Perfecting the recipe.

Distilling the latest trends and
challenges impacting the food
and beverage industry.

GWI.

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Introduction

If the last few years have taught us anything, it's to expect the unexpected. Although the food and beverage industry is poised for **strong growth** over the next few years, there are roadblocks – emerging trends, growing challenges, and changing consumer behaviors – to contend with.

Knowing is half the battle. How you react, pivot, and embrace these changes can make all the difference to your company growth, business strategy, and brand.

That's why GWI has done the legwork for you, gathering data on the biggest trends and challenges in the industry so you can position your business for success. In this ebook we'll take a closer look at the tech transforming how the food and beverage industry operates, the emerging trends impacting consumer purchasing, sustainability hurdles, and where there's room for growth. We'll also look at how brands are collecting this data and creating insights that have an impact.

Innovation and insights: tech that's transforming the industry.

Technology is transforming the industry by providing practical solutions to address industry-wide challenges, while enhancing quality, optimizing processes, and reducing energy consumption. While most companies understand that embracing innovations like artificial intelligence (AI), cloud computing, and machine learning is the best way to stay competitive and continue to grow, it can be hard to keep up.

Bottom line? Technology may be advancing at warp speed, but we're plugged into the trends so you won't miss a thing.

In the industry:
In April 2022, **Kraft Heinz and Microsoft partnered** to accelerate supply chain innovation as part of a broader digital transformation.

Confidence in cloud computing.

Cloud computing has been creeping into areas of **the food and beverage industry for years.** It's a vital tool that allows the industry to react quickly to shifting environments in the marketplace and gain a competitive advantage. As an alternative to costly hardware or software like on-premises servers, access to the cloud helps food producers acquire and process massive, dynamic data sets in real time without worrying about **server maintenance, security, or backups.**

One of the most significant cloud computing trends has been using sensors to improve food safety.

More and more food producers are using **cloud-based sensors** to gather real-time information like the appearance, location, and temperature of food products and ingredients. All of which contribute to safer, healthier products on the shelves and in consumers' hands.

Another global impact of cloud-based tech has been cloud-based labeling. Barcodes already allow product tracing and identification, but **cloud-based labeling** offers a birds-eye view of the entire food production process from field to grocery bag, improving food traceability.
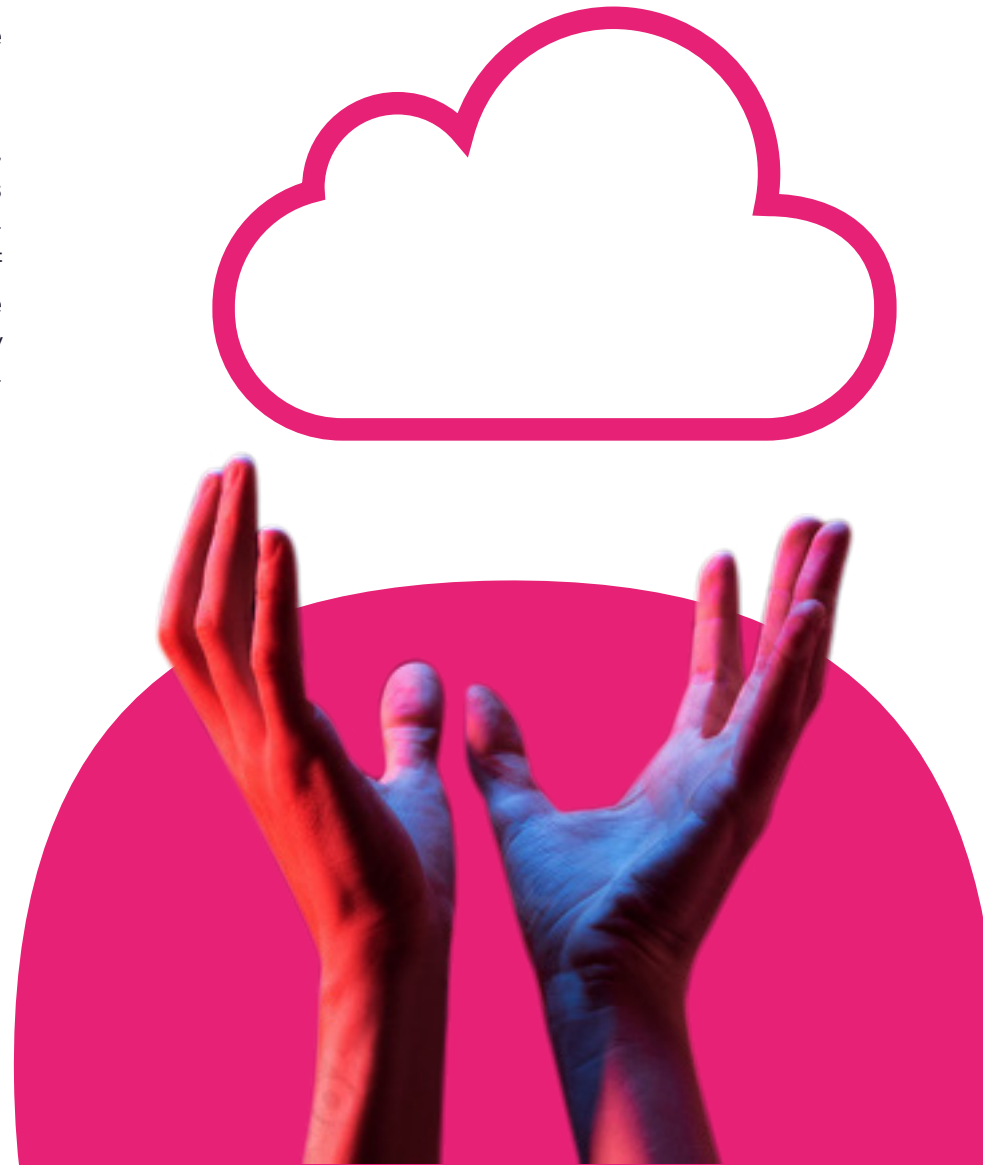
In the industry:
The FDA plans to launch a **new era of smarter food safety,** which will use technology to create a safer and more digitally traceable food system.

