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Establishing trust through traceability

Protect and empower your brand for today's "Omni Consumer"



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By Guy A. Blissett

The purchasing behavior of today's "Omni Consumer" is influenced by factors relating not only to the product, but also to its broader impact on society. To guide their purchasing decisions, these consumers leverage trusted sources of information, which traditionally included Consumer Products (CP) companies. However, product contaminations, recalls and confusion over marketing claims have eroded trust in CP manufacturers. To rebuild consumer confidence and re-establish brand relevance, CP companies should encourage transparency by delivering credible information about innovative products. We believe this is best accomplished through Full Value Traceability.

Introduction

Several factors have converged to create heightened need for transparency and effective communication within the Consumer Products industry. Public trust has declined in the wake of recent product contaminations and recalls. In just the past few months, high-profile recalls of pet food, chocolate, lettuce, spinach, peanut butter, baby food and others have prompted consumers to question whether CP companies have their safety and best interests in mind. Additionally, conflicting reports about the credibility of product health and wellness claims have created confusion and suspicion in the minds of consumers. And, finally, in an effort to reduce costs, CP companies have turned to both outsourcing and global sourcing, resulting in more complex supply chains with increased transparency concerns.

Coupled with these factors is the emergence of what we call the "Omni Consumer." This new generation of consumer is both enlightened and empowered – and has a new set of drivers that influence its purchasing decisions (see Figure 1).

CP companies have partially responded to these issues by investing in lot tracking processes and systems, which allow them to track batches of products through the supply chain. However, these systems are usually limited in scope, lacking in precision and deliver sharply reduced visibility as products move downstream in the supply chain. As well, they focus on isolating affected products after a contamination occurs. We believe there is a larger opportunity – what we call Full Value Traceability – that allows innovative CP companies to support the creation of integrated solutions throughout the supply chain. Such solutions can both safeguard the food supply and enable the trust and transparency necessary to instill consumer confidence. This, in turn, allows CP companies to more effectively position new products and brands and successfully compete with private-label offerings.

FIGURE 1.

The Omni Consumer has a new set of drivers that influence purchasing decisions.



Omniscient: informed, aware and concerned about products

- Omnipotent: has power and capability to tune messages in or out
- Omnipresent: purchases products through an ever growing, changing number of channels
- **Omnivorous:** consumes wider range of products than ever
- Omnifarious: doesn't fit in neat boxes or descriptions

Source: IBM Institute for Business Value.

Product and packaging

- Does it deliver health benefit?
- Does it contain trans fats, whole grain, peanuts...?
- Is packaging recyclable ?

Retailer

- Does it stock healthy, organic products?
- Are employees paid fairly?
- What product info is available?
- Do I feel good shopping there?

Consumer Products company

- Is it environmentally sensitive? What do nongovernmental
- organizations say?
- Is management responsible?
- Do actions match message?

Suppliers

- How are animals treated?
- Are growers paid fairly?
- · Is harvesting sustainable?
- Who certifies operations?

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A new recipe for trust

The factors influencing consumer purchasing behavior are changing. Previously, packaging and a product's intrinsic attributes - those things a consumer could see, touch and taste - were the primary drivers of purchasing behavior. Today, while product and packaging are still relevant, they are but two of many purchasing drivers. The Omni Consumer wants products that deliver more, such as functional foods that provide incremental health and wellness benefits. He or she also cares more about the impact of these products on individuals, society and the environment. This consumer is less concerned with brand name alone - if quality, functionality and responsibility levels are comparable - and is becoming more concerned about the accountability of each segment of the supply chain, including manufacturers (CP companies), retailers and suppliers.

Hunger for information

These purchasing factors have generated considerable consumer demand for new categories of products and increased information about them. Previously, consumers would gather information from the product and its packaging. Today, consumers access information through numerous channels and from a variety of sources, including Web sites, blogs and online chat rooms. To build trust and drive purchasing behavior, CP companies need to understand the varied information needs of their target consumers and their preferred sources for information. This understanding forms the basis for a comprehensive communication plan that gathers and disseminates to the consumer essential information from across the supply chain.

Additionally, the increasing convergence of food and pharmaceuticals, and the explosive growth of these products, creates a separate information challenge. CP companies should proactively address the informational requirements of these new products, or face the prospect of regulation similar to that of the pharmaceutical industry.

