

## Some Existing Insights Approaches

- Panel Data
  - a. Data from a significant number of people about purchase and consumption behavior demographically split. But still relatively small sample compared to total population.
  - b. Insights are only going to be based upon what already happened.
  - c. Mostly reveals common behaviours, and doesn't surface the long tail of behaviours that could be opportunities.
- POS Data
  - a. Purchase data is limited to existing products.
  - b. Does not reveal how they are being consumed and combined.
- Social Media Data
  - a. Less than 1% of all meal occasions are posted online. Anything that has got a statistical significance is already well known and doesn't reveal new information.
  - b. Often what people post on social media and do in reality are different.
  - c. An increasingly common and indefensible approach to deliver insights.

## Problems of These Approaches

1. Insights are often processed in silos, which does not take into account changes happening elsewhere. For example, POS data does not give consumption information or product to recipe experimentation.
  2. Insights that are based upon historical data, don't necessarily have clear outcomes or actions and often need people to analyze and make decisions. Humans have limited cognitive abilities that cannot compete with today's AI capabilities.
  3. When insights are derived directly from and purely upon historical data, the novelty of the insight is limited. The likelihood is that the output will be somewhat known and hence its value also questionable.
  4. Old, historical insights are also used for new product development, and by the time a product hits the market, usually another 12 months have passed and so the "new" opportunity, if there was one to be had, is now gone or has been leveraged by a more agile competitor.
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## Beyond Consumer Insights

Defined as a non-obvious understanding about your customers, which if acted upon, has the potential to change their behaviour for mutual benefit. Professionals in the food industry are constantly looking to understand their consumers so as to be able to sell their products effectively.

Analyzing the behavior of consumers in different demographics is the conventional way of gathering consumer insights. Many companies today make big decisions about new products, and their marketing strategy based on this data.

We have built a food brain that is able to ingest large amounts of data about consumer behavior at a global level and make sense of it.

To be able to cluster consumers into different groups, our Food Brain needs to have some understanding of :

- Ingredients
- Food Culture
- Flavour
- Health and Wellness

Behavior data by itself cannot be used to build trends, the trends will be scattered, and more importantly not accurate.

As an example, ingredients like honey, maple syrup and molasses can be grouped together as natural sweeteners once we have information about the sugars present in each of these ingredients and the knowledge that they come from natural sources. Consumers talking about any of these 3 ingredients can be grouped as conscious of “natural” and who like sweet tasting food.

This would not be possible without the combination of food knowledge and artificial intelligence. Molecular level data about food with scientifically backed principles will allow us to provide accurate, novel insights for your marketing team.

With the vast amount of data we have available in house, we are also building and validating scientific hypotheses about:

- 1) What foods go well together and why?
- 2) The drivers of liking in different regions of the world



## A Unique Approach... Connecting Disparate Dots

No one wants insights which are just theoretical, they need to be actionable, explainable and backed with data. Most of the times, it is relatively easier to identify a change in consumption, but how to leverage it to your business thesis is extremely difficult.

We link the points of data which at first look seem unrelated. Every path between two points is explained and backed with data. Moreover, these causal relations could extend deep, e.g. insights derived from connected points which are 20 relations apart. This connection depth is incomprehensible for humans to build by themselves. All the relevant possibilities are automatically suggested.

We came up with a suggestion for a juice manufacturer to leverage the popular seasonal pumpkin spice trend by connecting disparate dots. After mining through a countless number of data points, we came up with the concoction of a 'Papaya Turmeric Pumpkin Spice Smoothie'. Why?

At the molecular level, pumpkin and papaya share about 75% of their aroma compounds, which suggests that they go well together. The same is true for pumpkin and turmeric. The fact that papaya, like many other tropical fruits, has gained popularity among consumers over the last few years makes this a sensible choice.

In the last 7-8 years, the interest in turmeric as an ingredient has almost doubled. Curcumin, the main active in turmeric has many proven anti-inflammatory benefits and because it comes from a natural source, the use of turmeric is only growing. This beverage makes a great choice for consumers who are health conscious but still want to enjoy the flavor of pumpkin spice.

