

An Investigation Into the AR Packaging Marketing Strategy Methods of Chinese Mooncakes

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Abstract: Traditionally, during the Mid-Autumn Festival in the Chinese community, friends and relatives offer mooncakes to each other as a token of appreciation. This has formed a longstanding custom and serves as the most important sales period of the year. The longstanding homogeneous competition in the market has failed to attract the interest of the younger generation while increasing competition has resulted from the entry of non-pastry-industry companies into the market. Companies must seek innovative marketing strategies to continue to create additional corporate value and profits in the face of these changing times and trends. Augmented Reality (AR) technology has matured in recent years and be activated by simply scanning the barcode on a package with a cellphone. The era of cellphone applications for marketing has arrived, and it was continuously been expanded from personal to social media and e-commerce. Therefore, this study aimed to investigate the change in marketing strategies for the AR packaging of mooncakes. We first analyzed the relationship between AR information and the core concepts of Marketing 4.0 by exploring the role of packaging in the marketing mix and the interactive experience generated by AR packaging through literary review. The four marketing combinations of “interactive marketing”, “cultural aesthetics”, “social effect”, and “e-commerce” were summarized and resulted in the effects of “cross-industry alliance”, “digital life”, “information connection”, and “cocreation of value”. The conclusion conclusively proposes three principles: 1) information authenticity, 2) cross-industry cooperation, and 3) value transformation — which provide a reference for the integration of technology and marketing.

Key words: pastry industry; augmented reality; strategic alliance

JEL code: M310

1. Motivation and Objectives

In Chinese mythology, the gods inhabited the moon, and it has been a cultural activity since ancient times to make cakes for the gods during the full moon. It was said that, by sharing the offerings with others, one can be blessed by the gods with wealth and happiness, and this has made mooncakes the most representative gift of the Mid-Autumn Festival. Therefore, the peak season for mooncake sales is the period leading up to the Mid-Autumn Festival, which is also a major battlefield for the bakery industry’s marketing activities. Mooncake sales in 2019 increased by 7.9% compared to the same period last year with total sales of RMB 1.967 billion (approximately

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US\$2.77 billion) in the previous year. Sales have been on a steadily upward trend (Issue et al., 2019). The 2020 China Mooncake Industry Development Trend Report concluded that brand concentrations are increasing with traditional market sales channels declining by 5%–10% and purchases via the Internet increasing by 20%. In 2020, the market was expected to perform as it did in recent years, although the economic situation is not optimistic due to COVID-19 and U.S.–China relations (ZhiPeng, 2020). The mooncake market has not been greatly impact by the worldwide pandemic; rather, it has accelerated the change in consumers' habits to order mid-autumn gift boxes online.

Mooncake production methods originate from historical succession based on traditional inherited concepts, resulting in a high degree of homogeneity in the form of similar products, making brand differentiation difficult to form. Due to the immense commercial opportunities, increasingly atypical enterprises, not companies within the pastry industry, are entering the market, such as the Beijing Imperial Palace Museum, Starbucks, and Alibaba. The mooncake market has become an opportunity to enhance their brand images and expand their market influence. With the changes in the market, even well-known brands with good reputations or long histories must adapt and improve along with the times. In the face of changing trends and market competition, it is necessary to think of novel marketing strategies every year to attract attention, especially from the younger demographics (Chuyi, 2019). Another marketing tool that is relied upon is packaging, where creativity also influences people's willingness to buy. By collaborating with famous designers to improve the quality and preciousness of the gift, a company can win the attention of consumers with the most extravagant designs. However, another environmental issue arises as these mooncake boxes produce packaging waste that can be harmful to the environment; 40% of the packaging is unnecessary and wasteful (Cui, 2019).

With the development of digital information and Internet technology in recent decades, cell phones have gradually become a tool for social interaction in modern life. The immersion created by Augmented Reality (AR), an innovative technology, provides a strong sense of involvement and interactivity. By scanning a barcode or a specific graphic on the outside of a package, one can combine virtual and physical information anytime and anywhere to learn about the appearance, function, and usage of a product without the need to physically open the package, which addresses the lack of information in current packaging methods. There is growing interest in this new type of interactive information communication (Li & Si, 2019). Scholz (2016) argues that the use of AR technology to create immersive brand experiences is an innovative marketing approach that can create more interactive advertisements and enable consumers to experience products through new virtual spaces and use this technology as a reference for marketing decisions. AR technology can bring different marketing advantages to the traditional pastry industry (Scholz & Smith, 2016).

