CONNECTED PACKAGING.

Bridging the Gap Between Physical and Digital Experiences

SCAN ME

The Connected Packaging Playbook by Appetite Creative

APPETITE CREATIVE

CONTENTS.

APPETITE CREATIVE.

We are Appetite Creative, one of the world's few creative technology companies focused on Connected Packaging. Established in 2015, Appetite Creative's team is a unique blend of mixed experiences with a love for all things creative. We work with many clients, from tech companies, packaging giants, and the food industry to creative agencies. From e-commerce businesses to car brands. Our expertise allows us to cater to all types of clients and deliver a dedicated service to each of them. Considering B2B marketing, B2C marketing, Connected Packaging and customer engagement experiences at scale, what we do best is connect brands to their audiences in today's digital world.

ARMANI	amazon	adidas	CHANEL	PANDORA	BEN&JERRY'S

We firmly believe that diversity is an essential element of fostering creativity. In our company, we actively promote and embrace diversity, valuing individuals irrespective of their cultural or ethnic backgrounds. This inclusive approach enables us to attract and harness talent from various parts of the globe. We take immense pride in the international team we have cultivated and the vibrant work environment we have established within our offices.

We also got some awards. Big ones. Small ones. Square ones. Hexagon ones. We're pretty proud of them, if we may say so ourselves.

Top B2B companies UK	Top B2B Companies UK	Top UK Digital Marketing Agencies	Top B2B Companies Global	null

E-BOOK OVERVIEW.

"Connected Packaging: Bridging the Gap Between Physical and Digital Experiences" is a comprehensive guide that digs into the world of Connected Packaging, exploring its definition, importance, benefits, applications, technologies, case studies, and future prospects. This book provides valuable insights for businesses, marketers, and packaging enthusiasts seeking to understand and harness the power of Connected Packaging in today's market. Moreover, the book explores what business challenges can be solved with the use of Connected Packaging and answers questions such as "How to drive consumer engagement", "How to collect GDPR compliant data?" and much more.

From the Introduction which will shortly explore the concept of Connected Packaging and its significance in the modern era, the book will move to The Basics of Connected Packaging, understanding how Connected Packaging works, its role in the current market landscape, and the numerous benefits it offers.

Moving forward, Application of Connected Packaging will be discussed as follows:

1. Consumer Engagement: Examining how Connected Packaging enhances consumer experiences, fosters brand loyalty, and drives meaningful interactions.

2. GDPR-Compliant Data Collection: Exploring the responsible and secure gathering of consumer data through Connected Packaging.

3. Sustainability: Highlighting the role of Connected Packaging in promoting sustainable practices and reducing environmental impact.

4. Market Research: Uncovering how Connected Packaging provides valuable insights into consumer behavior, preferences, and trends.

5. Loyalty Programs: Showcasing the integration of Connected Packaging into loyalty programs, incentivizing customer loyalty and repeat purchases.

6. Instructional Information: Exploring how Connected Packaging delivers instructional content, product usage guidelines, and support to consumers.

The section "Technologies Used in Connected Packaging" helps businesses understand what technologies can be used on their packaging to drive engagement and sales.

To continue, the book also focuses on showcasing successful case studies of Connected Packaging implementation, highlighting real-world examples of brands harnessing its potential to drive customer engagement, improve user experiences, and achieve business objectives.

In the "Future of Connected Packaging", the following will be discussed:
Predictions for the Future: Offering insights into the future of Connected Packaging, including emerging technologies, market trends, and the transformative impact they may have.
Global Stats: Presenting relevant statistics and market data that reflect the growing adoption and impact of Connected Packaging on a global scale.
Implications for Brands and Consumers: Analyzing the implications and benefits that Connected Packaging brings to both brands and consumers.
Legislation Changes: Exploring the evolving legislative landscape and regulations surrounding Connected Packaging, including GDPR compliance and consumer privacy concerns.

Final Thoughts on the Future of Connected Packaging will look into summarizing the key takeaways, implications, and opportunities that Connected Packaging offers in the ever-evolving market landscape, while also providing a concise summary and reiteration of the book's main points, emphasizing the transformative potential of Connected Packaging for businesses and the experiences of consumers.

01

INTRODUCTION.

DEFINITION OF CONNECTED PACKAGING

Connected Packaging refers to the integration of digital technologies, such as sensors and connectivity solutions, with traditional packaging systems. It enables communication and interaction between physical product packages and the digital world. Through features like QR codes, RFID tags, or NFC chips, consumers can access product information and personalized experiences using their smartphones or connected devices. Manufacturers can track products in real-time, optimize supply chain logistics, and gather valuable data on consumer behavior and preferences. Connected packaging also promotes sustainability by providing recycling information and encouraging responsible consumption.

02

THE BASICS OF CONNECTED PACKAGING.

How Connected Packaging works

Importance of Connected Packaging in today's market - 2023 Stats from the Survey

Benefits of Connected Packaging

THE BASICS OF CONNECTED PACKAGING.

HOW CONNECTED PACKAGING WORKS

Connected Packaging works by combining traditional packaging with digital technologies to create an interconnected system. It begins with the integration of various components, such as sensors, connectivity modules, and interactive elements, into the packaging design.

These components can take the form of QR codes, RFID tags, NFC chips, or even embedded sensors, depending on the specific application. They are incorporated into the packaging material or attached to the product container.

When a consumer encounters a connected package, they can interact with it using their smartphone or other connected devices. By scanning a QR code or tapping an NFC chip, the digital journey of connected packaging is initiated.

The scanned or tapped information is then processed by the device, which establishes a connection with the cloud-based platform or the manufacturer's server. This allows for seamless data exchange and retrieval of relevant information.

The digital platform can provide a range of content, including product details, ingredients, usage instructions, manufacturing origin, expiration dates, and even user reviews or recommendations.

Consumers can access this information instantly, making informed purchasing decisions and gaining a deeper understanding of the product they are considering.

Moreover, Connected Packaging enables personalized experiences. It can deliver targeted offers, promotions, or loyalty programs tailored to the consumer's preferences and buying history.

Through the digital platform, manufacturers can also collect valuable data on consumer interactions, such as usage patterns, frequency of scans, and engagement levels. This data helps companies gain insights into consumer behavior and preferences, which can be utilized for marketing strategies and product improvements.

Connected Packaging can facilitate real-time tracking and monitoring of products throughout the supply chain. With embedded sensors or RFID tags, manufacturers can monitor temperature, humidity, or other environmental factors to ensure product quality and integrity.

The tracking capability also allows for better inventory management, enabling manufacturers to optimize stock levels, prevent stockouts, and reduce waste.

Connected Packaging enhances security and anti-counterfeiting measures. Unique identifiers embedded in the packaging can be verified through the digital platform, ensuring product authenticity and reducing the risk of counterfeit goods entering the market.

Additionally, Connected Packaging can enable seamless reordering or replenishment. By scanning or tapping the package, consumers can easily initiate a reorder process, saving time and effort.

The integration of sustainability features is another aspect of Connected Packaging. It can provide recycling instructions, information on eco-friendly practices, or encourage responsible consumption, contributing to environmental initiatives.

For manufacturers, Connected Packaging offers valuable feedback loops. They can gather consumer insights, measure the effectiveness of marketing campaigns, and track product performance through analytics and data-driven decision-making.

The collected data can be securely stored, analyzed, and used for predictive analytics, helping manufacturers anticipate consumer needs and adapt their strategies accordingly.

Furthermore, Connected Packaging fosters stronger brand-consumer relationships. By delivering personalized content and engaging experiences, it enhances customer loyalty and brand advocacy.

Overall, Connected Packaging functions as a bridge between the physical and digital realms. It enables seamless communication, data exchange, personalized experiences, and improved supply chain management, benefiting both consumers and manufacturers alike.