We believe Full Value Traceability will enable CP companies to fulfill these needs and reestablish the brand as "trusted source of information."

Ingredients for change

The increasingly dynamic nature of the consumer products landscape, evidence of which is found in the record number of product introductions over the past two years, represents a major challenge for many CP companies.¹ We have identified five primary ingredients for change impacting consumer purchasing behavior and driving the need for transparency.

1. Concerned and empowered consumers

Consumers want to "feel good" about the products they buy, use and consume. Traditionally, this feeling was driven by a relatively narrow set of intrinsic product attributes, such as taste, value and ease of use. Brands historically provided consumers with a way to both simplify and feel good about their purchasing decisions. Branded products were widely perceived as safer and good for you – and the information they provided was deemed trustworthy. Consumers knew the brands of detergent that cleaned well, the cereals that contained the most raisins and the TV dinners that had the most chicken.

Today, consumers require a much higher level of information to give the same level of trust. The Omni Consumer still wants to feel good, but has attached deeper meaning to that term, evidenced by:

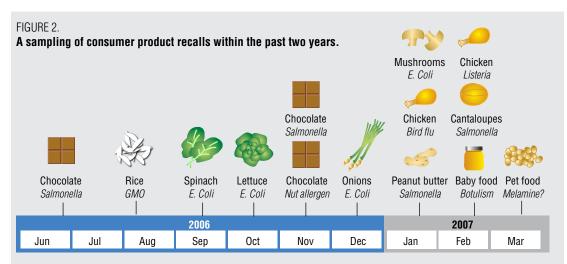
- The fact that 96 percent of U.K. consumers and 86 percent of U.S. consumers are familiar with the term organic, according to our recent survey²
- The number of U.S. and U.K. consumers

 approximately three of every five that
 report increased knowledge about the

contents of the food they buy – as well as a desire for even more information about product sources and contents.³

However, recalls and contaminations have eroded consumer confidence in product safety, the foundation of the brand value proposition (see Figure 2). Two of every five U.S. and U.K. consumers say they buy different brands today because of safety concerns.⁴

The Omni Consumer presents CP companies with a complex and conflicting dynamic. These consumers are on a quest for products that deliver health and wellness benefits. At the same time, they are skeptical of some benefit claims in traditional marketing messages. They have also learned to tune out *unwanted* messages. In fact, 56 percent of consumers report they *avoid* buying products that overwhelm them with marketing and advertising.⁵



Source: IBM Institute for Business Value.

Contaminations and recalls have eroded consumer confidence in product safety, the foundation of the brand value proposition. To date, we believe innovative retailers around the globe – by providing comprehensive and effective labeling on their private-label products - have capitalized more effectively than CP companies on this growing consumer hunger for desired information. They are also growing private-label market share by introducing premium offerings that deliver many of the same benefits as their branded counterparts. Consumers are increasingly comfortable with private label products - sixty-three percent perceive their safety as essentially the same as branded counterparts.⁶ Two-thirds view private label as a "good alternative" to other brands.⁷ Many private-label products now provide a wealth of information about ingredients, packaging and nutrition. As well, they include details about source and sustainability of ingredients, carbon footprint and the use of air shipment - plus retailer interaction with society as a whole. For example, Sainsbury's, a U.K. grocer, labels some fresh produce with the name and location of the farmer who grew the item.

These same consumers, who have exhibited a lack of trust in CP companies, also do not trust the government to do what is right. In fact, trust in the U.S. Food and Drug Administration (FDA) has declined by 12 percentage points since 2001.⁸

2. Credence-driven innovation

In today's competitive market, *true* innovation – such as products with credence-driven attributes – drives top-line growth and meets the needs of concerned and empowered consumers. Incremental innovation – such as the addition of one or two minor features to an existing product – no longer suffices. For example, during 2004 and 2005, a record number of new products were introduced.⁹ Yet, less than 1 percent of these reached US\$100 million in sales – and only 10 percent exceeded US\$20 million.¹⁰ Of these successful products, 64/68 percent (food/ nonfood) were new or differentiated varieties.

