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# Synergistic effects of market orientation implementation and internalization on firm performance: Direct marketing service provider industry

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## ABSTRACT

We draw on recent advances in Market Orientation domain to examine the synergistic effects of market orientation implementation and internalization on firm performance in the context of digital transformation within direct mail service provider industry. We introduce market orientation *internalization* as a mediator between market orientation *implementation* and *firm performance* relationship. In addition, the effect of *learning orientation* is considered as a moderator that strengthens the relationship between market orientation implementation and market orientation internalization. The research model is empirically tested using Hayes (2013) conditional process analysis utilizing a unique dataset from an industry that is undergoing an unprecedented digital transformation from physical to digital communication. The results suggest that firms that practice high levels of market orientation implementation and internalization perform better in both financial performance and customer service performance.

## 1. Introduction

Rapid changes in business environments fueled by technological innovations and disruptions have challenged senior management's ability to sense and dynamically respond to market changes. The inability to respond to such changes has led several venerable companies to flounder, restructure, or disappear completely. The demise of Blockbuster, Eastman Kodak, Motorola, Circuit City, RadioShack, Blackberry, Borders, and Toys R Us—once considered the most innovative in their respective industries—illustrate how senior management's inability to anticipate future market dynamics can lead to missed opportunities that can send even a mighty enterprise off course (Govindarajan & Trimble, 2010). For example, Blockbuster, in 2000, was the dominant name in movie rental business, but failed to adapt their business model to account for digital platforms (e.g., Netflix), which resulted in Blockbuster declaring bankruptcy in 2010. In today's dynamic business environments where business models are constantly disrupted by technological innovation, it is necessary that senior leaders identify and understand strategic orientations that enable a firm to sustain performance (Kumar, Jones, Venkatesan, & Leone, 2011).

Scholarly research has affirmed that market orientation is an effective strategy for surviving in a competitive environment in that it provides firms with a sustainable competitive advantage and focuses on

customer orientation, competitor orientation, innovation, and profit as inducements for creating satisfied customers (Kumar et al., 2011; Kohli & Jaworski, 1990; Narver & Slater, 1990). In the literature spanning over quarter of a century, market orientation has been studied primarily as *either* a behavioral *or* cultural construct and researchers have addressed them separately (Hult, Ketchen, & Slater, 2005). The behavioral perspective views market orientation as a behavioral construct that emphasizes organizational information-processing activities like the generation of, dissemination of, and responsiveness to market intelligence (e.g., Baker & Sinkula, 1999; Kohli & Jaworski, 1990). The cultural perspective views market orientation as market-oriented values and norms characterized by organization-wide adherence to values and norms that emphasize the importance of creating and delivering superior value to customers (Han, Kim, & Srivastava, 1998; Hurley & Hult, 1998; Narver & Slater, 1990). However, in practice, market orientation is a set of market-oriented behaviors *as well as* an aspect of organizational culture characterized by organization-wide adherence to market-oriented values and norms. Towards this objective, the current study integrates the behavioral and cultural perspectives of market orientation into a multi-dimensional construct and assesses its relationships with firm performance.

Taking inspiration from Kirca, Bearden, and Hult (2011) conceptual model, the research model presented in the current study represents the

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behavioral and cultural perspectives of market orientation using two distinct components: (i) implementation of market orientation and (ii) internalization of market orientation. Market orientation implementation component enables firms to sense and respond to customer needs effectively while market orientation internalization component allows the firm to internalize a shared set of market oriented norms and values at the cultural level. This multi-dimensional perspective will provide a more nuanced understanding of the market orientation concept and its complex relationships with performance (Ashwin & Hirst, 2014; Crittenden, Crittenden, Ferrell, Ferrell, & Pinney, 2011; Foley & Fahy, 2009; Hult et al., 2005; Kirca et al., 2011; Stoelhorst & Van Raaij, 2004). The current study broadens the research by introducing market orientation internalization as a mediator between market orientation implementation and firm performance relationship. In addition, this study considers the impact of learning orientation as a moderator that strengthens the relationship between market orientation implementation and market orientation internalization.

### 1.1. Study setting: direct mail/marketing services provider industry

The current study is conducted in a direct mail/marketing services provider industry, which is an exciting study setting as it undergoes an unprecedented digital transformation from physical to digital communication. The U.S. mailing industry supports 7.5 million jobs (roughly 6% of U.S. jobs) and \$1.4 trillion in sales revenue (roughly 4.6% of U.S. total output), making this industry about the same size as the airline or oil and natural gas industries (EMA, 2015). In 2017, the U.S. Postal Service delivered roughly 80 billion pieces of direct mail, representing 52% of all postal deliveries in that year. Direct mail spending in the US hit \$45 billion in 2015 (EMA, 2015). However, technological innovation in digital marketing and dynamic shift towards digital transformation have challenged traditional direct mail firms to play a larger role in the marketing value chain by offering a broad range of marketing and digital services. This state of disarray has opened the door to transform their businesses and expand their capabilities beyond print to address new opportunities (Foley Jr, 2011) and to build market-sensing and organizational capabilities to quickly adapt to emerging changes in the market. As Narver and Slater (1990) posited, market orientation is a business culture that develops over time and as such, firms in this space should realize this and immediately invest in the resources necessary to develop market capabilities as well as culture necessary to internalize it. The current study provides new insights into how implementation and internalization levels of market orientation and performance nexus are connected in the context of the transition and revitalization of this industry.

## 2. Theory and hypotheses

In the extant literature, a firm's market orientation is seen as an organizational capability that enables the organization to sense and respond to customers' needs in efforts to deliver superior value to customers (Day, 1994; Kohli & Jaworski, 1990). It consists of objective actions, routines, and standard operating procedures that include market-oriented behaviors related to the generation and dissemination of and responsiveness to market intelligence (Kohli & Jaworski, 1990). In addition, the deepest manifestations of market orientation occur at the cultural level, consisting of a shared set of market-oriented norms and values (Deshpande, Farley, & Webster Jr, 1993). Narver and Slater (1990) viewed market orientation as fundamentally a culture where market-oriented values and norms create and deliver superior value to customers (Han et al., 1998; Hurley & Hult, 1998; Kirca et al., 2011) and provide the cultural infrastructure of an organization (Gebhardt, Carpenter, & Sherry Jr, 2006; Homburg & Pflesser, 2000).

Based on resource-based theory, the marketing literature indicates that market orientation provides the firm with market-sensing, customer-linking, and channel-bonding capabilities (Day, 1994). Market-

driven organizations shift the span of all processes further towards the external end of the orientation dimension. This ensures that all market-sensing and customer-linking capabilities are deeply embedded within the organization and are better directed towards anticipating and responding to changing market requirements (Day, 1994). Accordingly, market orientation increases an organization's ability to understand and satisfy customers, thereby increasing its organizational capabilities (Luo, Sivakumar, & Liu, 2005). Scholars affirm that a firm's market-sensing capability is the most critical source of sustainable competitive advantage (e.g., Narver, Slater, & Tietje, 1998; Sinkula, 1994). Olavarrieta and Friedmann (2008) found that a firm's knowledge-related resources—namely, market-sensing capability, imitation capability, and organizational innovativeness and reputation assets—have a significant mediating effect on the market orientation–firm performance relationship. Market-oriented firms have normally superior returns given their superior market sensing, imitation, and innovation skills as well as reputation assets. Similarly, Ramaswami, Srivastava, and Bhargava (2009) used the resource-based view of the firm to propose that market-based assets and capabilities of a firm impact performance in three market-facing business processes—new product development, supply chain, and customer management—which, in turn, influence the firm's financial performance.

Learning orientation refers to an organization-wide activity involved in creating and using knowledge to enhance competitiveness. Organizational learning refers to the development of new knowledge or insights in the organization, with the potential to influence firm behavior (Olavarrieta & Friedmann, 2008). The literature points to three fundamental organizational values - commitment to learning, shared vision, open-mindedness (Sinkula, Baker, & Noordewier, 1997) - as necessary variables for the organizational learning structure. Casey (2005) argues that organizations require competent people to learn and interpret new market information and technology changes from the external environment and to create new knowledge faster than other competitors. Learning orientation is also studied as a means to achieve strategic renewal (Crossan & Berdrow, 2003). The need for learning orientation has been augmented with the need for creative learning (Farrell & Oczkowski, 2002) with a goal of creating new information and to establish a system to share it across the organization; need for learning from customers (Ottesen & Gronhaug, 2004); and need for challenging existing assumptions about the way market operates (Farrell, 2000). Research also stresses on organizational unlearning, which may precede learning that drives successful transformations (Leal-Rodríguez, Eldridge, Roldán, Leal-Millán, & Ortega-Gutiérrez, 2015).