BENEFITS OF CONNECTED PACKAGING

Connected Packaging offers several key benefits:

Enhanced consumer experience
Connected Packaging provides consumers with instant access to detailed product information, personalized offers, and interactive content, improving their overall experience and satisfaction.

Improved product transparency
Consumers can easily verify product authenticity, access ingredient lists, expiration dates, and other essential details, enabling informed purchasing decisions.

Real-time tracking and monitoring
Manufacturers can track products throughout the supply chain, ensuring better inventory management, preventing theft, and maintaining product quality.

Data-driven insights
Connected Packaging enables manufacturers to gather valuable data on consumer behavior, preferences, and usage patterns. This data can inform marketing strategies, product improvements, and supply chain optimizations.

Targeted marketing and promotions
Connected Packaging allows for personalized marketing campaigns, delivering tailored offers, promotions, and loyalty programs to individual consumers.

Sustainability and responsible consumption
Connected Packaging can promote sustainability by providing recycling instructions, encouraging responsible usage, and reducing waste through better inventory management.

Anti-counterfeiting measures
Connected Packaging integrates security features that help verify product authenticity and protect against counterfeit goods.

**Strengthened brand-consumer relationships**
By delivering personalized experiences, relevant content, and convenient reordering options, Connected Packaging helps build stronger connections between brands and consumers, fostering loyalty and advocacy.

IMPORTANCE OF CONNECTED PACKAGING IN TODAY'S MARKET - STATISTICS FROM THE CONNECTED PACKAGING SURVEY 2023 ISSUED BY APPETITE CREATIVE

In January and February 2023, a survey was conducted by Appetite Creative. The survey aimed to identify interest towards Connected Experiences for major FMCG/CPG and Media Brands, as well as understand main priorities and potential obstacles. The survey targeted respondents working in C-suite, advertising, procurement, or similar roles within Appetite Creative's network or direct clients across various brands. A total of 968 respondents participated in the survey. This section presents the key findings and statistical analysis of the survey results.

Adoption of Connected Packaging
In 2023, the survey found that **81.5%** of respondents had used Connected Packaging as a brand in the last year, showing a significant increase compared to 2022 (**46%**). This doubling of adoption indicates the growing popularity and importance of Connected Packaging.

2023

81.5%

2022

46%
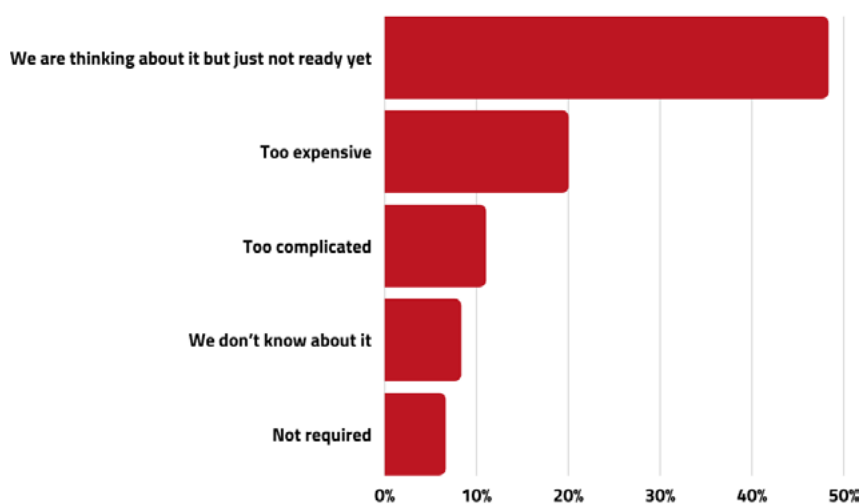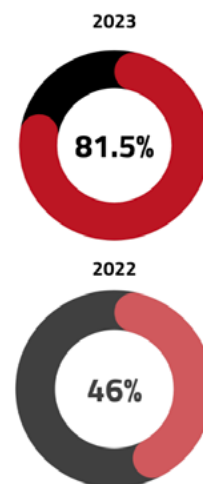
Barriers to Adopting Connected Packaging
Among the **19.5%** of respondents who have not yet taken advantage of Connected Packaging, the main reasons cited were as follows:

Considering it but not ready yet: **48.3%**
Cost-prohibitive: **20%**
Too complicated: **11%**
Lack of awareness: **8.3%**

Importance of Connected Packaging

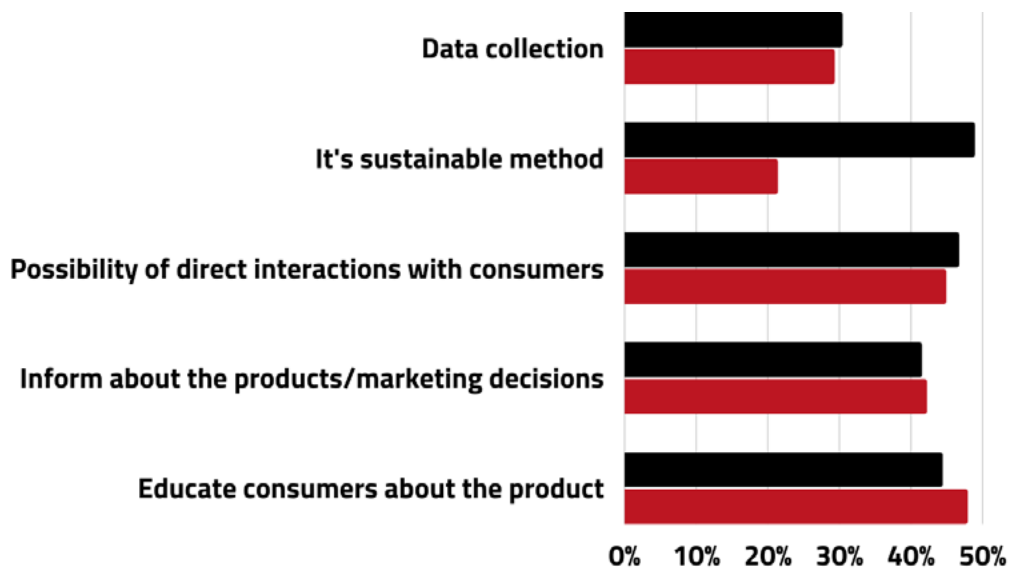For the **46%** of respondents who considered Connected Packaging important, the main reasons were:

Data collection: **29.3%**
Informing about products/marketing decisions: **42.2%**
Direct interactions with consumers: **44.9%**
Educating consumers about the product: **47.9%**
These main benefits remained consistent with the previous year.
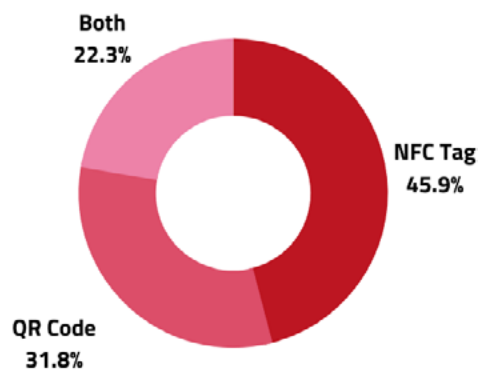

Technologies Used in Connected Packaging

Among respondents who had already implemented Connected Packaging, the following technologies were most commonly used:

NFC tag: **45.5%**
QR code: **31.5%**
All of the above: **22.1%**

The 2023's survey introduced new questions regarding gamification in marketing campaigns, revealing its popularity as a Connected Experience tool. A significant **70%** of respondents claimed to use or consider using gamification. Traditional mobile games were adopted by almost two-thirds (**57%**), augmented reality games by a third (**31%**), and **11%** shared quizzes through Connected Packaging experiences. Furthermore, **48%** utilized gamification to promote new products or drive sales, **17%** for data collection, and **15%** to enhance brand recognition.

