

## Dialogue

# Business-to-Consumer (B2C) Collaboration: Rethinking the Role of Consumers in Supply Chain Management

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### B2C COLLABORATION: ENTERING A NEW SUPPLY CHAIN ENVIRONMENT

Fawcett and Waller (2014) warn that competitive rules are changing—often dramatically. They note that emerging technologies have ushered in “a new source of customer intimacy” (p. 158) in supply chain management (SCM), characterized by value co-creation. We concur, but do not think they take the argument far enough. Technology has “informed, networked, and empowered” consumers. As such, they are an “active” player in upstream value creation. Now that consumers are viable collaborators in a broad array of SCM activities, we need to reconceptualize business-to-consumer (B2C) relationships in SCM.

Traditionally, consumers have been viewed largely as passive recipients of SCM output. In this view, consumers are relegated to engage in either value exchange or value extraction, but not value creation. More contemporary thought views consumers as value co-creators. However, they are still relegated to end-of-the-chain interactions. For example, Dell allows consumers to select and create their own laptops based on basic offerings, and Starbucks invites consumers to choose or create their preferred flavors for their coffee. We believe this view is still constrained. Decision makers should examine how “active” consumers can and should interact with and influence every core SCM process—including those further upstream. Specifically, Table 1 argues the B2C “collaborator” role of consumers is much broader in scope and scale.

By contributing knowledge, information, and tangible resources (such as direct operational support and transportation services) to SCM processes, consumers can co-create value not only just for themselves but also for firms and other consumers. Hence, B2C collaboration involves strategic leveraging of the consumer market across various activities, whereby consumers act as extended employees for firms, and are directly involved in supply chain execution. Consider the following B2C collaboration examples:

- *Consumer development of products and services:* Procter & Gamble uses consumer ideas for innovation needs and product co-development. To an even greater extent, consumers influ-

ence every aspect of the process at Quirky + GE, a partnership between General Electrics and Quirky, as they propose and select new ideas, co-develop new offerings, and improve existing products.

- *Consumer management of customer service levels:* Pfizer employs consumers to report on product merchandising and on-shelf availability during their shopping trips. The company then utilizes this information to perform necessary actions in coordination with retailers.
- *Consumer last-mile and on-demand delivery:* Ventures such as Instacart and Postmates leverage consumers to pick-up and deliver goods from local stores to other consumers. Likewise, big firms like Amazon are experimenting using bikers to deliver packages.
- *Consumer monitoring of suppliers:* Firms such as FieldAgent and Wegolook, through their crowdsourcing platforms, use consumers as an effective and low cost way of assessing potential and existing suppliers, as millions of shoppers become the eyes and ears for companies by checking and reporting on suppliers’ activities.
- *Consumer manufacturing:* The advent of additive manufacturing, such as 3D printing, allows consumers to become co-manufacturers of products. Hoover, a vacuum cleaner manufacturer, for instance, has allowed consumers to 3D print their vacuum accessories.
- *Consumer management of returns:* Consumers can also directly engage in returns management, by coordinating return pick-ups and delivery for other consumers, such as the service offered by San Francisco-based start-up Doorman.

### LOOKING THROUGH THE LENS OF B2C COLLABORATION

As the above examples and those in Table 1 suggest, today’s new reality of B2C collaboration requires a reevaluation of academic SCM research foundations, and consideration of new and provocative conceptual relationships. Three research domains are particularly critical:

- 1 A “rethinking” of the supply chain concept. Although existing conceptualizations and definitions of SCM often consider the consumer as a critical player in supply chains, they stop short of capturing the direct contributions of the

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**Table 1:** Transformation of Consumers' Role in SCM

