Evaluating channel partner's performance: impact of task environments on the relevance of measurement metrics

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Abstract

Purpose – The purpose of this paper is to develop a nuanced framework for evaluating a channel partner's performance in distribution channel relationships. Given a channel partner's task environment characteristics (high/low munificence, dynamism and complexity), the study examines which performance metrics (output, activity or capability) are most relevant for evaluating its performance levels effectively.

Design/methodology/approach – The study adopts self-administered cross-sectional survey-based research design. Matched data were collected from 252 channel partners – manager relationship dyads. The latent change score (LCS) model within SEM framework provides mean paired-differences of the relevance ratings for each metrics. This was used to assess the empirical validity of the hypothesized relationships.

Findings – The study demonstrates the importance of calibrating performance evaluation metrics to a channel partner's task environment state, made possible by its holistic approach to performance evaluation. Based on an extensive analysis, it shows that no single metric is relevant within all environmental states; rather, it could be dysfunctional, a result that differs from vast majority of the literature.

Research limitations/implications – Investigates individual linkages between task environment dimensions and performance metrics to provide a fuller understanding of these relationships. Also provides a theoretical framework to support further research on the topic.

Practical implications – The study provides managerial guidelines (and extensive graphical analysis) for nuanced and dynamic evaluation of channel partners' performance that can enable firms to identify and promote their most valuable channel partners and prevent the deterioration of others.

Originality/value – First one to develop and empirically validate a nuanced framework for evaluating performance of exchange partners that operate under diverse task environment states.

Keywords Performance evaluation, Task environment, Measurement metrics, Channel partner's performance

Paper type Research paper

1. Introduction

Understanding and managing channel partners' performance is fundamental to governing channel relationships and distribution networks. Accordingly, firms regularly spend huge amounts of time and resources on evaluating the performance of their channel partners to understand which channel relationships are valuable and to identify the inputs required by other relationships to make them valuable. Substantial research in the distribution channel domain has proposed multiple dimensions of channel partner performance and frameworks to better understand its nature (Barringer and Harrison, 2000; Das and Teng, 2000; Kang *et al.*, 2018). However, much of this literature promotes homogeneous performance metrics for evaluating channel partners across the network, implying that different performance dimensions will be similarly relevant for evaluating all channel partners, independent of their external task environment conditions and other individual differences. More recent research has instead suggested the importance of channel partners' task environments as a means of understanding their performance levels, such that certain performance metrics might be more relevant for performance evaluation in some task environments than in others (Flaherty *et al.*, 2007; Goll and Rasheed, 2004; Kabadayi, *et al.*, 2007). This concept is particularly important for firms operating large distribution networks, wherein channel partners are scattered across distinct markets and exposed to different task environment conditions (Mitręga, 2012).

External task environments are dynamic, and as different channel partners face different task environments, certain performance metrics might be more relevant than others for specific channel partner relationships. However, very little research explains how different performance metrics vary in their relevance for evaluating channel partners and enhancing

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their performance through identifying core areas of improvement. To fill this gap and contribute to the distribution channel literature, we adopt a nuanced framework that investigates the relative relevance of various performance metrics across different task environment states. Specifically, we ask the following question: Given a channel partner's task environment characteristics, which performance metric is the most relevant for evaluating its performance levels effectively?

Prior research has acknowledged that channel partners in distribution networks may operate within widely distinct task environment conditions (Andrews, 2009; Palmatier *et al.*, 2016; Paswan and Young, 1999). It also identifies three dimensions of task environments, i.e. munificence, dynamism and complexity that have often been used to study the influence of task environments on other channel variables, investigating one construct at a time or examining their isolated effects (Chenhall and Langfield-Smith, 2007; Dess and Beard, 1984). This stream of research is useful for studying the impact of task environments on channel outcomes because it describes the underlying mechanisms for these interactions, uncovers patterns of influence and identifies critical variables responsible for the influence.

Although the study of task environments in channel relationships has greatly advanced the knowledge of environments' influence on channel processes and structure, most studies have focused on individual characteristics of task environments in isolation and do not present an integrative framework for performance evaluation metrics (Webb and Hogan, 2002). To address this gap, in the current research, we combine the three major characteristics of task environments – i.e. munificence, dynamism and complexity – and three most studied dimensions of performance – i.e. output, activity and capability (Goyal and Mishra, 2016; Joshi, 2009; Spriggs, 1994) – to conceptualize an integrative framework for channel partners' performance evaluation. We present an adaptable model for the evaluation and management of channel partners' performance in accordance with the external task environment characteristics that are under managerial control. We draw empirical validity for our model through a cross-sectional survey-based matched data from 252 channel manager–partner dyads in the Indian automobile industry. We used the latent change score (LCS) model within the structural equation modeling (SEM) framework to assess empirical supports for the hypothesized relationships.

This research contributes to the distribution channel literature in at least four main ways. First, our framework provides a holistic approach to the performance management of individual channel partners using theory-rich multi-dimensional performance metrics. These metrics capture important information about their current and future contributions to business rather than reducing them to a few indiscriminately chosen indicators, as much of the extant research has done (Chang and Wang, 2008; Lubieniecki and Desrocher, 2004). Our three theoretically based characteristics of channel partners' task environments capture the subtle but important differences between channel partners who may appear similar when compared only with transactional characteristics or a single parameter. Therefore, our approach to performance evaluation has important implications for performance management of channel partners across diverse networks.

Second, our framework emphasizes the importance of calibrating performance evaluation metrics to each channel partner's task environment state, made possible by our more holistic approach to performance evaluation. This aspect of our study contrasts with the vast majority of the literature, which simply evaluates all channel partners on the same performance metric (mostly output-based), with the apparent assumption that its relative effectiveness is the same across different task environment states. This assumption can lead to potential inefficiencies in performance evaluation and control.

Third, on the basis of our conceptualization, we developed and empirically tested a framework that is parsimoniously described with three task environment characteristics (munificence, dynamism and complexity) and three performance metrics (output, activity and capability). Each task environment characteristic is divided into high and low state that captures the actual market conditions faced by channel partners. Through our framework, we provide nuanced managerial guidelines for designing and implementing channel partner-specific performance evaluation metrics. Accordingly, we demonstrate that a "blanket" approach to performance evaluation, which disregards channel partners' task environments, is not efficient. Our research framework and results indicate there is no single most relevant performance metric. Firms must realize that emphasizing the same performance metrics for all channel relationships does not lead to effective performance evaluation; instead, it can mislead them into suboptimal levels of overall performance.