Brands consider the following to be the main goals while using gamification:
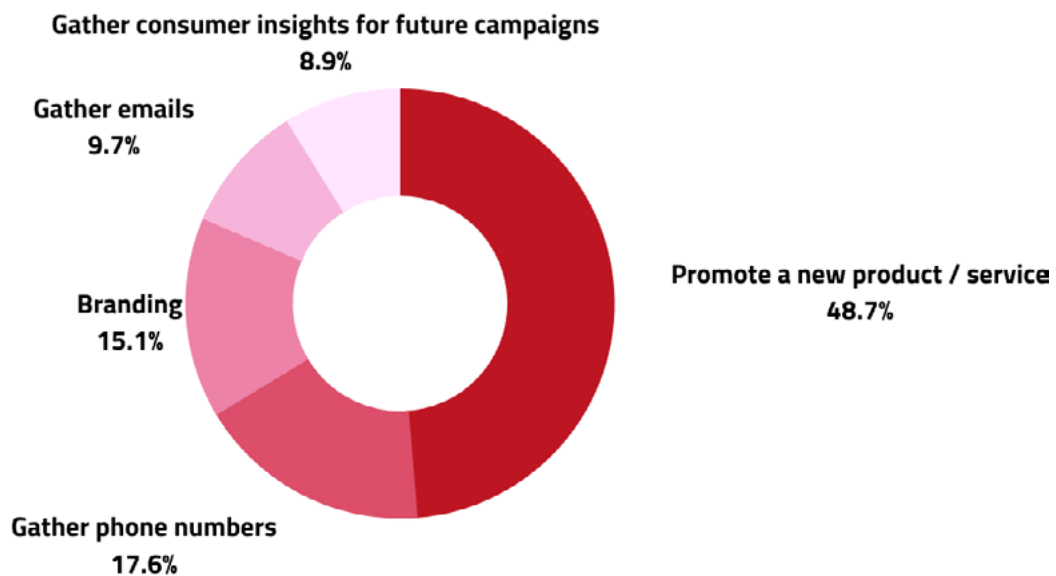
Future Outlook and Sustainability

The survey found that **91.8%** of participants believed that Connected Packaging would become increasingly important to the packaging industry in the next 12 months and beyond. Only **8.2%** disagreed, citing customer disinterest as the main reason. Furthermore, **90.7%** of all participants agreed that Connected Packaging could help improve the sustainability credentials of their companies.

For deeper insights into the information that the "Connected Packaging Survey 2023" provides, please see the official Survey Report.

CONNECTED EXPERIENCES INVESTMENT EXPECTED TO INCREASE IN 2023.

81%
Have already incorporated Connected Experiences into their marketing plans

92%
Consider it will be increasingly important to the packaging industry in the next 12 months

88%
Plan to increase overall investment in digital marketing spend in 2023

CONNECTED EXPERIENCES INVESTMENT EXPECTED TO INCREASE IN 2022.

54%
Have already incorporated Connected Experiences into their marketing plans

85%
Consider it will be increasingly important to the packaging industry in the next 12 months

59%
Plan to increase overall investment in digital marketing spend in 2022

03

THE APPLICATION OF CONNECTED PACKAGING.

Consumer engagement

Collection of the GDPR Compliant Data

Sustainability

Market Research

Authentification

Loyalty programs

THE APPLICATION OF CONNECTED PACKAGING.

CONSUMER ENGAGEMENT

Connected Packaging has revolutionised how companies interact with consumers. By utilising technologies such as QR codes, NFC, and RFID, companies can provide customers with information about their products such as ingredients, nutrition facts, and sourcing details.

This builds trust and credibility, leading to increased loyalty and repeat business. Moreover, Connected Packaging enables companies to offer personalized content and promotions, like exclusive discounts or AR experiences, which create a sense of exclusivity and build stronger relationships with customers.

Additionally, Connected Packaging facilitates social sharing and user-generated content, increasing brand awareness and reaching new audiences. As technology advances, Connected Packaging will offer even more exciting applications, like personalized product recommendations and interactive designs.

Overall, Connected Packaging has tremendous potential for driving consumer engagement and building stronger relationships between companies and their customers.

THE COLLECTION OF THE GDPR COMPLIANT DATA

Connected Packaging offers a game-changing opportunity for companies to collect GDPR-compliant data on consumer behaviors and preferences.

With the ability to utilize technologies such as QR codes, NFC, and RFID, companies can obtain valuable information such as usage patterns and purchase behaviors while remaining compliant with GDPR regulations.

Best practices for collecting data in compliance with GDPR include opt-in mechanisms, anonymization, and specific purpose data collection. Companies that adhere to these guidelines can gather valuable data that enhances their understanding of their customers' needs and preferences, leading to more personalized experiences, increased loyalty, and repeat business.

Moreover, GDPR compliance builds trust and credibility with customers and can protect companies from data breaches and regulatory fines. Overall, Connected Packaging offers a powerful tool for companies to collect valuable data, gain insights into customer behavior, and improve their products and services while respecting their customers' privacy.

SUSTAINABILITY

The applications of Connected Packaging go beyond just collecting data and providing valuable information to consumers. They can also contribute to sustainability efforts by reducing waste and improving the recycling process.

For example, Connected Packaging can include tracking systems that enable better monitoring of product life cycles, which can help reduce waste and carbon emissions by optimising transportation and distribution.

Companies can also use Connected Packaging to communicate recycling instructions to consumers, making it easier for them to recycle properly and prevent contamination of recyclable materials.

Additionally, Connected Packaging can encourage consumers to adopt more sustainable behaviours, such as using refillable packaging or reducing their plastic usage. With these features, Connected Packaging can contribute to the circular economy, reduce waste, and ultimately, promote a more sustainable future.

MARKET RESEARCH

Connected Packaging also offers a range of opportunities for market research and understanding consumer behaviour. By using technologies like QR codes, NFC, and RFID, companies can collect valuable data on customer preferences, usage patterns, and purchase behaviours.

This data can then be used to inform marketing strategies, improve product design, and enhance the overall customer experience. Connected Packaging can also enable companies to conduct surveys and gather feedback from customers in real-time, providing instant insights and the ability to adapt quickly to changing customer needs.

Our custom -built dashboard facilitates the comprehensive aggregation and analysis of invaluable user data, enabling the extraction of actionable insights pertaining to consumer behavior and user patterns.
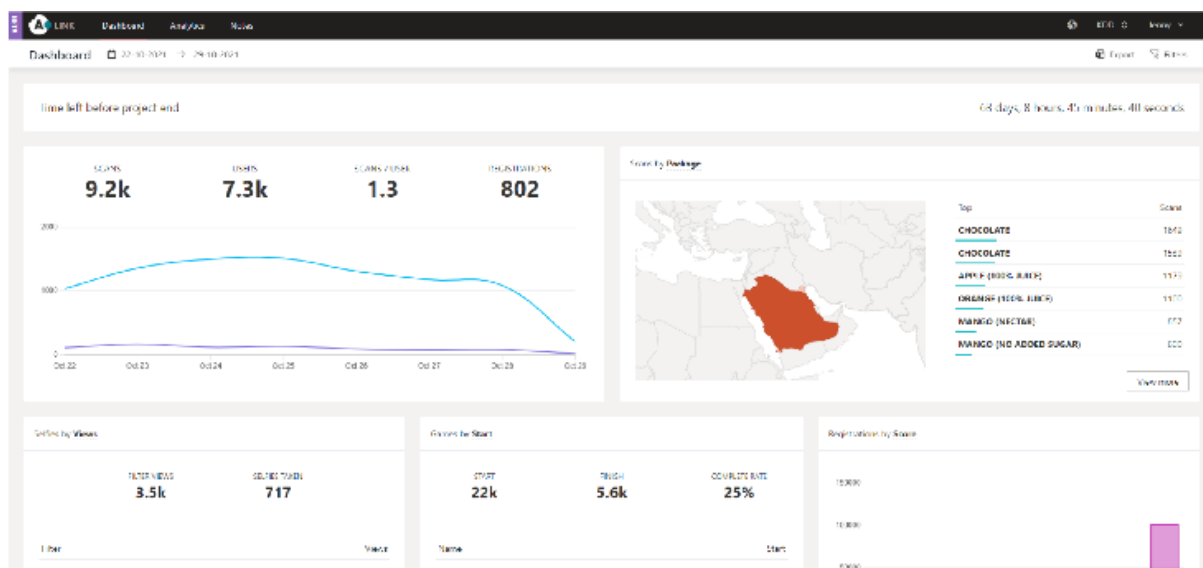
AUTHENTIFICATION