A central theme of market orientation is the idea that any firm that is able to raise its level of market orientation will improve its performance in the marketplace. Numerous studies have documented the positive relationship between market orientation and business performance (e.g., Baker & Sinkula, 1999; Homburg & Pflesser, 2000; Jaworski & Kohli, 1993; Narver & Slater, 1990; Subramanian & Gopalakrishna, 2001). The marketing strategy literature has posited that market orientation provides a firm with market-sensing and customer-linking capabilities that lead to superior organizational performance (Day, 1994; Hult & Ketchen, 2001). The results of Kirca, Jayachandran, and Bearden's (2005) meta-analysis of the consequences of market orientation are consistent with traditional hypotheses that market orientation has a positive impact on firm performance.

### 2.1. Implementation/internalization dimensions of market orientation

The implementation–internalization dimensions of market orientation is supported by organizational research from an institutional theory perspective, which has been widely used for studying the adoption and diffusion of organizational practices among organizations (e.g., DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1995; Tolbert & Zucker, 1983). The central tenet of institutional theory is that

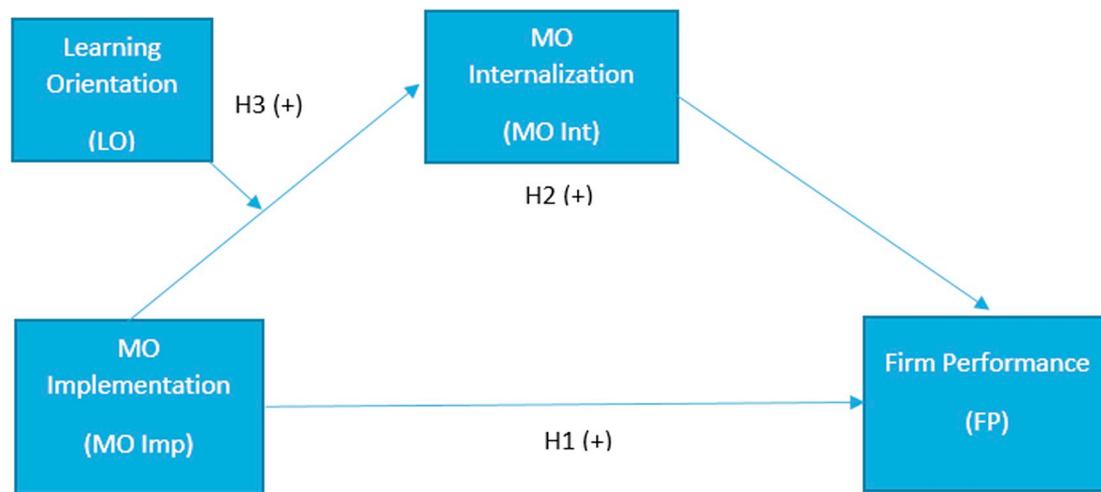


Fig. 1. Research model: first stage moderated mediation model showing the direct effect of market orientation implementation, mediating effect of market orientation internalization, and conditional moderating effect of learning orientation on firm performance.

organizational actions and structures are embedded in the organizational environment and are affected by the pressures of conformity and legitimacy (Scott, 2001). From this perspective, organizations sharing the same environment tend to employ similar practices and become isomorphic with each other. In essence, institutional theory focuses on the processes by which societal expectations of proper values, norms, and behavior influence the adoption of practices in organizations. The adoption of these practices is explained by organizations' conformity to institutional pressures driven by legitimacy motives (DiMaggio & Powell, 1983).

Implementation and internalization dimensions have also been studied in prior organizational research, i.e., in the adoption of organizational practices and innovative technology (e.g., Kostova & Roth, 2002; Zeitz, Mittal, & McAulay, 1999). For example, Kostova and Roth (2002) suggested that the adoption response is comprised of a behavioral (i.e., the actual implementation of the practice) and an attitudinal component (i.e., the internalized belief in the value of the practice) and the different levels and configurations of these two components reflected the variation in adoption response. Kostova and Roth (2002) further observed that the implementation and internalization elements of practice adoption reflect the overall level and depth of the adoption. In other words, implementation is the set of actions and behaviors required by the practice whereas internalization is the state in which the employees' view the practice as valuable and become committed to it. Internalization is conceptualized as the state in which the organization attaches meaning, norms, and values to the practice such that this practice becomes widely accepted by organizational members (Zeitz et al., 1999). It is important to note that the implementation–internalization components of a practice are viewed as related but distinct and are not necessarily causally related (Kostova & Roth, 2002). Along the same lines, Tolbert and Zucker (1996) identified pre-institutionalization, semi-institutionalization, and full institutionalization as three basic stages in the adoption of an organizational practice while Zeitz et al. (1999) identified initial adoption and entrenchment as two stages of practice utilization. The implementation–internalization distinction is also supported by prior research in marketing. Day (1994) observed that the most distinctive features of market-driven organizations are their mastery of the market-sensing and customer-linking capabilities. Day (1994) proposed two key approaches—the bottom-up redesign of underlying processes and top-down direction and commitment—for building a market-oriented organization. Narver et al. (1998) identified the programmatic approach and market-back approach as two approaches that contribute to enhancing market orientation. The programmatic approach typically

involves teaching organizational members the basic processes and skills for creating superior value for customers while the market-back approach is characterized by the firm's focus on continuous experiential learning where the firm's customer value skills, resources, structures, processes and procedures are continually adapted and improved to profitably and effectively create superior value for customers.

Consistent with the above discussed perspectives, Kirca et al. (2011) theorized that the implementation–internalization dimensions apply to a firm's market orientation practice as well. In a point of difference from the extant market orientation literature, Kirca et al. (2011) proposed that the implementation (i.e., behavioral) and internalization (i.e., cultural) aspects of market orientation are distinct components that are not necessarily causally related. They further noted that the internalization of market orientation complements the implementation of market-oriented behaviors and that “internalization ultimately creates an organizational identity that does not change very easily and is preserved even if individuals come and go”. Kirca et al. (2011) defined the implementation of market-oriented behaviors from an organizational learning perspective as the development of behaviors related to the generation and dissemination of market information and responsiveness to it in organizations (e.g., Kohli & Jaworski, 1990). In other words, market orientation implementation concerns “explicit, tangible, and observable organizational behaviors and activities that enhance the market information-processing capabilities of the firm” (Baker & Sinkula, 1999). The internalization component captures the cultural aspects of market orientation (e.g., Narver & Slater's, 1990 cultural perspective) that emphasizes an organization-wide commitment to the creation of superior value for customers and ensures a common understanding of and adherence to market-oriented values and norms. The research model is shown in Fig. 1 and statistical model is shown in Fig. 2.

## 2.2. Direct effect of market orientation implementation

The first hypothesis concerns the effects of a market orientation implementation on firm's financial performance and customer service performance. Firms that implement market orientation are predicted to perform better because they have the highest level of market-sensing and customer-linking capabilities compared to emergent and inactive firms that lack these capabilities. These firms are in a better position to generate and disseminate market information, to sense the trends in their markets, and to respond to changing customer requirements than their competitors (Kohli & Jaworski, 1990). Furthermore, the high degree of market orientation implementation exhibited by these firms