To address this, more and more companies are introducing functional and organic products, such as Omega 3-enriched peanut butter and shade-grown organic coffee. The functional foods market is already large – US\$36 billion per year in the United States alone – and is projected to grow at 19 percent per year.¹¹ Similarly, the global organic food market generates US\$36.7 billion per year.¹² This contrasts with a total food market growth rate of approximately 2 percent per year.¹³

In addition to innovation, there is also a high level of activity surrounding the issue of sustainability – the ability to develop products that meet today's needs without compromising natural resources. Examples include initiatives by such companies as Coca-Cola, Procter & Gamble and Nestlé to both reduce and use more sustainable packaging.¹⁴

The challenge is that credence attributes are not readily verifiable – either at the point of purchase or point of use. CP manufacturers, therefore, need to increase transparency in their claims to instill consumer trust and confidence.

3. Complex supply chains

In an ongoing effort to drive down costs and increase responsiveness, CP companies continue to expand adoption of global sourcing and outsourcing. While these efforts have, in Shifts to global sourcing have strained the ability of regulators to monitor and sample the quality and safety of shipments. large part, achieved their objectives, they have also increased supply chain complexity. This chain now comprises an increased number of participants and an expanded geographic network of vendors, increasing CP company exposure to new – and, in some cases, poorly regulated – sources of supply.¹⁵

As well, outsourcing of core logistics functions reduces CP company control over product movements and access to associated information. A recent survey of CP companies revealed that 50 percent had extensively outsourced transportation – and 44 percent had extensively outsourced warehousing and distribution centers.¹⁶ The burden on these companies to affirm product safety has also increased – as shifts to global sourcing have strained the ability of regulators to monitor and sample the quality and safety of shipments.

As a result of globalization, imported agricultural and food products are at higher volumes – and products are increasingly sourced from greater distances. The potential exists for increased import and export delays because of food safety concerns, trade requirements and U.S. antiterrorism laws.¹⁷ The net result is that both upstream tracing and downstream tracking are more difficult – but are more critical than ever. Indeed, "lack of critical supply chain process visibility" is the leading concern of global supply chain executives.¹⁸

Three additional factors further complicate the supply chain. First, retailers are demanding ever more and differentiated products – even if points of difference encompass only minor packaging changes – resulting in additional

SKUs that must be manufactured, stored and shipped. Second, product life cycles are shorter, creating additional issues as products move on and off the shelf at a more rapid pace. Finally, a proliferation of SKUs, as products have been introduced in record numbers over the past few years, has increased the complexity of supply chain management.

These factors have introduced various traceability-related pain points within the supply chain, primarily in:

International shipments

- Inability to secure containers to protect against theft and guarantee content integrity and product authenticity
- Limited ability to monitor and affect conditions during shipment and storage – or to have knowledge of the contents of individual containers
- Complicated vendor/supplier management because of multiple hand-offs between suppliers, logistics service providers, contract manufacturers, distributors and the end customer
- Inconsistent, inaccurate and missing shipment documentation that causes delays at ports and borders.

Tracking and tracing issues

- Difficulty locating products and isolating risk in the event of contaminations
- Ineffective supplier management difficulty in identifying suppliers of raw materials
- Limited adoption of enabling technologies, such as second-generation barcodes and radio-frequency identification (RFID), delays location of ingredients and products.

Data

- Limited technological sophistication of suppliers, service providers and customers hinders data collection and sharing
- Poor data quality and lack of standardization delays decision making and increases transaction friction
- Storage of relevant data in disparate systems complicates development of an end-to-end supply chain picture.

4. Critical data and information

In addition to managing the complexity of the physical supply chain, CP companies are challenged with effective management of data and information. Product. customer. vendor and transactional data must be collected, stored, analyzed and communicated across multiple trading relationships. Speed-related traceability requirements, such as the FDA's four hour one-up/one-back requirement, are further driving the need to automate data collection and supply chain processes.¹⁹ This heightened information management importance was highlighted during a recent IBM study of CP business and IT executives. According to the survey, CP companies are adopting a more aggressive posture toward IT.²⁰ A growing number of executives view IT as an essential investment area, and most consider it a strategic asset.²¹

Although traceability enablers, such as global data synchronization (GDS) and the electronic product code (EPC), have been adopted by the industry, much work remains.

5. Expanded regulatory agenda

In response to recent consumer concerns, the number of regulations affecting CP companies has increased sharply. And as CP companies have become more global, the challenge of dealing with regulations across multiple jurisdictions has become more difficult. Individually, regulations – such as a U.S. Farm Bill that would include animal identification requirements – address specific issues and gaps affecting the safety of the food supply. Collectively, they raise the documentation, reporting and handling requirements for CP companies, their retail customers and suppliers.