Social platforms have become the center of information dissemination, consumers can verify and better understand the authenticity of brand marketing strategies, and the fulfillment of corporate promises will be the key to building brand reputation (Jara et al., 2012). In the face of atypical competitors in the market, sluggish consumption of the new generation, the conflict and continuity between digital and traditional cultural aspects, and product differentiation, traditional mooncakes have been forced to develop a marketing strategy aligned with the times. For these reasons, this study attempts to investigate the importance of the marketing trend of "Marketing 4.0" by analyzing the traditional packaging marketing method and the change of AR to create interactive experiences and marketing messages. In addition, by collecting case reports of effective Chinese mooncake AR marketing on the Internet, the study will summarize the effects and principles of AR mooncake marketing strategies, which be used as a reference by related industries.

2. Literature Review

2.1 The Marketing of Mooncake Packaging Methods

Packaging is an integral part of the marketing mix, primarily serving the functions of protection and preservation, containment, shipping convenience, and information communication, making it an important part of corporate marketing practices (Agariya et al., 2012). As the market becomes more competitive, all elements of the packaging, including text, color, structure, images and characters, style, and personality, must be integrated to provide consumers with visual information to evaluate the product at the time of purchase or use (McNeal & Ji, 2003). The visual impact of packaging design affects storefront purchasing behavior. If consumers are to be interested in the product, the packaging must be perceptually stimulating and easily understood, a concept that has applied to packaging design and marketing strategy, making packaging design a strategic marketing tool (Clement, 2007). Packaging is more effective than advertising, but the more demanding consumers are, the more important it is to provide the right services and information as a communication function and a tool for marketing strategy to attract consumers' attention (Vyas & V., 2015). Packaging acts as an intermediary between consumers and companies, so dialogue with consumers must be beneficial to promote the brand. However, to achieve purposeful and effective communication, it is important to have an idea of the consumer's psychology so that manufacturers can understand the needs and respond appropriately (Silayoi & Speece, 2007).

Beyond the basic marketing functions of mooncake packaging methods, the Mid-Autumn Festival serves its importance in symbolizing the cultural rituals that represent people's expectations for a harmonious and happy lifestyle while also symbolizing the reunion of the whole family, making the cultural aesthetics more important than the general packaging. Therefore, it is critical to incorporate traditional cultural elements into the design concepts to create aesthetic tastes and uniqueness that meet modern people's needs (Yixuan, 2019). The aesthetics formed by the visuals are the expression of the atmosphere that affects the sales results. Especially in the traditional Chinese festive atmosphere, the unique shape of the packaging, which symbolizes good luck and cultural elements, can trigger impulse purchasing (Yeung & Yee, 2010). However, driven by commercial interests and profits, the development of mooncakes has taken a deviant path with overly exaggerated packaging producing environmental pollution. This not only distorts the image of warmth and goodness of mooncakes in people's minds but also is detrimental to the heritage and development of mooncakes (Jiang, 2017).

Product homogeneity has long been a marketing issue for mooncakes. According to Huang et al., to stand out from the fierce competition, packaging must feel innovative and interesting to consumers. Comte Creativity Bake Shop has created two creative packaging designs, an innovation that greatly improves the function and enjoyment of mooncakes as gifts. In addition to being a tool to promote consumer purchasing behavior and the sale of goods, packaging can establish market segmentation and recognition. The term "positioning" began in 1969 and originally referred to the shapes and package sizes of products and their pricing competitiveness whereby the positioning strategy of a product would impact subsequent marketing practices (Maggard, 1976). Packaging can generate product differentiation and positioning, which is a relativistic concept, meaning that defining product positioning is more meaningful from a comparative perspective. Having a significant advantage over competitors is sufficient to influence strategic decisions in the marketplace, allowing companies to analyze competitive product strategies more objectively and carefully rather than relying solely on intuition (Ampuero & Vila, 2006). In short, the packaging of mooncakes plays a major role in sales, mainly in four purposes: 1) shipping convenience, 2) safety and environmental friendliness, 3) brand management, and 4) cultural connotation. In

particular, the cultural messages conveyed are relevant to brand differentiation. In the past, packaging was an unidirectional projection of visual information, but the digitalization and interactivity of information has changed the way of communication, causing a reshaping of the market ecology and a change in marketing concepts. In the future, more marketing possibilities will be available.

