ARTICLE IN PRESS

Industrial Marketing Management xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

Industrial Marketing Management

journal homepage: www.elsevier.com/locate/indmarman

Review Paper

Customer information resources advantage, marketing strategy and business performance: A market resources based view☆

Rajan Varadarajan

Department of Marketing, Texas A&M University, 4112 TAMU, College Station, TX 77843–4112, United States of America.

ARTICLE INFO

Keywords:
Competitive advantage
Market based resources
Customer information based resources
Customer insights
Outside-in and inside-out approaches to strategy

ABSTRACT

Chief among a firm's market-based resources are its relational resources such as brand equity, customer equity and channel equity that result from its interactions with customers and marketing intermediaries, and intellectual resources – accumulated knowledge about entities in the market environment such as consumers, end use and intermediate customers and competitors. In the evolving digital data rich market environment, customer-based resources, a subset of a firm's market-based resources, are becoming increasingly important as potential sources of competitive advantage. Customer information assets refer to information of economic value about customers owned by a firm. Information analysis capabilities are complex bundles of skills and knowledge embedded in a firm's organizational processes employed to generate customer knowledge from customer information assets. Customer insights or knowledge is a firm's extent of understanding of customers that informs its business decisions. Building on the resource-based, capabilities-based and knowledge-based views of the firm, resource advantage theory of competition, and the outside-in and inside-out approaches to strategy, this article presents a market resources-based view of strategy, competitive advantage and performance. The article presents a framework delineating the relationship between a firm's customer information based resources, marketing strategy and performance, and discusses implications for theory, research and practice.

1. Introduction

"What everyone 'knew' was that the quality parents most sought from nappies was leak-free performance during activity – so that's what all the innovation and communications rounded on. Focus groups merely confirmed that prior 'knowledge'. When Pampers turned to ethnography, though, an 'Of course!' moment was revealed. What counted for most in a home with a baby was sleep. Everyone craved it – and wetness was often the reason they didn't get it. So Pampers innovated nappies with extra 'dry layers' for bedtime, and the entire brand strategy was shifted to the attainment of 'Golden sleep'" (Edwards, 2013).

Kimberly-Clark Brazil (KCB), competing in one of the most commoditized consumer products, toilet tissue, against 50 other companies and 200 brands, was in search of potential avenues for competitive advantage through innovation. While investigating how Brazilian shoppers took toilet tissue home, it observed that most of them lugged it a long way on foot or via public transportation. This inspired KCB to innovate by significantly compressing the rolls in a vacuum pack and adding a plastic carrying strap to the package. Among the added benefits of significantly compressing the rolls in a vacuum pack were lower shipping costs, lower transportation related environmental impact, and a reduction in the amount of retail shelf space needed (Mauborgne & Kim, 2017).

"Doubling down on your distinctive strengths not only helps you fight disruption from upstarts, but it also enables you to disrupt an industry on your own terms. That's exactly what Netflix did. In the late 1990s, the company competed directly with the Blockbuster retail chain. In 2007, when streaming video became viable, Netflix rapidly pivoted to offer that service. It … has pioneered the use of artificial intelligence and machine learning to tailor its output to consumer interests. All along, its success has been enabled by a core distinctive strength: the ability to understand what its customers want and do, using in-depth analytics and the behavioral data it captures" (strategy + business, *2017*).

"Another blowout quarter from Alibaba highlights the Chinese e-commerce company's ability to harness its trove of data to boost earnings… Its operating margin widened by 7 percentage points, which management attributed in part to better use of data, as operating profit almost doubled from a year ago. ... It attributes the revenue increase to

☆ Certain sections of this manuscript draw on the following commentary by the author on an editorial essay: Varadarajan (2018), "A Commentary on Transformative Marketing: The Next 20 Years," *Journal of Marketing*, 82 (July), 15-18.

E-mail address: varadarajan@tamu.edu.

https://doi.org/10.1016/j.indmarman.2020.03.003
Received 16 January 2020; Received in revised form 29 February 2020; Accepted 7 March 2020
0019-8501/

Please cite this article as: Rajan Varadarajan, Industrial Marketing Management, https://doi.org/10.1016/j.indmarman.2020.03.003

more shoppers as well as its ability to deliver more relevant content to them. …The company accounts for around three-quarters of online retail sales in China and hence has a trove of data on consumer behavior. Such data allow Alibaba to display ads to shoppers that they will most likely be interested in … Merchants are willing to pay higher prices if they know the ads are likely to draw in sales. Better algorithms allow Alibaba to earn more ad dollars without a similar rise in costs" (Wong, 2017) (p. B12).

The above vignettes serve to highlight a long-standing business practice, namely, the generation of customer insights to inform a firm's business decisions. The first two vignettes are illustrative of the use of methods such as ethnography, field and laboratory experiments, focus groups, observations and survey research by firms to generate customer insights. The last two vignettes are illustrative of customer insights generation in the current internet enabled, interactive digital market environment by leveraging a firm's customer information assets and information analysis capabilities. In an interactive digital market environment, firms have the ability to generate customer insights about individual customers in real time, integrate them with accumulated insights, and leverage the insights to target specific customer segments (individual customers) with customized (personalized) product offerings, price promotions, marketing communications, etc. Firms also have the ability to generate customer insights in real time by conducting numerous A-B experiments (e.g. customers' responsiveness to almost equivalent price promotions framed differently such as "buy one-get one free" versus "buy one-get one free for one cent"). The vignettes also shed insights into recent customer insights related developments in firms such as the following:

- A greater emphasis on developing in-house customer insights generation capabilities.
- A greater emphasis on big data and analytics enabled customer insights generation to complement the traditional approaches to customer insights generation (e.g. ethnographic research, experimental research, focus groups, observational research and survey research).
- A greater emphasis on generating customer insights in real time (Macdonald, Wilson, & Konus, 2012).
- A change in outlook from considering a firm's customer insights related efforts as a cost of doing business to a potential source of competitive advantage (Barton, Koslow, Dhar, Chadwick, & Reeves, 2016).

The first two vignettes also shed insights into the outside-in approach to strategy and innovation. Day and Moorman (2010) conceptualize the *outside-in* approach as strategy informed by *market insights* – an understanding of the changing needs of customers for drawing out actionable ideas[1,2]. They note that, crucial to the outside-in approach to strategy for creating and retaining customers, by delivering superior customer value, is standing in the shoes of customers and viewing everything the firm does through their eyes. In a related article, Day and Moorman (2011) note that the history of successful firms and brands begins with a strategy designed from the outside-in by focusing on customer related questions such as (1) what do customers need, (2) how and why are customers changing, and (3) what can we do to better solve their problems and meet their emerging needs. In a related interview (Knowledge@Wharton, 2010), Day cautions that the inside-out approach to strategy, by focusing on firm resources related questions can inherently limit and slow its response to major changes in the market. [Questions such as (1) what is the firm good at, (2) what are its capabilities and products, and (3) how can the firm use its resources more effectively and efficiently].