We believe CP companies can take a lesson from recent events in the U.S. pharmaceutical industry. Traceability concerns have generated individual, state-led pushes for ePedigree legislation to track drugs from their source through to the retail outlet. The semi-automated lot traceability systems in place at many CP companies are unlikely to provide necessary "chain of custody" documentation if functional foods come under similar regulatory requirements.

Imperatives

To maintain relevance with the Omni Consumer and operate effectively in today's dynamic environment, we believe CP companies need to deliver transparency – as well as quality products. Full Value Traceability, which creates visibility and can build trust, has the capability to deliver transparency and, in turn, protect and empower the brand. As Figure 3 illustrates, Full Value Traceability differs from most current approaches to traceability in two ways:

- 1. Many traceability activities today are driven by the food safety issue. This focus on protection and risk mitigation creates a defensive traceability posture for many companies. While food safety *is* critically important, Full Value Traceability adopts a more strategic view of transparency and leverages the availability of information to empower products and brands to more credibly market functionality and responsibility claims.
- Full Value Traceability also requires a more integrated approach to transparency that addresses the dynamics of today's complex physical and informational supply chains. It recognizes the value of engaging with a broad set of stakeholders and the need for integrated enabling solutions.

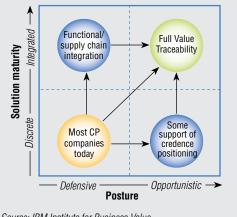
Full Value Traceability should be viewed as a journey and not a destination. Indeed the traceability goal posts will continue to move. By initiating action against each of four imperatives we detail below, CP companies can commence the journey and begin realizing the benefits of Full Value Traceability.

1. Leverage traceability to protect and empower the brand

To communicate effectively with the Omni Consumer, and compete with private-label offerings, CP companies should leverage Full Value Traceability to address both *protection* and *empowerment* in their brand value propositions (see Figure 4). Both elements have suffered as a result of product contaminations and recalls. In addition, many consumers today do not perceive the incremental value of branded products over private label. In a recent survey by the IBM Institute for Business Value, only 24 percent of respondents believe

FIGURE 3.

The challenge for CP companies is to move from a defensive posture and discrete solution to an opportunistic posture and an integrated solution.



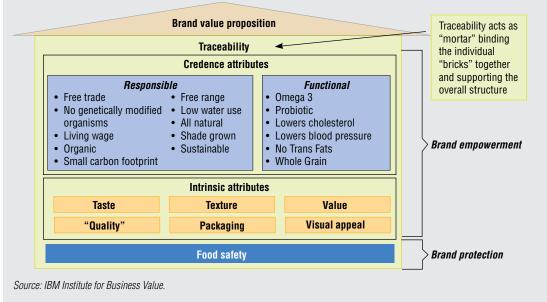
Source: IBM Institute for Business Value.

branded products are more likely to deliver benefits claimed than private label.²²

Efforts to address protection and empowerment (see Figure 5) start with a deep understanding of the target consumer's wants, needs and preferences; this includes knowing the valued sources and formats of information. Sources of these insights can include in-home product testing, interviews, call center feedback, analysis of sales, loyalty card and panel data, and, increasingly, the Internet. Today, most CP companies use the Internet as a channel for communicating to consumers. However, innovative companies now leverage the Internet as a source of information. Software that "trolls" the Internet provides companies with a window into emerging consumer sentiments and potential product issues. Adidas used information gathered this way to identify an issue with its newest soccer sneaker and was able to proactively communicate informa-

FIGURE 4.

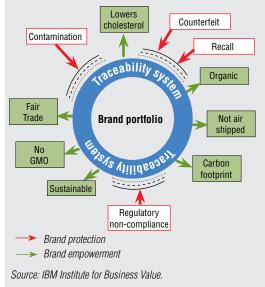
Traceability can play a critical role in collecting and providing information that protects against contaminations and effectively supports product marketing claims.



Efforts to address brand protection and empowerment start with a deep understanding of the consumer's wants, needs and preferences.

FIGURE 5.

Typically associated with food safety, most traceability systems today fall short of either protecting brands from recalls or empowering them to make new claims.



tion to consumers to mitigate the issue.²³ The potential for leveraging similar early warnings on product contaminations and other issues is clear.