2.2 AR Technology and Marketing

AR is a technology that enables people to synchronize virtual information and images of physical objects, people, or space in a physical environment in real time. It is now possible to scan a barcode or QR code through a cell phone camera to match the image of a 3D object with the actual environment. AR technology has to be integrated with smartphones and apps to become a complete, standalone, and convenient platform that can be applied anywhere, anytime, and without specialized knowledge (Wagner et al., 2005). The Internet allows cell phone systems to display a variety of product information depending on whether the consumer is in a store or at home; different contents can be displayed in both settings. It is also possible to provide consumers with timely information on where to purchase products or information for purchasing (Valkkynen et al., 2011). The approach mobile phone apps take enables AR experiences that increase convenience, activeness, and immediacy, and digital information can be displayed as text, pictures, animations, music, 3D objects, and many other types that can be combined according to the purpose. AR can play an important role in integrated marketing programs and can generate unique and powerful potential (Scholz & Smith, 2016). The introduction of AR technology on ketchup packaging by Heinz in 2011 was one of the first marketing success stories in the food and beverage industry as consumers scanned the packaging and activated an Internet connection to display a recipe booklet with reference dishes using Heinz ketchup. In 2014, “Huamei Mooncake” used QR Code technology to allow recipients to see and hear the giver’s blessing video by scanning the package on their cell phones, which attracted over 60 million views on Weibo (Yiru, 2015). The immersive experience of AR technology constructs an authentic, in-person environment that allows consumers to experience products in a new way and context, creating a unique opportunity to contribute to an integrated marketing strategy designed to address consumer characteristics, triggers, objectives, information content, and the physical context of their lives and, most importantly, consumer motivation and AR engagement (Scholz & Smith, 2016).

E-commerce and social media platforms instantly link product information and reviews, allowing purchases to be made online wherever you are and creating a new consumer ecology and marketing model (Figure 1). The intellectualization of information has given packaging a new dimension and function, creating an interactive experience between the customer and the brand, making interactivity one of the key elements of digital marketing that increases the sense of engagement. This new technology has been successfully used in corporate marketing to make customers feel the novelty and gain their complete attention and interest through the immersion of AR with the main goal of stimulating consumers’ demands and decisions to consume products through the visual experience generated (Ruiz et al., 2019).

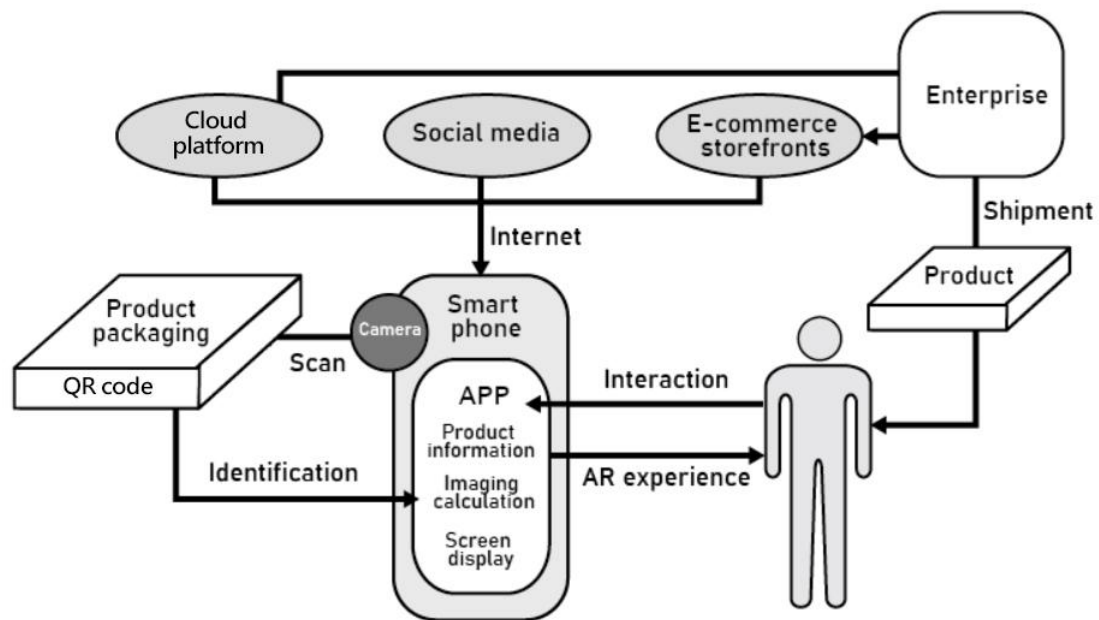


Figure 1. App-based AR Consumption Ecology and Marketing Model for Mobile Devices

