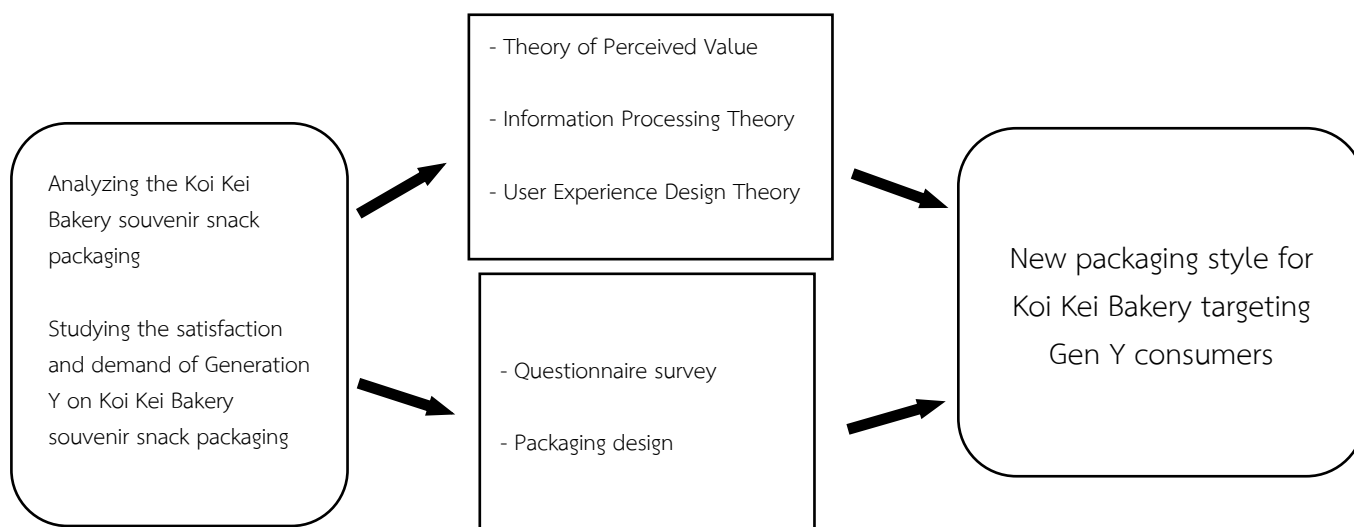


Figure 1 Conceptual Framework

## Methodology

This study adopts a mixed-methods approach, integrating quantitative and qualitative techniques to explore and improve the souvenir snack packaging design for Koi Kei Bakery, with a particular focus on aligning with the preferences of Generation Y consumers. The rationale for employing a mixed-methods design is grounded in human-centered design research, which emphasizes the importance of combining measurable user feedback with expert insights to inform iterative design development (Sanders & Stappers, 2008). The research process consists of four key stages: competitive product analysis, consumer survey, expert consultation, and iterative packaging design refinement:

### Step 1: Analysis of Koi Kei Bakery's and its competitors' Souvenir Snack Packaging

This step involves a structured analysis of the packaging designs of Koi Kei Bakery and its main competitors—Yeng Kee and Choi Heong Yuen. To enhance the objectivity and analytical rigor of this stage, the researchers employed a visual content analysis approach, drawing from design analysis methods such as visual semiotics and packaging attribute coding. Key packaging

elements (e.g., color schemes, typography, layout, imagery, and structural form) were systematically categorized based on their frequency, salience, and symbolic meaning. The analysis was guided by principles from Gestalt theory and visual hierarchy theory, which emphasize the psychological perception of visual composition and the organization of information to direct consumer attention (Lidwell et al., 2010).

Accordingly, this step was divided into two sub-steps to facilitate focused evaluation:

Step 1.1: Analysis of Koi Kei Bakery's packaging design, identifying its current visual strengths and limitations.

Step 1.2: Analysis of competitors' packaging (Yeng Kee Bakery and Choi Heong Yuen Bakery), providing a benchmark for evaluating design differentiation and consumer appeal.

## Step 2: Study of Generation Y's Satisfaction and Demands

Step 2.1: A survey of 400 Gen Y consumers (ages 28–43) at Koi Kei Bakery locations in Macau was conducted using convenience sampling to assess satisfaction and preferences regarding five design elements. The questionnaire demonstrated good reliability through Cronbach's alpha and satisfactory content validity via the Item-Objective Congruence (IOC) index. Data were analyzed using SPSS.