It is, therefore, essential that CP companies *protect* their brands by addressing the issues of food safety, diversions and counterfeiting. Although the food supply is arguably as safe as ever, foodborne diseases still cause more than 76 million illnesses each year in the United States alone – which may explain why the majority of consumers do not believe food supply safety has increased in the past two years.²⁴ Safety is particularly relevant to CP companies since, in the event of a product recall, more consumers trust the *grocery store* (75 percent) than the *CP company* (61 percent).²⁵ In most major markets, retailers are considered more likely than CP companies to

"do what is right."²⁶ Recent recalls of leading consumer product and pet food brands have generated significant cost and damaged brand reputations.²⁷ To give consumers confidence about product safety and authenticity, consideration should be given to marketing activities that support safety, such as compliance with Hazard Analysis and Critical Control Point Procedures (HACCP) and ISO 22000.

Traceability is not just a supply chain or compliance issue – but a marketing issue as well. Consumer product marketing increasingly requires a high degree of trust, especially regarding functionality and responsibility claims. CP companies can substantiate these claims and empower their brands in these large and rapidly growing segments by effectively communicating information about ingredient source, functionality, sustainability and supply chain conditions. Numerous innovative retailers have already recognized and seized upon this opportunity, including Tesco, Marks & Spencer, Whole Foods, Sainsbury's, and Migros.²⁸ Several CP companies, such as Seventh Generation, Tom's of Maine and Horizon Organic, have built high levels of trust and loyalty by effectively communicating large amounts of information to the consumer.²⁹

Protecting and empowering brands is a continuous exercise. On an ongoing basis, CP companies should assess the attributes they will use to market products and deliver information that most effectively supports those claims. Quality assurance, compliance and sourcing representatives should be included in product development and brand marketing activities.

Dannon's marketing of functional products

Dannon has created a stir in the yogurt category by communicating detailed information about its growing portfolio of functional products, thereby effectively building consumer trust. The company has built a growing portfolio of functional foods to address specific consumer needs. For example, the Activia line claims to improve digestion.³⁰ This product reached US\$130 million in sales after its first year on the market.³¹ Additionally, other Dannon products claim to control cholesterol, have reduced sugar content, bolster the immune system and provide skin nourishment.³² Since the introduction of these products, Group Dannone's stock has significantly outperformed the S&P 500 over the past two years.³³

2. Define vision and create roadmap

The journey to Full Value Traceability is complex – with product and brand risk factors, the importance of credence attributes (as defined in the first imperative), applicable government regulations and retailer mandates influencing the path taken. Accelerating the process will require collaboration across both the entire supply chain and internal functions, as well as the creation of a long-term, developmental roadmap. As with other strategic initiatives, this roadmap should include:

- Engagement of executive level sponsors
- Identification of Full Value Traceability as a strategic imperative
- Identification of specific objectives, critical metrics, and milestones
- Allocation of a discrete budget to avoid competition with other investments
- Definition of the roles and responsibilities for key upstream and downstream supply chain participants

• Identification of functional leaders and extended stakeholders, and the source of each stakeholder's interest.

We believe Full Value Traceability should be a strategic initiative. As such, it requires a dedicated budget and ongoing, focused attention.

3. Integrate the physical and informational supply chain

Today's distributed, complex global supply chains, while generally cost efficient, place the burden of protecting consumers and brands increasingly on the CP company. This is particularly true in the United States, where the number of inspections and inspectors has declined in recent years – at the same time inbound shipments have sharply increased.³⁴

Integration of the physical and information supply chains requires CP companies to capture, store, analyze and communicate information from across the supply chain about product movements, processing activities and attribute changes. Ongoing, targeted investment against each of these areas is necessary to realize needed improvements in supply chain visibility.

 Product movements – Fundamentally, a traceability system requires each upstream and downstream product or ingredient movement be captured and recorded by the current owner. Activity to date has largely been downstream, aimed at facilitating CP and retailer collaboration, reducing finished goods inventories, avoiding out of stocks and complying with mandates and regulations. However, upstream visibility is increasingly critical for product safety and to help isolate problems when they do occur. CP companies need to encourage vendors and suppliers to enhance capabilities and avoid companies that do not possess required capabilities. As Full Value Traceability delivers an end-to-end view of the supply chain, CP companies can credibly communicate information about the carbon footprint of their products, burnish their corporate social responsibility credentials and optimize the global supply chain.