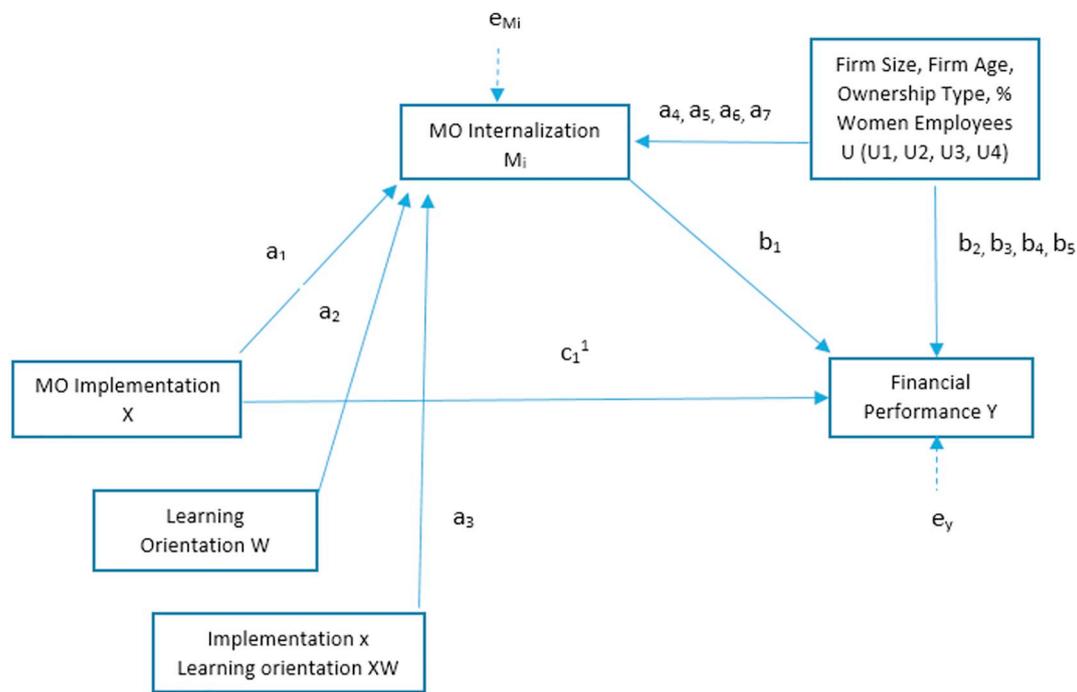


Fig. 2. Statistical model: direct effect of market orientation implementation, mediating effect of market orientation internalization, and conditional moderating effect of learning orientation on financial performance.

facilitates the identification of existing and latent customer needs by directing resources for creating innovative solutions to customer problems, which in turn contribute significantly to sales growth and profitability (Atuahene-Gima, Slater, & Olson, 2005). Firms that have high levels of market orientation implementation can sense the trends in their industry and respond to changing customer requirements effectively (Day, 1994). High levels of market orientation implementation coupled with market-sensing capability enable organizations to learn faster than their rivals. Firms may use this capability to create innovative solutions to customers' problems continuously, thereby enhancing their financial performance (Atuahene-Gima et al., 2005). On the other hand, low levels of market orientation implementation prevent firms from developing information-generating and -processing capabilities. Furthermore, the weak market-sensing capabilities are predicted to have a more limited impact on financial performance. The limited capability to sense the shifts in customers' preferences and the lack of commitment to the creation of superior value for customers prevents these firms from developing strategies that satisfy the needs and requirements of customers. Accordingly, the following hypotheses are tested:

**H1a.** The extent of market orientation implementation is positively related to firm's perceived financial performance.

**H1b.** The extent of market orientation implementation is positively related to firm's perceived customer service performance.

### 2.3. Mediating effect of market orientation internalization

Mediation (mediator variable) explains the relationship between the dependent variable and the independent variables. A mediator lies causally between the two variables (Baron & Kenny, 1986; Hayes, 2013; Preacher & Hayes, 2008). The indirect effect of market orientation implementation on firm performance quantifies the sequence of causal steps by which implementation affects performance through a mediator variable internalization. Market orientation Internalization is used as mediator between Implementation and Firm Performance (perceived financial and customer service) primarily based on theory and the study

setting. As established in literature review section of the manuscript, the internalization of market orientation complements the implementation of market-oriented behaviors. Internalization ultimately creates an organizational identity that does not change very easily and is preserved even with employee turnover (Kirca et al., 2011). As Kostova and Roth (2002) observe, whether an innovative artifact can survive and has significant continuous organizational impact depends mainly on the effectiveness of the process that transmits the value from the artifact to the organization (i.e., internalization). When an artifact is internalized, the employees view the artifact as valuable for the organization and become committed to it. The high levels of internalization allow the firm to internalize market-oriented values and norms, thereby creating a cultural infrastructure that focuses on the continuous creation of value for customers (Gebhardt et al., 2006; Narver & Slater, 1990). The effective use of customer information through the market-learning process provides them with a competitive advantage (Day, 1994). Therefore, firms with high levels of implementation and internalization are likely to outperform their rivals on key metrics, such as customer satisfaction, retention, and loyalty, because they have strong customer-linking capabilities. On the other hand, the lack of internalization of market-oriented values and norms will prevent firms from developing customer-linking capabilities.

From the practical point of view, the current study is conducted in a direct mail/marketing services provider industry, that is undergoing an unprecedented digital transformation from physical to digital communication. A lion's share of firms in this space are nearly a century old, have legacy processes, and tenured employees; and they must build new market capabilities to survive. Authors' first-hand knowledge of the industry and insights gained from various studies and executive interviews have showed that firms in this space are investing in building market-oriented capabilities, but the overall resistance and lack of willingness to alter core operations internally remains a serious threat in realizing expected performance. Internalization of market orientation provides employees with a cultural foundation that focuses on the continuous creation of superior value for customers. In addition, internalization complements the implementation of market-oriented behaviors and the two dimensions work synergistically towards achieving

financial and customer service performance. Based on these predictions, the following hypotheses are tested:

**H2a.** The market orientation internalization mediates the positive relationship between market orientation implementation and perceived financial performance. Market orientation Internalization strengthens the relationship between implementation and perceived financial performance.

**H2b.** The market orientation internalization mediates the positive relationship between market orientation implementation and perceived customer service performance. Market orientation Internalization strengthens the relationship between implementation and perceived customer service performance.

#### 2.4. Moderating effect of learning orientation

Moderation (moderator variable) alters the relationship between two variables without entering the relationship. The moderating effect is “when” market orientation has an effect on performance. According to Hayes (2013), “moderation refers to an interaction; a moderator variable is a variable that interacts with another variable, often with an independent or predictor variable.” The present study uses learning orientation as a moderator between market orientation implementation and internalization. Since the study is conducted in a specific industry setting – many of the moderators used in prior studies (e.g., environmental moderators) are less useful. In prior research, learning orientation has been studied both as an independent variable as well as a moderating variable. Baker and Sinkula (1999) argued that a learning orientation moderates the relationship between market orientation and change in relative market share, and market orientation and overall performance. Farrell (2000) found that both a market orientation and a learning orientation directly affect performance, with a slightly stronger effect for a learning orientation. Sinkula (1994), Slater and Narver (1995), Farrell (1999) have also found the positive relationship between at market orientation and learning orientation. According to Casey (2005), learning orientation as an organizational capability enables an organization to keep pace with the changing environment. Slater and Narver (1994) argued that market orientation is a capability and the principal cultural foundation of learning organizations. Similarly, Kumar et al. (2011) pointed out that the constant gathering and sharing of information regarding customers and competition within market-oriented firms encourage organizational memory and a culture of continuous improvement. Market orientation, when coupled with learning orientation creates an environment to foster a mutually beneficial relationship between employees and their organizations to facilitate learning and innovation (Huang & Wang, 2011).

A strong market orientation can promote an organization to absorb market knowledge from its competitors and customers and can enhance market-based organizational learning (Liao, Chang, Wu, & Katrichis, 2011). While market orientation impacts the scope of firms' market information-processing activities, the learning orientation influences the higher-order examination and retention of the results. Learning orientation also facilitates higher order learning (Baker & Sinkula, 1999). Organizational learning theory views that “learning orientation influences the propensity of the firm to create and use knowledge; it influences the degree to which firms are likely to promote generative learning as a core competency” (Sinkula et al., 1997). A firm's ability to sense the market, absorb new information, distribute it, interpret it, and store it for accessible retrieval accelerates organizational learning processes (Day, 1994). Accordingly, the above predictions are summarized in the following hypotheses:

**H3.** The learning orientation moderates the positive relationship between market orientation implementation and market orientation internalization such that it strengthens the relationship between market orientation implementation and market orientation internalization.