1.1. Outside-in and inside-out approaches to strategy in tandem

The customer resources-based strategies of firms in the current internet enabled, interactive digital market environment suggests that strategy informed by the inside-out and outside-in approaches may be operating in tandem, iteratively in firms. The ability of firms to accumulate valuable customer information assets in digital form, and the imperative to develop new information analysis capabilities to discern actionable customer insights from the accumulated information assets is suggestive of a coalescing of the inside-out and outside-in approaches. The following hypothetical, albeit highly plausible, characteristics of a firm in reference to the questions that Day and Moorman (2010) note as the principal focus of the inside-out approach to strategy serves to illustrate this point.

- *What is the firm good at?* One of the things the firm is good at is generating superior customer insights that inform its business decisions.
- *What are the firm's capabilities?* One of the capabilities of the firm is its superior customer information analysis capability (i.e. the ability to generate actionable customer insights by analyzing its customer information assets).
- *How can the firm use its resources more effectively and efficiently?* The firm can compete more effectively and efficiently by leveraging its superior customer based information resources (customer information assets, information analysis capabilities, and customer knowledge or insights) to customize (personalize) the product offering and specific marketing mix elements (e.g. advertising and pricing) to specific customer segments (individual customers).

Extant literature also provides insights into the iterative nature of the outside-in and inside-out approaches. For instance, in a commentary titled, "An Outside-In Approach to Resource-based Theories," Day (2014) notes that in order to augment and enhance their dynamic capabilities, starting with an outside-in approach, firms should nurture their adaptive capabilities. Day (2011) lists three adaptive capabilities that can enable firms to adjust more quickly to fast-changing markets. (1) *Vigilant market learning* – enhancing deep market insights with an advance warning system to anticipate market changes and identify unmet needs. (2) *Experimenting* – continuously learning from market experiments. (3) *Relationships* – forging relationships with partners closely attuned to market changes, such as those stemming from new media and social networking technologies.

Building on extant literature, Mu (2015) conceptualizes marketing capability from an outside-in perspective as a constellation of three distinct capabilities that are interdependent and complementary – market sensing, customer engaging, and partner linking. He reports that, firms with superior inside-out marketing capability, by virtue of their greater capacity to generate insights from market sensing, customer engaging and partner linking achieve higher levels of new product development performance. Mu, Bao, Sekhon, Qi, and Love (2018) note that the outside-in marketing capability of firms serve as a precursor or basis for them to update their inside-out marketing capability (a set of marketing-mix based capabilities and interrelated organizational routines). They report that outside-in marketing capabilities lead to superior firm performance through their impact on inside-out marketing capabilities.

[1] Day and Moorman (2010) conceptualize *market insights* as understanding of the changing needs of customers for drawing out actionable ideas. Since the term, "market," broadly construed encompasses customers, competitors and the marketplace at large, in this article, the term, "customer insights" is used.

[2] Although the focus is on customers in plural (e.g. a firm's understanding of customers such as their needs and wants, changes in them, and the reasons for the changes), consistent with the terminology used in extant literature, the terms customer information assets, customer information analysis capabilities and customer insights are used.

1.2. Market-based resources advantage and business performance

A question of enduring interest and the focus of a large body of research in strategic marketing, strategic management and industrial organization economics is, "what explains variance in firm performance within and across industries." In an attempt to shed additional insights into this question, this article presents a customer information resources-based view of competitive advantage and business performance. It provides an exposition of heterogeneity in customer information resources (hereafter, customer resources – customer information assets, customer information analysis capabilities, and customer insights or knowledge) as partially accounting for heterogeneity in firm performance.

A number of literature streams (e.g. strategic marketing, consumer behavior and innovation) and sub-streams (e.g. market-based resources, market orientation, outside-in approach to strategy, customer relationship management, and customer experience management) in marketing focus on the role of customer insights in informing a firm's business decisions (e.g. marketing and innovation decisions), and superior customer insights as a source of competitive advantage. However, a void in the literature is a formal explication of the growing importance of a firm's *market-based resources advantage* broadly, and *customer information resources based advantage* specifically in the current Internet enabled, interactive digital market environment. The objective of this article is to fill this void. A framework delineating the relationship between a firm's customer information assets, information analysis capabilities and customer insights, marketing strategy and business performance is advanced. The proposed framework complements the framework presented in Srivastava, Fahey & Christensen (2001). Srivastava et al. focus on how firms, by leveraging their market-based assets and capabilities to deliver superior customer value, can achieve a competitive positional advantage in the marketplace, and in turn, superior financial performance.

The remainder of the article is organized as follows. First, an overview of literature on customer resources and the resource-based, capabilities-based and knowledge-based views of the firms is presented. Next, definitions of customer information assets, customer information analysis capabilities, and customer knowledge /customer insights are proposed. Third, a framework delineating the relationship between a firm's customer information resources, marketing strategy and performance is presented. Implications for theory, future research, marketing practice and marketing education are discussed. In this article, the terms, "customer insights" and "customer knowledge" are used interchangeably and equivalently. Customer insights or knowledge is conceptualized as "a firm's extent of understanding of its customers that inform its business decisions such as product innovation decisions and marketing strategy decisions." Srivastava, Fahey & Christensen's (2001, p. 781) use of the term, "*insightful customer knowledge*," and Said, Macdonald, Wilson, and Marcos' (2015) conceptualization of customer insight as, "*knowledge* about customers that is valuable for the firm," are indicative of the terms being used equivalently in literature. However, in recent years, customer insights seems to have gained greater traction in marketing as evidenced by its widespread usage in both marketing literature and marketing practice.

2. Market-based resources: an overview of relevant literature

2.1. Demand side and supply side insights and marketing strategy

The marketing strategy decisions of firms, at various organizational levels (e.g. business, product category, product and brand), are informed by both demand side insights (customer insights) and supply side insights. *Demand side insights* refers to a firm's understanding of customers such as their (1) demographic, socio-economic and psychographic characteristics, (2) needs and wants, and (3) affects, cognitions and behaviors. Over the years, a number of authors have highlighted the importance of, and the need for consumer research based insights for informing marketing strategy. For instance, Keller (1993) noted that marketers need a more thorough understanding of consumer behavior as a basis for making better strategic decisions. The need for consumer research based insights for informing marketing strategy are also the focus of a recent guest editorial essay by Hamilton (2016), and commentaries on the essay by Dahl (2016) and Deighton (2016). Hamilton refers to strategy based on insights about consumers as *consumer-based strategy*. However, commenting on the state of consumer behavior focused research in marketing, Houston (2016) notes that for the most part, the body of research is agnostic regarding the implications of the findings for marketing strategy. *Supply side insights* refers to a firm's understanding of factors such as the structural characteristics of the industry (e.g. market size, market growth rate, number of competitors, industry concentration, entry barriers and exit barriers), the firm (e.g. its resources and capabilities), and its competitors (e.g. their resources and capabilities).