Connected Packaging offers a range of opportunities for product authentication and anti-counterfeiting measures. By utilizing technologies such as QR codes, NFC, and RFID, companies can implement secure authentication systems that enable customers to verify the authenticity of their products.

This can help prevent counterfeiting, ensure product safety, and protect brand reputation. Additionally, Connected Packaging can provide customers with access to important information, such as batch numbers, manufacturing and expiration dates, and regulatory compliance information, all of which can be critical for ensuring product safety and quality.

Connected Packaging can also facilitate the reporting of counterfeit products, allowing companies to take swift action against unauthorized distributors and protect their brand reputation.

By utilizing Connected Packaging for authentication purposes, companies can enhance product safety, prevent counterfeiting, and ensure customer trust and confidence in their brand.

LOYALTY PROGRAMS

Connected Packaging can also be used to enhance customer loyalty and rewards programs. By incorporating technologies like QR codes, NFC, and RFID, companies can provide customers with unique codes or offers that can be redeemed for rewards or discounts.

Connected Packaging can also enable companies to personalise these rewards based on customer preferences and usage patterns, providing a more personalised and engaging experience for the customer.

By utilising Connected Packaging for loyalty programs, companies can increase customer engagement and incentivize repeat purchases. Additionally, the data collected through these loyalty programs can be used to better understand customer preferences and optimise marketing strategies.

With these features, Connected Packaging can be a valuable tool for enhancing customer loyalty and driving repeat business, ultimately leading to increased sales and revenue for the company.

INSTRUCTIONAL INFORMATION

Connected Packaging can also be utilized to provide customers with instructional information and support. By incorporating technologies like QR codes, NFC, and RFID, companies can provide customers with access to detailed product information, instructions, and troubleshooting guides.

This can be particularly useful for complex products that require assembly or setup, or for products that require specific care or maintenance. Connected Packaging can also provide

customers with links to instructional videos or other resources, helping to enhance the customer experience and reduce customer frustration.

By utilizing Connected Packaging for instructional purposes, companies can improve customer satisfaction and reduce the likelihood of returns or negative reviews. Additionally, the data collected through Connected Packaging can be used to identify common customer issues and improve product design and development.

Overall, Connected Packaging offers a valuable tool for providing instructional information and support, ultimately enhancing the overall customer experience and improving brand loyalty.

04

TECHNOLOGIES USED IN CONNECTED PACKAGING**.**

QR Codes

Secure QR Codes

Augmented Reality (AR) Technology

AI Technology

Near Field Communication (NFC)

TECHNOLOGIES USED IN CONNECTED PACKAGING.

Connected Packaging is rapidly becoming a popular tool for companies to engage with customers and enhance the overall product experience. The incorporation of various technologies in Connected Packaging has enabled companies to provide a wealth of information to customers, from product details to nutritional information and sourcing. Here are some of the key technologies that are used in Connected Packaging:

QR CODES

QR codes are one of the most commonly used technologies in Connected Packaging. They are scannable codes that can be read by smartphones, providing customers with a range of product information, exclusive content, and promotional offers. QR codes can also be used to enable customers to leave feedback or access customer support, improving the overall customer experience.

SECURE QR CODES

Secure QR codes take things a step further, providing an additional layer of security to protect against counterfeiting. These codes are encrypted and can be scanned to verify the authenticity of a product, providing peace of mind to customers and increasing their trust in the brand.

AUGMENTED REALITY (AR) TECHNOLOGY

Augmented reality (AR) technology is another popular tool in Connected Packaging. AR technology enables customers to visualize products in their real-world environment before making a purchase. For example, furniture companies can utilize AR technology to show customers how a specific piece of furniture would look in their home.

AI TECHNOLOGY

AI technologyis also being utilized in Connected Packaging to provide customers with personalized recommendations and product suggestions. By analyzing customer data, such as purchase history and browsing behavior, companies can offer customized product suggestions to customers, increasing the likelihood of repeat purchases and enhancing the overall customer experience.

NEAR FIELD COMMUNICATION (NFC)

Near Field Communication (NFC) technology enables customers to interact with products by simply tapping their smartphones against the packaging. This technology can be used to provide a range of features, such as tracking the freshness of perishable goods or offering exclusive content or rewards.

Overall, Connected Packaging has revolutionized the way companies interact with customers and provide them with valuable information and experiences. By incorporating various technologies, companies can create a more engaging and interactive product experience, ultimately driving customer loyalty and repeat business.

05

SUCCESSFUL IMPLEMENTATION OF CONNECTED PACKAGING - CASE STUDIES.

Emmi's New Flavour Promotion using Augmented
Reality and Smart Packaging

Showcasing the KDD Beverage Range via an
Engaging Connected Experience

Enhancing Sustainability Engagement – Don Simon

SUCCESSFUL IMPLEMENTATION OF CONNECTED PACKAGING - CASE STUDIES.

EMMI'S NEW FLAVOUR PROMOTION USING AUGMENTED REALITY AND SMART PACKAGING

In collaboration with Swiss milk processor Emmi and global packaging leader Tetra Pak, Appetite Creative embarked on an exciting journey to launch an innovative augmented reality (AR) Connected Experience using Smart Packaging. This case study explores how the partnership successfully promoted healthy and positive lifestyles among Emmi's customers while elevating brand recognition and image.

Challenge

Swiss milk processor Emmi, Tetra Pak, and Appetite Creative collaborated on an AR Connected Experience using Smart Packaging. The interactive AR-enabled experience is accessible through Emmi's Tetra Stelo Aseptic 1000 packaging, promoting healthier lifestyles and enhancing brand recognition.

Solution

The first step was to collaborate closely with Emmi and Tetra Pak, understanding their vision and goals. Appetite Creative designed an interactive and visually appealing AR-enabled experience that would be accessed through Emmi's new Tetra Stelo Aseptic 1000 packaging. The sleek packaging design served as a gateway to an augmented reality world, where users could unlock a range of experiences designed to inspire healthier and happier lifestyles.

The AR experience began with users simply scanning the packaging using their mobile phone cameras. Immediately, an enchanting AR animation enveloped the packaging, introducing users to a menu of immersive experiences. Alongside the engaging visuals, we incorporated fun facts about the packaging improvements to educate and entertain users.

To make the experience even more captivating, Appetite Creative developed interactive games within the web-based app. One such game, "Move your Body," allowed users to select from three new milk drink options: Barista, High Protein, or Milk Drink. Through this game, users learned about the different drinks while collecting virtual fruit, oats, and other ingredients in a digital cereal bowl. Appetite Creative also created the "Breakfast Ninja" game, where users raced against time to slice various breakfast ingredients. Each game concluded with updated recipe ideas and inspirational quotes, providing users with additional value beyond entertainment.