If you're new to the term "food traceability", it's essentially the ability to follow the movement of a product and its ingredients through all steps in the supply chain, both backward (to where it originated) and forward (to where it ends up). It can be especially useful in finding the origin of a foodborne illness or product contaminant, leading to a speedier removal of the affected product from the marketplace and reducing the incidences and impact of foodborne illnesses.

In the US, regulators are using cloud-based systems to determine food safety, with the Food and Drug Administration (FDA) launching a **cloud-based platform** to review and manage large data sets directly from the FDA's files.

They're involved with traceability too, proposing new food traceability recordkeeping requirements for all businesses that manufacture, process, pack, or hold foods that are labeled as "high-risk" in the Food Traceability List (FTL), making "ingredient labeling" a significant portion of the packaging process.

The more we adopt technology, however, the more opportunities we offer cybercriminals. Cybersecurity has become a major area of concern in the food and beverage industry, with its connected legacy systems proving particularly vulnerable to cyberattacks.

In the industry: Brazil-based meat processing group JBS experienced a cyberattack that knocked out slaughterhouses in the US, Canada, and Australia, and cost the company around **$11 million.**

The rise of robotics.

AI, automation, and machine learning are the future. Specialized algorithms, advanced tech (think robots), and data analytics are helping to improve efficiency, productivity, and the customer experience while reducing human error and costs.

They can be especially useful when unplanned disruptions in the supply chain – something we've all experienced in the last few years – means having to change plans on the fly.

Uses for AI and machine learning include:

- Real-time forecasting for brands and market trends through data analytics that can shorten time to market and forecast interest in products

- Predictive machine maintenance (deploying analysis to identify patterns and prevent breakdowns)

- Supply chain optimization through algorithms and programs written specifically to predict disturbances and create solutions