### 3. Data and methods

#### 3.1. Data collection and sample

The sampling unit in the current study are firms that are in direct mail/marketing service provider industry space. First, an exploratory list of marketing service provider firms is compiled by scanning through Direct Marketing Association (DMA) directory, trade associations, and professional groups associated with specified industries. Three industry leaders reviewed the exploratory list to ensure they adequately represent the study setting. Next, database of key informants is compiled - deciphering key information from industry contacts and secondary sources. Prior studies have revealed that senior managers were highly familiar with marketing strategy and performance of his/her firm (Zhang & Duan, 2010). Informants are contacted by email to solicit their cooperation; a pre-notification message was sent to 500 firms informing them of the study with primary objective to better understand business practices in the Direct Mail service provider industry. The respondents were informed of the importance of this topic to academic and business community and were assured of confidentiality of their responses. In appreciation for their time, respondents were informed that they will receive a special report on containing the listing of top 10 and top 200 direct mail service providers that was specifically compiled for the purposed of this study as well as a chance to win \$50 Visa Gift Card and to receive summary of findings after study is complete. One week after the pre-notification letter, a questionnaire titled “Direct Mail Business Practices Survey” created using Qualtrics was emailed to the same 500 firms. Two reminders were sent reminding them of the importance of the survey to the direct mail industry as well as the offer to receive complementary reports relevant to their business. A total response of 151 was obtained that yielded a usable response of 143 fully completed cases for an effective response rate of 28.6%. Sample size and response rates were deemed sufficient based on statistical power analysis conducted using G\*Power software tool (Faul, Erdfelder, Lang, & Buchner, 2007). Using the number of predictors as four including the interaction effect as shown in the research model (market orientation implementation, market orientation internalization, learning orientation, and implementation x learning orientation), medium effect size level (0.15), a moderate significance level ( $\alpha = 0.05$ ), and a power requirement of 0.80, the minimum required sample size was 85.

Table 1 shows the profile of the sample organizations showed a

**Table 1**  
Profile of sample characteristics.

| Characteristics               | No of firms in sample | % of firms in sample |
|-------------------------------|-----------------------|----------------------|
| Annual revenue range          |                       |                      |
| Less than \$10 million        | 52                    | 36%                  |
| \$10 million to \$25 million  | 39                    | 27%                  |
| \$25 million to \$100 million | 24                    | 17%                  |
| Over \$100 million            | 28                    | 20%                  |
| Company age (years)           |                       |                      |
| 0 to 5 years                  | 11                    | 8%                   |
| 5 to 10 years                 | 23                    | 16%                  |
| 10 to 25 years                | 26                    | 18%                  |
| Over 25 years                 | 83                    | 58%                  |
| Ownership type                |                       |                      |
| Family Owned                  | 26                    | 18%                  |
| Privately Held                | 103                   | 72%                  |
| Publicly Traded               | 14                    | 10%                  |
| Percent of women employees    |                       |                      |
| < 5%                          | 5                     | 4%                   |
| 5% to 10%                     | 14                    | 10%                  |
| 10% to 25%                    | 25                    | 18%                  |
| 25% to 50%                    | 74                    | 51%                  |
| Over 50%                      | 25                    | 17%                  |

reasonable spread of firms based on size, ownership, and age. Although, there is no single database that lists all firms in this industry, based on industry knowledge and expert opinion, the sample representation is adequate in effectively representing the population of firms in this industry setting. The presence of any response bias was detected by contacting a small sample of firms that chose not to participate in the survey. Company policy and restrictions were cited as the primary reasons for not responding to the survey. Sample bias was assessed using the time-trend extrapolation test (Armstrong & Overton, 1977) by comparing early responders' responses to those of late responders using chi-square tests of independence and no differences were evident between these two groups.

### 3.2. Measures

Firm performance is operationalized as financial performance and customer service performance, each dependent variable analyzed separately. Following Moorman and Rust (1999) and a vast majority of market orientation research, the present study collected managers' subjective perceptions of performance as it minimized the issue of typical unwillingness to share actual performance data especially in the context of current study setting. Financial performance is measured using Moorman and Rust (1999) scale that is designed to measure return on sales, market share, profitability. This is operationalized by asking informants the following questions: relative to your company's objectives, how did your company or business unit perform last year on the following criteria: return on sales, market share, and profitability. Consistent with Moorman and Rust (1999), informants are asked to rate firm performance relative to their firm's stated objectives. This approach has been taken in prior literature and found to compare well to evaluations of firm performance relative to competitors. Customer service performance is measured using Moorman and Rust (1999) scale that is designed to measure customer satisfaction, customer retention, and product/service quality. This is operationalized by asking informants the following questions: relative to your company's objectives, how did your company or business unit perform last year on the following criteria: customer satisfaction, customer retention, and product/service quality. Both financial performance and customer service performance is measured using a seven-point Likert scale where 1 represented significant decrease and 7 represented significant increase. Scores are averaged to obtain cumulative score on financial performance and customer service performance.

Market orientation implementation is measured using Homburg and Pflesser (2000) scale that is adapted from Kohli, Jaworski, and Kumar (1993). This 14-item scale measures the construct of market orientation implementation using a seven-point Likert scale. Market orientation internalization is measured using Internalization of market orientation (new scale based on Deshpande et al. 1993; Narver & Slater, 1990) recommended by Kirca et al. (2011) in their conceptual paper. This 9-item scale is based on the original 25 item scale developed by Narver and Slater (1990). Seven-point Likert scale is used where a score of 1 indicate the firm did not engage in the practice at all while 7 indicate that the firm engaged in the practice to a large extent. Scores are averaged to obtain a cumulative market orientation implementation score and market orientation internalization score. Learning orientation is measured from the scale developed by Baker and Sinkula (1999). This 15 item scale measures firm's commitment to learning, shared vision, and open mindedness. A seven-point Likert scale is used to measure the learning orientation anchored at 1 for strongly disagree and 7 for strongly agree. The scores are averaged to obtain a cumulative score for the firm. Consistent with literature, a number of control variables were considered to be used in the study. Due to the specific industry setting of the current study, Firm size, firm age, firm ownership structure, percent of women employees are included as control variables as they are deemed important determinants of performance. Firm age is assessed by asking the number of years since the firm was founded. Firm

size is indicated by the annual revenue. Ownership structure is assessed by asking informants if the firm is publicly owned, privately owned, or family owned.

### 3.3. Analytical procedures

First, descriptive statistics are analyzed and summarized. Factor structure analysis and scale reliability analysis are performed to ensure validity of the constructs and reliability of performance measurement scales. PROCESS v2.16 macro 2016 release (Hayes, 2013) is used along with SPSS to estimate the main effect, indirect effect, and conditional indirect effect. PROCESS analytically integrates mediation and moderation analysis into a unified statistical model (Hayes, 2016) as opposed to separate moderation analysis (testing the contingencies of an effect) or mediation analysis (testing the mechanism by which an effect operates). According to Hayes (2016), the PROCESS is an extension of the idea initially termed as "mediated moderation" and "moderated mediation" that appeared in the literature decades ago primarily by Baron and Kenny (1986) as well as tools and systematic procedures put forth by Hayes and Preacher. The model used in the current study specifies a single mediator causally located between X and Y and therefore simple mediation model Hayes Process model 4) is used to test the mediation only effect. PROCESS model 7 (first stage moderated mediation model) is used to analyze the effect of X on mediator M by moderator variable W. An index of moderated mediation (Hayes, 2015) quantifies the association between an indirect effect and a moderator followed by an inference as to whether this index is different from zero.

The first stage moderation model (Edwards & Lambert, 2007) allows the effect of X on M in a mediation model to be moderated by W, which can be represented as:

$$M = i_M + a_1X + a_2W + a_3XW + e_M$$

$$Y = i_Y + C^dX + bM + e_Y$$

and the indirect effect ( $\omega$ ) of X on Y is a linear function of W and expressed as:

$$\omega = (a_1 + a_3W)b = a_1b + a_3bW$$

In the first stage (and, by extension, the first stage and direct effect) moderation model, the indirect effect of X on Y through M is a linear function of W. The weight for W in this function,  $a_3b$ , is referred as the index of moderated mediation for this model (Hayes, 2015). Hayes (2015) recommends the use of a bootstrap confidence interval for the index of moderated mediation in models such as these, as the index of moderated mediation directly quantifies the relationship between the indirect effect and the moderator. Following Hayes (2013) guidance, covariates (control variables) are mathematically treated exactly like independent variables in the estimation, with paths to all mediators and the outcome. Similarly, Hayes (2013) recommendation is followed in treating more than one dependent variable by simply running PROCESS k times, one each for dependent variable. The bias corrected bootstrap confidence intervals are based on 5000 bootstrap samples.