Fourth, our research provides unique insights into the discipline of performance measurement metrics, which has received limited attention in distribution channel research to date. As Spriggs (1994, p. 338) notes, "Limiting the definition and measurement of performance to outcomes only, or to a single measure (specific or global), would have failed to capture important facets of performance". Based on our extensive analysis, we show that the output-based evaluation is not relevant within all environmental states; rather, it could be dysfunctional, a result that differs from much of the earlier literature (Ambler *et al.*, 2004; Chang and Wang, 2008).

2. Theory and hypotheses

We first review the construct of channel partners' performance and its specific dimensions; then, we summarize the literature on channel partners' task environments and their characteristics. Drawing on these two main concepts and using the channel relationship principles, we conceptualize a theoretical framework for the effective evaluation of channel partners' performance based on their task environment states.

2.1 Channel partner's performance

Distribution channels are network of entities, often independent, that are directly involved in the distribution of goods, services and information from the source to the downstream channel partners and customers. Like most inter-firm arrangements, channel partners enter the partnership to enhance their own competitive position and to pursue their individual business objectives (Barringer and Harrison, 2000;

Das and Teng, 2000), which may not align with the focal firm (Celly and Frazier, 1996; Davies and Walters, 2004). Given channel partners' distinct goals, expectations, resources and knowledge, distribution networks are ripe for agency-related problems (Fayezi *et al.*, 2012; Ketchen and Hult, 2007).

To control channel partners' behavior and align their objectives with their own, firms deploy intricate performance evaluation and control systems. The success of performance evaluation systems in controlling channel partners' behavior rests on the relevance of the measurement metrics (Kumar *et al.*, 1992). The choice of performance evaluation metrics is critical for at least four reasons. First, the metrics act as an implicit control tool signaling toward what is valued by the firm, and therefore inducing channel partners to focus their resources and efforts in the desired direction (Celly and Frazier, 1996). Consistent with the traditional thinking of "you get what you measure", Oliver and Anderson (1994) suggest that firms excel at what they emphasize in performance evaluation. Second, contextually relevant performance metrics can help firms identify those channel partners that are truly contributing to the firm's business objectives. This identification can help firms optimize their resources and managerial attention in developing more productive relationships with valuable and contributing channel partners. Third, firms can also accomplish a more equitable distribution of rewards to channel partners; therefore, they can keep channel partners positively motivated for future performance. Fourth, contextually relevant performance metrics would generate robust corrective feedback for channel partners. Therefore, firms could easily monitor and calibrate channel partners' activities in accordance with the dynamic task environment states.

Literature on channel partners' performance evaluation identifies a variety of measurement metrics such as sales generated, cooperation offered, inter-firm assistance, return on assets, profit and market share garnered, inventory levels, cost and wastage rate (Goyal and Mishra, 2016). The literature also identifies many other softer dimensions of performance such as dealer behaviors, operational performance and competence measures (Chelariu *et al.*, 2014). As the number of performance measurement metrics has multiplied in the literature, it has become increasingly complicated to identify relevant metrics for effective evaluation. To address this gap, scholars have tried to consolidate these distinct performance measures into broader metrics of channel partner performance, i.e. output, activity (behavioral) and capability performance measures (Challagalla and Sherwani, 1996; Goyal and Mishra, 2016; Spriggs, 1994). Drawing from this stream of literature, we use three performance measurement metrics – i.e. output, activity and capability – in our research.

Output performance metrics focus on business results or outputs of the dealer. These are often short term, tangible and financial in nature, reflecting past actions rather than being suggestive of future performance. Activity performance metrics focus on behavior and the dealer's attitude toward customers and the dealership. This metrics is oriented toward a dealer's activities in the present time frame. Measuring this metric is based on the premise that certain behaviors and attitudes may be crucial for the success of channel relationship, e.g. initiatives taken, cooperation offered, adaptability and flexibility, self-marketing and promotion efforts, experience and knowledge of product and customer relationships. Finally, capability performance metrics focus on the channel partners' resources and manpower capabilities that act as indirect enablers for future performance. These metrics capture a channel partners' long-term commitment to the firm and their future performance potential (capability). Additionally, capability metrics capture the channel partner's underlying ability to set up the best practice and processes that indirectly enhances their performance in operational and non-operational domains (Joshi, 2009; Goyal and Mishra, 2016). For example, based on the specific industry context, capability performance indicators could be the number of sales persons and their skill levels, inventory capacity, investments in other resources, such as inventory management systems, enterprise resource planning packages and other operational and non-operational assets.

These three metrics are not seen as substitutes for each other but rather are considered independent dimensions of performance (Barringer and Harrison, 2000; Das and Teng, 2000). Although these metrics are measures in the present time, they can also be differentiated based on their time orientation, i.e. output metrics are a function of the past (how well the dealer did what it were supposed to do), activity metrics are oriented toward the present activities of the dealer that helps it in generating superior performance and capability metrics are targeted toward the resources and skills of the dealers that would be critical for future performance gains.

Although the literature recognizes various dimensions of channel partner performance, it is silent on their appropriate usage for effective evaluation and control of channel partner's performance. In our extensive review of literature, we did not find any framework to guide the appropriate use of these performance dimensions, i.e. which dimension is most relevant (and thus must be emphasized) for channel partners' evaluation facing specific task environment conditions. In this study, we develop and test a conceptual framework for the fit between the task environment characteristics and the relevance of the three performance metrics. The key premise is that the fit between performance metrics and the channel partner's task environments will result in superior relationship outcomes.

2.2 Organizational task environments

Distribution channel relationships are often complex and are shaped by numerous external and internal factors. Channel partners' task environments are identified as one of the key external contingencies in distribution channel relationships (Dwyer and Oh, 1987; Olson *et al.*, 2005). Literature suggests that "the channel context [...] may have an impact on the relative importance of the different criteria" used for evaluating channel partners' performance (Kumar *et al.*, 1992, p. 249). Therefore, effective performance evaluation in channel relationships must correspond to the prevailing task environment characteristics (Flaherty *et al.*, 2007).