Step 2.2: Expert Interviews – Semi-structured interviews were conducted with six experts from packaging design and consumer behavior backgrounds to gain qualitative insights. The interview data were analyzed using thematic analysis, following established qualitative research procedures (e.g., Braun & Clarke, 2006), which enhances the rigor and credibility of the findings. The experts' list was shown in Table 1.

**Table 1** Expert List

No.	Role	Specialization	Affiliation
Expert 1	Packaging Design Professional	Packaging Design, Branding	University of Macau
Expert 2	Packaging Design Professional	Graphic Design, Packaging Innovation	Macau University of Science and Technology
Expert 3	Packaging Design Professional	Sustainable Packaging Materials	Institute for Tourism Studies Macau
Expert 4	Industry Expert	Consumer Behavior, Snack Packaging Trends	City University of Macau





No.	Role	Specialization	Affiliation
Expert 5	Industry Expert	Souvenir Packaging Design, Consumer Preferences	Macau Polytechnic Institute
Expert 6	Industry Expert	Consumer Behavior, Marketing, and Packaging	University of Shanghai

### Step 3: Design the Initial Draft of Koi Kei Bakery Souvenir Snack Packaging

In Step 3, this study focuses on developing hand-drawn sketches and initial drafts of Koi Kei Bakery's redesigned souvenir snack packaging. This phase follows the "Discover-Define-Develop-Deliver" design thinking model to ensure a systematic approach. The process begins with defining the design scope and establishing a core concept, followed by selecting key elements such as color, shape, font styles, material, and printed information. Guided by insights derived from consumer surveys and expert interviews (Steps 1 and 2), the design aims to align closely with market preferences and Generation Y's expectations. This stage involves generating preliminary sketches and drafts, gradually evolving into a comprehensive design scheme through iterative refinement.

### Step 4: Finalization of the New Packaging Design

Step 4 involves finalizing the packaging design based on iterative feedback from expert interviews. Six experts review the hand-drawn sketches and initial drafts produced in Step 3, providing critical evaluations that are analyzed and integrated to refine the packaging. This stage completes the "Deliver" phase of the design thinking model, ensuring the final design is well-rounded and market-ready.

By adhering to this structured, user-centered design process framed within an established design thinking model, the study aims to develop a packaging design that not only meets the preferences of Generation Y but also enhances Koi Kei Bakery's brand competitiveness.

## Results

Objective 1 of this study is to analyze the Koi Kei Bakery souvenir snack packaging. To achieve objective 1, the researchers conducted a comparative analysis on the packaging designs of Koi Kei, Yen Kee, and Choi Heong Yuen Bakery (as shown in Table 2). Step 1.1 was to analyze the current packaging design of Koi Kei, as shown in Table 4. The researcher selected five outperforming product series: Almond Cookies, Candies, Chinese Pastries, Gift Boxes, and Cookies.

According to the results from step 1.1, Koi Kei Bakery's packaging design demonstrates a number of clear strengths, including its thoughtful integration of traditional Chinese aesthetics with modern minimalism, effective use of color coding for product differentiation, strong brand

identity through classical fonts and logo placement, and high-quality materials that enhance the perception of luxury. These elements collectively contribute to a compelling brand image that honors cultural heritage while appealing to contemporary sensibilities. However, the brand also faces several pain points. Its traditional design motifs may not fully resonate with younger or international consumers unfamiliar with Chinese culture, while color strategies risk misinterpretation across different cultural contexts. The use of straightforward product imagery, though clear, can lack creativity or emotional engagement. Additionally, inconsistencies across product lines and sustainability concerns present further challenges.

**Table 2** Packaging design of Koi Kei, Yen Kee, and Choi Heong Yuen Bakery

Product Series	Koi Kei Bakery	Yeng Kee Bakery	Choi Heong Yuen Bakery
Almond Cookies			
Candies			
Chinese pastry			
Gift Box			
Cookies			



In step 1.2, the researchers conducted an analysis of competitors' packaging (Yeng Kee Bakery and Choi Heong Yuen Bakery). The comparative analysis results offered a thorough insight into the weaknesses of Koi Kei Bakery's packaging design and the factors that make the packaging of the other two brands appealing to Gen Y consumers.