- AI-backed A/B testing for quicker, more precise, and less costly results

The food and beverage industry's investment in AI is expected to increase by **$5.66 billion** between 2021 and 2026.
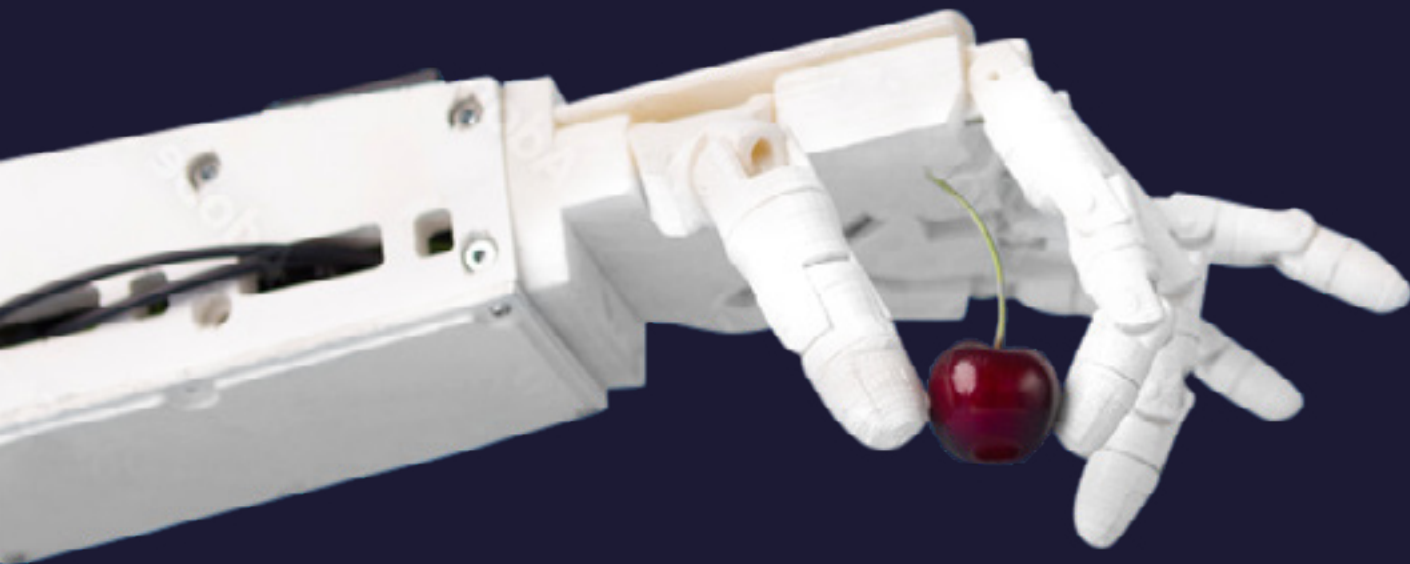
Automation, and **robots**, are increasingly in the spotlight. The automation of food packaging processes has helped food and beverage companies keep up with the surging demand and labor shortages across the industry. Robots can work faster, are more sanitary, and aren't at risk of workplace injuries from lifting or repetitive movements. They can even work **together with humans** and have built-in sensors, so they're aware of their environment and don't bump into people or walls.

Lastly, food and beverage companies are exploring blockchain to combat the chaos of the supply chain, increase transparency, and boost customer confidence. Using blockchain, companies can increase traceability, transparency, supply availability, and efficiency, improving operations.

A significant driver of the exploration of blockchain in the supply chain is IBM, which created the **IBM Food Trust** in 2017 to store information about food and beverage products.

This enables Food Trust participants such as Nestlé, Kroger, Tyson Foods, and Walmart to track products as they're harvested, processed, packaged, and distributed, increasing visibility and efficiency in their supply chains.

In the industry:
Nestlé USA has launched an AI-powered virtual bot that uses autonomous animation to answer questions about its Toll House chocolate chip cookie recipe (May 2021).

Personalized, premium, and popular.

Food and beverage companies are concentrating on their more expensive products as consumers experience one of the biggest inflation shocks in decades. It seems counterintuitive to ask consumers to pay more during an economic downturn.

Still, there's a method to this madness: focusing on the widest customer base and the most popular products, no matter the price, is key to maintaining and growing profits in this economic climate. Some consumers are watching their wallets, but others are trading down to premium products and are willing to spend more on quality.

Sure, brands can use historical trends to figure out what products have been popular, but using real-time data paints a more detailed picture.

Leveraging these data sets provides insight into consumer preference, but also pricing and product marketing trends, so brands know where to focus their advertising budget.

Whether companies choose to market products as **bespoke, personalized, or premium** or push the higher quality, sustainability, or health features to help validate a higher price, consumers are undoubtedly buying into the premium product trend. To continue to capture these audiences, companies need to demonstrate the added value within their brands and give consumers a good reason to buy higher-priced products, extending consumers' willingness to pay. Harnessing audience insights is key to staying competitive as the high cost of living continues to change consumer behavior.

Something old, something new.

While food and beverage company mergers and acquisitions (M&A) are nothing new, they're on the rise, with food and beverage M&As in 2021 reaching **674 deals**, the second-highest number on record. This surge shows no sign of abating into 2023.

Larger food conglomerates are establishing their own venture capital funds to acquire new, innovative food companies as a way of keeping up with evolving food trends and helping young companies grow.

In the industry:
Hershey has set up an in-house arm, C7 Ventures, to make equity investments. One such **investment is in Bonumose, Inc.,** a start-up company with breakthrough innovations in plant-based food ingredients.