2.2. Market orientation

Customer centric concepts such as customer orientation, market orientation and interaction orientation are the focus of a large body of research in marketing. A common thread undergirding all of these concepts is their focus on generating customer insights to inform a firm's business decisions. For instance, Kohli and Jaworski (1990) conceptualize market orientation as the organization wide generation of market intelligence pertaining to the needs of current and future customers, dissemination of the intelligence, and responsiveness to it. Hunt and Morgan (1995) conceptualize market orientation more broadly as encompassing intelligence generation about both customers and competitors, dissemination and responsiveness. Specifically, they conceptualize market orientation as the systematic (1) gathering of information about customers and competitors, both present and potential, (2) analysis of information for the purpose of developing market knowledge, and (3) use of the knowledge to guide strategy recognition, understanding, creation, selection, implementation, and modification. As evidenced by the above conceptualizations of market orientation, customer insights (e.g. generation of knowledge about customers and utilizing them for informing a firm's business decisions) is integral to all of them. Customer insights is also the underlying focus a number of other orientation constructs. For instance, Ramani and Kumar (2008) conceptualize *interaction orientation* as the ability of a firm to interact with individual customers, and leverage the information obtained from them over the course of successive interactions to achieve profitable customer relationships.

Literature on market orientation also sheds insights into firm capabilities crucial to generating superior customer insights (Day, 1994; Hunt & Morgan, 1995). For instance, in reference to differences between organizations in the extent to which they are market oriented, Day (1994) notes that market oriented organizations are those with superior *skills* in understanding and satisfying customers' needs, whose principal features are (1) a set of beliefs that put customers' interest first, (2) the ability to generate, disseminate and use superior information about customers and competitors, and (3) the coordinated application of inter-functional resources to the creation of superior customer value. Day further notes that superior understanding of customers' needs, competitors' actions and market trends enables a market-oriented firm to identify and develop *capabilities* that are necessary for achieving superior long-term performance. In a similar vein, Hunt (2012) notes that market oriented firms are those with organizational *capability* to systematically (a) gather market intelligence pertaining to current and future customers (i.e. their needs, wants, tastes, and preferences) and current and potential competitors (e.g. their strengths, weaknesses, and market offerings), (b) disseminate the intelligence across departments, and (c) respond to the intelligence in terms of market offerings (e.g. goods and services). Kumar, Jones, Venkatesan, and Leone (2011) note that a market orientation stresses the importance of using information, and that the primary objective of market orientation is delivering superior customer value based on the firm's knowledge about customers and competitors. They further note that developing and improving a firm's market orientation may enable the firm to develop distinctive marketing *capabilities* (relative to competitors) as a potential source of sustainable competitive advantage. They point out that market-oriented firms, by engaging in ongoing acquisition of information about customers and competitors and sharing this information within the organization, are well positioned to develop an organizational memory, and thereby, becoming a learning organization.

Extant research provides evidence suggestive of a positive relationship between customer insights and business performance, albeit, in the context of closely related constructs (e.g. market orientation; data-driven decision-making culture). Based on a meta-analysis of 418 effects from 130 independent samples reported in 114 studies, Kirca, Jayachandran, and Bearden (2005) report a grand mean of 0.32 for the correlation between market orientation and performance. In their review of research on market orientation and performance, Liao, Chang, Wu, and Katrichis (2011) note that 36 empirical studies report a positive relationship, two no relationship, and none a negative relationship.

Based on a study of the performance consequences of a *data-driven decision-making culture* (the extent to which a firm's decisions are based on *data and analysis* versus *experience and intuition*) of 179 large firms, Brynjolfsson, Hitt, and Kim (2011) report that firms that adopted "data-driven decision-making" achieved productivity that was five to 6% higher than could be explained by other factors, including how much the companies invested in technology. They note that a 5% increase in output and productivity is significant enough to separate winners from losers in most industries. They further note that to the extent a data-driven decision-making culture is found by firms to positively impact their performance, the culture is likely to become more ingrained.

2.3. Market-based relational and intellectual resources

Srivastava, Shervani, and Fahey (1998) (p. 19) conceptualize market-based assets as resources that arise from a firm's co-mingling with entities in the external environment, and distinguish between relational and intellectual market-based assets. *Relational market-based assets* are outcomes of a firm's relationship with key external stakeholders (e.g. assets such as brand equity, customer equity and channel equity that are outcomes of a firm's relationship with external stakeholders such as end use customers and intermediate customers – channel members). *Intellectual market-based assets* refers to knowledge gained by the firm about the environment (e.g., state of market conditions) and the entities in the environment (e.g. competitors, customers, channel members and suppliers). While Srivastava, Shervani & Fahey use the term, "market-based assets," Kozlenkova, Samaha, and Palmatier (2014) use the more encompassing term, "market-based resources." In this article as well, the term "market-based resources" is used to refer to various types of firm resources such as assets, capabilities and knowledge.

While the development of customer-based resources is a marketing strategy objective, following successful development, the resources are available to the firm to leverage for enhancing its marketing strategy effectiveness and/or efficiency. The linkages in Srivastava, Fahey & Christensen's (2001, Fig. 1, p. 782) framework for analysis of market-based resources from (a) financial performance to investments in developing market-based resources, and (b) from investments in developing market-based resources to marketing-specific resources serve to highlight the above characteristic of customer-based resources. Information about customers is a customer-based asset that a firm develops and accumulates through its interactions customers. Along similar lines, while reputation for customer satisfaction is a customer-based asset that a firm can gainfully deploy, a prerequisite to developing and accumulating the asset is the ability to deliver superior customer satisfaction experiences, a capability that must first be developed. Rubera and Kirca (2017) note that the satisfaction effects from innovative efforts are a market-based asset available to the firm for improving that performance.

2.4. Resources, capabilities and knowledge based views of the firm

The resource-based view (RBV) of the firm posits that heterogeneous market positions result from effectively leveraging heterogeneous firm resources that are valuable, rare, inimitable and non-substitutable (VRIN resources) to achieve and sustain a competitive advantage in the marketplace (Barney, 1991). In the RBV, firm resources refer to all assets, capabilities, organizational processes, firm attributes, knowledge, and other factors controlled by the firm that it can use to conceive and implement strategies to achieve a competitive advantage in the marketplace. In the resource advantage (RA) theory of competition, firm resources refer to all tangible and intangible entities available to a firm (financial, physical, legal, human, organizational, informational, and relational) that enable it to produce efficiently and/or effectively a market offering of value to one or more market segments (Hunt & Morgan, 1995).

The capabilities-based view (CBV) of the firm distinguishes between two broad types of firm resources (assets controlled by the firm), and capabilities (ability of the firm to deploy its assets to a desired end) (Amit & Schoemaker, 1993; Helfat & Peteraf, 2003). Makadok (2001) (p. 389) defines capabilities as "embedded and non-transferable organizational resources that enable a firm to improve the productivity of its other resources." Day (1994) conceptualizes *assets* as resource endowments accumulated by a business, and *capabilities* as resources that enable the business to bring these assets together and deploy them advantageously.

Vorhies, Morgan, and Autry (2009) draw attention to the role of organizational capabilities in the deployment of its distinctive resources as well as standardized resources (i.e. commonly available resources). Their observation is particularly pertinent in the context of customer insights generated by firms, based on customer related information resources that may be available to both the firm and its competitors. For example, in most frequently purchased consumer product categories, all or most competing firms may be subscribing to the same market research data collected by a market research agency (e.g. customer demographics, purchase quantity, purchase frequency, price paid, store type and location, trade and consumer sales promotion incentives associated with purchase). However, differences in the analytics capabilities of the personnel of competing firms will manifest as heterogeneity in customer insights. Day and Wensley's (1988) distinction between *superior skills* (the distinctive capabilities of a firm's personnel that set them apart from the personnel of competing firms), and s*uperior resources* (the more tangible requirements for advantage that enable a firm to exercise its capabilities) is instructive in this regard.