## 4. Results

Tables 2 to 4 present correlation and multiple regression results. A significant regression equation was found ( $F(7,135) = 21.766$ ,  $p < 0.001$ ) with an R-square of 0.53 for financial performance and 0.65 for customer service performance. The results indicate that the overall model is significant and can explain over 53% of the variance in the performance measures. Market orientation implementation is significant for both financial performance and customer service performance ( $p < 0.001$ ). Market orientation internalization is also significant to financial performance ( $p < 0.01$ ) and to customer service performance ( $p < 0.001$ ). While MO implementation and MO internalization were significant predictors of firm performance, neither the

**Table 2**  
Means, standard deviations, and correlations.

| Variables               | M    | SD   | 1            | 2            | 3      | 4            | 5      | 6     | 7    |
|-------------------------|------|------|--------------|--------------|--------|--------------|--------|-------|------|
| 1. MO Implementation    | 3.69 | 0.87 | 1.00         |              |        |              |        |       |      |
| 2. MO Internalization   | 4.15 | 0.8  | <b>0.529</b> | 1.00         |        |              |        |       |      |
| 3. Learning Orientation | 4.63 | 0.87 | <b>0.648</b> | <b>0.684</b> | 1.00   |              |        |       |      |
| 4. Firm Size (rev)      | 2.2  | 1.13 | -0.196       | -0.137       | -0.103 | 1.00         |        |       |      |
| 5. Firm Age             | 3.27 | 0.99 | -0.249       | 0.127        | -0.03  | <b>0.385</b> | 1.00   |       |      |
| 6. Ownership Type       | 1.92 | 0.52 | 0.037        | -0.063       | 0.081  | <b>0.036</b> | -0.065 | 1.00  |      |
| 7. % Women Employees    | 3.7  | 0.99 | 0.093        | 0.136        | 0.03   | 0.091        | 0.125  | 0.033 | 1.00 |

Bold are significant correlations (p < 0.01 level).

**Table 3**  
Results of multiple regression analysis: standardized regression coefficients (standard errors) (N = 143).

| Independent variables   | Financial performance | Customer service performance |
|-------------------------|-----------------------|------------------------------|
| 1. MO Implementation    | 0.539***              | 0.319***                     |
| 2. MO Internalization   | 0.219**               | 0.478***                     |
| 3. Learning Orientation | NS                    | NS                           |
| 4. Firm Size (rev)      | NS                    | NS                           |
| 5. Firm Age             | NS                    | NS                           |
| 6. Ownership Type       | NS                    | NS                           |
| 7. % Women Employees    | NS                    | NS                           |
| F                       | 21.76***              | 35.10***                     |
| R                       | 0.728                 | 0.8                          |
| R <sup>2</sup>          | 0.53                  | 0.65                         |

NS = Not Significant.

\*\*\* p < 0.001.

\*\* p < 0.01.

**Table 4**  
a: Pearson correlation table (financial performance).  
b: Pearson correlation table (customer service performance).

a

| Variables                | Mean | SD   | N   | 1            | 2            | 3            |
|--------------------------|------|------|-----|--------------|--------------|--------------|
| 1. Financial performance | 5.27 | 1.31 | 143 |              |              |              |
| 2. Implementation        | 3.69 | 0.87 | 143 | <b>0.677</b> |              |              |
| 3. Internalization       | 4.14 | 0.8  | 143 | <b>0.546</b> | <b>0.529</b> |              |
| 4. Learning orientation  | 4.62 | 0.87 | 143 | <b>0.577</b> | <b>0.648</b> | <b>0.684</b> |

b

| Variables                | Mean | SD   | N   | 1            | 2            | 3            |
|--------------------------|------|------|-----|--------------|--------------|--------------|
| 1. Financial performance | 5.63 | 0.96 | 143 |              |              |              |
| 2. Implementation        | 3.69 | 0.87 | 143 | <b>0.656</b> |              |              |
| 3. Internalization       | 4.14 | 0.8  | 143 | <b>0.733</b> | <b>0.529</b> |              |
| 4. Learning orientation  | 4.62 | 0.87 | 143 | <b>0.651</b> | <b>0.648</b> | <b>0.651</b> |

Bold are significant (p < 0.001).

learning orientation nor any of the control variables (firm size, firm age, ownership type, and percent of women employees) were found to be significant predictors of the dependent variable.

4.1. Robustness checks

The key premise of research hypothesis used in the current study rest on the validity of the constructs. The content validity concerning the substance of the items under each construct is not a major concern as the survey was sent to managers in North America and instructions clearly stated the purpose of the study was to investigate business practices in direct mail service provider industry given the transformation happening in this space from physical to digital communication. Construct validity was determined by looking at the correlations among

variables making up the market orientation scale. Convergent validity was determined through factor analysis. Both convergent and discriminant validity are included in construct validity. The scale items used in the study were factor analyzed using principal component analysis employing maximum likelihood and varimax rotation. Principal components analysis was used to eliminate scale items that did not contribute to a simple factor structure and failed to meet a minimum criterion of having a primary factor loading and to derive the final four factor solution. For the final stage, principal components analysis of 28 items using varimax rotation yielded four factors that explained 69% of the total variance. The eigen values associated with each of the four factors were > 1.00. Bartlett's test for sphericity was significant 3279.75 (significance = 0.000). The Kaiser – Meyer – Olkin measure of sampling adequacy was 0.908 that is very high and above the commonly recommended value of 0.6 (Kaiser, 1974). The first factor had very high eigen value (12.74) and explained 45.5% of the variance. The communality for the items was between 0.48 and 0.80, indicative of a high degree of linear association among the items of the scale. These four factors have theoretical support - market orientation implementation, market orientation internalization, learning orientation, and firm performance - have been theorized to be dependent and linked to the construct of market orientation.

The reliability analysis is conducted to measure internal consistency and is reported using Cronbach's alpha. The reliability score (Cronbach's alpha) of the market orientation implementation scale is 0.889, market orientation internalization scale is 0.937, learning orientation scale is 0.919, financial performance scale is 0.913, and customer service performance scale is 0.879. They follow the recommended criteria that Cronbach's alpha values above 0.7 indicate sound and reliable measures (Nunnally, 1978).

4.2. Direct effect

Tables 5a and 5b show the effect, p value, and 95% bias-corrected bootstrap confidence interval for the direct effect of MO implementation on financial performance (c11 = 0.864 with a p value < 0.001) and customer service performance (c11 = 0.400 with a p value < 0.001). A 95% bias corrected bootstrap confidence interval is entirely above zero in both cases (0.5912 to 1.1370 for financial performance and 0.2390 to 0.5615 for customer service performance). In both consequents, the confidence interval does not contain zero, pointing to a statistically significant relationship. Therefore, it can be concluded that firms that exhibit high levels of MO implementation perform relatively better based on the survey responses from managers in these firms.

4.3. Indirect (mediating) effect

In a simple mediation model, a mediator variable M influences the relationship between antecedent variable X and the outcome variable Y. A simple mediation model results (PROCESS model 4) for the implementation – performance relationship through internalization is shown in Fig. 3a (financial performance consequent) and Fig. 3b (customer service consequent). The model coefficients are indicated on each

**Table 5a**  
Direct effect of MO implementation (X) on financial performance (Y).

| Effect | P     | 95% bias-corrected bootstrap CI |
|--------|-------|---------------------------------|
| 0.8641 | 0.000 | 0.5912 to 1.1370                |

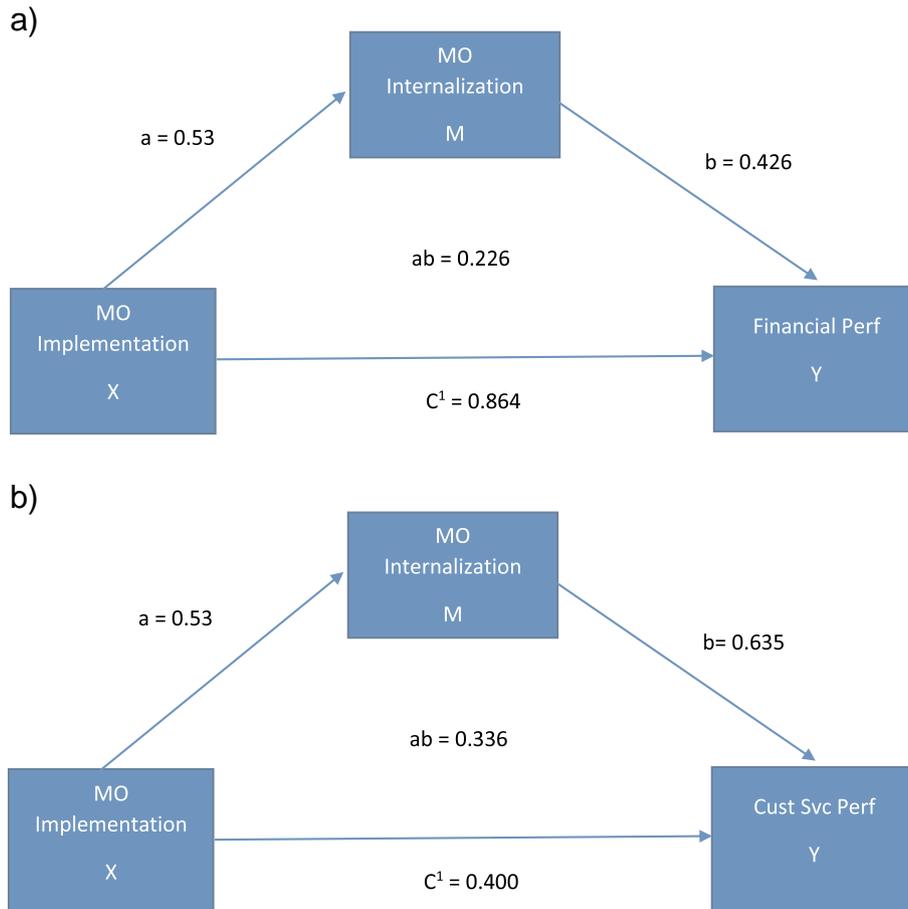
**Table 5b**  
Direct effect of MO implementation (X) on customer service performance (Y).

