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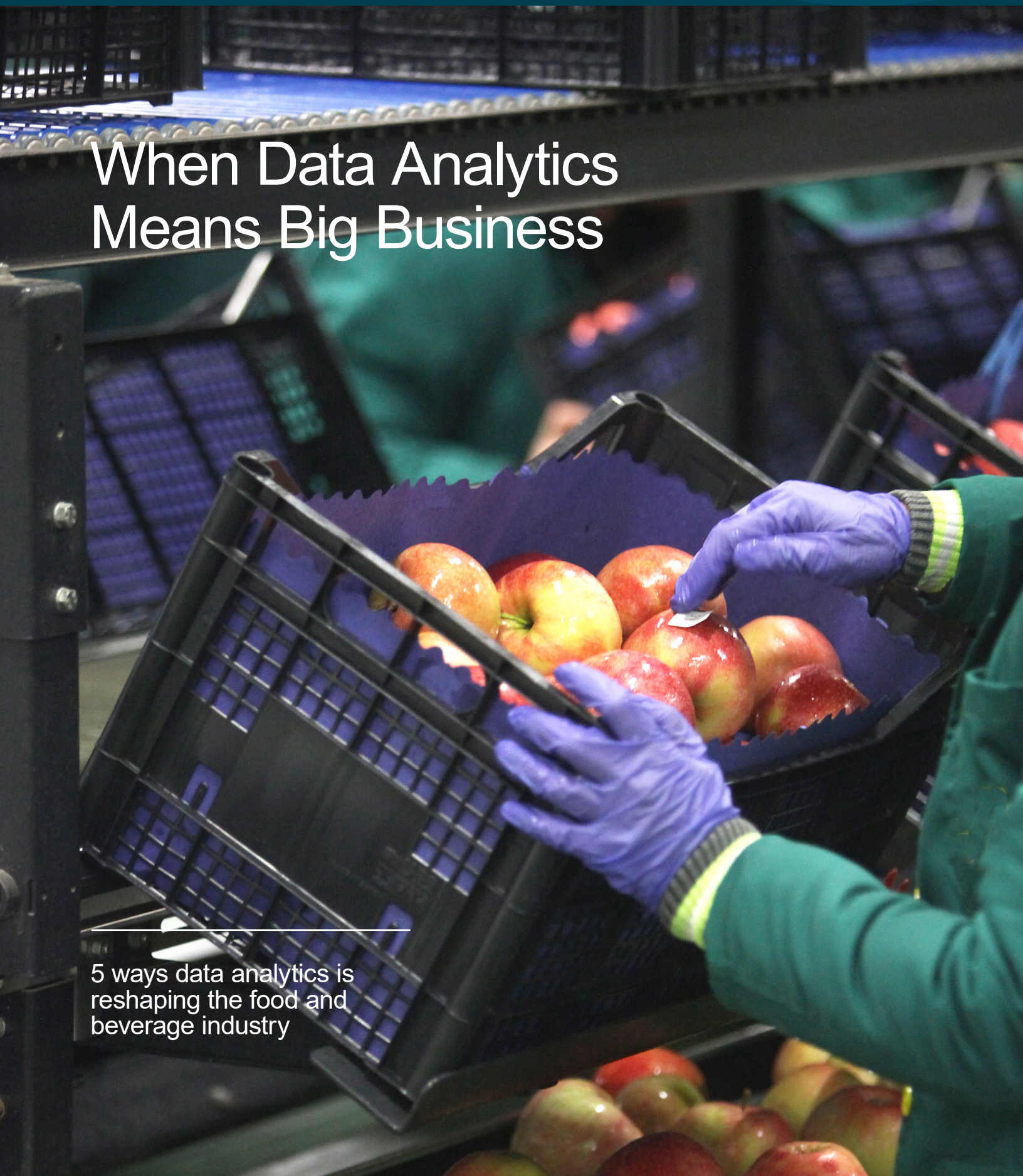

When Data Analytics Means Big Business

5 ways data analytics is reshaping the food and beverage industry

Table of contents

Introduction

Data analytics is fostering growth and creating big gains in the rapidly expanding food and beverage industry.