Based on the results, Ying Kee's packaging design emphasizes a modern and minimalist style, utilizing hexagonal boxes, vibrant colors, and clear product information for quick recognition. Its contemporary layout and typography convey a high-end, fashionable image that appeals to consumers favoring clean design. The portable square packaging is convenient for everyday use or gifting, and high-quality materials enhance brand trust and purchase intention. The packaging of Choi Heong Yuen Bakery combines modern and classic designs, adding cartoon designs such as cartoon images or product cartoons to cater to young people's preferences and cultivate emotional resonance.

Compared to Ying Kee and Choi Heong Yuen, Koi Kei Bakery's packaging design falls short of effectively integrating traditional and contemporary elements, impacting its brand image and competitive edge. While Koi Kei's design leans towards a traditional aesthetic, it remains relatively conservative, lacking the innovative modern features that appeal to younger consumers. In contrast, Ying Kee and Choi Heong Yuen successfully merge traditional Chinese elements, such as ink wash art and calligraphy, with minimalistic modern styles, which highlights cultural depth while aligning with contemporary consumer tastes. By presenting a unique brand identity, these brands achieve a balance between heritage and fashion trends that Koi Kei's uniform, square packaging shapes fail to replicate, resulting in lower brand differentiation. Additionally, Koi Kei's approach to color coding and brand recognition is less effective. Ying Kee and Choi Heong Yuen differentiate their product lines with distinctive color schemes—green and brown for almond cakes, vibrant purple and green for candies—enhancing brand recognition and enabling consumers to quickly identify products. Koi Kei's packaging lacks this level of diversity in color use and visual communication, missing the opportunity to strategically employ color perception to strengthen brand identity. In a market where consumers prioritize personalized choices and rapid information processing, Koi Kei still has significant room for improvement in conveying brand identity and enhancing user experience.

Objective 2 of this study is to study the satisfaction and demand of Generation Y on Koi Kei Bakery souvenir snack packaging. To achieve this objective, the researchers conducted a mixed-method approach, combining a quantitative questionnaire survey and qualitative expert interviews.





First, this study investigated the satisfaction and demand of Generation Y on Koi Kei Bakery souvenir snack packaging through a questionnaire survey. The results were divided into two parts as follows:

**Table 3** Demographic data

Variable	Category	Frequency	Percentage (%)
Gender	Female	216	53.33
	Male	189	46.67
Education	University or higher	104	25.68
	High school or equivalent	103	25.43
	Middle school	77	19.01
	Technical or vocational school	71	17.53
	Primary school	45	11.12
	No formal education	5	1.23
Monthly Allowance	5001 - 10000 CNY	152	37.53
	Less than 5000 CNY	147	36.30
	10001 - 15000 CNY	65	16.05
	More than 15000 CNY	41	10.12

In the first phase, the study examined Gen Y's satisfaction and demand through a structured questionnaire. The demographic profile of the 405 respondents is presented in Table 3. Among them, 53% are female, and 47% are male. Most respondents have either a high school education (25%) or a university degree (26%), while only 1% lack formal education. Regarding monthly expenditure, 38% spend 5001–10000 CNY, followed by 36% spending less than 5000 CNY, and 26% belonging to the higher spending segment (above 10001 CNY).

In the second part of the questionnaire survey, an analysis of five aspects of Koi Kei Bakery souvenir snack packaging (color, shape, material, printed information, and font size) was conducted. The results highlight several areas for improvement (the overall is shown in Table 3).