Rather than the mere possession of idiosyncratic resources and static capabilities, the dynamic capabilities (DC) view of the firm considers a firm's ability to integrate, build and reconfigure competencies, in response to a changing environment, as crucial to achieving and sustaining a competitive advantage (Eisenhardt & Martin, 2000; Teece, Pisano, & Shuen, 1997). Teece et al. (1997) (p. 516) define dynamic capabilities as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments." Eisenhardt and Martin (2000) (p.1107) define dynamic capabilities as "the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve and die." In reference to the distinction between "ordinary capabilities" and "dynamic capabilities," Teece (2014) notes that latter enable firms to transform themselves through continuous renewal.

Technological advances undergirding faster generation of customer insights at a lower cost, and related recent additions to the customer insights lexicon such as *real time experience tracking* (Macdonald et al., 2012), and *agile insights* (Gordon, Liedtke, & Timelin, 2016) serve to highlight the importance of dynamic capabilities. For instance, in reference to agile insights, Gordon, Liedtke & Timelin note that while market research has traditionally been a linear and slow process, newer, digitally enabled techniques offer greater flexibility, effectiveness and speed. As cases in point, they highlight mobile ethnography, and online focus groups that provide facial coding of emotional responses and automatic transcription.

The *knowledge-based view (KBV) of the firm* posits that knowledge is at the core of a firm's competitiveness, and the manner in which a firm creates, acquires, assimilates and exploits knowledge leads to the creation of new potential sources of revenues and persistence of performance differences among competing firms (Grant, 1996; Rubera, Chandrasekaran & Ordanini,2016). A manner by which firms create knowledge is by utilizing their information analysis capabilities to process their information assets. In effect, in certain organizational contexts, a firm's distinctive assets and capabilities are the basis for the creation of a third type of firm resource, namely, knowledge. Case in point, a firm's customer information assets and information analysis capabilities are the basis for generation of customer insights. Definitions of customer information assets, information analysis capabilities and customer insights, and a conceptual framework delineating the relationships between them, marketing strategy and performance is presented in the next section.

A number of recent articles provide valuable insights into the growing importance of customer based information resources for effectively competing in the current internet enabled, digital interactive marketing (e.g. Dawar, 2018; Hagiu & Wright, 2020). Dawar notes, as consumers' attention shifts to artificial intelligence (AI) assistants, while assets that were previously crucial (e.g. manufacturing capability and brands) will diminish in importance, the value of a firm's customer information based assets and the predictive ability of its AI assets will grow in importance. Hagiu & Wright note that firms should objectively assess how specific types of customer-based information can be potential sources of competitive advantage. They include the following. (1) How much value would leveraging information about customers add relative to the stand-alone value of a product? (2) How enduring is the value of specific types of information about customers or how fast would value deplete. (3) How difficult would it be for competitors to imitate a firm's product improvements that are based on insights generated from proprietary customer information?

3. Customer information resources advantage, marketing strategy and business performance: a market resources based view

3.1. Construct definitions

'The lab is an ambitious expansion of Ms. Duckworth's work on grit. Its mission is to 'advance the science and the practice of character development.' Her team, she says, relies on an "inclusive definition of character from Aristotle: everything that allows a person to live a good life. Not just grit but gratitude; not just gratitude but curiosity, imagination, social and emotional intelligence, empathy, kindness, delayed gratification, self-control, growth mindset. The list is long."' (Hymowitz, 2017, p. A11).

Customer information assets is defined as "information of economic value about customers owned by a firm." In the Data-Information-Knowledge-Wisdom framework, Burton-Jones (1999) (p. 6) refers to information as "processed data that is meaningful and of value." *Customer information analysis capabilities* is defined as "complex bundles of skills and knowledge embedded in a firm's organizational processes used to generate customer insights from its customer information assets." The proposed definition builds on Day's (1994) conceptualization of capability as complex bundles of skills and knowledge embedded in a firm's organizational processes by which it transforms available resources into valuable outputs. It overlaps with Rubera, Chandrasekaran, and Ordanini's (2016) (p. 170) conceptualization of *market information management capabilities* as skills used by a firm to develop and use market knowledge (i.e. customer knowledge and competitor knowledge).

Customer insights is defined as "a firm's extent of understanding of customers that informs its business decisions." Customer insights is a construct whose scope spans customers' attitudes, behaviors, beliefs, demographics, desires, emotions, habits, involvement, lifestyles, motives, needs, perceptions, preferences, psychographics, tastes, values, wants and more. Hence, the proposed inclusive definition. A brief discussion on the definitional elements and literature underpinnings of the proposed definition follows.

Table 1 provides a summary of extant conceptualizations and definitions of customer insights and remarks concerning their merits and/or shortcomings. While a number of conceptualizations and definitions refer to *understanding of customers*, there seem to be differences in respect of the scope of the construct. For instance, Hillebrand et al. (2011) (p. 595) define customer insights as "the degree to which a firm has an understanding of current customer needs, the reasons behind these needs, and how these change over time." While customers' needs is an important dimension of customer insights, most authors seems to view it as a multidimensional construct. For instance, in reference to role of customer insights in adapting to external change, in addition to customers' needs, Barton, Reeves, Lang, and Bergman (2016) also refer to customers' behaviors, emotions, perceptions and preferences.

Extent of understanding of customers refers to a firm's level or degree of understanding of customers in respect of those dimensions of customer insights which may be pertinent in a particular decision context such as customers' attitudes, behaviors, beliefs, demographics, desires, emotions, habits, involvement, lifestyles, motives, needs, perceptions, preferences, psychographics, tastes, values, or wants. *Business decisions* refers to a firm's decisions at various organizational levels (e.g. brand, product, product category, business unit and firm) and functional areas (e.g. marketing, finance and R&D). While the primary purpose of generating customer insights may be to inform (guide) a firm's marketing decisions and innovation decisions, customer insights may also be an important input to business decisions in other functional areas, and at higher organizational levels (e.g. corporate level decisions such as mergers and acquisitions, diversification and divestitures, and strategic alliances and joint ventures). In this regard, Barton, Reeves, et al. (2016) note that some firms may be overlooking the relevance of customer insights as an input for certain business decisions. They conceptualize *customer centricity* as the percent of a firm's business decisions that are influenced by customer insights, and *customer insights intensity* as the firm's expenditure on customer insights as a percentage of its sales revenue.

3.2. Conceptual framework

Fig. 1 presents a conceptual framework delineating the relationships between customer information resources, marketing strategy and performance. As explicated in the framework, a firm, by effectively leveraging its advantageous resource positions in customer information assets (Box A1), and information analysis capabilities (Box A2), can achieve an advantageous resource position in customer knowledge or insights (i.e. superior customer insights) (Box A3). In turn, by effectively leveraging its advantageous resource position in customer insights to inform its marketing strategy decisions, the firm can achieve greater marketing strategy effectiveness and efficiency, and thereby superior marketing and financial performance. While the framework is presented in the context of marketing strategy, it is adaptable to other business decisions that are informed by customer insights such as innovation and customer relationship management. The framework is applicable in both business-to-business and business-to-consumer markets.