3. Digital Technology and Marketing 4.0

3.1 Digital Upgrade and Marketing Transformation

The innovations of digital information and the Internet have had a sweeping impact on the world with globalization changing the rules of trade, transforming marketing organizations, and reshaping markets (Underwood, 2015). The database of business activities has become a company's most important asset, and the ability to manage data properly holds the key to success. The marketing activities of companies have to keep up with the times, comply with the changes in consumer lifestyle patterns affected by digitalization, and enter the era of Marketing 4.0 (Başyazıcıoğlu & Karamustafa, 2018). The changes of information digitization from Marketing 1.0 to 4.0 are summarized according to Kotler's definition and Başyazıcıoğlu and Karamustafa's research, showing that information technology has changed the marketing landscape.

Marketing had evolved from 1.0 to 2.0 as digital information, Internet technology changed the way messages were communicated, and the Internet was adopted for communication and promotional activities (Tarabasz, 2013). Peattie and Belz (2010) introduced the concept of 4Cs: customer, cost, convenience, and communication. This is a shift from McCarthy's 4Ps marketing theory to incorporate sustainability standards into marketing strategies (Kumar et al., 2012).

Marketing 3.0 focuses on emotional and intimate relationships with consumers as the Internet changes the lifestyles of consumers. Web 3.0 constructs a new online environment based on collaboration among users that is more intuitive and integrated, creating key changes in marketing and enhancing marketing skills to form highly sophisticated customer orientation, culture, spirituality, and synergistic marketing attitudes (Kotler et al., 2012). In this context, companies promote their products through emotional rewards to engage consumers' hearts and souls, emphasizing "humanistic values" and "spiritual benefits". The social community has become a new challenge for marketing, and cell phones are now an important tool for social activities in life with consumers increasingly

relying on online social platforms to obtain reviews of products before purchase. Recent retail surveys confirm that social content does rank first in purchase decisions (Güven et al., 2009)

Table 1. Shifts in Marketing from 1.0- 4.0

Information	Marketing 1.0	Marketing 2.0	Marketing 3.0	Marketing 4.0
Links	Passive acceptance of promotion	Peer-to-peer feedback	Synchronized information acquisition, Autonomous verification	Free flow of information, Active participation
Communication	One-to-many	One-to-one	Collaborative relationships between groups	Intergroup cocreation
Value	Unidirectional relationship	Bidirectional	Emotional appeals, Value-driven	Innovative customer experience
Components	Customers cater to products	Personalization, meeting needs	People-centered	Social activities
Core	Primarily 4P products	4C customer focus	Humanistic values	Integration of reality and virtual environments
Vehicle	Product features	Customer Satisfaction	Mobile information apps	Barcodes, QR codes
Technology	Solid text	Digital network information	Network community Web 3.0	AR, VR, big data, AI

The basic concept of Marketing 4.0 is an extension of 3.0. They mainly involve use of new technology to enhance the marketing experience provided to customers. Through the Internet, customers can link to a product's website, view extended descriptions of product features, or access detailed information and experiences on social media platforms. The Web of Things, with its ability to link products to URLs, can deploy an extension of product information that allows customers to verify and commit to the authenticity of products (Jara et al., 2012). The communication experience created by this information is the key to building brand reputation. Active participation in the free flow of information, for both companies and customers, creates a common interaction with a high degree of autonomy and participation (Virvilaitė & Belousova, 2005). The use of technology in marketing has become the trend of Marketing 4.0, and the key to using technology in marketing is the use of digital information to provide a better experience to customers.

3.2 AR Mooncakes Case Studies

The consumption of mooncakes as gifts has primarily nested within the Chinese community, and, to understand the use of AR in the practical marketing environment, we searched the Internet for relevant reports using the keyword “AR mooncakes”. Based on the principles of 1) clearly advocating the use of AR technology, 2) specifically describing the content of AR and marketing, and 3) actually marketed and sold, a total of six reports will ultimately be sorted and screened out, covering the period from 2015 to 2019. Marketing analysis was performed on the main contents and summaries; results are listed in chronological order in Tables 2-6 as follows.