Gen Y participants' perceptions of packaging elements reveal both strengths and areas for improvement. Color (Mean = 3.55, SD = 0.89) is seen as a somewhat influential factor in purchase decisions, though the moderate standard deviation indicates varied opinions; the current color strategy lacks a strong brand association, highlighting the need to enhance color-brand congruence for a more cohesive visual identity. Shape (Mean = 3.30, SD = 0.86) is moderately



recognized but fails to drive purchases or reinforce brand impression, suggesting untapped potential in structural design to boost shelf impact and memorability. Material (Mean = 3.81, SD = 0.77) received the highest satisfaction rating, with low variability, indicating general agreement on its contribution to perceived quality; however, growing concern for environmental sustainability calls for eco-friendly packaging innovations. In contrast, Printed Information (Mean = 3.28, SD = 0.92) was deemed only moderately helpful, with high variability pointing to inconsistent user engagement—implying that refining information hierarchy through visual communication strategies may enhance clarity and messaging. Lastly, Font Size (Mean = 3.19, SD = 0.88) received a neutral evaluation; while it aids in product recall (Mean = 3.33), it lacks emotional and aesthetic appeal, suggesting that the application of emotional design principles could improve its effectiveness with Gen Y consumers.

**Table 4** Satisfaction and demand of Generation Y on Koi Kei Bakery souvenir snack packaging

Packaging Aspect	Mean	SD	Interpretation	Key Insights from consumers
Color	3.37	1.09	Neutral	Slight influence on purchasing decisions but weak brand recall. Needs better alignment with brand identity.
Shape	3.30	1.01	Neutral	The shape is accepted by some respondents, but does not significantly drive purchases or create a strong product image.
Materials	3.81	0.85	Agree	Recognized as high quality, contributing positively to brand perception. Room for sustainable innovation.
Printed Information	3.28	1.04	Neutral	Limited impact on purchase decisions; readability and relevance could be improved.
Font Size	3.19	1.09	Neutral	Minimal influence on brand engagement; more distinctive and appealing font choices recommended.
Overall	3.39	102	Neutral	Consumers perceive packaging as adequate but lacking a strong visual impact; design refinements are needed to enhance appeal and differentiation.



In the qualitative phase, in-depth interviews were conducted with three packaging design experts and three industry professionals to gain deeper insights into Koi Kei Bakery's packaging strategy. The interview findings were categorized according to the same five packaging attributes to facilitate comparison and data triangulation.

**Color:** Experts recommended adopting more vibrant and varied colors to capture Gen Y's attention, while reinforcing brand recognition through the strategic use of signature hues. This aligns with visual branding theory, which emphasizes consistent and meaningful color application.

**Shape:** Experts advocated for incorporating modern minimalism into packaging structures while preserving traditional elements. Merging narrative-driven design with familiar forms—such as pastry boxes—can strengthen brand storytelling and improve emotional connection.

**Material:** Sustainability was emphasized. Experts suggested biodegradable or recycled materials that signal environmental responsibility without sacrificing quality. This reflects Gen Y's preference for ethical consumption and aligns with the principles of sustainable product design.

**Printed Information:** Experts proposed redesigning the content using icons and concise text to improve clarity and visual flow. Enhancing the semiotic function of printed information could differentiate products while reinforcing brand uniqueness.

**Font Styles:** Experts advised using modern, minimalist typefaces to improve both legibility and aesthetic appeal. A balance between tradition and modernity in typography can enhance memorability and support brand positioning.

Despite the insightful expert input, deeper integration of qualitative findings into the broader narrative could further enrich interpretation. For example, alignment and divergence between consumer survey data and expert recommendations reveal strategic gaps: while consumers rate materials highly, experts point to untapped opportunities in sustainable innovation; both groups express dissatisfaction with the current color and shape strategies, reinforcing their importance as redesign priorities.

To conclude, the results from both quantitative and qualitative sources reveal areas where Koi Kei Bakery can optimize its packaging to align more closely with Gen Y's visual preferences, emotional expectations, and value-driven behaviors. Greater application of theoretical frameworks such as visual communication, emotional design, and user-centered design will be essential for strengthening packaging effectiveness and brand resonance.

Objective 3 of this study is to develop and design a new style of souvenir snack packaging that meets the preferences of Gen Y consumers for Koi Kei Bakery. To achieve this objective, the researchers first developed and designed hand-drawing sketches and initial packaging drafts for five product series based on the results from research objectives 1 and 2: almond cookies, candies, Chinese pastry, gift box, and cookies. In the second phase, these sketches and drafts





were evaluated by experts from the same group. Based on their feedback, the researchers refined the drafts and finalized the packaging design for Koi Kei Bakery (see Table 5).