Organizational task environments are important constructs extensively studied in the distribution channels literature (Andrews, 2009; Boyd and Gove, 2006; Olson *et al.*, 2005). These environments are recognized as important constructs in the distribution channel literature that influence channel strategies (Palmatier *et al.*, 2016), channel structures and processes (Goll and Rasheed, 2004) and managerial decision-making in channel relationships (Anderson and Oliver, 1987).

Recent research also suggests that channel partners' task environments can influence the relative relevance of different performance metrics used for their evaluation (Chenhall and Langfield-Smith, 2007).

Literature on task environment analysis emphasizes that it is a multidimensional construct (Bierly and Daly, 2007). Various dimensions of task environments – i.e. environmental dynamism (Kabadayi *et al.*, 2007), munificence (Andrews, 2009), complexity (Meier and Bohte, 2003), competitive intensity (Ju and Zhao, 2009), etc. – are studied separately or in conjunction with one another. Dess and Beard (1984) proposed three key dimensions of task environments, i.e. munificence (the capacity measure), complexity (the homogeneity–heterogeneity and concentration–dispersion measures) and dynamism (the stability–instability or turbulence measure). These three dimensions are widely accepted in the distribution channel literature for analyzing task environments (Boyd and Gove, 2006) and are considered more inclusive than other simpler dimensions (Chen *et al.*, 2017). Therefore, for the purpose of this study, we follow the Dess and Beard (1984) framework for task environment states.

Munificence is conceptualized as the extent to which the external environment is rich (or poor) in terms of resources and consumer demand and the extent to which these are available to the focal firm (Achrol and Stern, 1988). Dynamism in task environments refers to both the frequency and unpredictability of changes (Homburg *et al.*, 1999; Kabadayi *et al.*, 2007). Complexity refers to the number and diversity of actors in the task environments (e.g. suppliers, buyers and competitors) that decision-makers must consider (Meier and Bohte, 2003).

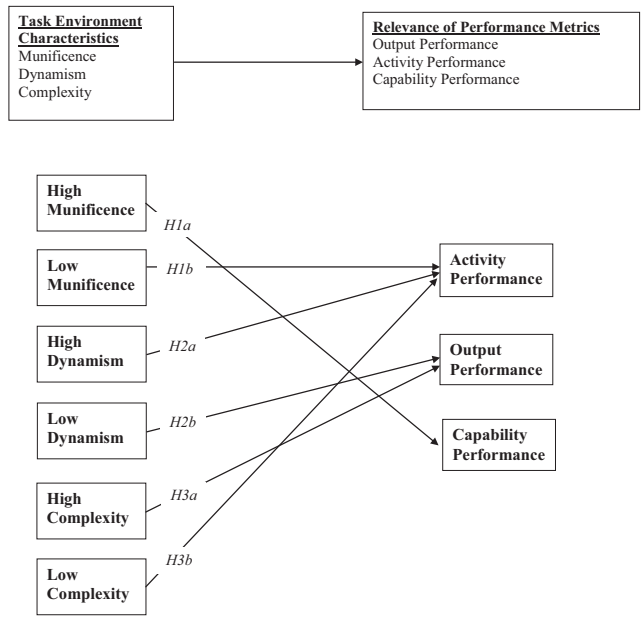
2.3 Hypotheses development: task environments and performance measurement metrics

Literature on channel partners' performance indicates that the relevance of measurement metrics is influenced by several factors, including channel partners' task environments (Chen *et al.*, 2017; Goll and Rasheed, 2004; Kabadayi *et al.*, 2007). While channel managers may use multiple performance metrics, some metrics would be more relevant compared to others based on channel partners' task environment characteristics (Flaherty *et al.*, 2007; Huang *et al.*, 2015; Rosenbusch *et al.*, 2013). This study focuses on the influence of the three dimensions of task environments – i.e. munificence, dynamism and complexity – on the relative relevance of the three performance metrics, i.e. output, activity and capability (please see Figure 1.

2.3.1 Munificence

A highly munificent task environment presents strong demand and high market opportunity for profit and growth (Dwyer and Oh, 1987). Earlier studies have found a relationship between market munificence and firm)behavior and strategy (Homburg *et al.*, 1999; Kabadayi *et al.*, 2007). Influence of munificence in task environments has also been duly recorded in the context of channel management (Dwyer and Oh, 1987). Munificent markets are likely to have an abundance of market opportunities and high consumer demand, and hence, we argue that it would be futile to emphasize output performance for channel partners operating within such task environments. Channel partners would find it easier to generate high levels of outputs under such conditions, and their outputs can be attributed to the heightened market demand (Andrews, 2009). The output thus generated may be driven by external factors rather than by channel partners' deliberate actions/efforts. Therefore, output performance may not reflect the true level of their efforts and performance.

Figure 1 Research framework and hypothesized model



Similarly, owing to high opportunities for growth and profit, channel partners may generate equivalent levels of output performance through distinct set of activities. Emphasis on particular channel activities by the supplier firm may be perceived as an unwarranted intervention and deprivation of autonomy (Heide *et al.*, 2007) by channel partners. This perception can beget psychological "reactance" from channel partners and inhibit their motivation to perform further (Grewal *et al.*, 2013).

Managers' perceptions of environmental munificence would direct their attention toward resource allocation to secure future inflows (Castrogiovanni, 1991). Additionally, as perceived munificence increases, the perceived decision-making uncertainty would decrease (Achrol and Stern, 1988). In such a market, channel managers may be inclined to maximize their leverage on the heightened profit opportunity for continued future performance. However, channel partners' capability (resources and skills) may put indomitable constraints on their ability to take such leverage in the future. Furthermore, channel managers may realize that such periods of munificence may not last for long, especially in emerging economies that are notorious for frequent upheavals. Hence, munificent task environments can be used as a period to build channel partners' capabilities for future performance gains (Barringer and Harrison, 2000; Das and Teng, 2000). This can be stressed by channel managers though increased emphasis on capability performance measures while evaluating a channel partner's performance, which is aligned with the traditional thinking of "you get what you measure" (Oliver and Anderson, 1994).

Therefore, we predict that, in high munificent environments, capability performance metrics would be more relevant relative to output and activity metrics for performance evaluation. This prediction is also consistent with the transaction cost theory (Williamson, 1979, 1981), i.e. during a high growth market, channel partners are more easily persuaded to invest in capability building because the perceived investment risks are less. Adopting this line of argument, we hypothesize that during periods of high munificence, channel managers would place higher relevance on capability metrics compared to other performance metrics:

H1a: Among all performance metrics, capability performance metrics have the highest relevance within a task environment state characterized by high munificence.