> The **UN claims agriculture** accounts for up to 12% of total greenhouse gas (GHG), 50% of methane, and 60% of nitrous oxide emissions.

The environment and sustainability: trends and challenges impacting the industry.

From deforestation for livestock farming to soil erosion from intensive agriculture, the food and beverage industry significantly strains the planet's resources. And with the impact of climate change being felt across the globe, it's no surprise that consumers are taking an interest in companies' environmental and sustainability efforts. In fact, being eco-friendly is **the number one thing** consumers want from brands.

This increased scrutiny has encouraged investors to take a more active role in supporting and accelerating sustainability measures, including signing on to a list of **key expectations for the industry** to move toward achieving a net-zero future. Environmental, social, and governance **(ESG)** has also become a popular buzzword, with investors increasingly applying these non-financial factors as part of their analysis process to identify material risks and growth opportunities.

The industry may **rank highly on sustainability,** but there's still a long way to go, and devising a sustainability strategy is crucial for food and beverage companies to remain competitive and improve their reputation.

Connecting the dots on climate change.

Roughly **a third of the food intended for human consumption** in the United States ends up as food loss and waste (FLW). Not only does this make terrible sense economically, there's also an important connection between food loss, waste, and climate change. The production, transportation, and handling of food create carbon dioxide (CO_2) emissions, while the landfills of food waste produce methane, another GHG.

The rising costs of food waste, and the growing amount of legislation aimed at combating it, mean brands are turning to data to see where they can reduce food waste and save resources. They're using batch food expiration data to achieve faster processing, food temperature data to enable safer storage, and market trend data to help optimize inventories.

Analytics in the food industry also has a major role in tracking surplus and supply gaps to avoid future supply and demand inconsistencies, which in turn reduces waste and cuts costs.

For consumers, **reducing and preventing food waste** increases food security. For companies, it saves money (with more products on shelves instead of in landfills) and resources (which are vital in an energy- and water-intensive sector.) Focusing on environmental impact and addressing climate change could also decrease climate change-related shocks to the supply chain.

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Around a third of the food produced globally is lost or wasted and this is having a real impact on climate change, contributing **8–10%** of total man-made GHG emissions.

Securing supply chain sustainability.

In recent years, the supply chain has dominated news coverage, impacting everything from holiday shopping to energy prices. And the impact has been particularly severe across the food and beverage industry, with products stuck at ports and grocery store shelves empty.

The food and beverage sector is the **most susceptible to climate change** and is already experiencing disruptions because of it: increasingly, extreme weather events are impacting both **agriculture and the supply chain,** making it harder to accurately forecast.

But just as the environment impacts the supply chain, so the supply chain impacts the environment. Agriculture requires land, water, energy, and other finite resources, all of which **directly and indirectly** impact the environment at different stages of the supply chain. From pesticides seeping into the groundwater, to deforestation to make more grazing land, to the sheer amount of freshwater necessary to grow crops, all stages of the chain put stress on the environment and produce varying levels of GHG emissions.

There's a link between climate change, agriculture, and supply chain resiliency. But moving a complex supply chain toward sustainability requires a **fundamental shift in perspectives** and practice. It demands leadership and stakeholder buy-in to acquire the staff, training, processes, and tools to build sustainability into all levels of the supply chain.

The pandemic and plant-based protein.

Throughout the pandemic, **people learned a hard lesson** about the effects of agricultural supply chains on the environment and the population's food security. And with the growing movement toward supporting local businesses and eating with seasonality in mind, they're increasingly seeking food products that don't have to travel a great distance to get to their kitchens.

Americans are becoming more health conscious and also aware of the impact of their choices on the environment. Meatless companies have poured a lot of resources into highlighting the environmental benefits of plant-based meat versus raising livestock.

So environmental considerations, along with the growing availability of plant-based food options and the declining cattle inventory, have led to a surge in the popularity of plant-based foods.

The American diet is diversifying, and as the price of meat products has risen dramatically over the last two years, so has the popularity of plant-based foods and vegetarian diets, reported to be **cheaper, healthier, and better for the environment.** Data suggests that this popularity will **continue to grow,** moving plant-based foods further into the mainstream.

In the industry:
Tyson Foods has expanded its **Raised & Rooted™ brand** of plant protein products with three new products to meet the increased demand for plant-based protein options.

That's a wrap.

It's impossible to talk about the environmental impact of the food and beverage industry without mentioning packaging. The excess consumption and improper disposal of plastic are both critical issues in the industry, with most plastic packaging not being recycled and ending up in landfills.

Consumers want convenience, but more and more, **they're buying brands with green initiatives:** they want to know food and beverage companies see the problem and have plans to change.