The experts provided the following recommendations for the packaging designs, offering targeted suggestions across multiple product lines. However, it is important to note that the evaluative criteria guiding these suggestions were not explicitly stated. To strengthen the rationale behind these decisions, it is useful to interpret them through the lens of key design frameworks—namely, visual aesthetics, human-centered design, and sustainable packaging principles. Additionally, the final packaging adjustments can be further examined through the five stages of the Design Thinking Model (Empathize, Define, Ideate, Prototype, Test) to assess how they address Generation Y's functional and emotional needs.

**Almond Cookies Packaging:** Experts recommended lightening the cartoon color tones and replacing the product name and logo with a realistic product image to achieve a more balanced and appealing layout. This recommendation reflects the principle of visual hierarchy from visual aesthetics theory, where imagery plays a central role in guiding consumer attention. From a human-centered design perspective, replacing cartoon elements with realistic visuals may better align with Gen Y's preference for authenticity and product transparency. According to the Define and Ideate stages of the Design Thinking Model, these changes directly respond to the identified consumer desire for clear visual cues and credible brand representation.

**Candies Packaging:** Experts advised lightening the overall color palette, particularly in the depiction of trees and leaves, and adjusting the product image to make it appear more compact and dynamic. This modification draws from color theory, which suggests that lighter hues evoke freshness and approachability. A more dynamic layout increases visual engagement, aligning with Gen Y's desire for aesthetic stimulation. These adjustments also reflect the Empathize and Prototype stages of the Design Thinking process, where consumer feedback is translated into visually energizing and spatially efficient packaging.

**Chinese Pastry Packaging:** The recommendation to replace cartoon illustrations with realistic images and to use contrasting colors addresses concerns around monotony and lack of product clarity. These revisions are grounded in affective design principles, where visual clarity and color contrast can evoke stronger emotional resonance and improve brand recall. The inclusion of additional product information enhances cognitive accessibility, addressing functional needs for informed decision-making. From a Design Thinking perspective, this packaging solution integrates both emotional and informational components, meeting Gen Y's expectations during the Ideate and Test phases.

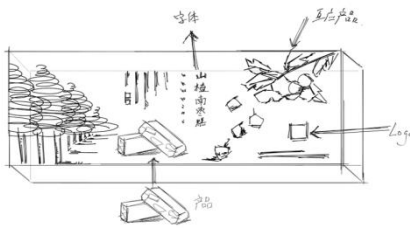


**Gift Box Packaging:** Experts suggested reducing font size and replacing generic text with specific product information, alongside introducing multilingual content to enhance visual

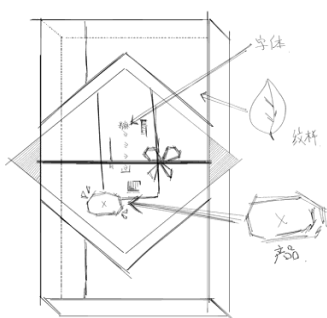





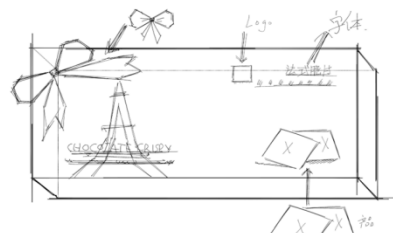


contrast and user inclusiveness. This aligns with inclusive design and multicultural communication strategies, both relevant to Gen Y consumers who are digitally literate and globally connected. These changes demonstrate the application of user empathy and cultural sensitivity, especially in the Empathize and Define phases of Design Thinking.

**Cookies Packaging:** The dark color scheme was critiqued as too heavy, with experts recommending a lighter shade of blue for a fresher, more inviting appearance. Additionally, they proposed reducing the space between the product name and image to create a more visually cohesive layout. These adjustments are based on visual balance and spatial harmony, which are central to aesthetic judgment. A lighter tone also aligns with sustainable branding cues, where colors are used to imply naturalness and eco-friendliness—important values for Gen Y. Within the Design Thinking Model, these refinements emerge during the Prototype phase as iterative responses to user feedback.

In summary, while the expert recommendations provided meaningful direction for packaging improvements, future research or design implementation could benefit from explicitly referencing standardized evaluation frameworks. Doing so would reinforce the credibility and transferability of the design decisions. Moreover, analyzing how each packaging modification aligns with the functional (e.g., readability, usability) and emotional (e.g., aesthetic appeal, authenticity) needs of Gen Y consumers—through the structure of the Design Thinking Model—offers a coherent and user-centric justification for the final design outcomes.