Table 1
Customer insights: proposed definition and overview of representative conceptualizations and definitions in marketing literature.

Customer insights (customer knowledge): conceptualization / definition[a]	Remarks
Proposed Definition Customer insights is "a firm's extent of understanding of customers that informs its business decisions." Extent of understanding: Level of / degree of / breadth, depth and scope of understanding of customers.	The proposed definition is an *inclusive* definition. Here, a firm's extent of understanding of customers encompasses understanding of customers' (a) needs and wants and changes in needs and wants, (b) affects, cognitions and behaviors, (c) profiles – demographics, psychographics and lifestyles, and more.
Customer insights is "an organization's extent of understanding of customers that informs its business decisions."	By substituting "organization" for firm, the definition generalizes to both for-profit and not-for-profit organizations.
Extant Definitions and Conceptualizations	Collectively, extant definitions and conceptualizations of customer insights presented here refer to customers' needs and wants and changes in them, feelings, thoughts and actions (affects, cognitions and behaviors), and lives. The proposed inclusive definition encompasses all of the above and more.
Customer insight is *knowledge* about the customer that is valuable for the firm (Said et al., 2015).	An inclusive definition that is similar to the definition proposed in this article. As might be noted, in the other definitions summarized in the table, the term "understanding" rather than "knowledge" is used. Hence, in the proposed definition, the term "understanding" is used. Also, since, there are likely to be differences between competing firms in their extent of understanding of customers, the term "level of" is included in the proposed definition.
The degree to which a firm has an *understanding* of the needs of its current customers, the reasons behind their needs, and how they change over time. (Hillebrand, Nijholt, & Nijssen, 2011, p. 595)	A firm's degree of understanding of the *needs* of its current customers, the reasons behind their needs, and how they change over time are important dimensions of customer insights. However, customer insights also encompasses a number of other dimensions of knowledge about customers.
A *revelatory breakthrough* in a firm's *understanding* of *people's lives* that directs it in new ways to serve its customers better. (Edwards, 2013)	The most valuable customer insights are likely to be revelatory breakthroughs in a firm's understanding of people's lives that enables it in to serve its customers better, and in new ways. However, even customer insights that are not revelatory breakthroughs can enable a firm to serve its customers better and in new ways by enhancing its understanding of people's lives.
"A *non-obvious understanding* about a firm's customers, which if acted upon, has the potential to change their behavior for mutual benefit." (Laughlin, 2014)	Not all customer insights are either likely to be, or need to be non-obvious understanding. A better or clearer understanding of customers can also serve to inform a firm's business decisions for the mutual benefit of the firm and its customers.
"A deep *understanding* of a customer's *needs* and *behaviors* - both *known needs* that the customer can identify, and the *latent needs* that they cannot" (Neighbor & Kienzle, 2012, p. 3).	Certain customer insights are likely to be deep, others modest, and still others superficial. The term "extent of" in the proposed definition captures such differences.
"A factual *observation* about customers' *thoughts, feelings or actions* that reveals a clear and material basis for *communication*." (Anon 2014)	In addition to communication decisions, customer insights are also an important consideration from the standpoint of a number of other business decisions in firms.
The fresh *understandings* of customers and the marketplace derived from marketing information that becomes the basis for *creating customer value and relationships*. http://the-definition.com/term/customer-insights	In addition to creating customer value and relationships, customer insights are also a basis for communicating and delivering value to customers.

[a] The words highlighted in *italics* in the first column of this table only for added emphasis, and not in the original sources.

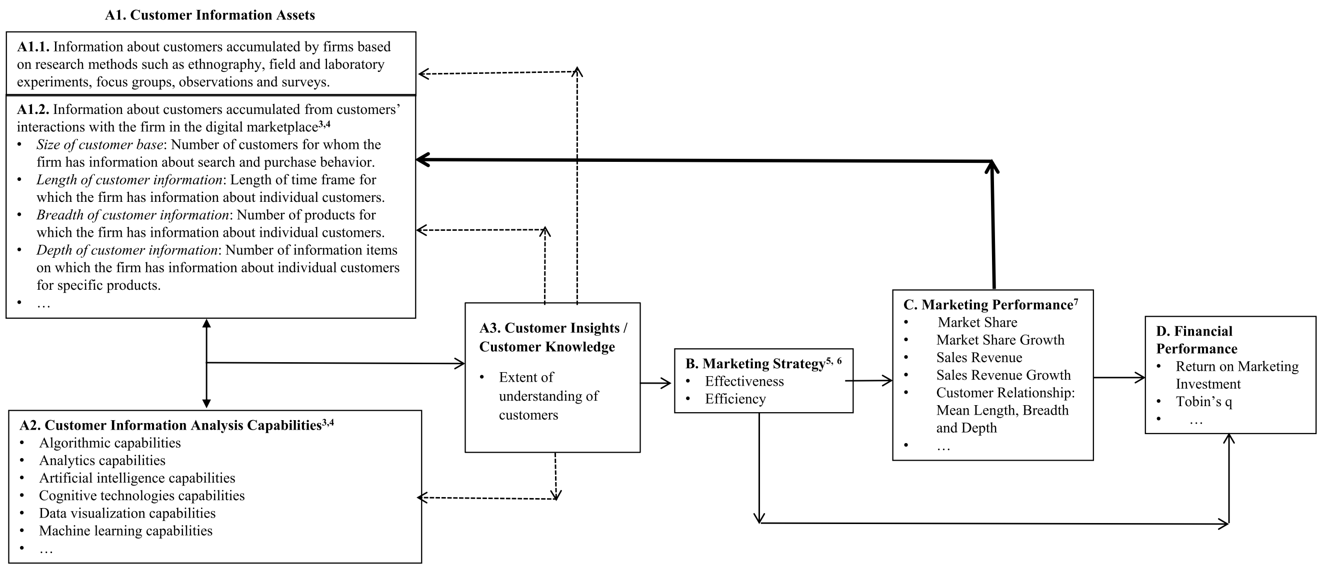
Customer insights or knowledge in the proposed framework is distinct from knowledge embedded in a firm's customer information analysis related capabilities. The former refers to knowledge as understanding (knowing *what* something means) and the latter to knowledge as knowhow (knowing *how* to do something) (see Kogut & Zander, 1992). Bierly, Kessler, and Christensen's (2000) conceptualization of *knowledge* as the understanding of information and its associated pattern corresponds with the former. The tacit nature of organizational knowledge embedded in a firm's capabilities makes it relatively difficult for competitors to diagnose and/or replicate (Teece et al., 1997), and transfer from one firm to another without also transferring ownership of the firm, or some self-contained subunit of the firm within which the capabilities reside (Makadok, 2001).