In low munificence markets, emphasizing capability performance may be futile for enhancing channel partners' capabilities (Williamson, 1981). Furthermore, emphasis on output performance measures may signal a supplier firm's lack of concern for its channel partners. This perception can generate a "reactance effect" (Grewal *et al.*, 2013) that can lead to lower levels of relationship satisfaction and performance. On the other hand, specifying channel activity in low munificent markets is likely to indicate a firm's support and commitment to its channel partner's business that can trigger a "commitment effect" (Grewal *et al.*, 2013). This effect can enhance solidarity in channel relationships and maintain channel partners' motivation for continued efforts and higher performance under the constraint of low market munificence. Therefore, we hypothesize that:

H1b: Among all performance metrics, activity performance metrics have the highest relevance within a task environment state characterized by low munificence.

2.3.2 Dynamism.

Market dynamism is a determinant of perceived unpredictability that has been extensively studied in channel literature (Dess and Beard, 1984; Kabadayi *et al.*, 2007). High dynamism in task environments is characterized by rapid and unpredictable changes (Homburg *et al.*, 1999) that engender high levels of "state" uncertainty for decision-makers (Milliken, 1987). Channel managers require a certain degree of environmental stability to plan and direct resources effectively (Bordia *et al.*, 2004). High "state" uncertainty can amplify decisional overload; thus, it inhibits channel managers' abilities to take a long-term strategic view toward channel partner relationships (Celly and Frazier, 1996). Disquieted by high "state" uncertainty, channel managers will find it difficult to identify specific capability measures (resources and skills) that would be necessary for achieving long-term performance.

Furthermore, emphasizing the output levels for performance evaluation may be equivalent to holding channel partners responsible for unpredictable external factors which could lead to dissatisfaction and dysfunctional behavior (Celly and Frazier, 1996). Additionally, within highly dynamic task environments, output performance measures are unlikely to serve any "goal clarity" (Stouthuysen *et al.*, 2012) or motivational roles for channel partners. Additionally, as per the agency theory (Fayezi *et al.*, 2012), it is argued that channel partners would also expect higher compensation (e.g. higher margins or lower targets) within uncertain environments to compensate for higher assumed risks (Anderson and Oliver, 1987). Therefore, channel managers may find it unfeasible or extremely costly to emphasize output performance metrics within task environments characterized by high dynamism.

Owing to their broader experience across different markets and aggregated market knowledge, channel managers are in a better position to identify the channel activities that can help channel partners attenuate the ill effects of dynamic task environments on their performance (Celly and Frazier, 1996). Additionally, it suggests that, when faced with environmental dynamism, channel managers are likely to get risk averse and opt for more controlling and internally focused performance measures, i.e. activity-based performance. Therefore, based on these arguments, we are inclined to predict that:

H2a: Among all performance metrics, activity performance metrics have the highest relevance within a task environment state characterized by high dynamism.

Low dynamism in task environments could make it easier to predict possible business scenarios and spell out future contingencies (Bordia *et al.*, 2004). In such a market, channel partners' output is an unambiguous observable consequence of their efforts and activities (Heide *et al.*, 2007). Therefore, in such a task environment, emphasizing output measures would encompass the information of a channel partner's activities too (Boyd and Fulk, 1996). Furthermore, under a predictable task environment, it would be easy for channel managers and channel partners to agree on the best practices and channel activities for superior performance. Therefore, evaluating channel partners on activity performance metrics would be akin to measuring the degree of compliance which may not reflect their true performance and fail to differentiate between channel partners.

In a predictable and stable task environment, channel partners' capability (access to resources) is also not likely to be a major differentiator due to its reduced criticality (Joshi, 2009). Additionally, based on the principle of direct proportionality of risk–rewards, less dynamic markets (and therefore less risky) are likely to yield lesser reward opportunities, which can further inhibit the use of capability performance metrics (Bordia *et al.*, 2004). Therefore, capability metrics are not likely to be a true reflector of their efforts and performance.

Emphasizing the output performance for channel partners "approximates a market contracting arrangement" that is an efficient control system generating superior overall performance (Anderson and Oliver, 1987, p. 76). Furthermore, emphasizing the output performance measures will lessen the burden on channel managers that can motivate them to devote more resources for environmental scanning (Boyd and Fulk, 1996). This result can support channel partners in achieving higher overall performance. Therefore, we hypothesize that:

H2b: Among all performance metrics, output performance metrics have the highest relevance within a task environment state characterized by low dynamism.

2.3.3 Complexity

Complexity in task environments refers to the diversity and number of environmental factors such as competitors, suppliers, regulators, buyers and others that influence decision risk. High complexity can blur the cause–effect relationships between the factors (Baldauf *et al.*, 2005); thus, it inordinately increases "response" uncertainty in task environments (Milliken, 1987). Within such task environments, supplier and channel partners would find it difficult to agree on common goals and strategies (Atuahene-Gima and Li, 2002). This difficulty can lead to higher perceived decision risk and heightened perceptions of conflict. Tighter and more formal controls must be enforced if the goals of the two parties within an exchange are not compatible (Pandey and Rainey, 2006).

Furthermore, perceptions of high complexity can also enhance the awareness of multiple and potentially conflicting organizational goals that the channel partners are supposed to meet (Pandey and Rainey, 2006). The "goal ambiguity" related to the perceptions of high complexity may result in channel partners' poor performance as they struggle to achieve a myriad of competing objectives (Chun and Rainey, 2005).

Obscure cause-and-effect relationships will make it difficult for channel managers to identify specific best activities or capabilities for channel partners. As managers cannot preemptively know which activities or capabilities would be aligned with a firm's organizational objectives and which would not, these performance metrics would be futile to emphasize. The ambiguous knowledge of what activities lead to improved overall performance or what resources or skills are critical for future performance will further impede the use of activity or capability performance metrics.

High market uncertainty due to high complexity will also constrain managers in foreseeing all plausible business scenarios (Katz-Navon *et al.*, 2016). This uncertainty will render them unable to prescribe specific capability metrics (investment in developing specific resources and skills) to channel partners because it is associated with high risk of misconceived investments or investments becoming obsolete before breakeven (Williamson, 1979, 1981). In a task environment characterized by high complexity and blurred cause–effect relationships, channel managers must rely on objective performance measures that are an unambiguous representation of a channel partner's efforts and performance levels (Baldauf *et al.*, 2005). Therefore, we argue that, as the complexity in channel partners' task environments increases, channel managers are likely to rely more on short-term bottom line-oriented performance metrics, i.e. output performance metrics. We hypothesize this relationship as:

H3a: Among all performance metrics, output performance metrics have the highest relevance within a task environment state characterized by high complexity.

