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Invited article

Outside-in marketing: Why, when and how?

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ABSTRACT

We explore the nature and evolution of outside-in marketing. Outside-in is the marketing view of strategy, with inside-out being the traditional view. We show how outside-in and inside-out clash culturally, and trade off strategically, especially in service. Technological advances in communications and information technology have enabled closer relationships with customers, and "big data" for managing those relationships. The marketing function is important for managing outside-in, because market orientation alone is insufficient. Outside-in management is most effective for focusing on customer satisfaction and revenue, since insights about customer needs and wants tend to move bottom-up through the organization. Taken to its logical conclusion, outside-in implies replacing inside-out, product-focused management (e.g., brand managers) with outside-in, customer-focused management (e.g., customer managers). Customer-focused, future-oriented metrics (e.g., customer satisfaction, customer lifetime value, customer equity) increasingly grab attention away from aggregate, short-term metrics (e.g., product sales). Long-term impact from customer-relevant issues such as discrimination plays out over time, and must be researched using longitudinal methods. Eventually, even the meaning of "outside" will change, as computers increasingly become the customer.

1. Why outside-in?

The strategy literature largely views strategy as arising from internal capabilities within a firm (Barney, 2001). In opposition to this view, a literature in marketing has arisen that instead views strategy as emanating from the customer ("outside-in")(Day & Moorman, 2010; Mu, 2015). Marketing is especially suited to address this view of strategy, given its natural role as the function that connects to customers (Moorman & Rust, 1999).

In this paper, we discuss the inherent trade-off between inside-out thinking and outside-in thinking, ways in which firms monitor the "outside," the relationship between outside-in and market orientation, the conditions under which outside-in thinking pays off, how viewing customer relationships dynamically affects strategy, how a firm should organize itself for outside-in management, metrics for outside-in, pitfalls of utilizing personal information about customers, and how technological advances are changing the meaning of "outside."

2. Trading off inside vs. outside

It is useful to think of a company as being comprised of two essentially opposite enterprises—an internal ("inside") function focused on efficiency, and an external ("outside") function focused on sales and service. The outside function is the one that directly interacts with the customer, and therefore has a deeper understanding of the customer's needs and wants. Culturally, the two functions are quite dissimilar, if not in conflict.

The tradeoff between inside and outside has important consequences. Research shows that goods companies that focus on *both* inside (efficiency and productivity) and outside (customer satisfaction and revenue), can be successful, because goods quality depends on standardization, which means that focus on standardizing internal processes improves both productivity and quality as perceived by the customer (Anderson, Fornell, & Rust, 1997; Deming, 1986).

By contrast, service firms, to be successful, must typically choose *either* inside or outside to focus on, rather than both (Anderson et al., 1997). With the bulk of every developed economy heavily skewed toward service, this increasingly implies that there should be increasing attention to the inherent tradeoffs between inside and outside, and firms should increasingly choose either productivity (cost reduction) or customer satisfaction (revenue expansion) as a strategic focus, but not both (Rust, Moorman, & Dickson, 2002). This further implies that firms should *not* try to maximize productivity, but rather should seek the optimal level of productivity, trading off against satisfaction (Rust & Huang, 2012).

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3. Monitoring the outside

Information and communication technology has played a central role in changing how firms interact with their customers. As new technologies bring customers and companies closer together, customer relationships deepen, and the service economy expands (Rust & Huang, 2014). As informational capabilities change, how the firm monitors the "outside" also should change.

Monitoring the outside used to mean aggregate surveys or conjoint experiments to obtain average measures of customer satisfaction, customer choice, and customer needs (Green & Srinivasan, 1978). As the ability to track the behavior of individual customers has advanced, monitoring the outside has come to mean building large databases that compile all of the customer's interactions with the firm. These databases have come to be known as "big data." This results in an iterative interaction pattern, in which the company supplies a product (often a service product), observes the customer's reactions, and then revises and improves the product to personalize better for the customer (Rust & Huang, 2014). An AI approach known as "adaptive personalization systems" details how such a system may be designed and employed (Chung, Rust, & Wedel, 2009; Chung, Wedel, & Rust, 2016).

Social media provide another method of monitoring the outside (Tirunillai & Tellis, 2012; Hewett, Rand, Rust, & van Heerde, 2016; Timoshenko & Hauser, 2019). Mining this "user-generated content" can be particularly useful, in that it can enable monitoring of the market in almost real time (Rust et al., 2019).

4. Is market orientation enough?

Market orientation (see also its cousin, customer orientation) is the practice of basing the firm's activities on what the customers need. This is also the essence of the *marketing concept*. Market orientation has been shown to be successful financially (Kohli & Jaworski, 1990; Narver & Slater, 1990), leading many to think that market orientation, rather than marketing, is the key to successfully connecting to customers. That is, if functions other than marketing do marketing's work, does it really matter? It turns out that it does matter. Even controlling for market orientation, a marketing function that does the work of connecting with customers provides additional financial benefit (Moorman & Rust, 1999). Because the marketing function is often the only function within the company whose stated role is to connect with customers, those connections tend to work better if the marketing function handles them.