Furthermore, to incentivize participation and enhance user engagement, Appetite Creative introduced a leaderboard system where users earned points based on their interactions. Weekly winners on the leaderboard had the chance to win exciting prizes, including Apple Watches, yoga mats, and milk frothers. By encouraging users to share their experiences on social media, brand awareness was boosted and their engagement further amplified.

Results

The launch of this AR-Connected Experience resulted in significant success for both Emmi and Tetra Pak. The partnership between Appetite Creative and Emmi proved to be a powerful combination, with the AR experience quickly gaining popularity among customers. The interactive games and engaging content provided an enjoyable experience for users of all ages, while enabling Emmi to adapt marketing messages in real-time and foster authentic connections with customers.

The web-based app's real-time tracking capabilities allowed the brand to optimize their marketing efforts, gaining valuable insights into customer preferences and behaviors. The campaign's integration with social media channels facilitated widespread sharing and generated a buzz around the brand, ultimately leading to increased brand recognition and image enhancement.

Conclusion

The collaboration between Appetite Creative, Emmi, and Tetra Pak serves as a prime example of the successful implementation of augmented reality and Smart Packaging. By seamlessly blending technology, packaging design, and interactive experiences, healthier and happier lifestyles among consumers was inspired. The AR-Connected Experience not only captured the attention of customers but also enabled Emmi to connect with them on a deeper level, fostering brand loyalty and advocacy. This case study highlights the immense potential of AR and smart packaging to revolutionize the way brands engage with their clients.

SHOWCASING THE KDD BEVERAGE RANGE VIA AN ENGAGING CONNECTED EXPERIENCE
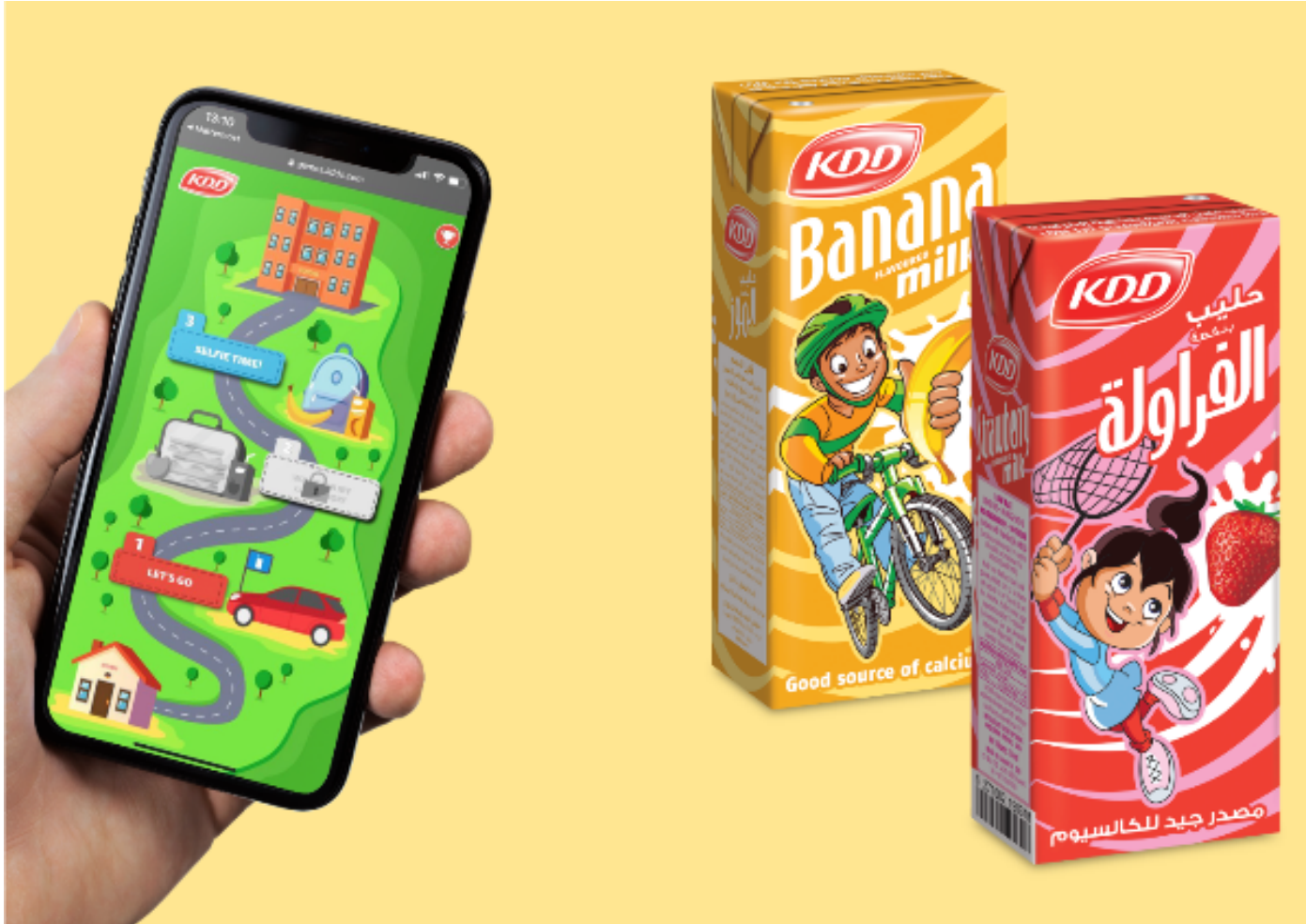
In the wake of the global pandemic, KDD faced the challenge of reconnecting with children and families as schools reopened. To address this, Appetite Creative developed a captivating Connected Experiences campaign for KDD, featuring interactive games and augmented reality (AR) filters. This case study highlights the successful execution of the campaign and its impact on engagement and brand recognition.

Challenge
After an extended period of school closures, KDD aimed to engage young students and their families by offering an interactive experience centered around their juice and milk drinks. The objective was to develop an appealing game that showcased the KDD beverage range, fostering connections with users of all ages.

Solution

Appetite Creative devised a multi-level experience that incorporated a 2D racing game, an AR game, and a selection of AR filters. Users accessed the games and filters by scanning a QR code found on KDD products. The initial racing game involved a personalized car representing the user's favorite KDD flavor, requiring players to navigate obstacles and collect boosting ingredients for improved leaderboard rankings.

Upon completing the racing game, users unlocked the AR game titled "What's in my lunchbox?" Leveraging the smartphone's camera, this game presented a three-dimensional space where KDD products and fruit were launched from a lunchbox. Players had to swiftly slice the items using their chosen 3D character, competing against time in three different levels. Additionally, users were encouraged to share their results on social media, increasing their chances of winning prizes.

Results

Within the first three months since its launch in September, the campaign achieved impressive results. Over **96,000 scans** were recorded, with the games played more than **191,000** times. Users spent an average session duration of 2 minutes and **39** seconds, showcasing the engaging nature of the experience and resulting in a low bounce rate of **1.09%**.

Furthermore, more than **9,900 users** submitted their data to appear on the leaderboard, providing valuable insights for KDD. The campaign's call-to-action for sharing on social media proved successful, with over **2,600 shares** across platforms such as WhatsApp, Twitter, and Facebook.

Conclusion

The collaboration between Appetite Creative and KDD demonstrated the power of Connected Experiences to engage and reconnect with audiences. By leveraging interactive games and AR filters, KDD successfully captured the attention of young students and their families, fostering brand loyalty and generating valuable user data. The campaign's impressive performance in terms of scans, game plays, and social media shares highlights the effectiveness of creative and immersive experiences in driving brand engagement and recognition.