Conversely, the cause–effect relationships between environmental factors will be better understood when there is low complexity in the task environments. Therefore, channel managers will be in a better position to identify and prescribe day-to-day channel activities that can align channel partners' efforts with suppliers' organizational goals. Emphasizing activity performance measures can also trigger a "commitment effect" for channel partners (Grewal *et al.*, 2013) that can lead to further enhanced performance. This may not be achieved if channel managers emphasize only the end goals, i.e. objective, output-based performance measures. Also, under a simpler (less complex) task environment, the cause-and-effect relationships between the channel activities and their output implications are better understood. Therefore, as per the agency theory (Fayezi *et al.*, 2012), it would be more cost-effective for channel managers to emphasize activities rather than outputs because they will not have to compensate channel partners for assuming the unaccounted market uncertainty (Anderson and Oliver, 1987).

Besides other counter possibilities, less complex market can also attract more competition because of lower entry barriers. Therefore, such markets will have shrinking profit opportunities over time. It would be futile to emphasize capability building under such task environments for at least two reasons, i.e. given high competition and low profit, channel partners may not have sufficient resources or incentive to invest in capability building for securing future performance potential and capability may also not be the most critical enabler for channel partners' performance under a simpler (less complex) task environment because, as markets get simpler, the competitive advantage of having specific resources gets blurred (Ciarli *et al.*, 2007). Therefore, based on the above arguments we hypothesize:

H3b: Among all performance metrics, activity performance metrics have the highest relevance within a task environment state characterized by low complexity.

3. Methodology

3.1 Sample and data collection

Empirical data for testing our research hypotheses were collected in India – a prominent emerging economy. The emerging market context is suitable for testing our research framework because, compared to the most developed markets that are regularized and standardized, emerging markets such as India have a reasonable degree of variation in their task environments. This presents a unique and interesting research context for this study.

The chosen research context for data collection was the distribution network of automobiles (four-wheeler). India's automobile industry is a vibrant industry in which most global brands have a presence (SIAM, 2015). Its distribution network typically consists of the focal manufacturers and exclusive distributors (or dealers). These distribution networks are appropriate for testing our research model for at least three reasons. First, we expect to receive high variability on task environment characteristics in the data as they come from the nationwide network of automobile dealers. Second, we expect the respondents (i.e. channel managers) to be knowledgeable about the research issue because, in automobile distribution, manufacturers are in the role of channel leaders with formal authority to evaluate channel partners' performance on a regular basis. Lastly, automobile companies are large corporate bodies with sufficient resources and streamlined dealer performance management functions, which is a resource-demanding exercise (Celly and Frazier, 1996). Therefore, we

expect to have a sufficiently large target population for data collection.

Data for the study were collected from various automobile firms in India. The participating firms have a combined market share of 42 per cent in the utility vehicles sector. We limit the data for our study to a single industry because it helps reduce the confounding effects of multi-industry-related factors (Kabadayi *et al.*, 2007). This also allows for a closer investigation of the focal relationships by providing reasonably comparable inter-firm contracts, governance structure and environmental influences.

The unit of analysis in this study is the dyadic relationship between a manufacturing firm and its dealer, with the channel manager of the firm and the channel partners (i.e. dealers) forming the two nodes of the relationship. A self-administered cross-sectional survey-based research design was used to collect matched data from channel partners' personnel and channel managers at the focal firms. The respondents were identified based on their job responsibilities and ensuing knowledge, i.e. these managers were responsible for dealer development, channel performance and dealer performance evaluation.

For the survey, 675 channel managers were sent an e-mail invitation to participate in the study. The corresponding distributors of channel managers who agreed to participate in the survey received the matched questionnaire for recoding their responses. In total, 268 channel manager–distributor pairs participated in the survey (response rate of 39.7 per cent). After removing incomplete and inconsistent responses, the final sample of 252 (final response rate of 37.3 per cent) matched, and completed responses were retained for further analysis and hypotheses testing. The channel managers' length of service in a dealership-handling role varied between one and 23 years, with the average being eight years. All channel managers had spent a minimum of one year with their present company. The number of vehicles sold by dealers varied between 200 and 10,000, and the average age of dealership was 12 years.

3.2 Measures

The matched data for this study come from the channel manager–partner dyads that provide a comprehensive picture of the phenomenon (Gulati and Sytch, 2007). As channel managers are routinely involved in performance evaluation of their channel partners, data on the relevance of the three performance metrics (activity, output and capability) were collected from them. Channel partners, on the other hand, are involved in day-to-day operations and are in close interaction with their task environment. Therefore, the data on the task environment characteristics (i.e. the degree of munificence, dynamism and complexity in their task environment) were collected from channel partners.

The scale items for measuring task environment characteristics were adopted from the literature (cf. Dwyer and Oh, 1987; Kabadayi *et al.*, 2007) with slight modifications to suit our research context. The scale items for measuring munificence were adopted from Kabadayi *et al.* (2007), Dwyer and Oh (1987) and Dess and Beard (1984), and the responses to these items were measured on a five-point scale anchored between strongly agree and strongly disagree. Dynamism scale items were adopted from Kabadayi *et al.* (2007). Responses to the items were measured on a five-point scale anchored between very few and very frequently and between highly unpredictable and highly predictable. Complexity scale items were adopted from Kabadayi *et al.* (2007) and Homburg *et al.* (1999). Responses to these items were measured on a five-point scale anchored between strongly agree and strongly disagree. Task environment characteristics were delineated as a perceptual construct in this study. This procedure is aligned with environmental studies which contend that perceptions shape decisions (Mitchell *et al.*, 2011); thus, perceptual measures are suitable for studying managerial behavior and decision-making (Boyd and Fulk, 1996).