5. When does outside-in work?

Research shows that outside-in is not always the way to manage. For example, if the firm is trying to implement internal efficiency (e.g., implementing a six sigma program), then the optimal direction of information is top-down (Rust et al., 2016). Such programs require standardization, and standardization is best managed from the top. By contrast, efforts to increase customer satisfaction and sales are best managed bottom-up (Rust et al., 2016). This is logical, given that customers' needs and wants are best understood by the employees on the "bottom," by which we mean closer to the customers.

6. Customer-centered management

With outside-in becoming more important, due to deepening customer relationships and the expansion of the service economy, it is surprising that so many marketing organizations seem more set up for inside-out. For example, many firms have brand managers, which is inherently a product-focused, inside-out perspective. More in keeping with an outside-in perspective is an organizational design that is centered on customers. Such a design includes customer managers (or customer segment managers), rather than (or sometimes in addition to) brand managers (Rust, Moorman, & Bhalla, 2010).

7. Metrics for outside-in

In addition to implying a change in organizational design, outside-in also implies different performance metrics. Instead of aggregate product metrics (X sales of product Y in time T), outside-in suggests the importance of customer-centered metrics, such as customer lifetime value (Berger & Nasr, 1998). Adding up the lifetime values of all of the firm's current and future customers results in customer equity (Blattberg & Deighton, 1996; Mu, 2015; Rust, Lemon, & Zeithaml, 2004; Rust, Zeithaml, & Lemon, 2000), which has been successfully used by many leading companies as a method for focusing strategic marketing expenditures.

Noting that a customer's value plays out over time, we see a crucial difference between the firm's actions to improve internal efficiency vs. outside sales. Internal efficiency efforts, such as cost cutting, tend to have immediate impact, whereas external sales and profits play out over time. This can lead to more emphasis on internal efficiency than is optimal (Mizik & Jacobson, 2007), resulting in under-appreciation of the metrics related to long-term, such as customer satisfaction (Huang & Trusov, 2019). A firm must pay special attention to balancing efforts that produce immediate effects against efforts that take longer to produce results. Prediction of future profits becomes paramount (Rust, Kumar, & Venkatesan, 2011). Future-oriented metrics, such as customer satisfaction and retention, customer lifetime value, and customer equity, need to be given their due weight, for the benefits of outside-in to be properly recognized.

8. The problem of discrimination

With increasing availability of information about individual customers, there is an increased potential for abuse. For example, big data, or an AI algorithm analyzing big data, may decide that women (or African-Americans, or Muslims) are a worse credit risk, in spite of the fact that all other objective information are just as good. Such discrimination does not need to be based on bigotry. Rather, there can be a "rational" discrimination, based only on profit maximization. This is known as "statistical discrimination" in the economics literature (Aigner & Cain, 1977; Phelps, 1972). Such discrimination has been shown to be non-optimal on a long-term basis, especially when there is more customer word-of-mouth (Ukanwa & Rust, 2019). Agent-based models (Goldenberg, Libai, & Muller, 2010; Libai, Muller, & Peres, 2013; Rand & Rust, 2011) and other computationally-intensive methods of simulating customer relationships over time are increasingly appropriate for investigating long-term customer impact.

9. Redefining "outside"

Traditionally, we have thought about the "outside" as individual human customers (either end consumers or company representatives). In the future this will be less true. Increasingly, firms are marketing to Alexa or Siri, or the Google search engine. That is, increasingly the customer is a computer rather than a human (Rust, 1997). Often such service to a computer is performed by a computer, too, meaning entire transactions may be untouched by human hands. This is known as the Internet of Things (Hoffman & Novak, 2018; Ng & Wakenshaw, 2017). We must get used to computers being our customers, and we may need to analyze them similar to how we analyze humans—by looking for behavioral regularities rather than reverse-engineering the algorithms.

10. Conclusions

Let us take a moment to distill many of the results and conclusions from the previous discussion. We highlight the following conclusions as being especially important, theoretically and managerially:

- Strategy does not always emanate from firm capabilities. Reacting to the needs and wants of the firm's customers provides an alternative strategic viewpoint that is likely to be more effective when the goal is revenue.

- Using aggregate summary statistics to describe the market is increasingly obsolete. Instead, smart firms focus on collecting and analyzing data about individual customers ("big data").
- Adaptive personalization systems change the product over time, in an iterative manner, to better serve individual customers.
- Market orientation alone is not enough. An effective marketing organization that focuses on customer connections provides important incremental benefit.
- Outside-in works best for programs to increase customer satisfaction, retention and sales. Inside-out works best for programs to standardize internal processes and increase efficiency.
- Firms should replace brand managers with customer managers. In general, the organization should be designed around customers and customer groups.
- Customer-centered metrics (customer satisfaction, customer lifetime value, customer equity) should increasingly replace aggregate metrics (e.g., sales, market share), as strategy becomes increasingly targeted to individual customers.
- Long-term impacts of customer-focused problems such as discrimination need to be explored using longitudinal models.
- Ultimately, the "outside" is increasingly likely to be a computer, and the Internet of Things is a blueprint for what that world will be like.

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