Table 2. Huamei Mooncake Launches “Technology Mooncake” (Compiled by This Study)

Title	Innovative Trend: Brands can also play this way - Augmented Reality (AR) “Technology Mooncake” for a boundary-crossing experience
Source	2015.10.14. Yi-Ru Chen. ExpBravo Editorial Department. Source: https://reurl.cc/Ak17qZ 2016.05.26. Golden Mouse Digital Marketing Awards. Source: https://17emarketing.com/html/anli/2016/0526/4881.html
Summary of Content	“Technology Mooncake”, Huamei Mooncake: In 2015, the “Dance with Chang’e” campaign was launched through a mobile app combined with AR (see note) technology to share the festive atmosphere with friends. By adding a stylish technological touch to the traditional product, the brand was able to establish a distinctive brand identity in the competition of China’s major mooncakes, extending into an interesting marketing topic. It has also successfully subverted consumers’ perception of the brand and attracted more consumers who like to taste freshness or innovation.
Marketing Analysis	Interactive experience: By scanning the logo on the mooncake box, a 3D Chang’e will slowly float out, allowing people to eat mooncakes while watching Chang’e dance on their palms. Create a relationship: PP tops the mooncake box with custom-made Mid-Autumn Festival cards and exclusive mooncakes for parents...and other activities to convey strong feelings of longing. Community sharing: You can take a photo with Chang’e and upload the photos to social websites. Cross-sector collaboration: Collaborated with three major enterprises: Huawei Glory, Tencent Wealth Management, and HNA Group. The campaign has gained more than 60 million exposures in the fields of cell phone, finance, and aviation and is estimated to have increased the potential customer base by 150,000 people.

Table 3. Tian Xiang Baihe AR Culture Mooncake (Compiled by This Study)

Title	The country’s first AR culture mooncake displayed Lanzhou Silk Road culture in a lively manner
Source	Fan-Fan. 2016.08.28. China News Network. Source: ARinChina, https://reurl.cc/no0MMn
Summary of Content	According to the designer of “Tian Xiang Bai Li AR Cultural Mooncake”, based on the production principles of “aesthetics”, “enjoyment”, “deliciousness”, and “healthiness”, “The outer packaging is carefully designed with the cultural atmosphere of the Silk Road, and pure wood pulp paperboard is used with an emphasis on health and environmental protection”.
Marketing Analysis	Interactive experience: Through cell phones, iPads, and other mediums, customers can enjoy the magical image of the lily fairy dancing on the moon cake gift box and experience the impact of the vivid AR visual technology.

Table 4. Chen-Li-Ji AR Mooncake Gift Box (Compiled by This Study)

Title	417-year-old historical establishment seamlessly collides with modern AR, the dynamically presented Chen Li-ji mooncake gift box
Source	2017.07.27. Source: Sohu.com Source: https://www.sohu.com/a/160590248_310095
Summary of Content	The AR innovation experience in Chen Li Ji Chen tangerine peel healthy Mooncake is a collision of a 417 years-old establishment and modern AR technology. The mooncake gift box is like a “treasure bowl” with six themes composed of six patterns and colors with traditional auspicious cultural meaning.
Marketing Analysis	<ul style="list-style-type: none"> Interactive experience: Switch on the code-scanning function on your cell phone and scan any of the scattered small round box pattern on the package, and a 3D animation will appear instantly. Under the moonlight, in the lotus pond, the Child of Good Fortune pops out from the lotus pistil, waving a ribbon and playing with the fish while the goldfish leaps and splashes water droplets into pearls to fill the lake, sending blessings of fortune and wealth to the customer. Click on the goldfish and the fish will swim along with customers’ fingertips; click on the child, and the child will play with customers to collect the sparkling pearls.