| Effect | P     | 95% bias-corrected bootstrap CI |
|--------|-------|---------------------------------|
| 0.4002 | 0.000 | 0.2390 to 0.5615                |

path. Both regression coefficients  $a$  and  $b$  are positive, meaning those that are relatively higher in MO internalization are estimated to be higher in firm performance. The indirect effect of X on Y through M is the product of these two coefficients  $a$  and  $b$ . Accordingly,  $ab$  (0.226 for financial performance and 0.336 for customer service performance) represents the impact of MO implementation on firm performance through MO internalization.

The estimated regression coefficients and their standard errors, the  $p$  values, the  $R^2$ , and model summary information for the simple mediation model is displayed in Table 6. Each of the three conditional

process models representing MO internalization, financial performance, and customer service performance are significant with  $R^2$  ranging from 0.61 to 0.80 ( $p < 0.001$ ). The regression coefficients for MO implementation (0.864,  $p < 0.001$ ) and MO internalization (0.426,  $p < 0.05$ ) are significant on financial performance consequent. Similarly, the regression coefficients for MO implementation (0.400,  $p < 0.001$ ) and MO internalization (0.635,  $p < 0.001$ ) are significant on customer service performance consequent. The regression coefficients for MO implementation is significant on MO internalization (0.53,  $p < 0.001$ ). The bias corrected bootstrap confidence interval has



**Fig. 3.** a. Simple mediation model for MO implementation-financial performance with MO internalization as mediator. b. Simple mediation model for MO implementation-customer service performance with MO internalization as mediator.

**Table 6**  
Model coefficients for the simple mediation model.

| Antecedent               | Consequent             |  |       |                           |                             |  |                                  |       |                             |   |       |       |
|--------------------------|------------------------|--|-------|---------------------------|-----------------------------|--|----------------------------------|-------|-----------------------------|---|-------|-------|
|                          | M (MO INTERNALIZATION) |  |       | Y (FINANCIAL PERFORMANCE) |                             |  | Y (CUSTOMER SERVICE PERFORMANCE) |       |                             |   |       |       |
|                          | Coeff.                 | SE   | p     | Coeff.                    | SE                          | p  | Coeff.                           | SE    | p                           |   |       |       |
| MO Implementation (X)    | a <sub>1</sub>         | 0.530  | 0.061 | 0.000                     | c <sup>1</sup> <sub>1</sub> | 0.864  | 0.113                            | 0.000 | c <sup>1</sup> <sub>1</sub> | 0.400   | 0.072 | 0.000 |
| MO Internalization (M)   |                        |  |       |                           | b <sub>1</sub>              | 0.426  | 0.122                            | 0.000 | b <sub>1</sub>              | 0.635   | 0.077 | 0.000 |
| Firm Size (U1)           | a <sub>4</sub>         | -0.105   | 0.057 | 0.071                     | b <sub>2</sub>              | 0.074  | 0.083                            | 0.372 | b <sub>2</sub>              | -0.043  | 0.053 | 0.416 |
| Firm Age (U2)            | a <sub>5</sub>         | 0.258  | 0.062 | 0.000                     | b <sub>3</sub>              | 0.071  | 0.094                            | 0.455 | b <sub>3</sub>              | 0.001   | 0.060 | 0.994 |
| Firm Ownership Type (U3) | a <sub>6</sub>         | -0.019   | 0.115 | 0.868                     | b <sub>4</sub>              | 0.077  | 0.163                            | 0.640 | b <sub>4</sub>              | -0.015  | 0.104 | 0.886 |
| % Women employees (U4)   | a <sub>7</sub>         | 0.046  | 0.056 | 0.410                     | b <sub>5</sub>              | -0.147   | 0.080                            | 0.069 | b <sub>5</sub>              | -0.002  | 0.051 | 0.967 |
| Constant                 | i <sub>j</sub>         | 1.442  | 0.421 | 0.001                     | i <sub>2</sub>              | 0.308  | 0.625                            | 0.623 | i <sub>2</sub>              | 1.649   | 0.398 | 0.000 |
|                          |                        | R <sup>2</sup> = 0.611<br>F(5,137) = 16.32, p<.001 |       |                           |                             | R <sup>2</sup> = 0.724<br>F(6,136) = 25.26, p<.001 |                                  |       |                             | R <sup>2</sup> = 0.80<br>F(6,136) = 40.33, p<.001 |       |       |

**Table 7a**  
Indirect effect of MO internalization on implementation-financial performance relationship.

|                             | Effect | P     | 95% bias-corrected bootstrap CI |
|-----------------------------|--------|-------|---------------------------------|
| Total effect                | 1.0899 | 0.000 | 0.8979 to 1.2819                |
| Direct effect               | 0.8641 | 0.000 | 0.6398 to 1.0884                |
| Indirect (mediating) effect | 0.2258 | 0.000 | 0.0708 to 0.4295                |

\* Bootstrap SE for the indirect effect is 0.0708

**Table 7b**  
Indirect effect of MO internalization on implementation-customer service performance relationship.

|                 | Effect | P     | 95% bias-corrected bootstrap CI |
|-----------------|--------|-------|---------------------------------|
| Total effect    | 0.7367 | 0.000 | 0.5936 to 0.8797                |
| Direct effect   | 0.4002 | 0.000 | 0.2575 to 0.5430                |
| Indirect effect | 0.3364 | 0.000 | 0.2159 to 0.4883                |

\* Bootstrap SE for the indirect effect is 0.0696

become the more widely recommended method for inference about the indirect effect in mediation analysis (Hayes, 2013). As illustrated in Tables 7a and 7b, a 95% bias-corrected bootstrap confidence interval is entirely above zero in both cases, i.e., 0.0708 to 0.4295 for financial performance and 0.2159 to 0.4883 for customer service performance. Therefore, the mediation effect of MO internalization on MO implementation – firm performance relationship is supported.

4.4. Conditional indirect effect (moderated mediation)

The conditional indirect effect quantifies how differences in X map onto differences in Y indirectly through M depending on the value of W (Hayes, 2013). To illustrate the indirect effect of X on Y through M, the PROCESS macro (model 7) automatically calculates various conditional indirect effects for various values of the moderator (W). Bootstrap confidence intervals for the conditional indirect effects are produced at values of the moderator corresponding to the mean and plus and minus one standard deviation from the mean of the moderator (learning orientation). The estimated regression coefficients and their standard errors, the p values, the R2, and model summary information is displayed in Table 8. Each of the three conditional process models representing MO internalization, financial performance, and customer

service performance are significant with R2 ranging from 0.53 to 0.64 (p < 0.001). The regression coefficients for MO implementation (0.864, p < 0.001) and MO internalization (0.426, p < 0.001) are significant on financial performance consequent. Similarly, the regression coefficients for MO implementation (0.400, p < 0.001) and MO internalization (0.635, p < 0.001) are significant on customer service performance consequent. The regression coefficients for MO implementation is significant on MO internalization (0.189, p = 0.01). Similarly, the regression coefficient for learning orientation is significant on MO internalization ((0.500, p < 0.001)). However, the conditional effects of X and W as shown with their product in the model has negative coefficient (negative effect) of -0.065 and statistically not significant (p = 0.47).