**Table 5** Hand-drawing Sketch, Initial Draft, and Finalized Design of Packaging

Product Series	Hand-drawing Sketch	Initial Draft	Finalized design
Almond Cookies			
Candies			

Product Series	Hand-drawing Sketch	Initial Draft	Finalized design
Chinese pastry			
Gift Box			
Cookies			

## Discussion

This study identifies key pain points in Koi Kei Bakery's souvenir snack packaging design, particularly regarding its appeal to Generation Y consumers, especially compared to competitors that have successfully captured a significant share of this market segment. While the brand effectively showcases cultural heritage through traditional motifs, calligraphy, and premium materials, these elements may feel outdated, overly complex, or environmentally unfriendly to younger consumers. Generation Y values clarity, emotional resonance, and sustainability—preferences not fully addressed by the current packaging. Furthermore, inconsistent styles, limited intercultural accessibility, and a lack of creative storytelling weaken brand connection and visibility. To remain competitive, Koi Kei Bakery must strategically balance tradition with modern expectations through refined design approaches.

To address the insufficient appeal to Generation Y, this study redesigned Koi Kei Bakery's packaging by focusing on five key design elements: color, shape, material, font styles, and printed information.

Regarding color, the study recommends balancing subtlety and boldness to evoke emotional resonance, with soft tones conveying sophistication and vibrant colors adding energy (see Fig. 2). This approach aligns with prior research highlighting color's role in fostering emotional connections (Agrawal, 2023). Generation Y also favors eco-friendly color palettes, preferring natural tones such as green, beige, and light brown, complemented by lively accents like yellow or orange (Liu & Liu, 2023). Additionally, culturally significant color combinations, such as red and gold or blue and white, appeal to their appreciation for heritage and cultural richness (Ahmad et al., 2012).



Figure 2 Candy Packaging Design

For shape, minimalist and functional packaging that supports multifunctionality—such as reusable boxes or storage—is favored by Generation Y consumers who value convenience amid busy lifestyles (Sharma & Srivastav, 2023; Sun & Xu, 2024). Simple geometric shapes like cuboids (see Fig. 3) offer practical benefits in storage and transport and resonate with design principles of visual simplicity and "form follows function" (Liu & Chen, 2019).



Figure 3 Gift Box Packaging Design

The material choice must prioritize sustainability, reflecting Generation Y's environmental values by using recyclable, biodegradable, or reusable components (Nur Amira & Harun Rashidi, 2020). Incorporating tactile finishes—such as matte coatings or textured surfaces—can enhance



sensory engagement and elevate perceived quality, linking to embodied cognition theories in design (Ren & Tengku Anuar, 2024).

Regarding font styles and sizes, integrating traditional calligraphy-inspired fonts with modern sans-serif styles balances cultural identity and contemporary clarity, strengthening brand recognition (Pelet & Taieb, 2017). Multilingual typography (see Fig. 4) improves intercultural accessibility and broadens brand appeal from a communication design perspective (Yang, 2023).

‘Lastly, printed information should be concise, well-organized through a clear visual hierarchy, and emotionally engaging. Generation Y values straightforward, relatable content, and incorporating emotional storytelling enhances brand connection. The addition of interactive elements, such as QR codes linking to brand stories or social media campaigns, further fosters engagement, appealing to the digital-native nature of this demographic (Liu & Liu, 2023).



**Figure 4** Cookie Packaging Design

In conclusion, this study offers actionable, theoretically grounded recommendations that align packaging design with Generation Y preferences. By applying culturally rich color schemes, minimalist and functional shapes, sustainable materials, clean multilingual typography, and interactive printed information, brands like Koi Kei Bakery can strengthen their market position and better meet the evolving expectations of this vital consumer group.

## Recommendation

### 1. Recommendations for Optimizing Packaging Design to Attract Generation Y Consumers

To enhance appeal among Generation Y consumers, this study proposes optimizing five key packaging elements grounded in design theory. First, the color scheme should balance subtlety and vibrancy, drawing on color psychology: soft tones can evoke elegance and calmness aligned with the brand's identity, while bold contrasts generate excitement and playfulness appealing to diverse segments within Generation Y. Incorporating natural hues or culturally inspired palettes further connects to values of sustainability and heritage important to this demographic.