SCM process	Passive recipients→	Value co-creators→	Collaborators
Customer relationship management	Consumers are targeted and marketed by firms. Communication is unidirectional. Consumer shopping habits may influence customer segmentation	Consumers personalize firms' offerings (e.g., Dell)	Consumers design marketing videos, slogans, advertising materials, and give referrals (e.g., Pepsi Co., Coca-Cola, Threadless.com)
Supplier relationship management	Consumers react to publicized supplier problems	Consumers influence firms' decisions through continuous and interactive dialogue about their experiences	Consumers monitor suppliers' activities (e.g., Wegolook, FieldAgent)
Customer service management	Consumers receive standardized service offerings	Consumers influence customer service by making their preferences explicit to firms	Consumers address problems raised by other consumers (e.g., Amazon, Best Buy), check on-shelf availability and product visibility (e.g., Pfizer)
Demand management	Consumers produce point of sale data used in demand planning	Consumers interact with firms to signal potential choices and future purchases	Consumers manage product portfolio by voting for the one to be manufactured, kept, or withdrawn (e.g., Threadless.com, Fluevog.com, Danone)
Order fulfillment	Consumers select predetermined shipping options	Consumers buying patterns impact variety and timing of firms' order selection and shipping offerings	Consumers perform last-mile and on-demand delivery to other consumers (e.g., Amazon, Instacart, Postmates). Consumers take control over their shipping options and carriers (e.g., Kanga)
Manufacturing flow management	Consumers have no direct involvement, though their demand patterns influence manufacturing cycles	Consumers handle product assembling themselves (e.g., Ikea)	Consumers participate in manufacturing using 3D printing (e.g., Hoover)
Product development and commercialization	Consumers have no direct involvement. Product preferences are based on consumer purchases	Consumers propose ideas for product personalization (e.g., Starbucks)	Consumers engaged in new product development and design, commercialization, as well as improvement of current products (e.g., Quirky + GE, Proctor & Gamble, Fiat, Dell)
Returns management	Consumers select based on menu of returns offerings	Consumers influence firms' return service offerings	Consumers may coordinate return pick-ups with other consumers (e.g., Doorman). Consumer involvement in other SCM processes contributes to "returns avoidance"

The SCM Process framework is based on the Lambert (2004) model. Although the processes are traditionally conceptualized as primarily B2B, we use the model to develop B2C interactions.

consumer market to SCM strategies and processes. Thus, the emergence of B2C collaboration represents a fundamental shift in how downstream supply chain entities and activities are conceived, opening opportunities to consider such research issues:

- Would B2C-enabled supply chains result in new SCM structures and processes?
  - Might new supply chain strategies emerge given the entrance of the consumer as a new active supply chain player?
  - Does B2C collaboration alter how SCM performance is measured and captured?
- 2 A "rethinking" of the collaboration concept. B2C collaboration inherently involves an open and unstructured network, which is fundamentally contrary to the closed structured dyadic or triadic view that is prevalent in extant supply chain collaboration research. Such an open network renders B2C collaboration as involving high levels of fluidity, engendering heterogeneous levels of resource and information sharing, commitment, trust, and relational ties. These distinct characteristics of B2C collaboration provoke several questions for future research:
- Might B2C collaboration become an effective alternative to existing B2B collaboration structures? Under what conditions?
  - Are B2C collaborators "partners"? Are they more likely to act opportunistically than B2B collaborators?
  - How should B2C collaborative relationships be governed?

- Should firms NOT collaborate with certain consumers (i.e., those that work for competitor organizations)? And, if so, how do firms monitor and manage this?
- 3 A "rethinking" of marketing contributions to SCM. Insights from marketing have always been germane to SCM researchers, particularly in the area of interfirm relational exchange behavior. B2C collaboration would open opportunities for SCM scholars to leverage additional marketing research areas that have not been traditionally relevant, such as consumer behavior, consumer psychology, and consumer information processing. If consumers are critical active participants in supply chain execution, SCM researchers must embrace consumer research as key to the understanding of supply chains. Particular questions would include:
- What factors (e.g., behavioral, psychological, economic, and other) drive consumers to collaborate on SCM tasks? Are certain consumer segments more likely to engage in B2C collaboration? Would certain strategies influence consumers to actively collaborate more than others?
  - How will B2C collaboration activities influence consumers' relationships with firms, products, and brands?

In sum, the B2C realm of supply chain exchange is ripe with investigative opportunity. Considering the economic stature and rapid innovations of the B2C domain, such research could have far-reaching impacts and implications.