Scale items for measuring the relevance of performance metrics (output, activity and capability) were adopted from Challagalla and Shervani (1996) and Joshi (2009). Channel managers marked their responses to these scale items on a five-point scale anchored between not relevant to most relevant. We would like to note here that we did not measure the three performance metrics *per se*, i.e. we did not measure the level of capability (or output or activity) performance of any channel partner instead we measured only the "degree of relevance" that the channel managers associate with each of the three performance metrics. Respondents were asked to respond to these scale items considering the chosen distributor. We discarded those responses where the distributor's name was missing or did not match with the corresponding channel manager's response. Please see Table I for the scale items used in this study.

3.3 Measurement bias checks

3.3.1 Common method bias

Common method bias is a major concern for the validity of perceptual measures in empirical studies. We follow the recommendations of Podsakoff *et al.* (2003) to safeguard against common method bias in our sample. We collected data on task environment characteristics (independent variable) and performance metrics' relevance (dependent variable) from different sources, therefore eliminating the potential for common method bias. This also partially addresses the concerns of potential endogeneity in our sample (Wooldridge, 2009).

Further, to assess the degree of potential common method bias in our sample, we performed two tests. First, Harman's one-factor test using exploratory factor analysis indicated that there is no single factor that accounts for a majority of the variance, suggesting an absence of common method bias. Second, following the Lindell and Whitney (2001) test, we selected the age of dealerships as our marker variable because it is theoretically unrelated to relevance scores of the performance metrics (marker variable method). Common method bias was then evaluated by observing the Pearson correlation between the marker variable and dependent variable which was found to be not significant (r = –0.026), suggesting that common method bias in not a concern for our data.

3.3.2 Key informant and non-response bias

We controlled for key informant biases in our sample through a multiple informant approach (Krafft *et al.*, 2015). Additionally, we included a three items scale to assess the knowledge and competency of the key informants (Campbell 1955). Channel managers who had a minimum of one year association with the

Table I CFA results – task environments and performance measures

Factors	Scale Items	Std. λ
Munificence	The dealer faces strong and growing demand for the manufacturer's products	0.68
	There is no shortage of necessary resources for the dealer	0.72
	Overall, the current market as faced by the dealer is conducive/right for high profit	0.84
Dynamism	Changes in customer preferences and expectations about the product features in the four-wheeler market are unpredictable	0.66
	Changes in competitive intensity in the dealer's four-wheeler market are unpredictable	0.73
	Changes in the yearly sales volume of the above-mentioned dealer are unpredictable	0.74
Complexity	Number of different customer segments in the dealer's four-wheeler market is high	0.67
	Customer requirements vary greatly across different customer segments in the dealer's four-wheeler market	0.74
	There is considerable variety in customer profiles involved in the dealer's four-wheeler market	0.81
Activity measures	The "self-market initiatives" taken by the dealer to increase sales	0.85
	Quality of "purchase and service experience" provided to the customer by the dealer	0.76
	The number of "customer complaints" against the dealer (negatively coded)	0.66
	The level of dealer's "compliance" with the firm's policies and guidelines	0.77
Output measures	Number of units sold by the dealer	0.78
	The level of "return on investment (ROI)" generated by the dealer	0.69
	Percentage penetration of "related products" sold by the dealer	0.72
	The "committed sales volume" by the dealer	0.79
	Level of sales generated by the dealer in related and upstream businesses	0.88
Capability measures	Infrastructure and facilities at the dealer's outlet and workshop	0.83
	The number of "employees" with the dealer (adequacy of sales and service staff)	0.80
	The "quality of manpower" with the dealer (skilled and trained)	0.89
	The level of "working capital" maintained by the dealer	0.72
	The degree of "competence" of the dealer's sales team, e.g. product knowledge	0.67

Notes: Global fit indices: χ^2 = 277.287, df = 215, p-value = 0.00267; χ^2/df = 1.289, RMSEA = 0.039; GFI = 0.97; AGFI = 0.95; CFI = 0.95; NFI = 0.95; NNFI = 0.97; IFI = 0.97, N = 252

focal firm and who exhibited a score of more than three on a five-point scale for knowledge of the channel partner were considered qualified to complete the questionnaire. Furthermore, to check for the non-response bias in our sample, we followed Armstrong and Overton (1977) guidelines. We compared the first and fourth quartiles of the responses for differences in length of total service, number of years in the present company and average age of dealership. We did not find significant differences on these important measures, indicating absence of non-response bias in our sample. Furthermore, as the response rate in our survey is approximately 40 per cent, non-response bias is unlikely to be a major concern (Fowler, 2009).

4. Results

4.1 Measurement model

The scale items for measuring the focal constructs were first subjected to exploratory factor analysis (Hair *et al.*, 2010). This analysis was followed by a confirmatory factor analysis (CFA) using variance–covariance metrics (Jöreskog and Sörbom, 1996). The fit indices for the six-factor CFA model (three for the organizational environment – munificence, dynamism and complexity – and three for the performance measures – *output, activity and capability*) were within an acceptable range. The CFA results are presented in Table I.

Reliability of the scale items as assessed using composite reliability (CR) indices showed high reliability of all the scales (Fornell and Larcker, 1981; Nunnally and Bernstein, 1994). Convergent validity was assessed using the average variance extracted (AVE) for each construct. CR and AVE estimates, along with inter-construct correlation estimates, are presented in Table II. CR scores are all above 0.70 (all the Cronbach α estimates are also above 0.70), indicating an acceptable internal consistency for the scale items. Further, the AVE scores were all above the threshold level of 0.5 (Hair *et al.*, 2010; Malhotra and Dash, 2011).

The scales' discriminant validity was established using the procedure suggested by Fornell and Larcker (1981), in which the square root of AVE is compared with the inter-construct correlation estimates (Φ). The results in Table II indicate that all the diagonal elements (square root of AVE) are greater than the off-diagonal elements (i.e. shared variance between the constructs), indicating an acceptable discriminant validity. In addition, each indicator in the measurement models loaded significantly on its represented construct. Finally, the scales'

Table II Descriptive statistics, reliability, discriminant and convergent validity

Scales	*M*	*D*	*CP*	*A*	*O*	*C*	*CR*	*AVE*
Munificence (M)	*0.75*						0.79	0.56
Dynamism (D)	0.29*	*0.71*					0.75	0.51
Complexity (CP)	0.24	–0.24*	*0.74*				0.79	0.55
Activity (A)	0.19	–0.18	0.17**	*0.76*			0.85	0.58
Output (O)	0.15*	–0.23	0.10	0.25**	*0.78*		0.88	0.60
Capability (C)	–0.03	–0.10	–0.32	0.20*	0.35**	*0.79*	0.89	0.62
Mean	4.17	3.67	4.01	4.3	3.76	4.1		
S.D.	0.82	0.81	0.77	0.59	0.57	0.54		

Notes: N = 252; *$p < 0.05$; **$p < 0.01$; diagonal elements are square root of AVE

content validity was ensured through multi-stage interviews with industry practitioners. Taken together, the results of psychometric properties indicate an acceptable level of reliability, convergent and discriminant validity for the scale items in the measurement model for this research.