Second, packaging shape should emphasize simplicity, functionality, and reusability. Drawing on affordance theory, shapes that communicate multifunctionality beyond initial use can increase attractiveness to practical-minded Generation Y consumers who favor minimalism.

Third, materials should prioritize environmental responsibility by using recyclable or biodegradable options. From the perspective of perceived value theory, sustainable materials can enhance consumers' perceptions of quality and ethical brand positioning. Adding tactile finishes—such as matte or embossed textures—leverages embodied cognition by enriching sensory experience and emotional connection.

Fourth, font styles should thoughtfully integrate traditional and contemporary elements. Strategic use of serif versus sans-serif or handwritten fonts can convey cultural heritage or modernity, reinforcing brand identity while maintaining clarity. Multilingual fonts ensure accessibility for diverse consumers, fitting for souvenir packaging.

Finally, printed information should be concise and visually organized according to principles of information design, such as visual hierarchy, to facilitate quick comprehension by a generation accustomed to rapid information processing. Including interactive elements—like QR codes linking to brand stories or social media campaigns—can boost engagement and resonate with tech-savvy Generation Y consumers.

## 2. Recommendations for Future Research

Although this study benefits from a robust sample of Generation Y consumers and expert interviews, its findings are limited by focusing on a single brand and product category. Future research should expand the scope to include multiple brands and a variety of snack types to enhance generalizability. Additionally, integrating theoretical frameworks—such as brand image theory to examine the alignment between packaging design and Koi Kei Bakery's desired brand personality, or consumer behavior theory to better understand Generation Y's decision-making processes—would strengthen the analysis. Exploring emerging technologies like AR and VR in packaging design could further enrich future studies by enabling immersive brand storytelling and product visualization, thereby enhancing the pre-purchase experience and offering deeper insights into how packaging shapes consumer perception and behavioral intentions.

## References

- Ab Gani, M. A. (2023). *Impact of snack food packaging design characteristics on consumer purchase decisions*. SAGE Open, 13(2), 215824402311671.
- Agrawal, D. K. (2023). *Increasing digital dissemination and online apparel shopping behaviour of Generation Y*. Journal of Fashion Marketing and Management, 28(7), 1–18.







- Agrawal, S., Tripathi, R. K. P., & Seth, N. (2015). *Packaging influences on consumer buying behavior. International Journal of Engineering Research and Applications*, 5(5), 1–6.
- Ahmad, N., Billoo, M., & Lakhan, A. A. (2012). *Effect of product packaging in consumer buying decision. Journal of Business Strategies*, 6(2), 1–10.
- Ajzen, I. (1991). *The theory of planned behavior*. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Bing, L. (2022). *KOIKEI brand development*. (Internal source as cited).
- Bloch, P. H. (1995). *Seeking the ideal form: Product design and consumer response. Journal of Marketing*, 59(3), 16–29.
- Bolton, R. N., et al. (2013). *Understanding Gen Y and their use of social media: A review and research agenda. Journal of Service Management*, 24(3), 245–267.
- Braun, V., & Clarke, V. (2006). *Using thematic analysis in psychology. Qualitative Research in Psychology*, 3(2), 77–101.
- Duarte, P., Silva, S. C., Roza, A. S., & Dias, J. C. (2024). *Enhancing consumer purchase intentions for sustainable packaging products. Sustainable Futures*, 7, 100193.
- Feng, L., Zhang, X., & Men, D. (2017). *User experience design in agricultural product packaging. Advances in Affective and Pleasurable Design*, 182–189.
- Gavilan, D., & Fernández-Lores, S. (2021). *Online snacks shopping: The influence of packaging design on product expectations. Digital Economy and Innovation Journal*, 1(1), e005.
- Gu, R. K. (2023). *Research on the application of local characteristics of Macao in souvenir packaging. Journal of Southeast University*, 25(S2), 165–168.
- Hasibuan, M. S., & Nuraeni, S. (2023). *Influential cosmetic packaging attributes toward customer purchase intention. Journal of Consumer Studies and Applied Marketing*, 1(2), 81–91.
- Koi Kei Bakery. (2017). *Company profile*. Retrieved from <http://www.koi-kei.com/tc/index.php>
- Li, Y., & Han, Y. (2024). *Emotional colours in product packaging. Highlights in Art and Design*, 6(1), 48–50.
- Lidwell, W., Holden, K., & Butler, J. (2010). *Universal principles of design*. Rockport Publishers.
- Liu, G., & Liu, L. (2023). *Snack food packaging design for college students. Shanghai Packaging*, (7), 121–123.
- Liu, Y., & Chen, H. (2019). *Snack packaging in the digital age*. (In-text citation only, full ref missing).
- Lockwood, T. (2010). *The bridge between design and business. Design Management Review*, 21(3), 5–10.
- Macau Statistics and Census Service. (2018). *Tourism statistics 2018*. Macau Statistics and Census Service.
- Marcus, A. (2011). *Design, user experience, and usability*. In DUXU 2011 Proceedings. Springer.
- Mruk-Tomczak, D., Jerzyk, E., & Wawrzynkiewicz, N. (2019). *Consumer engagement and perception of packaging information. Olsztyn Economic Journal*, 14(2), 195–207.