There are few topics in the food and beverage industry today getting more attention than *data analytics*. What is it and why all the hype? By making information available at multiple levels, food and beverage leaders are using data analytics tools to quantify specific processes, enabling their workforce to draw informed conclusions in their day-to-day decision making. Food and beverage businesses benefit from being able to better understand customer needs, uncover important food industry market trends and demand forecasts.

Five ways data analytics is reshaping the food and beverage industry

Success in the food and beverage industry largely depends on two major factors—the quality of the food and effectively getting product from point A to point B.

Data analytics may seem unrelated to the food and beverage industry, but is it? Here are several areas in which data analytics is serving this industry:

1. Data democratization
2. Streamlining food delivery and operational efficiency
3. Risk management
4. Customer sentiment customer service
5. Market basket analysis and future purchasing trends

Data analytics: What is it?

Food and beverage companies gather information every day – about their customers, their products, sales, inventory and more. Match that information to the vast amount of data gathered by internet search engines, like Google, and you've got a gold mine just waiting to be explored.

The process of examining information in order to make more informed business decisions is what data analytics is all about. Analytics software, from basic business intelligence (BI) and reporting and online analytical processing (OLAP), to advanced analytical software is the technology that helps to analyze the data and create reports and dashboards that help to run food and beverage businesses better.

Data democratization

What is data democratization and how does it affect food and beverage data analytics?

Simply put, data democratization is the conceptual understanding that data analytics should be available, understandable and usable by ordinary people running ordinary businesses. The sheer amount and availability of raw data is intimidating and often seems counter-productive in an industry whose main interest is growing, creating and delivering good food for a profit.

Data analytics is useful whether you're a big search engine, a small pastry shop on the corner or a successful food manufacturer.

For example, Baked by Melissa is a New York-based company that specializes in baking and selling bite-sized cupcakes. This niche market is so specialized it may be hard to imagine that it could survive in the competitive, global food and beverage industry.

However, Melissa found that in an increasingly industrialized market—particularly in an urban environment like New York City—her brand of low-calorie, personally baked treats had a winning market appeal. As business grew, so did the struggles of keeping up. Her initial success was immediately challenged by an overwhelming demand that she welcomed, but was also unprepared to satisfy.

This market is precisely where data democratization has gained traction. Baked by Melissa's initial success revealed a shortcoming in the company's accounting and delivery system: holiday orders came in so fast that their back-end system was unprepared to accept the huge volume of orders, let alone fulfill the deliveries. Melissa's response was to evaluate her business model to find weaknesses and consider how to avoid the same kind of trap in the future.

Using data analytics, Baked by Melissa improved its order and delivery system. First, the company examined its order slips and then built analytic models to identify patterns of customer behavior and anticipate when demand would be high. As a result, this small New York company has successfully solved its problem and can now predict when demand will be high to deploy its people, products and delivery at the right time in the right place.

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Data analytics streamlines operational efficiency

Not every business is a small business like Baked by Melissa. Many food manufacturers are part of a larger corporate structure with locations around the country and, in some cases, around the world. Unlike food and beverage companies of previous eras, their success often results from a deliberate effort to focus on operational efficiency, innovation and staying on top of market demands and changing tastes.

Food and beverage companies are able to thrive in this fast-paced environment through data analytics and personalization of their service. From consumers taking more time to learn about their food origins to connecting with their favorite food brands on social media, trends have shown that people are more engaged with the food and beverage industry than they were in the past. Competition among food manufacturers is forcing many companies to think beyond their traditional practices. A more personalized experience through data analytics might include suggesting products based on purchase history, customized recurring delivery as well as personalized products and product packaging.