All else being equal, the positive effect of customer insights advantage on marketing performance (i.e. increase in market share resulting in an increase in size of a firm's customer base in a growth market) will in turn have a positive effect on customer information assets. This effect is shown in the framework as a thick arrow link from marketing performance to digital customer information assets (Box A1.2). The dotted arrows in Fig. 1 denote a firm's assessment of gaps in its customer knowledge that limit its ability to compete more effectively and efficiently in the marketplace, and the underlying gaps in customer information assets and customer information analysis capabilities. Along the lines of heterogeneity among competitors in their customer information assets, information analysis capabilities and customer knowledge, there will also be heterogeneity among them in respect of customer knowledge gaps they aware of (known unknowns), and gaps they are unaware of (unknown unknowns).

In a digital data rich market environment, the ability of a firm to accumulate more, better, timely, granular and proprietary information about individual customers, and the ability to generate actionable customer insights from its customer information assets can have a transformative effect on its marketing strategy (i.e. a marked change in how the firm competes in the marketplace). For instance, by effectively leveraging superior customer insights, a firm can achieve greater marketing effectiveness and efficiency through personalization of the product offering and certain other elements of the marketing mix at scale.

Competitive advantage in resources (e.g. customer information assets advantage, information analysis capabilities advantage and customer insights/customer knowledge advantage) that a firm leverages to conceive and implement value-creating strategies is distinct from *competitive positional advantage in the marketplace* (i.e. cost leadership advantage and differentiation advantage). Cost leadership advantage refers to being the lowest cost producer, and thereby possessing the ability to compete on price, and realizing the highest profit margins relative to competitors under conditions of the price of competing offerings being the same. Competitive differentiation advantage implies the willingness of customers to pay a higher price (price premium) for the firm's product offering in light of its unique or distinctive features and the associated benefits. Understandably, competitive advantage in resources is a prerequisite for achieving competitive positional advantage(s) in the marketplace. As Conner (1991) notes that distinctiveness a firm's product offering (competitive differentiation advantage), or its relatively lower cost (competitive cost advantage) are linked directly to the distinctiveness of the inputs (resources) used to produce the product. That is, a business' ability to attain and hold on to

Customer Information Resources, Marketing Strategy and Performance: A Conceptual Framework[1,2]



[1]Adapted from: Varadarajan, Rajan (2018), "A Commentary on Transformative Marketing: The Next 20 Years," *Journal of Marketing*, 82 (July), 15-18. With appropriate adaptations in Boxes B and C, the framework can be adapted for other business decision contexts such as innovation (Box B: innovation. Box C: Innovation Performance Metrics) and customer relationship management (Box B: Customer Relationship Management. Box C: Customer Relationship Performance Metrics).
[2]Customer Information Resources: A1. Customer Information Assets. A2. Customer Information Analysis Capabilities. A3. Customer Insights / Customer Knowledge.
[3]The customer information assets and customer information analysis capabilities shown are representative of a larger number of assets and capabilities, respectively.
[4]The dotted arrows denote a firm's assessment of gaps in customer knowledge that constrain its ability to more effectively and efficiently compete in the marketplace, and the underlying gaps in customer information assets and customer information analysis capabilities. Here again, there will be heterogeneity across firms in respect of *known unknowns* (customer knowledge gaps that the firm is aware of), and *unknown unknowns* (customer knowledge gaps that the firm is not even aware of).
[5]The direct link from marketing strategy to financial performance denotes the effect of marketing strategy efficiency on financial performance.
[6]In the limit, personalization of the product offering and other elements of the marketing mix at scale.
[7]The link from marketing performance to customer information assets denotes the effect of increase in market share in a growth market on the size of a business' customer base.

Fig. 1. Customer information resources, marketing strategy and performance: a conceptual framework[1,2].

profitable market positions (sustainability of competitive positional advantages) depends on its ability to gain and defend advantageous positions in important resources underlying their production and distribution. Drawing a clearer distinction between the two, Hunt and Morgan (1995) use the terms comparative advantage in resources and competitive positional advantage.

While the proposed framework builds on literature insights from the resource-based, capabilities-based, and dynamic capabilities-based views of the firm, it highlights an organizational context where a firm leverages certain types of resources (customer information assets and information analysis capabilities) to create another type of resource (customer insights or knowledge), which it leverages to base its strategy. The schematic representations of the essence of the resource-based view, capabilities-based view, and customer insights-based view / customer knowledge-based view (i.e. a firm generating customer insights or knowledge as a resource by leveraging its customer information assets and information analysis capabilities) presented in Fig. 2A, B and C, respectively provide additional insights into this issue. The principal relationships delineated in Fig. 1 and Fig. 2C pertaining to a firm's customer information assets, information analysis capabilities, and customer knowledge can be formally be stated as follows:

Customer information assets advantage hypothesis: All else being equal, customer information assets will have a positive effect on business performance, mediated by customer insights.

Customer information analysis capabilities advantage hypothesis: All else being equal, customer information analysis capabilities will have a positive effect on business performance, mediated by customer insights.

Customer insights advantage hypothesis: Resource advantage in customer information assets and customer information analysis capabilities, through their positive effects on customer insights, will have a positive effect on firm performance. The effects will be stronger in internet enabled, interactive, and digital data-rich market environments.

4. Discussion

In reference to the question of, "what explains variance in firm performance within and across industries," this article presents an exposition of heterogeneity in customer information resources as an explanation for some of the heterogeneity in firm performance. That is, all else being equal, by effectively leveraging its resource advantage in customer information resources to implement strategies that offer superior value to customers, a firm can achieve and sustain competitive positional advantage(s) in the marketplace, and in turn, superior financial performance. The effect of customer information resources advantage on business performance will be greater in internet-enabled, interactive, digital market environments. This brings to fore the question of "what explains heterogeneity in customer resources between firms within and across industries." A brief discussion on this issue follows.

Potential factors underlying heterogeneity in customer information assets and information analysis capabilities across firms include management prescience, absorptive capacity and imitability of assets stocks. Cohen and Levinthal (1990) (p. 128) define *absorptive capacity* as "the ability to recognize the value of new information, assimilate it, and apply it to commercial ends." Differences among competing firms in their absorptive capacity will manifest as heterogeneity in customer information assets and information analysis capabilities.

Dierickx and Cool (1989) note that the *imitability of an asset stock* (i.e. the cost and the time it would take a competitor to imitate the asset stock of the focal firm) is a function of the characteristics of the process of accumulation of the asset stock. *Time compression diseconomies* refers to diseconomies associated with attempting to duplicate certain asset stocks accumulated by one firm over a longer period of time, by another firm over a shorter period (Dierickx & Cool). Thus, all else being equal, if Firm A maintains a given rate of spending over a particular time interval on accumulation of customer information and Firm B maintains twice the rate of spending over half the time interval, the former will achieve a larger increment to its stock of customer information assets compared to the latter. *Asset mass inefficiencies* refers to the impact of the initial level of an asset stock on its further accumulation (Dierickx & Cool). Thus, all else being equal, a firm's historical success resulting in a favorable initial asset stock position (customer information assets;