Table 5. Themed mooncakes of “AC Wufang”, the AR mooncake of Wufangzhai (Compiled by This Study)

Title	The story behind China’s first two-dimensional AR mooncake
Source	2017.09.26. Geek Park Express. Source: ARinChina, http://www.geekpark.net/news/222585
Summary of Content	During the period before the Mid-Autumn Festival of 2017, “Wu Fang Zhai”, a century-old brand, joined hands with “AcFun” (a video pop-up website that features real-time commenting) and “LiangFongTai” to launch an AR mooncake with the theme of “AC Wu Fang”. This is the first marketing method to incorporate AR interaction with “AcFun Girls” (Anime Comic Fun), which are anthropomorphic mascots. The packaging incorporates designs with anime-style characters, and the AR experience adds additional storytelling to the mooncake, providing a story about a strange court case. The combination of digital and traditional, the collision

	of culture and food, when the youngest website of animation and comic culture meets the century-old establishment, the traditional brand is renewed with vigor while digital culture fuses with the charm of tradition.
Marketing Analysis	<ul style="list-style-type: none"> Interactive experience: Select the AR scan in the Alipay App. Then, focus on the mooncake box, and start AcFun's IP cartoon visual image "AC Girls" otaku dance experience. Online pop culture is thus integrated into everyone's daily life. Cocreation relationship: Tens of thousands of UP owners (contributors) in AcFun's popup website and app upload AR otaku dance animations produced by LiangFongTai. Social activities: Together with AcFun, Wufangzhai and AcFun launched two Weibo topics, #Bake for the Moon and #MyARGirlfriend, which attracted millions of follows. Cross-industry cooperation: AcFun's AR technology cooperation with LiangFongTai E-commerce: AcFun has planned fun and interesting online activities on its website, and offline products have been included in a new unmanned retail store in cooperation with Tmall.

Table 6. HERSHEY's "Good Times (Hershey's)" Mooncake Gift Box (Compiled by This Study)

Title	Report 3: Hershey's Mooncake brings star Huang Zitao's Mid-Autumn AR blessing
Source	2019.8.9. callia. Source: ARinChina. Source: http://www.arinchina.com/article-10473-1.html
Summary of Content	HERSHEY'S, a famous international chocolate brand, launched an integrated Mid-Autumn Festival marketing campaign that utilized AR technology encouraging consumers to scan the "Hershey's" mooncake box with the mobile app Alipay.
Marketing Analysis	<ul style="list-style-type: none"> Interactive experience: After successful scanning, "Huang Zitao" will appear in front of customers, and "Only a Mid-Autumn Festival with you is a good time (Hershey)" will appear on the screen to show customers the Mid-Autumn Festival wishes from star Huang Zitao. Cocreation relationship: Customers can directly scan the pattern with Alipay AR to experience the AR technology and receive the "Good time (Hershey)" red envelope gift certificate and click "Give your blessing" to generate a Mid-Autumn Festival greeting card for the customer's friends. Cross-industry cooperation: Alipay AR technology solution provided by "My Sky Technology" and creative art content provided by "Bole Information". E-commerce: Customers can also collect coupons online to purchase products.

Table 7 Ever Rich's "Full Moon Mid-Autumn Mooncake Gift Box" (Compiled by This Study)

Title	Report 1: "Cake gift boxes can also play with AR! Coffee champion combined with historically established cakes to jump out of the traditional and experience a playful Mid-Autumn Festival".
Source	2019.08.15. author: Lu Jiande. Source: CNEWS. Source: https://reurl.cc/2r4Zb4
Summary of Content	Ever Rich's "Full Moon Mooncake Gift Box" was named after the English word "full moon," and the design team employed the latest AR technology.
Marketing Analysis	<ul style="list-style-type: none"> Interactive experience: MAKAR, a dedicated AR app, allows consumers to interact with the city of the Mid-Autumn Festival gift box through the camera. The real-life animation makes the brightly lit city and the moon on the outside of the gift box appear on the cell phone screen, allowing consumers to experience the Mid-Autumn Festival atmosphere as soon as they open the box. Cross-industry cooperation: The internationally renowned pastry store, Hong Kong Kee Wah Bakery, cooperated with Ever Rich.

Case studies on marketing mooncakes with AR packaging were examined, and the use of the concept of Marketing 4.0 was reviewed. The marketing features of AR packaging are as follows. (1) Interactive experience: Cell phones are used to scan the packaging patterns to access AR information content (Huamei Mooncake, Wufangzhai, Tianxiang Baihe, etc.) with elements, stories, and character animation following the theme of the Mid-Autumn Festival and the interactive experience of resonating value to meet the needs of consumers for the festive culture and gift aesthetics. (2) Social sharing: Using social media platforms, inclusiveness can be expanded to enhance customer engagement (Philip Kotler, 2019), and photos of animated characters in AR can be uploaded to social media to attract public attention to the brand, product, or event through the sharing of topical content. (3) Cocreative relationship building: Through the production of AR thank-you cards or blessing messages to family and friends, a cocreative relationship is formed between the recipient, the festival, and the brand, invisibly

connecting the core spirit of the company. (4) Cross-industry collaboration: Marketing 4.0 focuses on technological innovation, which requires collaboration between companies of different industries; the production of AR technology requires professional and young technical staff, and different modes of collaboration have been needed for online platforms. Traditional companies must think outside the box when it comes to new technologies.