4.2 Structural model

The hypothesized relationships between the three dimensions of task environments and relevance of the three performance metrics were tested using the LCS model within the SEM framework (Jöreskog and Sörbom, 1996; McArdle, 2009). We split the data sample into two sub-samples based on the median values of the task environment characteristics labeling the higher-than-median group as "high" and the other group as "low". In a recent article, Iacobucci *et al.* (2015a , 2015b) provide strong support for the validity of median split analysis for testing moderation when the independent variables are uncorrelated.

LCS modeling provided the mean paired-differences in the relevance rating of performance measures (such that d_{a-c} refers to the mean paired-difference between the relevance ratings of activity and capability performance measures) within the hypothesized task environment conditions. These estimates, i.e. the mean of paired differences (d) and their significance values (p-value), were used to assess whether our data support the hypothesized relationships. The approach used to test our hypotheses through paired-difference estimates (d) from the LCS model is superior to the classical paired-sample t-tests because the LCS model allows for the variability in changes by such predictors as prior changes in other variables, whereas the paired-sample t-test assumes that the change is simply correlated with the initial levels (Grimm *et al.*, 2012). The estimates for d and p-value along with the hypothesized relationships and hypotheses test results are summarized in Table III.

The results indicate that the task environments characterized by high munificence are associated with the highest relevance of capability performance (d_{c-a} = 0.76, t-value = 2.89, p = 0.004; d_{c-o} = 1.14, t-value = 3.14, p = 0.002) and the task environments characterized by low munificence are associated with activity performance (d_{a-c} = 0.36, t-value = 2.34, p = 0.020; d_{a-o} = 0.44, t-value = 2.56, p = 0.020); thus, the results support *H1a* and *H1b*. Task environments characterized by low dynamism were found to be associated with output performance (d_{o-c} = 0.68, t-value = 2.83, p = 0.005; d_{o-a} = 0.91, t-value = 2.93, p = 0.004); thus, the results support *H2b*. However, high dynamism in task environments was found to be equally associated with activity and output performance relevance (d_{a-o} = 0.08, t-value = 1.58, p = 0.116; d_{a-c} = 1.09, t-value = 3.06, p = 0.002; d_{o-c} = 1.01, t-value = 3.02, p = 0.003), providing partial support for *H2a*. Lastly, task environments characterized by high complexity were associated with output performance (d_{o-a} = 0.32, t-value = 2.29, p = 0.023; d_{a-c} = 1.58, t-value = 3.78, p = 0.000) and task environments characterized by low complexity were associated with activity performance (d_{a-c} = 0.39, t-value = 2.37, p = 0.019; d_{a-o} = 1.35, t-value = 3.36, p = 0.001), providing support for *H3a* and *H3b*.

4.3 Post hoc analysis: integrated task environment model

Although, the previous analyses uncover important insights from the interactions between task environment characteristics (munificence, dynamism and complexity) and the relevance of the three performance metrics (output, activity and capability), it does so in an isolated manner. For example, it indicates that output metrics is most relevant under task environment characterized by high munificence; however, it does not inform on how the relative relevance of the three metrics would change if the task environment also has high/low dynamism along with high munificence and low complexity. In that respect, the previous analyses are limited to inform on relevance of performance metrics when one characteristics changes while keeping others constant. In practice, channel partners face task environments that have simultaneous interplay of all three characteristics, i.e. task environments moving from high munificence, high dynamism and high complexity to low munificence, low dynamism and low complexity, etc.

Therefore, we conduct a post hoc analysis to uncover the relative relevance of the three performance metrics with regard to different task environment scenarios. This captures the simultaneous interplay of the three task environment characteristics. To integrate the task environment characteristics into plausible market scenarios, we split the sample data into two sub-groups based on the median values of the task environment characteristics (Iacobucci *et al.* (2015a , 2015b). To form the task environment scenarios, we take dynamism and complexity as uncertainty factors that contribute toward enhanced risk in the task environment (Andrews, 2009; Boyd and Fulk, 1996) and munificence as a reward factor (Castrogiovanni, 1991). Accordingly, we get eight configurations of task environment characteristics based on the high/low levels of munificence, dynamism and complexity (see Table IV). Subsequently, these eight configurations were reduce into six distinct risk–reward profiles, i.e. task environmental scenarios, i.e.

1. high risk – high rewards;
2. medium risk – high rewards;
3. low risk – high rewards;
4. high risk – low rewards,
5. medium risk – low rewards; and
6. low risk - low rewards.

Further, the relationships between the task environment scenarios and relative relevance of the three performance metrics were analyzed using the LCS model within the SEM framework (Jöreskog and Sörbom, 1996; McArdle, 2009). We used LCS modeling to get the mean paired-differences in the relevance rating of performance measures (such that d_{a-c} refers to the mean paired-difference between the relevance ratings of activity and capability performance measures) within each of the six task environment scenarios. These estimates, i.e. the mean of paired differences (d) and their significance values (p-value), were used to assess which performance metrics are the most and least relevant under each of the scenarios. The estimates for d and p-value for each of the task environment scenarios are summarized in Table VI.