Hayes (2015) recommends to use the Index of Moderated Mediation as the most direct test for evidence of moderated mediation. This index is then tested for statistical significance using bias-corrected bootstrapping for statistical inference. According to Hayes (2015), an inference as to whether this index of moderated mediation is statistically different from zero is a formal test of moderation of the indirect effect by the moderator in the model. In other words, a bootstrap confidence interval for the index of moderated mediation that does not include zero provides more direct and definitive evidence of moderation of the indirect effect. PROCESS automatically produces this index of moderated mediation through each mediator in the model as well as bootstrap confidence interval for inference. The index of moderated mediation and the bootstrap confidence interval produced by PROCESS is an automatic implementation of the formal test of moderated mediation (Hayes, 2015). As shown in Tables 9a and 9b, the index of moderated mediation is -0.0316 and -0.041 for financial performance and customer service performance respectively. The 95% bias corrected bootstrap confidence interval is -0.1349 to 0.0246 for financial performance and -0.1519 to 0.0539 for customer service performance. In both cases, a 95% bootstrap confidence interval based on 5000 bootstrap samples and the confidence interval for the regression coefficient of the product of X and W include zero leading to conclude that the indirect effect of MO implementation on firm performance through MO internalization is not moderated by learning orientation. There is no support to claim that learning orientation is moderating any mediation of the effect of MO internalization on the MO implementation-firm performance relationship.

5. Discussion

Hypotheses concerning the direct effects of market orientation implementation on financial performance (H1a) and customer service performance (H2a) as well as the hypotheses concerning the indirect or

**Table 8**  
Model coefficients for the conditional process model.

| Antecedent               | M (MO INTERNALIZATION) |   |       | Consequent |                             |   |       |                                  |                             |   |       |       |
|--------------------------|------------------------|---|-------|------------|-----------------------------|---|-------|----------------------------------|-----------------------------|---|-------|-------|
|                          |                        | Coeff.  | SE    | p          | Y (FINANCIAL PERFORMANCE)   |   |       | Y (CUSTOMER SERVICE PERFORMANCE) |                             |   |       |       |
| MO Implementation (X)    | a <sub>1</sub>         | 0.189   | 0.072 | 0.010      | c <sub>1</sub> <sup>1</sup> | 0.864   | 0.138 | 0.000                            | c <sub>1</sub> <sup>1</sup> | 0.400   | 0.082 | 0.000 |
| MO Internalization (M)   |                        |   |       |            | b <sub>1</sub>              | 0.426   | 0.167 | 0.012                            | b <sub>1</sub>              | 0.635   | 0.114 | 0.000 |
| Learning Orientation (W) | a <sub>2</sub>         | 0.501   | 0.083 | 0.000      | c <sub>2</sub> <sup>1</sup> |   |       |                                  | c <sub>2</sub> <sup>1</sup> |   |       |       |
| X x W                    | a <sub>3</sub>         | -0.065  | 0.089 | 0.466      | c <sub>3</sub> <sup>1</sup> |   |       |                                  | c <sub>3</sub> <sup>1</sup> |   |       |       |
| Firm Size (U1)           | a <sub>4</sub>         | -0.071  | 0.051 | 0.167      | b <sub>2</sub>              | 0.074   | 0.086 | 0.387                            | b <sub>2</sub>              | -0.043  | 0.054 | 0.429 |
| Firm Age (U2)            | a <sub>5</sub>         | 0.180   | 0.060 | 0.003      | b <sub>3</sub>              | 0.071   | 0.099 | 0.478                            | b <sub>3</sub>              | 0.001   | 0.061 | 0.994 |
| Firm Ownership Type (U3) | a <sub>6</sub>         | -0.111  | 0.087 | 0.206      | b <sub>4</sub>              | 0.077   | 0.169 | 0.651                            | b <sub>4</sub>              | -0.015  | 0.098 | 0.879 |
| % Women employees (U4)   | a <sub>7</sub>         | 0.055   | 0.054 | 0.311      | b <sub>5</sub>              | -0.147  | 0.089 | 0.100                            | b <sub>5</sub>              | -0.002  | 0.056 | 0.970 |
| Constant                 | i <sub>1</sub>         | 3.750   | 0.333 | 0.000      | i <sub>2</sub>              | 3.510   | 0.851 | 0.000                            | i <sub>2</sub>              | 3.129   | 0.589 | 0.000 |
|                          |                        | R <sup>2</sup> = 0.55<br>F(7,135) = 23.83, p<.001 |       |            |                             | R <sup>2</sup> = 0.53<br>F(6,136) = 22.55, p<.001 |       |                                  |                             | R <sup>2</sup> = 0.64<br>F(6,136) = 41.74, p<.001 |       |       |

**Table 9a**  
Index of moderated mediation: financial performance.

| Mediator           | Index   | SE (Boot) | 95% bias-corrected bootstrap CI |
|--------------------|---------|-----------|---------------------------------|
| MO internalization | -0.0316 | 0.040     | -0.1349 to 0.0246               |

**Table 9b**  
Index of moderated mediation: customer service performance.

| Mediator           | Index   | SE (Boot) | 95% bias-corrected bootstrap CI |
|--------------------|---------|-----------|---------------------------------|
| MO internalization | -0.0414 | 0.053     | -0.1519 to 0.0539               |

mediating effect of market orientation internalization on financial performance (H2a) and customer service performance (H2b) are empirically supported. However, hypothesis concerning the conditional indirect (moderated mediation) effect of learning orientation is not empirically supported. The regression equations predicted that MO implementation is a key determinant of financial performance (2.2× that of MO internalization) while MO internalization is a key determinant of customer service performance (1.67× of MO implementation). This is consistent with the view shared by scholars like Gebhardt et al. (2006), Day (1994), Narver and Slater (1990), that the internalization of market oriented behaviors focuses on a culture of continuous value creation for customers which in turn contributes to superior customer service performance. Similarly, market orientation implementation enables firms to sense market trends and to respond to changing customer requirements, which in turn contributes to superior financial performance. This is consistent with views shared by extant literature (e.g., Atuahene-Gima et al., 2005; Hult et al., 2005; Kohli & Jaworski, 1990).

The key underpinning of hypotheses 1a and 1b rests with the argument that the firms that practice high degree of market orientation implementation are in a better position to effectively generate, disseminate, and respond to changing market needs and to serve customers better. Thus, there is a direct impact of market orientation implementation on firm performance. The key underpinning of hypotheses 2a and 2b rests with the argument that higher levels of market orientation implementation enables firms to identify customer needs and to develop new products quickly to solve customer problems.

This is likely to result in increased sales revenue, market share, and ultimately higher financial performance (Atuahene-Gima et al., 2005). In a similar vein, the presence of higher MO internalization enables firms to fully realize the benefits of such market-sensing, market-learning, and customer-linking capabilities, allowing them to create value to customers and proactively build long term collaborative relationships (Kirca et al., 2011). Conversely, when firms practice lower levels of internalization, market oriented values are neither internalized nor culturally adopted which may lead to poor performance irrespective of MO implementation levels. Hypothesis 3 where a third moderating variable was introduced to moderate the mediating relationship between market orientation implementation and internalization was not supported.

To better explore the relationships surrounding the construct of learning orientation, several additional tests were conducted. Support was found for the direct effect of learning orientation on both financial performance (effect = 0.5288, p < 0.01) and customer service performance (effect = 0.2964, p < 0.01) both having a 95% bias corrected bootstrap confidence interval above zero based on 5000 bootstrap samples (0.2469 to 0.8107 for financial performance and 0.1293 to 0.4636 for customer service performance). Support was also found for the mediating role of learning orientation on implementation – performance relationship (simple mediation analysis using Hayes Process model 4; indirect effect of X on Y through M (ab) of 0.213 for financial performance; 0.283 for customer service performance; 95% bias-corrected bootstrap confidence interval is 0.0618 to 0.3764 for financial performance and 0.1647 to 0.4240 for customer service performance). However, support was not found for the moderating role of learning orientation on implementation – performance relationship (Hayes Process model 1; regression coefficient of the interaction MO implementation x learning orientation was -0.0296, p = NS for financial performance and -0.0435, p = NS for customer service performance; 95% bias corrected bootstrap confidence interval for the moderating effect of learning orientation is -0.2338 to 0.1747 on MO implementation-financial performance and -0.1884 to 0.1014 for MO implementation-customer service relationship).