From a summary of the case strategies (Table 8), the marketing characteristics of the three brands, HUAMEI “Technology Mooncake”, “WuFangZhai”, “AC WuFang” and HERSHEY’S “Good Time” are more comprehensive and complete in their use of AR packaging. In four cases, the combination of festive culture and AR experience brought about a sense of beauty and enjoyment in evaluating the products, and consumers were not only trying to satisfy rational needs but also included expectations of “fantasy”, “fun”, and “emotion” (Holbrook, 1982). The digitalization of packaging not only promotes the digital function but also meets the core value of the interactive and innovative experience of Marketing 4.0 as well as the demand of digital lifestyle behavior patterns.

Table 8. Analysis of the Marketing Characteristics of AR Mooncakes in Each Report

AR Mooncake Marketing Case Strategies								
	Time	Brand	Interactive Experience	Cultural Elements	Cocreative Relationships	Cross-industry Collaboration	Social Effect	E-commerce
1	2015	Huamei Mooncake “Technology Mooncake”	•	•	•	•	•	
2	2016	Tian Xiang Baihe “AR culture mooncake”	•	•				
3	2017	Chen-Li-Ji mooncake	•	•				
4	2017	Wufangzhai “AC Wufang”	•	•	•	•	•	•
5	2019	HERSHEY’S Good Time	•		•	•	•	•
6	2019	Ever Rich, Full Moon	•			•		

4. AR Packaging Marketing Strategies for Chinese Mooncakes

Kotler (2019) proposed the 3is golden triangle of marketing in Marketing 3.0. It is the relationship between brands, differentiation, positioning, identity, integrity, and image that builds brand trust. In Marketing 4.0, more interactive experiences are introduced, and consumers’ experiences affect value perceptions while the interactive experiences generated by AR packaging creates new value perspectives. Chinese mooncake packaging presents a combination of cultural aesthetics and AR experience, which becomes the most basic and important starting point of AR packaging. It then gradually extends to e-commerce and social effects. Therefore, this study proposes four basic combinations of AR packaging marketing strategies that form four types of effects (Figure 2), described in detail below in relation to each other.

(1) Cross-industry partnerships: collaborating with others from beyond their own boundaries

AR generates digital information that is creative in the nature of multimedia, creating a cultural aesthetic and fun experience that satisfies consumers’ fantasies and sense of engagement, and becomes a creative value for brands. The pastry industry itself does not have AR-related talents and technologies. Therefore, it must be adopting an open attitude for the integration of different professions or cooperate with online platform operators to attract platform users. In addition to establishing product differentiation, companies are also working with e-commerce platforms to provide online promotions and order convenience. Moreover, it can also promote the effect of digital transformation and innovation within the companies.

(2) Digital lifestyle: Marketing information enters the digital lifestyle to play a branding role

Cell phones are now already the focus of most people's lives. Scanning the QR codes or barcodes on AR packaging transforms a product's physical message into virtual information. As a marketing tool, packaging crosses over from the physical to the virtual. This interactive experience not only reduces the marketing costs associated with physical promotion but also attracts consumers' attention and resonates with them, and its effect make marketing not only fast and precise but also more natural in digital life, especially for the younger generation, triggering their motivation to share information.

(3) Freedom of information: Authentication under the free flow of information is what builds brand integrity.

Free flow of information is also a concept of interaction and the possibility for consumers to receive different information (Virvilaitė & Belousova, 2005). The act of uploading the results of shared participation in interactive experiences can lead to the verification of product information and increase trust. After consumers share the product information with their respective communities, they create a customized message in the AR experience and a picture of themselves with the AR character. Therefore, a key to marketing is to promote the free flow of product information.