Waste reduction = cost reduction

Rising costs of food waste and legislation aimed at reducing the problem are forcing food and beverage industry leaders to take a closer look at their data to see where they can reduce waste and save resources. Data analytics can be a useful tool to decrease waste by analyzing batch food expiration data for faster processing, food temperatures for safe storing and market trends to optimize inventories. Tracking of surplus and supply gaps to avoid future supply and demand inconsistencies also reduces waste and saves costs.

Data analytics and risk management

Food and beverage companies must address the same concerns of any business owner, and data analytics can be instrumental in helping food and beverage professionals minimize risk and maximize safety.

By analyzing its entire supply chain, any food manufacturer can use data analytics to assess potential health risks originating with agriculture and farming and continuing through the food storage processes at each step in the supply chain.

Today the farm, tomorrow the world

In the middle of this stream is the packaging industry, which affects the cost and quality of many of the agricultural and dairy products delivered every day. The food and beverage industry ultimately feeds into the bottom end of this chain via waste management, recycling, food security issues, global food waste, pollution and preservation of natural resources. Using data analytics to develop an intelligent business model can help corporations not only please suppliers and shareholders, but also allows food and beverage industry professionals to groom themselves as responsible and caring corporate citizens.

Data analytics, customer sentiment and service

Food and beverage companies can more effectively predict customer sentiment by leveraging data analytics tools.

When hearing about data analytics or Big Data, thoughts of targeted marketing and advertising campaigns can come to mind. Anyone who uses the internet has been the subject of advertisements for consumer products, tailored to their individual online browsing activity.

These kinds of analytics tools can also be used to gauge and predict customer sentiment and improve and enhance customer service. For example, food manufactures can capitalize on customer surveys to better cater to those who are more sensitive about their food preferences and then adjust accordingly.

By leveraging this information into data analytics tools, language processing applications, and social media listening applications, food and beverage industry professionals can more effectively predict and prevent customer complaints and dissatisfaction. By preventing the damage that often results from an undetected negative reputation, food manufacturers can save time, money and frustration, while expanding their market share more rapidly and effectively.

Data analytics and market basket analysis to predict customer purchasing trends

Using data analytics effectively allows food and beverage companies to secure their share of the market.

As Baked by Melissa learned the hard way, predicting customer demand can be a lifesaver for food manufacturers. Avoiding delivery obstacles is not the only prize for those who develop an effective analytics model for their food and beverage company. Modern food manufacturers that use data to create new products and variations on existing products are thriving in the current fast-paced market.

Data analytics can give food and beverage professionals the tools to sharpen their skills in e-commerce, develop new models of delivery and collaborate with larger online marketing behemoths like Amazon.

By analyzing consumer trends, the food supply chain, as well as delivery and distribution channels, food and beverage professionals can determine what lies ahead. Using data analytics effectively allows food and beverage professionals to secure their share of the market.

How ERP delivers the benefits of data analytics

Enterprise Resource Planning (ERP) is a software technology solution that allows business professionals from all areas of commerce to develop a centralized method of managing the concerns discussed in this paper. ERP software integrates a variety of functions and issues into one complete system that streamlines information, commerce, activity, and strategies, enabling more effective and more intelligent business management and data analysis across all sectors. An effective and reliable ERP system is essential for food and beverage industry professionals interested in using data to maximizing profitability, efficiency, and safety in areas that include:

- Inventory and order management
- Accounting and finance
- Resource Management
- Traceability and product recall management
- Customer relationship management (CRM)
- Publicity, sales, and marketing
- Logistics

An effective and reliable ERP system is essential for food and beverage manufacturers to use data to maximize profitability, efficiency and safety.

About NexTec Group

NexTec Group is an award-winning business software consulting firm with over 24 years in the food industry, helping companies streamline food safety processes and ensure compliance. We specialize in implementing ERP, CRM, BI, Cloud and On-premise solutions that can manage product recalls and customer issues, track products, reduce food waste and improve operations.

Contact us for a demo at nextecgroup.com/foodbev.

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