



How Consumer Packaged Goods Companies Use Collective Intelligence Tools to Improve Operational Performance

Leverage the tacit knowledge in your organization to improve decision making, increase control, and proactively reduce risk

White Paper

crowd-cast (krowd-kast') *n.* Accurate, prediction free of bias and spin. 1. Incorporate collective knowledge of your colleagues dynamically; enables deep root-cause analysis.

fore-cast (for-kast') *n.* 1. often biased and updated. 2. prediction of coming event

"Knowledge has become the key economic resource and the dominant – and perhaps only – source of comparative advantage" – Peter Drucker

Executive Summary

CEOs in other industries look on with envy at consumer packaged goods (CPG) companies. Indeed, many of the makers of food and beverage, health and beauty, household, and other consumer products enjoy solid balance sheets and profit margins. But after years of rapid growth, the industry is seeing revenues and market values flatten.

In recent years, retailers have been exerting considerable pressure on suppliers, influencing such key factors as pricing and fulfillment. Moreover, retailers are morphing from customers to competitors, stealing market share with lower priced house brands. CPG companies' core competencies around supply chain management and brand and customer access are becoming commoditized.

To compete effectively, CPG companies have to do something different. They need a new source of competitive advantage. One that allows them to bring new products to market faster and most cost effectively, get more out of promotions, assess and mitigate strategic and operational risks. The answer lies in tapping the vast knowledge and experience of their employees and partners.

A Source of Competitive Advantage

CPG companies are continually innovating: strengthening existing brands with extensions, layering in new products and introducing new categories. When product strategy is executed well, CPG companies reap great rewards. According to a recent Grocery Manufacturers Association report, the \$2.1 trillion CPG industry added a staggering trillion dollars of value to the overall economy. Execution is becoming more and more difficult however, as evidenced by a flattening of growth.

Brand and product managers routinely answer big questions. How much to spend on advertising for a new product or line extension? What should a new product cost? How much inventory to carry? Which supplier is most cost-effective and least risky?

Analyzing historical data and conducting market research can inform some of these decisions. The latter works well when the future is similar to the past, while the former is well suited for understanding consumer preferences around the end product. There are obvious gaps. Namely, events that don't resemble the past (e.g., completely new product category launches) and strategic and operational risks (e.g., supplier risk), which cannot be vetted by consumer panels.

“Since the late '90s the [CPG] industry has not matched its earlier strides in value, quality and convenience”

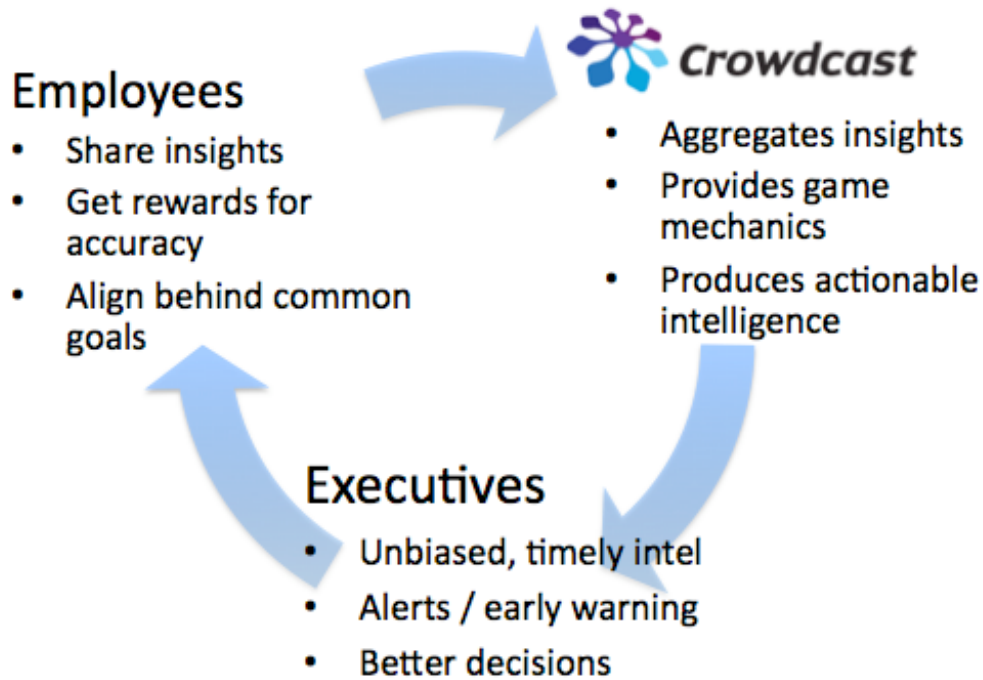
**- Mark McGrath, Director,
McKinsey & Co**

