CASE STUDY



NO MORE GUESSWORK

Minimising waste and maximising standards, through analytics

Abstract

Henry Wilson, the Regional Head of Sustainability at a food and travel retail company, needed a framework that could quantify the data on food waste with a standard unit of measurement. Working with data analytics experts from Infosys BPM, he gained a robust framework that incorporated the nuances of his business model, leading to 100% Worldwide Responsible Accredited Production (WRAP) compliance standards attainment.





Unequal weights and measures

Henry Wilson, the Regional Head of Sustainability at a leading food and travel retail company, was grappling with a pressing challenge. As he reviewed the discussion points from the recent cadence meeting, one question lingered: How could he elevate the company's sustainability initiatives to a new frontier? His role, encompassing all environmental, social, and governance (ESG) initiatives executed in the region, demanded a high degree of collaboration with diverse departments like Purchasing, Finance, and Operations. Additionally, he was accountable to both internal and external stakeholders, including regulators. Henry quickly began examining the company's existing ESG efforts to identify potential areas of improvement. It wasn't long before the waste quantification process caught his attention. As a part of its commitment to sustainable consumption of resources, the company aimed to reduce food and beverage waste and closely monitored this across their operations.

He realised that although each business unit diligently collected data, the lack of a standard unit of measurement in the internal systems hindered his team's ability to draw meaningful insights. Weak data controls allowed users to switch between kilograms, litres, and other units of measurement, making the data inconsistent across different business units. Customisation of food and beverage options to cater to regional preferences added another dimension to the challenge.

However, Henry knew that the volatile nature of the industry and the company's unique business model made standardisation far from easy. This required expertise in analytics solutions, so he decided to consult with Infosys BPM. The company had, in the past, successfully partnered with Infosys BPM for various initiatives. Given their positive working relationship, Henry quickly obtained the necessary approvals to engage with them.

Tidying up the data on waste

Soon, Devesh Joshi, a Senior Analytics Lead from Infosys BPM, met with Henry to discuss the challenges in the current data collection process. Henry explained that he was looking for a framework that aligned with their product hierarchy and could fill data gaps with analytics. Devesh then assembled a team of analytics experts and conducted a thorough examination of the data and systems.

Approach summary



Devesh's team discovered that the data collection approach was rudimentary, as it calculated the weight of food or beverage wasted using a product's price, along with certain other assumptions. The approach failed to factor in the high inflation rates or its effect on prices. It also did not take into consideration the tens of thousands of products the company offered across various food and beverage categories. And since the company operated in the travel retail space, certain products had a higher margin than others, which meant that using a product's selling price to determine its weight was flawed. Devesh was aware that using an oversimplified approach with limited data points while not taking into account the nuances of a business was a common pitfall. So, along with his team, he set out to create a more robust framework.

The team sifted through the existing data to identify records that captured information on weight using the generally acceptable units of measurement. For records that were missing this information, the team used text mining and mapped records with the internal recipe database to calculate the weight of a food or beverage item. Then, with the help of advanced analytical techniques, they arrived at a weight-value ratio for the immediate parent product in a hierarchy. This ratio helped estimate the weight for the remaining records and ensured the usage of a consistent unit of measurement across all items.

By combining siloes of data and employing analytical methods to fill in the data gaps, Devesh's team developed a framework that matched the needs of the company.



Minimum waste, maximum compliance

Henry was excited to finally have a framework that quantified the weight

of wasted food and beverages with a common measurement standard and met

100% Worldwide Responsible Accredited Production (WRAP) compliance standards.

Key benefits



Devesh's team also performed a deepdive analysis of the ESG data, pinpointing product categories, markets, and store units contributing to high waste rates. This insight gave Henry the confidence to adjust strategies and take corrective action. With just a few minor tweaks, Henry was also able to extend the framework to other markets which gained the project even greater effectiveness. The outcome of this was that Henry and Devesh's strong collaboration received all-round appreciation for their expertise and efforts, while Henry continues to work towards promoting sustainable growth with even greater vigour.

*Names have been altered to preserve the identities of the people involved.



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