- Nemat, B., et al. (2019). *Packaging design and recycling behavior*. Sustainability, 11(16), 4350.
- Nur Amira, A. B. R. P., & Harun Rashidi, J. N. (2020). *Packaging design and youth junk food purchase intention*. Journal of Business and Management Practice, 6(1), 25–35.
- Pelet, J.-É., & Taieb, B. (2017). *Skeuomorphism to flat design in m-commerce*. In *Advances in National Brand and Private Label Marketing*, 95–103. Springer.
- Raheem, A. R., Ahmad, N., Vishnu, P., & Imamuddin, K. (2014a). *Packaging and labeling on Pakistani consumers*. European Journal of Scientific Research, 10(16), 464–473.
- Raheem, A. R., Vishnu, P., & Ahmed, M. A. (2014b). *Packaging and consumer buying behavior*. European Journal of Scientific Research, 122(2), 125–134.
- Ren, C. Y., & Tengku Anuar, T. F. (2024). *Packaging and consumer purchase intention*. Int. Journal of Entrepreneurship and Management Practices, 7(24), 212–219.
- Ren, Y. (2018). *Macau souvenir food industry brand impact*. Intellectual Property Publishing House.
- Rodriguez Parada, L., et al. (2024). *Biodegradable algae-based food packaging*. Artículo de investigación, 99, 59–62.
- Sanders, E. B.-N., & Stappers, P. J. (2008). *Co-creation and the new landscapes of design*. CoDesign, 4(1), 5–18.
- Sandova, V., & Ferdaous, J. (2015). *Information-processing constraints and consumer behavior*. European Journal of Business and Management, 7(20), 62–75.
- Sharma, H., & Srivastav, P. (2023). *Gen Z vs Gen Y purchasing preferences*. Int. Journal for Multidisciplinary Research, 5(4), 1–8.
- Sun, M., & Xu, Y. (2024). *Packaging design coherence for seafood snacks*. Packaging and Design, (3), 122–123.
- Tassawa, C., & Khumhome, B. (2023). *Packaging elements on perceived value and age moderation*. ABAC Journal, 43(3), 112–127.
- TVB Drama Review. (2023, June 19). *All companies withdraw from Hong Kong...* NetEase. <https://www.163.com/dy/article/l7KMGO150517SNLE.html>
- van de Sand, F., et al. (2020). *Information processing for product perception*. In *User experience is brand experience*. Springer.
- Waheed, S., et al. (2018). *Packaging and purchase intentions*. Market Forces, 13(2), 97–114.
- Wang, H., & Ab Gani, M. A. (2022). *Emotional design for children's packaging*. Ideology Journal, 4(1), 48–63.
- Wyer, R. S. (2019). *Theory and method in consumer information processing*. In *Handbook of Research Methods in Consumer Psychology*. Routledge.
- Yang, D. J. (2023). *Urban cultural elements in Macau tourist food packaging*. Beauty and Times, (07), 82–86.





Zhou, H., & Wang, Z. (2021). *Brand upgrading strategies for Macao's souvenir culture*. Journal of Fujian University of Technology, 19(5), 428–433.