(4) Value of information: Transforming interactive information into physical value

The accumulation and interaction of the abovementioned marketing information effects will eventual transform into the economic value of online shopping actions. By extending the interactive experience to social platforms and e-commerce with cell phones and the Internet, we can increase participation and trust, making use of the experience of product interaction to drive product consumption, in other words, transforming the value of virtual interactive information into the economic value of physical product sales. Therefore, the use of marketing information has effects from "creativity" to "resonance" and "flow" and finally accumulates into "value", and AR packaging can therefore be transformed into brand creativity, identity, integrity, and image.

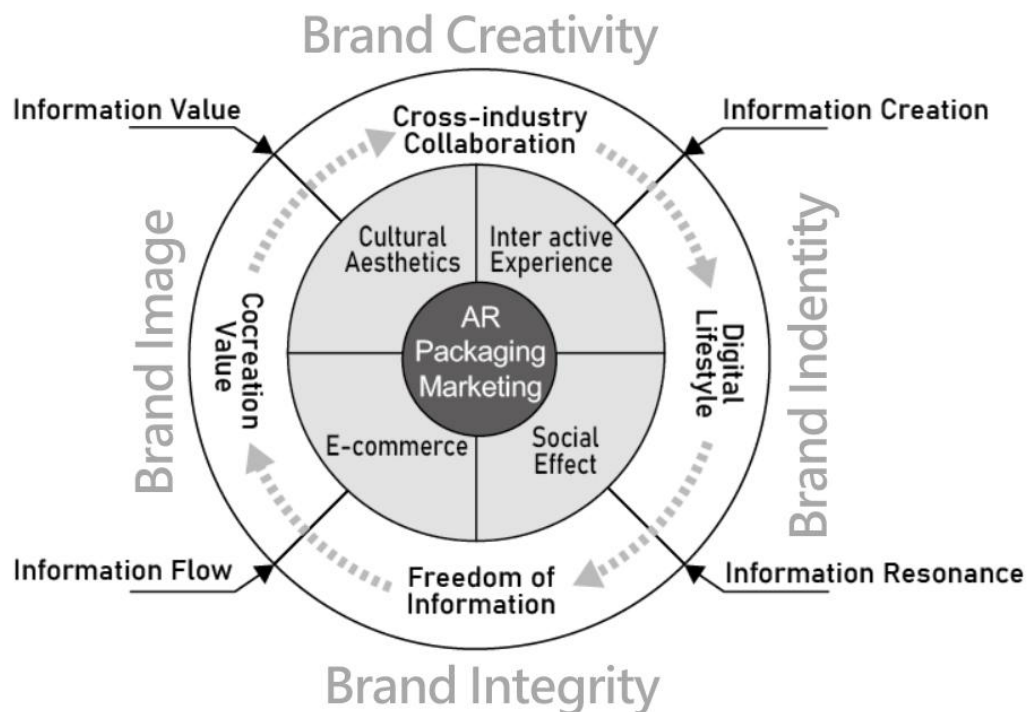


Figure 2. Structure, Stages, and Effects of AR Packaging Strategy

5. Conclusion and Suggestions

Festivals are an important common value within a nation or society. The historical and cultural values of mooncakes are greater than the products themselves, and the ability to create an aesthetically beautiful shared experience of culture is an important value for mooncake marketing. This study examined the AR mooncake packaging case studies and proposed four marketing combinations and effects, forming brand creativity, identity, integrity, and image. Therefore, the first principle of AR packaging marketing strategy is to focus on the real marketing message to have a positive cumulative effect. For example, to create an aesthetic value that drives culture or to master the nature of information sharing on social platforms and to give full use to the freedom of information to build integrity verification, consumers can only be transformed into economic value with the interaction of the above information value. However, if the information is exaggerated and untrue, it will damage the integrity of the enterprise, and such effects will also offset each other. Secondly, we should adopt an open attitude of cooperation and uphold the spirit of cocreation among various companies, incorporating creativity and digital transformation internally, to strengthen each other's competitiveness in the market and to face the challenges of future market changes. In his book "Marketing 4.0", Philip Kotler mentions that the new concept of marketing in the digital economy emphasizes that Marketing 4.0 is a close relationship between reality and virtualization, and virtual connections alone are not enough. AR packaging can travel between the virtual and the real, creating, sharing, satisfying, and validating information to build commonality, and both individuals and companies can participate in cocreation by accessing this information to enhance brand value and corporate social responsibility. The interactive experience of AR packaging will be one of the important technologies to activate this value.

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