EDUCATING CONSUMERS ABOUT THE IMPORTANCE OF SUSTAINABILITY THROUGH A CONNECTED EXPERIENCE
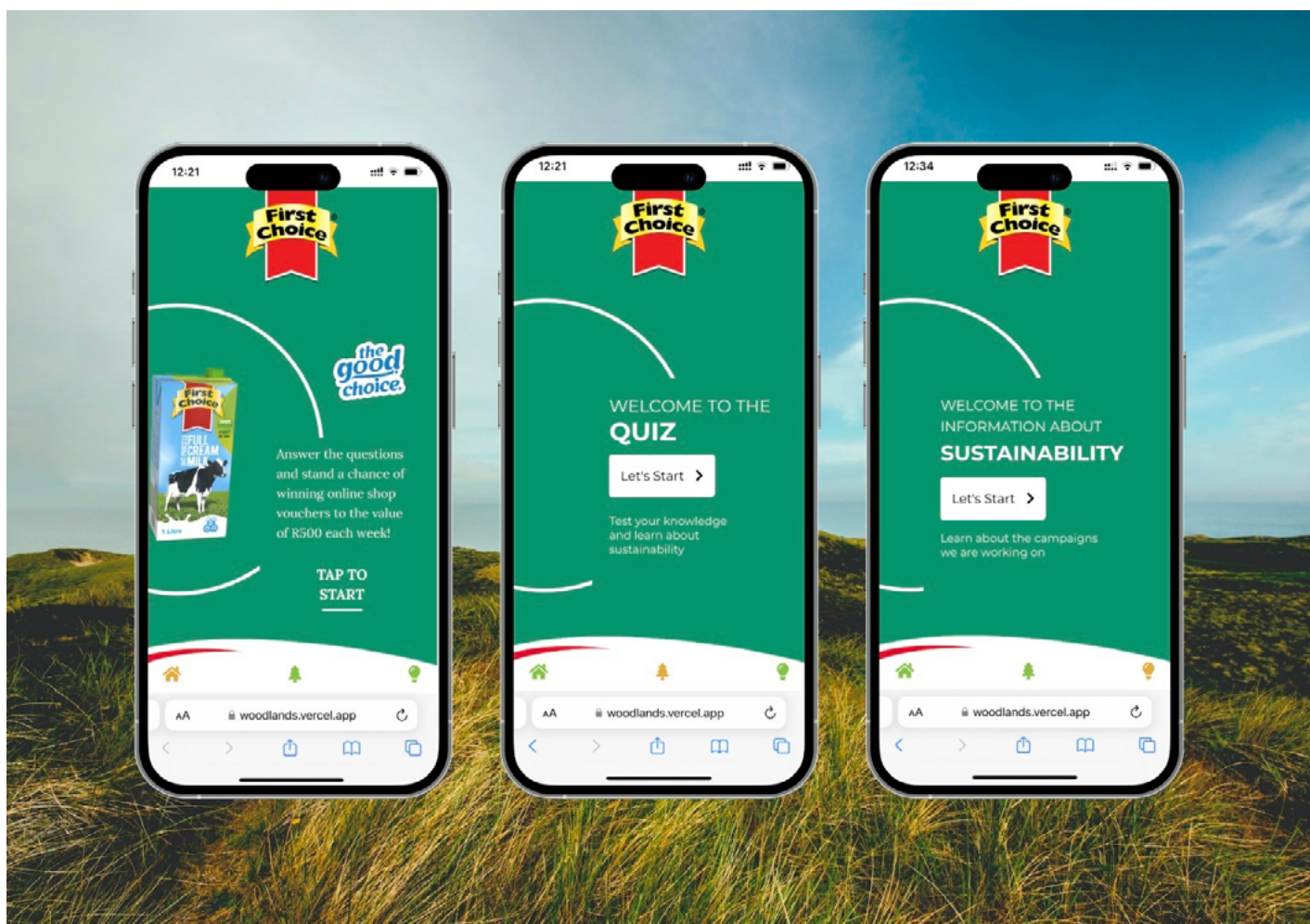
This case study explores the successful sustainability campaign undertaken by Woodlands Dairy in collaboration with Tetra Pak and Appetite Creative. The study highlights the challenges faced in effectively communicating sustainability initiatives, the strategic solutions implemented, and the remarkable results achieved in engaging the target audience, increasing participation, and promoting Woodlands Dairy as a brand dedicated to sustainability within the dairy industry.

Challenge

Woodlands Dairy faced the challenge of effectively communicating its sustainability initiatives and educating consumers about the importance of sustainability in the dairy industry. The goal was to engage a diverse audience, with a specific focus on mothers and children, by capturing their attention, encouraging participation, and positioning Woodlands Dairy as a brand that prioritizes sustainability. Additionally, the campaign aimed to provide an interactive and educational experience that would resonate with the target audience.

Solution

To overcome these challenges, Woodlands Dairy partnered with Tetra Pak and enlisted the expertise of Appetite Creative to create an interactive experience that would educate and engage consumers. Through the simple act of scanning a QR code on Tetra Pak cartons, consumers were able to embark on an interactive journey. This experience included a quiz with short and engaging questions designed to educate consumers about sustainability and offer insights into Woodlands Dairy's green initiatives. To boost engagement, Woodlands Dairy incentivized participation by offering 13,500R shopping vouchers as prizes in a weekly draw. Sharing the winners on social media channels generated additional excitement and raised awareness about Woodlands Dairy's sustainability efforts.

Results

Since the campaign's launch in March, there has been a remarkable surge in growth, which can be attributed to the strategic promotion and weekly announcement of winners on social media. This approach significantly contributed to increased engagement and participation.

The campaign successfully attracted a predominantly female audience, with women comprising 78% of participants. This aligns with the campaign's focus on mothers and highlights the effectiveness of targeting this demographic.

The desired age demographic of 25-36 was effectively reached, as participants within this age group formed the largest proportion of the campaign's audience.

The campaign received substantial traffic from Facebook, indicating that sharing winners on this social media platform yielded excellent results. This strategy successfully attracted visitors and increased visibility for the campaign.

The campaign achieved a below-average bounce rate of only 18%, indicating that the interactive experience successfully captured users' attention and encouraged further engagement. The average user engagement time of 2 minutes and 14 seconds suggests that participants actively interacted with the content, spending a significant amount of time learning about Woodlands Dairy's sustainability initiatives.

Conclusion

The collaboration between Tetra Pak, Woodlands Dairy, and Appetite Creative for the sustainability campaign proved highly successful in educating consumers, engaging the target audience, and promoting Woodlands Dairy as a brand committed to sustainability. The interactive experience, accessed through scanning QR codes on Tetra Pak cartons, effectively captured users' attention and encouraged active participation, as demonstrated by the rapid growth, increased engagement, and favorable user engagement metrics. The campaign's strategic use of social media, particularly in sharing winners and raising awareness, further contributed to its achievements. Overall, this campaign successfully communicated Woodlands Dairy's sustainability initiatives, resonated with the target audience, and enhanced the brand's reputation as an environmentally conscious leader in the dairy industry.

ENHANCING SUSTAINABILITY ENGAGEMENT - DON SIMON

In an effort to prioritize sustainability and engage consumers, Don Simon introduced a new range of Pure-Pak eSense packs with a web app-based Connected Experience. Accessible through QR codes, this innovative packaging aims to educate consumers about its aluminium-free carton, renewable plastic cap, and unbleached natural brown board. This case study explores how Appetite Creative successfully integrated sustainability and interactivity to create an engaging and data-driven campaign.