Developing and launching new products is a multidimensional problem. Packaging, price, acceptance rates, and manufacturability are but some of the factors to consider. This is one of the reasons CPG product teams are collaborations of people from just about every functional unit. Ultimately, it is the collective insight of the team that informs critical decisions. Unfortunately, due to limitations of technologies and processes, these teams are small, comprising a tiny subset of the vast knowledge and experience pool of the enterprise.

But what if you could do more? What if you could easily tap the wisdom and experience of everyone – no matter the department and geographic location – who has knowledge about your product? What if you had efficient communication channels that crisscrossed the company and connected the people with questions to those with answers? What if there was a way for everyone to share unique insights about key metrics and align behind a common purpose? What if this system rewarded everyone for relevant and accurate knowledge?

Introducing Crowdcast

Crowdcast is a collective intelligence platform that enables everyone – your employees and partners – to share insight on what is planned. It augments historic transactional data with forward-looking people-driven intelligence. Crowdcast is a new outlet that aligns people and purpose, where insight, plans, and experience come together, creating a clear shape to possible actions and business outcomes.



The Crowdcast process

A Business Scenario: Leading Household Products Manufacturer

Background: This company was struggling with poor forecast accuracy around promotional campaigns. Problematic metrics include Net Invoiced Sales, ship dates for new products, number of new customers, as well as risk factors, such as raw material costs. Their legacy forecasting and planning process involves a “home-grown” tool, which consolidates input from sales and marketing and statistical models of transactional data. Brand managers are responsible for synthesizing a consensus forecast. The process is time consuming and yields inadequate results (forecast accuracy of some metrics is tracking at less than 20%).

Challenge: Improve promotional program performance. Gain better visibility into future outcomes faster and more efficiently.

Solution: Crowdcast was deployed to 500 employees. Brand managers pose questions about key performance and risk metrics to a cohort of people that includes marketing, sales, R&D, finance, packaging, and manufacturing. Participants share their insights on questions about which they have relevant knowledge. Brand managers build better performing promotional campaigns faster by incorporating crowd beliefs.

“When we get [a forecast right] we think we’re smart. When we get it wrong, we blame external factors”
- Director of Supply Chain

Decisions impacted: How much product to build, optimal bundling combinations, raw materials hedging strategy.