The lack of evidence for the moderation effect or the moderated mediation effect of learning orientation is not surprising. The literature has struggled to reach consensus regarding the nature of causality between the constructs of market orientation and learning orientation (Farrell & Oczkowski, 2002). Extant literature has been mixed on the role of learning orientation: with some studies showing direct impact on performance (e.g., Baker & Sinkula, 1999; Farrell & Oczkowski, 2002), others finding mediation or moderation effects of learning orientation

on performance (e.g., Baker & Sinkula, 1999; Liu, Luo, & Shi, 2002). There are also studies that have found no significant impact of learning orientation on performance. Farrell and Oczkowski (2002) argued that both market orientation and learning orientation have impact on performance, thereby making a case for analyzing market orientation and learning orientation together on a common ground. The lack of evidence for the moderated mediation effect of learning orientation on MO implementation/ MO internalization relationship may also be explained intuitively given the study setting used in the current research. The direct mail industry, until recently has been very static, mature, traditional, placid, and fragmented. The shift in consumer preferences from physical to digital communication has forced many firms in this industry to transform rapidly. Farrell (2000) argued that organizations that are able to appreciate the value of timely and relevant information (market oriented) will already be intelligent enough to challenge existing assumptions about the way the market operates.

Additional tests were also conducted to see if internalization has a direct effect on performance and if it mediates the relationship between internalization and performance. Internalization was found to have a positive effect on customer service performance ( $c11 = 0.52$ ,  $p < 0.001$ ,  $CI = 0.3435$  to  $0.7057$ ) but not on financial performance ( $c11 = 0.23$ ,  $p = 0.051$ ,  $CI = -0.0005$  to  $0.4659$ ). It is important to note that the test of the direct effect of Internalization on Financial performance was very close to significance ( $p = 0.051$ ) having effect size of 0.231 (low), and 95% bias-corrected bootstrap confidence interval – 0.0005 to 0.4659 (contains zero pointing to a statistically non-significant relationship). However, when implementation was introduced as a mediator between internalization and performance, it strengthened the relationship between internalization and financial performance as well as customer service performance (95% bias-corrected bootstrap confidence interval 0.3237 to 0.7253 for financial performance and 0.1299 to 0.3584 for customer service performance). It furthers the argument that internalization and implementation are distinct components, one complementing the other.

### 5.1. Theoretical contributions

The current study views the construct of market orientation as multi-dimensional by integrating both the behavioral and cultural perspectives of market orientation. The extant literature has predominantly viewed market orientation as either a cultural or behavioral construct. The current study focuses on an integrative framework - that provides a more nuanced understanding of the market orientation concept and its complex relationships with performance (Kirca et al., 2011). This paper contributes to the market orientation body of knowledge by empirically applying implementation and internalization dimensions to a firm's market orientation practice. The implementation and internalization dimensions have been widely employed in prior studies in the adoption of organizational practices (e.g., technology implementation or internationalization of a corporate practice) but to a lesser extent in marketing and very rarely in market orientation domain. By introducing internalization as a mediator between market orientation implementation and firm performance relationship, the current study attempts to bring together the behavioral (i.e., the actual implementation of the practice) and an attitudinal component (i.e., the internalized belief in the value of the practice) a concept predominantly employed in organizational research.

The current study empirically tests Hayes (2013) mediation, moderation and conditional process analysis with PROCESS macro using a unique dataset from an industry that is undergoing an unprecedented transformation from physical to digital communication. In addition, authors test variables in multiple ways as it applies to market orientation literature (i.e., by looking at various direct, mediating, and moderating relationships) using appropriate PROCESS models. As Hayes PROCESS model is relatively new and becoming popular, future researchers may benefit from varied application of these models and the

context in which they have been used in the current study setting. PROCESS analytically integrates mediation and moderation analysis into a unified statistical model (Hayes, 2016) as opposed to separate moderation analysis (testing the contingencies of an effect) or mediation analysis (testing the mechanism by which an effect operates). The research model includes total effect (main direct paths) between market orientation implementation and firm performance operationalized as financial performance and customer relations performance. In addition, the model predicts the indirect (mediating) effect of market orientation internalization and conditional indirect effect (moderated mediation) of learning orientation. Although all these procedures can be conducted with any OLS regression program, the PROCESS model makes the analysis easy and summarizes relevant information using SPSS or SAS. As Hayes PROCESS model is relatively new and becoming popular, future researchers may benefit from the model and methodology used in the current study. In addition, studying the market orientation implementation and internalization aspects of a direct mail industry - that is rapidly changing, century old, fragmented - and methodically learning their responses to rapid technological and environmental turbulences – will help further contribute to theory development.

### 5.2. Implications to practice

As the present study is conducted in a direct mail/marketing services provider industry, it greatly contributes to practitioners who are in the midst of physical to digital transformation and are looking for ways to reinvent their business to stay relevant and to avoid being cannibalized by innovative startups in the digital realm. The state of disarray opens the door for print service providers to transform their businesses and expand their capabilities beyond print to address these new opportunities (Foley Jr, 2011) and play a larger role in the marketing value chain. Some of the leaders in this industry have pioneered innovative products to reap positive results omni-channel coupon delivery via mobile and wearable devices, augmented reality, mobile wallet, and so on. The relatively placid nature of this industry, until recent years, has very likely led firms in this industry to resist investing in key marketing capabilities. As a result, many firms are likely playing catch up in responding to fast changing customer preferences and competitor offering while others likely are in decline. This changing landscape underscores the importance of effectively interacting with the market environment in order to obtain an advantage. It is imperative that service providers become more market oriented in their offerings and better tailored to their customers' needs, wants, tastes, and preferences. In addition, they should build market-sensing as well as organizational capabilities to quickly adapt to emerging changes in the market.

Kumar et al. (2011) analyses indicated that market orientation has a positive effect on business performance in both the short and the long run; that the firms that are early to develop a market orientation benefit the most; and that the benefits are enhanced over time under intense competitive conditions. The current study clearly establishes that firms that exhibit higher levels of market orientation implementation and internalization have superior financial and customer service performance. The study points out that implementation or internalization of market orientation should go hand in hand and complement each other to achieve overall performance.

In a turbulent environment marked with physical to digital transformation and rapidly evolving technologies, market orientation should be viewed as “cost of competing” (Kumar et al., 2011) based on which companies either innovate or die. Digital technologies have made it easy to quickly generate and disseminate information especially in this industry. However, it is important that senior managers are not overburdened with vast amounts of data and instead cut through the clutter and focus on actionable information to effectively respond to a rapidly changing workplace (Kohli, 2017). It is also equally important that senior managers enable and foster internalization of market orientation

as it complements the implementation of market-oriented behaviors (Kirca et al. (2011) and work synergistically to achieve higher performance.

### 5.3. Research limitations and future research

The study has certain limitations and avenues for future research. First, the study is conducted in one specific industry setting – direct mail service provider marketplace. As such, caution should be exercised in generalizing the findings. Many of the moderators and mediators employed in the extant literature (e.g., market turbulence, technological turbulence, competitive intensity, supplier power) do not apply to a single-industry study. Second, the current study is a snapshot of firm performance at a given point in time. Therefore, it ignores the time-varying impact of market orientation on firm performance. Future research may explore the longitudinal effects of market orientation on firm performance, particularly in an industry that's undergoing a major transformation. Third, the current study is based on survey responses containing subjective measures of performance measures. The firms in this industry are predominantly private and objectives performance measures could not be obtained. Although it is common to use subjective measures in market orientation research, future studies may benefit from the use of objective measures sourced from secondary sources, if available. Subjective performance data reflect the imperfect information and biases inherent in judgmental assessments of any kind. In contrast, objective data are, by definition, accurate and bias-free.

Recent work in marketing strategy has pointed to the need for marketers to identify and manage a diverse set of stakeholders (Ferrell, Gonzalez-Padron, Hult, & Maignan, 2010; Greenley & Foxall, 1996) —a stark contrast to the traditional view where customers are the most important stakeholder group and other stakeholders are considered important only in the context of the customer's perspective (Day, 1994; Narver & Slater, 1990), and not from a larger societal viewpoint (Ferrell et al., 2010). Diverse sets of stakeholders—employees, customers, shareholders, regulators, and suppliers—may have specific expectations of the organization (Kumar, Subramanian, & Yauger, 1998). Felix (2015) analyses showed positive relationship between Corporate Social Responsibility (CSR), market orientation, corporate relationship, innovation, and employee commitment, indicating that companies with high levels of market orientation also attain high levels of CSR. The notion of “market orientation plus” put forth by Hult (2011) calls for elevating market orientation efforts to incorporate additional stakeholders plus CSR. Further research may explore varying levels of implementation and internalization of market orientation to satisfy the demands of an organization's myriad stakeholders.

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