Challenge

Don Simon recognized the importance of incorporating sustainability into every aspect of their brand. They sought to educate consumers about their eco-friendly packaging and make recycling both convenient and enjoyable. The challenge was to design a Connected Experience that not only emphasized sustainability but also encouraged consumer participation and provided valuable insights for the brand.

Solution

Appetite Creative developed a web app-based Connected Experience that transformed Don Simon's packaging into a platform for interactive engagement. Upon scanning the QR code, consumers were immersed in a range of sustainability-themed games and educational content.

The interactive games included activities such as creating packaging from sustainable materials, developing products from plants, and learning about carton recycling. These experiences aimed to educate and entertain consumers while emphasizing the brand's commitment to sustainability.

Furthermore, the web app employed real-time tracking capabilities, capturing valuable data on consumer behavior and preferences. This data encompassed buying habits, product preferences, average engagement time, location, scan rate, number of visitors, return visitors, and GDPR-compliant personal data. By collecting this information, Don Simon gained insights into consumer engagement, enabling them to refine marketing strategies and enhance their sustainability initiatives.

Jenny Stanley, managing director at Appetite Creative, emphasized the campaign's focus on sustainability and consumer involvement. The ambassador competition, offered through the Connected Experience, not only rewarded consumers with early access to new products and brand updates but also provided an opportunity for passionate consumers to become engaged influencers for the brand.

Results

The Don Simon Connected Experience campaign proved to be a resounding success, both in terms of consumer engagement and data collection. The interactive games and educational content captivated consumers, driving increased awareness of the brand's sustainable packaging. The real-time tracking capabilities provided Don Simon with valuable insights into consumer behaviors and preferences, enabling them to tailor their marketing strategies effectively.

By combining sustainability messaging with gamified experiences, Don Simon encouraged consumers to actively participate in recycling efforts. The campaign's ambassador competition further amplified consumer involvement and fostered a community of passionate brand advocates.

Conclusion

The collaboration between Don Simon and Appetite Creative resulted in a compelling case study on the integration of sustainability and Connected Packaging. By leveraging a web app-based Connected Experience accessible via QR codes, Don Simon successfully educated and engaged consumers about their eco-friendly packaging solutions. The interactive games and data-driven insights not only strengthened the brand's commitment to sustainability but also fostered a community of dedicated brand advocates. This case study highlights the power of interactive packaging experiences in driving consumer engagement, increasing brand loyalty, and collecting valuable data for strategic marketing decisions.

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FUTURE OF CONNECTED PACKAGING**.**

Predictions for the Future of Connected Packaging

Global Stats, Emerging Technologies and Their Potential Impact

Implications for Brands and Consumers

FUTURE OF CONNECTED PACKAGING.

PREDICTIONS FOR THE FUTURE OF CONNECTED PACKAGING

Appetite Creative, a leading creative technology studio, has unveiled the findings of its second annual Connected Packaging survey. The survey reveals a significant surge in the adoption of Connected Packaging over the past year, with **81%** of respondents stating that they have utilized this innovative packaging solution, compared to just **54%** in 2022.

Among the key insights, it is evident that almost half (**48%**) of the participants recognize the importance of Connected Packaging in educating customers. This aligns with the results from the previous year's survey. Additionally, **45%** of respondents highlighted the value of direct customer interaction facilitated by Connected Packaging, while **42%** emphasized its role in sharing product updates and informing marketing decisions. Although data collection requirements were considered less important by a third (**29%**) of those surveyed, other factors took precedence.

The survey further revealed that **88%** of respondents plan to increase their investment in digital marketing spend in 2023, compared to **59%** in the previous year. In terms of Connected Packaging campaigns, a staggering **88%** claimed to have plans for such campaigns this year. The majority (**92%**) of respondents also acknowledged the increasing importance of Connected Packaging in the packaging industry, highlighting its potential for the next 12 months and beyond. These figures indicate a significant rise compared to 2022, where only **59%** expressed intentions for Connected Packaging campaigns, and **85%** considered it important for the industry.

Connected Packaging has emerged as a sustainable and effective means to engage and educate customers, as indicated by **57%** of respondents. Nearly half (**44%**) also view it as the primary channel for direct communication with customers. In addition, **38%** of those surveyed believe that Connected Packaging promotes customer loyalty, while gamification ranked closely behind at **36%**, demonstrating the significance of playable ads in engaging younger audiences.

The perceived value of Connected Packaging has been positively influenced by increased sustainability pressures on packaging producers and the introduction of new EU packaging laws. A substantial **91%** of respondents agreed that Connected Packaging enhances a company's sustainability credentials, compared to **80%** in 2022.

Jenny Stanley, Managing Director at Appetite Creative, commented on the findings, saying, "**Despite the cost-of-living crisis and global economic uncertainty, investment in Connected Packaging experiences continues to rise. No longer confined to data collection, Connected Packaging has evolved into a long-term customer relations and educational media channel, enabling companies to navigate ever-changing sustainability requirements and make informed product development and marketing decisions. As it transitions from a tipping point to mainstream usage this year, Connected Packaging is now considered a business 'must-have'.**"

GLOBAL STATS, EMERGING TECHNOLOGIES AND THEIR POTENTIAL IMPACT

The Rise of Smart Packaging: Essential Trends for 2023
In recent years, the integration of advanced technologies, such as sensors, into packaging solutions has given rise to the development of Smart Packaging. This innovative approach is revolutionizing supply chains, improving product integrity, safety, and quality, and enhancing the overall customer experience.

Smart Packaging has gained popularity across various sectors, including eCommerce, industrial goods, and consumer packaged goods. With the increasing demand for these intelligent packaging solutions, businesses have the opportunity to leverage these innovations, tapping into a growing market and boosting their competitiveness and performance.

An Overview of the Global Smart Packaging Industry
Businesses are increasingly recognizing the potential of Smart Packaging to improve and preserve the quality of their products. By utilizing technologies like sensors, valuable data can be gathered, saved, and analyzed to gain critical insights into product quality, facilitating appropriate improvements. Moreover, companies are turning to Smart Packaging to comply with strict national and international labeling standards. These opportunities have contributed to the rapid growth of the Smart Packaging market.

Smart Packaging Market Potential and Size
The Smart Packaging market was valued at **US$ 41.55 billion in 2022** and is projected to reach **US$ 63.25 billion by 2030**, with a compound annual growth rate (CAGR) of **5.39%**. In 2022, the Smart Packaging industry accounted for **2%** of the US$ 900 billion packaging industry, and it is expected to grow to **5% by 2030**. These statistics underscore the potential for businesses to leverage the growing demand for Smart Packaging.

With intensifying competition in local and international markets, Smart Packaging is rapidly becoming a holistic solution that transforms how businesses deliver, sell, and use products. Companies across various industries, including food, cosmetics, and pharmaceuticals, have already adopted Smart Packaging solutions.

Factors Driving Smart Packaging Market Growth
Several factors are driving the demand for Smart Packaging materials and fueling market growth:

Changing consumer lifestyles and demands: The growth of the Smart Packaging market is closely tied to ongoing urbanization and the increased use of personal products with integrated advanced innovation. Modern customers are also more health-conscious and interested in the packaging of the food they consume. Brands can leverage Smart Packaging features like QR codes to enhance customer access to product information.

Demand for temperature-controlled packaging solutions: Industries such as food, beverage, and pharmaceuticals are seeking temperature-controlled packaging solutions to monitor and maintain product freshness. This application of Smart Packaging has fueled demand and market growth.

Developments in printing processes: Printing technologies have evolved, offering improved functionality in processing and presenting information. This enables brands to connect and communicate with their target customers more effectively. For example, the ability to print QR codes on paper and other surfaces has made these innovations more accessible to retailers.