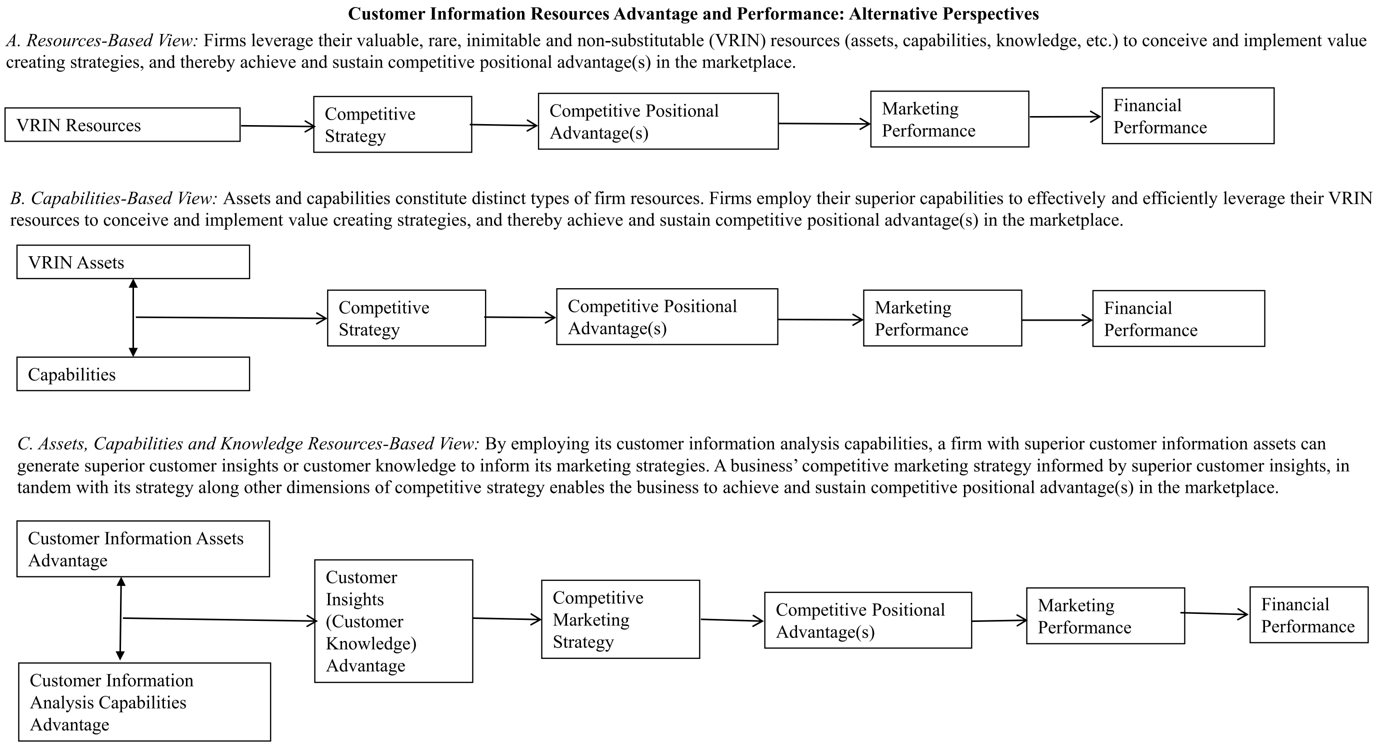


Fig. 2. Customer information resources advantage and performance: alternative perspectives.

customer information analysis capabilities) will facilitate further accumulation of the asset stock at a lower cost than a competitor attempting to build from an initial low level of the asset stock. *Interconnectedness of asset stocks* refers to accumulating increments of one stock being dependent on the initial stock position of another stock (Dierickx & Cool). Thus, all else being equal, accumulating increments of customer information assets is dependent on the firm's stock of customer information analysis capabilities, and vice versa.

4.1. Implications for theory

In the resource-based view of the firm, resources encompasses all assets, capabilities, organizational processes, firm attributes, knowledge, and other factors controlled by a firm that can be used to conceive and implement strategies for competing effectively and efficiently (Barney, 1991). The capabilities-based view of the firm distinguishes between assets and capabilities. Assets are resource endowments accumulated by a firm, and capabilities are complex bundles of skills and collective learning that enable the firm to bring these assets together and deploy them advantageously (Day, 1994). This article makes a theoretical contribution to the above stream of literature on firm resources, competitive advantage and performance by highlighting organizational contexts where a firm's resource advantage in certain resources are the basis for achieving a resource advantage in certain other resources. Case in point, as highlighted in the article, is a firm achieving a resource advantage in customer insights by leveraging its resource advantage in customer information assets and information analysis capabilities.

4.2. Implications for research

In the face of erosion of current sources of competitive advantage, due to their neutralization by competitors, changes in consumers' preferences, and/or changes in the market environment, identifying and developing new sources of competitive advantage is a competitive imperative for firms. With the evolution of market environment to an Internet enabled and digital data rich market environment, some firms had the prescience to invest in building customer information assets and the development of customer information analysis capabilities in order to be able to achieve and sustain a customer insights advantage. A potential avenue for research is empirical investigation of the marketing and financial performance effects of advantageous resource positions in customer information assets, information analysis capabilities and customer insights.

4.3. Implications for marketing education

The resource-based, capabilities-based and knowledge-based views of the firm, and resource-advantage theory of competition are integral to a number of marketing courses (e.g. marketing management; strategic marketing). By providing an exposition of above in the context of customer information resources (customer information assets, customer information analysis capabilities and customer insights), this article contributes to advancing marketing education.

5. Conclusion

"The new source of competitive advantage is customer centricity: deeply understanding your customers' needs and fulfilling them better than anyone else.

You need data to accomplish this. Yet having troves of data is of little value in and of itself. What increasingly separates the winners from the losers is the ability to transform data into insights about consumers' motivations and to turn those insights into strategy. This alchemy requires innovative organizational capabilities that, collectively, we call the "insights engine." (van den Driest, Sthanunathan, & Weed, 2016 (p. 64).

Observations such as the above serve to highlight the importance of customer information assets and information analysis capabilities for generating actionable customer insights in the current internet enabled, interactive and digital data rich market environment. All else being equal, a firm in an advantageous resource position in respect of digital customer information assets and information analysis capabilities will be able to generate superior customer insights relative to its competitors. In turn, by effectively using the insights to inform its marketing strategy decisions and implement them, the firm can achieve superior marketing and financial performance.

References

Amit, R., & Schoemaker, P. J. H. (1993). Strategic assets and organizational rent. *Strategic Management Journal, 14*(1), 33–46.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Barton, C., Koslow, L., Dhar, R., Chadwick, S., & Reeves, M. (2016). Why companies can't turn customer insights into growth. *BCG Perspectives (August)*https://www.bcgperspectives.com/content/articles/center-customer-insight-marketing-sales-why-companies-cant-turn-customer-insights-growth/.

Barton, C., Reeves, M., Lang, F., & Bergman, R. (2016). The introverted corporation. *BCG perspectives (April)*https://www.bcgperspectives.com/content/articles/strategy-technology-digital-introverted-corporation/.

Bierly, P. E., Kessler, E. H., & Christensen, E. W. (2000). Organizational learning, knowledge and wisdom. *Journal of Organizational Change Management, 13*(6), 595–618.

Brynjolfsson, E., Hitt, L., & Kim, H. (2011). Strength in numbers: How does data-driven decision making affect firm performance? *MIT Sloan School of Management working paper (April)*.