Whether that's fundamentally changing the way products are manufactured **creating a circular system to recycle and reuse, embedding edible data** inside food, or creating sustainable packaging out of **non-pollutive biomaterials,** the industry is having to get creative on the road to a net-zero future.

In the industry:
Nestlé has announced its decision to use **100% recyclable packaging material by 2025.**

Data, data, everywhere:
the challenges of turning data into insights.

The food and beverage industry is one of the most diverse, competitive, and innovative industries in the world. Highly attuned to the wants and needs of its consumers, the industry uses market research and insights to stay current with consumer trends, uncover patterns, and personalize experiences. And staying current is becoming more critical and more difficult, with consumer behavior seeming to change faster than insights can be gathered, and more channels (think TikTok or Instagram) than ever before.

Instead of waiting to receive outdated insights, more and more brands are bringing data gathering in-house, enhancing insight capabilities by gaining access to complete data sets without having to wait for agencies. There are positives and negatives to this agile strategy. Bringing data in-house means real-time access to information when it's needed. On the other hand, not all data-gathering tools are created equal, and insights are only as good as the questions and methods used to create them.

The studies that may be the most cumbersome can also be the most valuable. Multicultural insights can be challenging to gather, as can global insights, primarily because of sample size. Brand health is another important consideration. Conducting studies and gathering awareness and consideration metrics versus competitors is incredibly valuable, but not all brands have the scope in-house.

Whether it's crafting the correct questions, finding people to allocate, or turning the data into actionable, insightful information, the process can be costly and time-consuming to say the least.

The good news is that you're not alone in this data adventure. The GWI platform is fueled by rich data collected from a large sample size that provides valuable insights directly to a dashboard so you can stay agile, focused, and on-trend.

GWI provided us with the strength, volume, and variety of data points we needed to gather compelling results, with the flexibility to ask additional questions as the landscape developed in front of us.

SHANE MANSFIELD
Marketing Director

Pivot and position: how City Pantry used GWI to unlock new opportunities.

City Pantry is a popular office catering company with tens of thousands of weekly orders across more than 600 businesses. As a brand, its mission is to make working lives better with their food service, a mission that became more difficult in 2020 with office closures, lockdowns, and more remote workers. City Pantry saw an opportunity to shift its focus from the office to the employee, and start a conversation around employee wellbeing.

The first challenge was positioning City Pantry as thought leaders, moving away from office food to instead talk about employee happiness and how this impacts the company as a whole. The second challenge: sourcing the insights needed to cement City Pantry's position as a thought leader.

Working with GWI to carry out a **custom survey** on a select audience in the UK, they set out to better understand welfare in the workplace among those with desk jobs.

They wanted to uncover the key emotional drivers behind employee wellbeing by asking questions around stress, mental health, employer support, and attitudes toward work.

City Pantry was able to drive low-cost, high-quality leads with smart positioning and inspiring content. But the campaign also had a big impact on the City Pantry brand. Using insights to help reposition core messaging, and pivot during the crisis, City Pantry was able to seize the moment and lead the conversation on employee wellbeing, a hot-button topic for employers since the outbreak of Covid.

Conclusion

Find your audience.
Satisfy your curiosity.
Establish your lead.

Accurate market and consumer insights are essential for effective decision-making – especially in the food and beverage industry. Having trustworthy insight to hand is essential for developing successful strategic plans, trialing innovative tech, and pioneering sustainable change in the industry.

It all starts with the data. To stay on top of trends and optimize your global growth and marketing strategies, it's important to have on-demand access to information in the form of a single, consistent view of your total addressable market.

With GWI, you get credible, granular, and multi-layered insights that you can turn into actions. GWI provides answers to highly specific business questions, helping our clients find the "so what" in any situation and mine data for meaning.

Validate your strategic thinking, identify new opportunities for product development, and drive business growth with on-demand and single-view insights into the changing tastes and buying triggers of billions of consumers.

Gather more insights from our **2023 Insights Report** or **visit us on the web** to learn what makes GWI different.

Find your audience. Satisfy your curiosity. Establish your lead.

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> GWI is the leading audience insights company. The company's flagship survey represents 2.7 billion people globally, by continually collecting data across 50 countries. It provides global data at an unrivaled scale to help businesses gain a deep understanding of their audiences at speed. GWI's SaaS platform and custom data products are trusted by the world's biggest brands, media organizations, and agencies. Customers include Google, Spotify, Reddit, EA, Red Bull, WPP, and Omnicom.

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