Types of Smart Packaging
Connected Packaging: Brands utilize Connected Packaging to establish a direct connection with customers. By integrating technologies such as tags, QR codes, and sensors, brands can collect third-party data for consumer behavior analysis. Connected Packaging transforms packaging into interactive brand tools, creating meaningful experiences. An example is the ability for customers to scan a QR code and access a company's website or app portal, where they can explore additional media like product usage videos.

Active packaging: Active packaging employs technologies that release or absorb compounds from food or the packaging itself. It incorporates advanced features like temperature control, thermochromic capabilities, moisture control, or bacteria control. Active packaging helps companies increase product shelf life and quality by minimizing degradative reactions.

Design-led packaging: Design-led packaging focuses on enhancing the function and structure of a product to improve the user experience and value perception. Innovative physical package design takes precedence in appealing to target customers.

Intelligent packaging: Intelligent packaging integrates smart, interactive, and connected solutions. The technologies employed enable various activities, including data collection, product tracking and tracing, and problem detection. Intelligent packaging employs indicators and sensors placed inside or outside the packaging to diagnose product conditions such as freshness, temperature, tightness, and storage time.

Emerging Trends and Technologies in Smart Packaging
Augmented Reality (AR): AR transforms how customers interact with product packaging by combining physical and virtual reality. Brands can relay packaging information through 3D content, leading customers into the digital world and increasing opportunities for engagement.

QR codes in Smart Packaging: With the widespread functionality of smartphones today, reading QR codes has become effortless for customers as long as they have a camera and internet access. QR codes are increasingly adopted in Smart Packaging, allowing customers to access company websites for detailed product information or participate in marketing initiatives and promotions. Additionally, businesses can track products and maintain visibility throughout the supply chain using QR codes.

RFID sensors in Smart Packaging: RFID sensors enhance product monitoring and sensing capabilities. These technologies transmit data over long distances, facilitating tracking during shipping. RFID tags and smart labels can also alert users when products have been exposed to harmful conditions, making them inedible.

Industries with High Demand for Smart Packaging

The food, beverage, and healthcare industries lead in both demand and adoption of Smart Packaging, projected to hold the largest market share of **69%** by 2031. Strict storage and transportation standards for various food and healthcare products drive this demand. Smart Packaging in the food and beverage industry plays a crucial role in reducing costs, minimizing waste, and maintaining quality standards. Similarly, the health and high-end consumer goods sector embraces Smart Packaging for improved communication, product security, and enhanced access to product or brand information.

Conclusion

The Smart Packaging industry is experiencing rapid growth as businesses embrace packaging solutions that enhance product protection, quality, shelf life, and customer experience. To strengthen their competitiveness, companies should adopt Smart Packaging technologies such as AR, QR codes, and RFID sensors. Targeting industries with high demand for Smart Packaging, such as food, beverage, and healthcare, can yield early benefits in this dynamic market.

IMPLICATIONS FOR BRANDS AND CONSUMERS

The rise of Connected Packaging has brought significant implications for both brands and consumers. This innovative technology has revolutionized the way brands engage with their customers and created new opportunities for interactive experiences. Let's explore the key implications of Connected Packaging for brands and consumers.

For brands, Connected Packaging has become a powerful tool to enhance customer engagement. Packaging now serves as an extension of the brand, enabling brands to establish a direct and personalized connection with consumers. Through on-pack design elements like QR codes, brands can offer instant access to product information, promotions, and interactive content. This heightened level of engagement not only fosters brand loyalty but also allows brands to gather valuable data on consumer behavior and preferences.

Consistent brand representation is crucial in customer engagement through packaging. Brands must ensure that their packaging design reflects their identity, utilizing appropriate colors, fonts, and logos. Consistency across different platforms, including packaging, reinforces brand recognition and helps brands stand out in a competitive market. By choosing materials strategically, brands can enhance the sensory experience and immediate engagement with packaging, leveraging textures and sensory additions to draw attention and provide a unique touch.

Smart Packaging, which integrates digital elements such as QR codes, takes brand-consumer interaction to the next level. With the transformation from physical packaging to a digital platform, brands gain additional opportunities to engage consumers in-store or at home. QR codes, although existing for some time, have experienced a resurgence in recent years. Their use and interaction have grown significantly, and brands are increasingly incorporating them into their packaging designs. Other design elements also encourage consumers to connect with brands digitally, amplifying engagement and creating memorable experiences.

Intelligent packaging takes the concept even further by integrating added functionality into the packaging material itself. Sensors can detect freshness, temperature, and other parameters, providing real-time information about the product's condition. This ensures consumer confidence in the quality and safety of the contents. Another branch of intelligent packaging is active packaging, where the package interacts with its contents. For example, antimicrobial agents can be released when sensors detect compromised freshness, preventing bacterial growth and maintaining product integrity.

From a consumer perspective, Connected Packaging offers convenience, information, and interactive experiences. Consumers can easily access product details, promotions, and brand content by scanning QR codes or engaging with other digital elements on the packaging. This immediate access to information empowers consumers to make informed purchase decisions, discover additional product features, and explore brand offerings.

Furthermore, Connected Packaging allows consumers to engage with brands beyond the physical realm. By bridging the gap between the physical and digital worlds, packaging becomes a gateway to a broader brand experience. Consumers can interact with brands through mobile apps, websites, and other digital platforms, deepening their connection and fostering loyalty.

In a highly competitive landscape, on-pack prints and campaigns serve as valuable touchpoints to engage consumers across multiple platforms. Digital technologies enable seamless interaction with brands, extending from physical packaging to the digital sphere. Brands that leverage Connected Packaging and design elements promoting this digital crossover create a crucial opportunity to enhance consumer engagement and build lasting relationships.

Overall, Connected Packaging brings exciting implications for brands and consumers alike. Brands can leverage this technology to establish direct connections, gather valuable data, and enhance brand loyalty. Meanwhile, consumers benefit from convenient access to information, interactive experiences, and a seamless bridge between the physical and digital realms. As Connected Packaging continues to evolve, it holds immense potential for shaping the future of brand-consumer interactions.

LEGISLATION CHANGES

Businesses and consumers are increasingly seeking sustainable choices, but the lack of data transparency across supply chains can make informed decision-making challenging. However, a solution is on the horizon: the Digital Product Passport (DPP).

The Digital Product Passport, proposed by the European Commission, is a tool designed to promote transparency and facilitate circularity by sharing comprehensive product information throughout the value chain. This includes data on raw material extraction, production processes, recycling, and more.

As the implementation of the DPP will have a significant impact on companies in the coming years, WBCSD and BCG have conducted an assessment of the implications of the new EU Regulations. They have also released a series of publications on this topic to provide valuable insights and guidance to businesses:

"[The EU Digital Product Passport shapes the future of value chains: What it is and how to prepare](#)" is an overarching report that summarizes the policy perspective and offers corporate guidance. It also illustrates a potential scenario of the DPP's implementation along the electronics value chain.

In "[Enabling circularity through transparency: Introducing the EU Digital Product Passport](#)," WBCSD and BCG delve into the details of the regulation and address current uncertainties. They analyze different options that could shape the regulation and identify key implications for businesses.

To assist companies in preparing for the DPP and reaping its benefits, WBCSD and BCG provide clear, actionable steps in "[Navigating uncertainties of the EU Digital Product Passport: How to prepare now as a company](#)."

With the introduction of the Digital Product Passport, businesses will have a valuable tool to enhance transparency, enable circular practices, and make more sustainable choices. By following the guidance and preparing adequately, companies can position themselves for success in this new regulatory landscape.

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CONCLUSION.

FINAL THOUGHTS ON THE FUTURE OF CONNECTED PACKAGING

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WANT TO KNOW MORE?
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