Burton-Jones, A. (1999). *Knowledge capitalism: Business, work, and learning in the new economy.* Oxford University Press.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly, 35*(March), 128–152.

Conner, K. R. (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management, 17*(1), 121–154.

Dahl, D. W. (2016). The argument for consumer-based strategy papers. *Journal of the Academy of Marketing Science, 44*(3), 286–287.

Dawar, N. (2018). Marketing in an age of Alexa. *Harvard Business Review, 96*(May-June), 80–86.

Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing, 58*(October), 37–52.

Day, G. S. (2011). Closing the marketing capabilities gap. *Journal of Marketing, 75*(4), 183–195.

Day, G. S. (2014). An outside-in approach to resource-based theories. *Journal of the Academy of Marketing Science, 42*, 27–28.

Day, G. S., & Moorman, C. (2010). Strategy from the outside. *Profiting from customer value*. New York: McGraw Hill.

Day, G. S., & Moorman, C. (2011). An outside/in perspective to strategy: Step outside to see what's important. *Marketing Management,* (Fall), 22–29.

Day, G. S., & Wensley, R. (1988). Assessing advantage: A framework for diagnosing competitive superiority. *Journal of Marketing, 52*(2), 1–20.

Deighton, J. (2016). In support of consumer-based strategy research. *Journal of the Academy of Marketing Science, 44*(3), 288–289.

Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science, 35*(12), 1504–1511.

van den Driest, F., Sthanunathan, S., & Weed, K. (2016). Building an insights engine. *Harvard Business Review,* (September), 64–74.

Edwards, H. (2013). The true meaning of 'customer insight' - and why marketers should treat it with care. *Campaign*(July 29)http://www.campaignlive.co.uk/article/helen-edwards-true-meaning-customer-insight-why-marketers-treat-care/1193164?src_site=marketingmagazine.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10/11), 1105–1121.

Gordon, J., Liedtke, L., & Timelin, B. (2016). *Now new next: How growth champions create new value.* September: McKinsey & Company Article. http://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/now-new-next-how-growth-champions-create-new-value#0.

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal, 17*(1), 109–122.

Hagiu, A., & Wright, J. (2020). When data creates competitive advantage and when it doesn't. *Harvard Business Review, 98*(January-February), 94–101.

Hamilton, R. (2016). Consumer-based strategy: using multiple methods to generate consumer insights that inform strategy. *Journal of the Academy of Marketing Science, 44*(3), 281–285.

Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal, 24*(10), 997–1010.

Hillebrand, B., Nijholt, J. J., & Nijssen, E. J. (2011). Exploring CRM effectiveness: An institutional theory perspective. *Journal of the Academy of Marketing Science, 39*(4), 592–608.

Houston, M. B. (2016). Is "strategy" a dirty word? *Journal of the Academy of Marketing Science, 44*(5), 557–561.

Hunt, S. (2012). Explaining empirically successful marketing theories: The inductive realist model, approximate truth, and market orientation. *AMS Review, 2*(1), 5–18.

Hunt, S., & Morgan, R. M. (1995). The comparative advantage theory of competition. *Journal of Marketing, 59*(April), 1–15.

Hymowitz, K. S. (2017). Is there anything grit can't do? *Wall Street Journal, 24*(June), A11.

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing, 57*(1), 1–22.

Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing, 69*(2), 24–41.

Knowledge@Wharton (2010). 'Outside In' Strategy for the C-suite: Put Your Customers Ahead of Your Capabilities. Interview of George Day by Editor of Knowledge@Wharton. September 29 https://knowledge.wharton.upenn.edu/article/outside-in-strategy-for-the-c-suite-put-your-customers-ahead-of-your-capabilities/.

Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science, 3*(3), 383–397.

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing, 54*(April), 1–18.

Kozlenkova, I. V., Samaha, S. A., & Palmatier, R. W. (2014). Resource-based theory in marketing. *Journal of the Academy of Marketing Science, 42*(January), 1–21.

Kumar, V., Jones, E., Venkatesan, R., & Leone, R. P. (2011). Is market orientation a source of sustainable competitive advantage or simply the cost of competing? *Journal of Marketing, 75*(January), 16–30.

Laughlin, P. (2014). Holistic customer insight as an engine of growth. *Journal of Direct, Data and Digital Marketing Practice, 16*(2), 75–79.

Liao, S., Chang, W. J., Wu, C. C., & Katrichis, J. M. (2011). A survey of market orientation research (1995-2008): Literature review and classification. *Industrial Marketing Management, 40*(2), 301–310.

Macdonald, E. K., Wilson, H. N., & Konus, U. (2012). Better customer insight – in real time. *Harvard Business Review, 90*(September), 102–108.

Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal, 22*(5), 387–401.

Mauborgne, R., & Kim, W. C. (2017). *Blue ocean shift: Beyond competing - proven steps to inspire confidence and seize new growth.* New York, NY: Hachette Books.

Mu, J. (2015). Marketing capability, organizational adaptation and new product development performance. *Industrial Marketing Management, 49*(August), 151–166.

Mu, J., Bao, K., Sekhon, T., Qi, J., & Love, E. (2018). Outside-in marketing capability and firm performance. *Industrial Marketing Management, 75*(November), 37–54.

Neighbor, H., & Kienzle, L. (2012). *Customer Insights Toolkit.* US Aid. March. Retrieved from http://www.hopeconsulting.us/pdf/Customer_Insight_Toolkit.pdf.

Ramani, G., & Kumar, V. (2008). Interaction orientation and firm performance. *Journal of Marketing, 72*(January), 27–45.

Rubera, G., Chandrasekaran, D., & Ordanini, A. (2016). Open innovation, product portfolio innovativeness and firm performance: The dual role of new product development capabilities. *Journal of the Academy of Marketing Science, 44*(2), 166–184.

Rubera, G., & Kirca, A. H. (2017). You gotta serve somebody: The effects of firm innovation on customer satisfaction and firm value. *Journal of the Academy of Marketing Science, 45*, 741–761.

Said, E., Macdonald, E. K., Wilson, H. N., & Marcos, J. (2015). How organisations generate and use customer insight. *Journal of Marketing Management, 31*(9–10), 1158–1179.

Srivastava, R. K., Shervani, T. A., & Fahey, L. (1998). Market-based assets and shareholder value: A framework for analysis. *Journal of Marketing, 62*(January), 2–18.

strategy + business (2017). Disruptors and the disrupted: A tale of eight companies — in pictures. *strategy + business*(September 27)https://www.strategy-business.com/pictures/Disruptors-and-the-Disrupted-A-Tale-of-Eight-Companies-in-Pictures?gko=00234.

Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of Management Perspectives, 28*(4), 328–352.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.

Varadarajan, R. (2018). A commentary on transformative marketing: the next 20 years. *Journal of Marketing, 82*(July), 15–18.

Vorhies, D. W., Morgan, R., & Autry, C. W. (2009). Product-market strategy and marketing capabilities: Impact on market and financial performance. *Strategic Management Journal, 30*(12), 1310–1334.

Wong, J. (2017). Alibaba cashes in on data trove. *Wall Street Journal,* (August 18), B12.