To facilitate communication among trading partners, each product, ingredient, location and owner should be uniquely identified using accepted standards such as GS1 and EPCGlobal. Information should move with the physical product through use of bar codes and/or RFID. Companies should evaluate adoption of applicable technologies and incorporate traceability benefit areas into the business case.

• Processing Activities – As a starting point, CP companies and, where appropriate, other supply chain participants should fully comply with HACCP. Standardized process steps, as well as conditions that enable the monitoring and recording of critical processing activities, help protect against contaminations and recalls. Further, CP companies should continue their investment in technologies that sense deviations from processing standards and automatically trigger remedial action. CP companies currently expend large amounts of time and effort testing, monitoring and adjusting conditions during processing. Although many of the core processing steps in food production have not changed, the potential of contamination may have increased because of new sources of supply, demands for manufacturing flexibility,

reduced government oversight and more complex supply chains. As well, storage and updates of process documentation help maintain compliance with regulations and standards.

 Attribute changes – In order to effectively track and trace products across the supply chain, each ingredient, additive, product and package should be uniquely identified using accepted industry standards. This becomes especially challenging in some emerging markets where detailed records are not always maintained. CP companies should carefully assess the risk/return trade-off in such situations, factoring the potential cost of contamination into their sourcing considerations.

As they assess options for integrating their physical and informational supply chains, CP companies need to consider the evolution of ePedigree requirements in the pharmaceutical industry. By proactively leveraging Full Value Traceability to deliver increased product information to consumers, CP companies could avoid the complexity of state-led pharmaceutical regulations and also encourage self-regulation of functional foods.

Given the challenges of creating centralized networks, we recommend creation of a virtual traceability system. We believe each company should maintain its own master data and record of operating transactions in a distributed, open system and make this information available on a permission basis to other stakeholders.

4. Proactively engage with stakeholders

In order to realize the transformative potential of Full Value Traceability, CP companies should proactively engage with a set of stakeholders that reaches beyond direct supply chain participants. Quarterly mock recall exercises between CP manufacturers and retailers are no longer sufficient. Consistent, thoughtful and vocal leadership by CP company executives is required, with the emphasis on creating a common vision and a shared sense of responsibility across a broad set of stakeholders. Suppliers, vendors, consultants, service providers, advisers, financers and insurers need to believe that investment and participation in a robust traceability system will protect and empower the company's brands.

The mindset required for this shift in focus will require CP companies to overcome their traditional defensive posture regarding traceability. Instead of focusing on the costs of a traceability system, we believe the more appropriate questions address potential growth opportunities and protection of recurring revenue. A comprehensive business case for Full Value Traceability incorporates building trust with consumers and empowering brands to compete with private labels on something other than price. And it should provide for the capture of a greater portion of the rapidly growing organic and functional food segments. To further reinforce their marketing claims and build trust, companies should consider engaging with nongovernmental organizations (NGOs) such as The World Wildlife Fund, Amnesty International and Greenpeace. Since 2002, trust in NGOs has increased substantially, while trust in most other organizations has decreased.³⁵ CP companies should craft an engagement strategy that aligns brand requirements and corporate values with the mission of the NGO. This is not superficial exercise; the relationship must be founded on shared core beliefs, long-term goals, and agreed upon milestones and measurements.

Where are you currently?

There are several key questions we believe you should ask as you begin the journey toward Full Value Traceability. These questions will enable you to assess your current state, and provide guidance on where to focus.

- 1. Do you understand what drives your target consumer's purchasing behavior?
- 2. How do you communicate information about your brands? How do you assess the effectiveness of these communications?
- 3. What is your strategy for protecting your brands in the marketplace?
- 4. How are traceability and transparency integrated with your brand strategy?
- 5. How do you engage with your supply chain partners to deliver transparency and traceability?

Conclusion

Ultimately, food product safety issues have been driving CP companies to create traceability systems. By expanding these endeavors beyond the bare essentials and creating Full Value Traceability, we believe Consumer Products companies can better protect their brands against contaminations, recalls and private label competition. At the same time, they can accomplish the broader objective of restoring consumer confidence and aggressively entering new, high-value markets.

About the author

Guy A. Blissett is the Consumer Products Lead for the IBM Institute for Business Value. He has extensive experience in the consumer products industry and has worked on issues such as corporate social responsibility, marketentry strategy, product development, customer management and logic-based pricing. He can be reached at *guy.blissett@us.ibm.com*.

Contributors

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