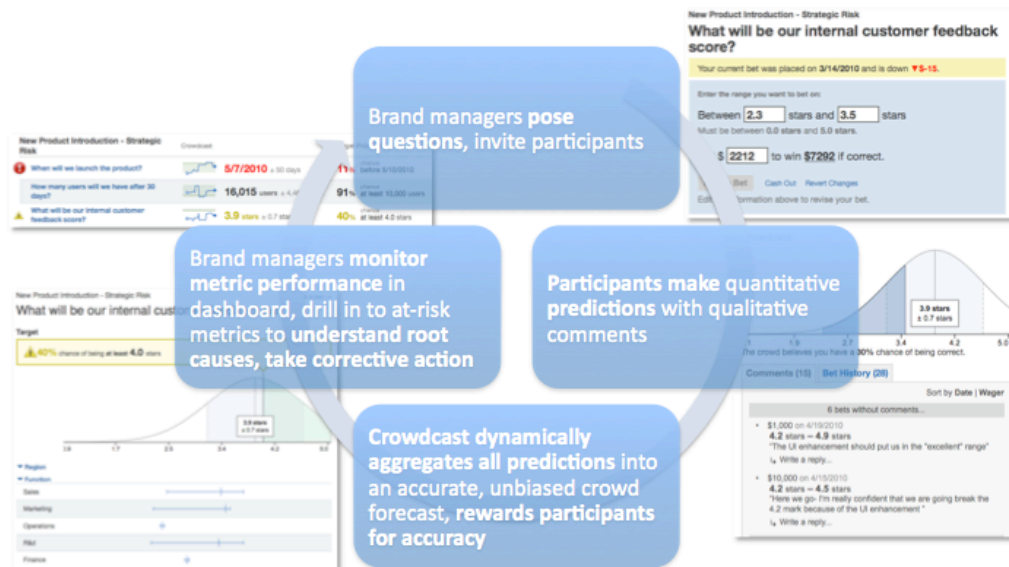
<i>Before</i>	<i>After</i>
Product launch plans were established by department heads and marketing leads	Crowdcast was deployed to 500 employees across hierarchies and departments, to forecast new product ship dates, volumes, and strategic risks
Incentives to be overoptimistic resulting in less accurate forecasts	Incentives to be truthful. The Crowdcast forecasts were 37% more accurate than the corresponding official forecasts
Forecasts were infrequently updated	New forecasts reflected real-time updates as new information becomes available

This company did something different. They changed the way they planned and executed promotional campaigns by turning to their most valued asset – their employees – for help. The results were dramatic. Here are benefit highlights:

- Promotion planning cycle times went down from 1-2 weeks to days, thanks to crowd forecasts that integrate quantitative predictions with comments that provide supporting rationale
- Program effectiveness improvements resulted in hard savings due to fewer stock-outs
- Employee engagement and morale increased, especially among newer employees, who complained about their voices not being heard

How It Works

Crowdcast uses a patent-pending information market-based approach to collect insights from employees and partners. Decision makers post questions about key metrics and events to a cohort of participants — knowledgeable people from inside and outside the firewall. Questions can be about dates, numbers (such as units, percents, and currency), and discrete outcomes.



Participants who have relevant knowledge about a given question share their insights by selecting ranges of likely outcomes and by giving their beliefs weights using virtual currency. For example, someone might predict that the product will ship between March 5 and 15. Someone else with different information might enter a completely different prediction. Participants also leave qualitative comments that provide rationale behind their beliefs.

Crowdcast's patent-pending market-based mechanism offers participants a fixed payoff if they are right – that is, if the true outcome falls in their selected range. The payoff is based on how likely the crowd thinks they will be right at that moment. In this way, the system rewards those who not only have accurate information, but are early to reveal it.

When a new prediction comes in, the mechanism analyzes the range, the weight, and the participant's total portfolio value. From this data, and the current crowd forecast, or *crowdcast*, we can infer the participant's perception of the probabilities of various outcomes. We then do a weighted Bayesian update of the crowdcast to its new position. This is what is presented to the next participant. So, the crowdcast adapts to incorporate new behavior, and also acquires mass (and therefore inertia) over time.

Conclusion

Consumer packaged goods companies face heightened global competition, complex distribution channels, strict government regulations and approval processes. These pressures require strong forecasting tools and effective communication and collaboration across internal and external stakeholders.

Ample evidence shows that employees and partners have knowledge that, if harnessed properly, can inform the most critical decisions. Leveraging this hidden knowledge requires a new kind of tool – one that enables people to share information anonymously, efficiently aggregates this information into a meaningful whole, and presents results to management in a way that improves decision making.

Crowdcast is the only provider of collective intelligence solutions that is wholly focused on challenges in the enterprise. Crowdcast has helped numerous companies align decision-making and understand and reduce risks associated with developing and launching new products and on-going operations.

About Crowdcast

Crowdcast is the leading provider of collective intelligence solutions that help executives make better-informed decisions. Through its patented knowledge aggregation platform, Crowdcast allows decision makers to harness the knowledge of employees, customers, and partners and translate it into accurate and insightful business forecasts. Fortune 1000 companies rely on Crowdcast to improve project and portfolio management and to uncover and mitigate strategic risk. For more information, visit <http://www.crowdcast.com>.