The results indicate that the task environment scenario characterized by high risk – low reward is associated with the

Table III Test of hypotheses – LCS model

Hypothesis	Task environment	Paired difference tested	SD (*d*)	*t*-statistic	*p*-value	Test result
H1(a)	High munificence (*n* = 131)	Activity–output	0.38	2.37	0.019	Supported
		Output–capability	–1.14	3.14	0.002	
		Capability–activity	0.76	2.89	0.004	
H1(b)	Low munificence (*n* = 121)	Activity–output	0.44	2.56	0.020	Supported
		Output–capability	–0.08	1.58	0.116	
		Capability–activity	–0.36	2.34	0.020	
H2(a)	High dynamism (*n* = 123)	Activity–output	0.08	1.58	0.116	Partially Supported
		Output–capability	1.01	3.01	0.003	
		Capability–activity	–1.09	3.06	0.002	
H2(b)	Low dynamism (*n* = 129)	Activity–output	–0.91	2.93	0.004	Supported
		Output–capability	0.68	2.83	0.005	
		Capability–activity	0.23	2.08	0.039	
H3(a)	High complexity (*n* = 122)	Activity–output	–0.32	2.29	0.023	Supported
		Output–capability	1.58	3.78	0.000	
		Capability–activity	–1.26	3.24	0.001	
H3(b)	Low complexity (*n* = 130)	Activity–output	1.35	3.36	0.001	Supported
		Output–capability	–0.96	2.96	0.003	
		Capability–activity	–0.39	2.37	0.019	

Table IV Task environment scenarios – risk–reward profiles

Scenario no.	Dynamism		Complexity		Munificence		Risk–reward profile		Task environment scenarios
	High	*Low*	*High*	*Low*	*High*	*Low*	*Risk*	*Rewards*	
1	H		H			L	H	L	Highly unfavorable
2	H			L		L	M	L	Unfavorable
3		L	H			L	M	L	
4		L		L		L	L	L	Mature market
5	H		H		H		H	H	Turbulent market
6	H			L	H		M	H	Favorable
7		L	H		H		M	H	
8		L		L	H		L	H	Highly favorable

Notes: H = high; L = low

Table V Task environment scenario – performance metrics analysis

Sr. no.	Task environment scenarios	Risk–reward profile	Activity	Output	Capability
1	Highly unfavorable	High–low	3.94	4.01	3.11
2	Unfavorable	Medium–low	3.87	3.69	3.33
3	Mature markets	Low–low	3.52	3.44	3.56
4	Turbulent markets	High–high	4.02	4.07	3.54
5	Favorable	Medium–high	3.93	3.77	3.77
6	Highly favorable	Low–high	3.61	3.52	3.99

higher relevance of output and activity performance compared to capability performance which is found to have lowest relevance score (d_{a-o} = –0.070, *t*-value = 0.89, *p* = 0.380; d_{o-c} = 0.903, *t*-value = 3.36, *p* = 0.002; d_{c-a} = –0.833, *t*-value = 2.88, *p* = 0.007). Task environment scenario characterized by medium risk – low reward was also found to be associated with high relevance scores on output and activity metrics compared to capability metrics (d_{a-o} = 0.180, *t*-value = 1.76, *p* = 0.041; d_{o-c} = 0.358, *t*-value = 2.34, *p* = 0.022; d_{c-a} = –0.538, *t*-value = 2.97, *p* = 0.004). Task environment scenario characterized by low risk – low reward did not reveal significant differences among the relevance scores of performance metrics (d_{a-o} = 0.080, *t*-value = 0.92, *p* = 0.367; d_{o-c} = –0.120, *t*-value = 1.02, *p* = 0.315; d_{c-a} = 0.040, *t*-value = 0.85, *p* = 0.404). High risk – high reward scenario was found to be have high relevance scores on activity and output performance metrics (d_{a-o} = –0.050, *t*-value = 0.84, *p* = 0.406; d_{o-c} = 0.530, *t*-value = 2.32, *p* = 0.026; d_{c-a} = –0.480, *t*-value = 2.17, *p* = 0.036) and least relevance on capability metrics. Task environments characterized by medium risk – high reward was found to be associated with no particular performance metrics as most or least relevant (d_{a-o} = 0.160, *t*-value = 1.67, *p* = 0.099; d_{o-c} = 0.005, *t*-value = 0.65, *p* = 0.518; d_{c-a} = –0.165, *t*-value = 1.72, *p* = 0.045). Lastly, task environment scenarios characterized by

Table VI Task environment scenario analysis – LCS model

Sr. No.	Task environment scenarios (risk–reward profile)	Paired difference tested	SD (*d*)	*t*-statistic	*p*-value	Remarks
1	High risk – low reward (*n* = 37)	Activity–output	–0.070	0.89	0.380	Output and activity metrics have higher relevance; capability metrics have lowest relevance
		Output–capability	0.903	3.36	0.002	
		Capability–activity	–0.833	2.88	0.007	
2	Medium risk – low reward (*n* = 61)	Activity–output	0.180	1.76	0.041	Activity metrics have highest relevance; capability metrics have lower relevance
		Output–capability	0.358	2.34	0.022	
		Capability–activity	–0.538	2.97	0.004	
3	Low risk – low reward (*n* = 23)	Activity–output	0.080	0.92	0.367	No significant differences in the relevance of performance metrics
		Output–capability	–0.120	1.02	0.315	
		Capability–activity	0.040	0.85	0.404	
4	High risk – high reward (*n* = 47)	Activity–output	–0.050	0.84	0.406	Output and activity metrics have higher relevance; capability metrics have lowest relevance
		Output–capability	0.530	2.32	0.026	
		Capability–activity	–0.480	2.17	0.036	
5	Medium risk – high reward (*n* = 57)	Activity–output	0.160	1.67	0.099	Activity metrics have highest relevance; capability metrics have lowest relevance
		Output–capability	0.005	0.65	0.518	
		Capability–activity	–0.165	1.72	0.045	
6	Low risk – high reward (*n* = 27)	Activity–output	0.090	1.02	0.317	Capability metrics have highest relevance
		Output–capability	–0.473	2.08	0.046	
		Capability–activity	0.383	1.98	0.058	

Note: *n* = sample size of the sub group

low risk – high reward were found to be associated with high relevance on capability performance metrics (d_{a-o} = 0.090, *t*-value = 1.02, *p* = 0.317; d_{o-c} = –0.473, *t*-value = 2.08, *p* = 0.046; d_{c-a} = 0.383, *t*-value = 1.98, *p* = 0.058).

Our results suggest that the relevance of capability metrics increases as the market moves from highly unfavorable toward highly favorable, i.e. as the profit and growth opportunities in the task environment increases. This finding is aligned with earlier research that suggests that managers would leverage intermittent periods of high growth for capability building to secure future performance gains (Barringer and Harrison, 2000; Das and Teng, 2000). We found that capability measures have higher relevance under low risk – high rewards market scenario (scenario no. six). Although, literature acknowledges that some performance measurement can be futuristic in orientation (Spriggs, 1994), our results provide empirical support to this notion in the channel relationship context.

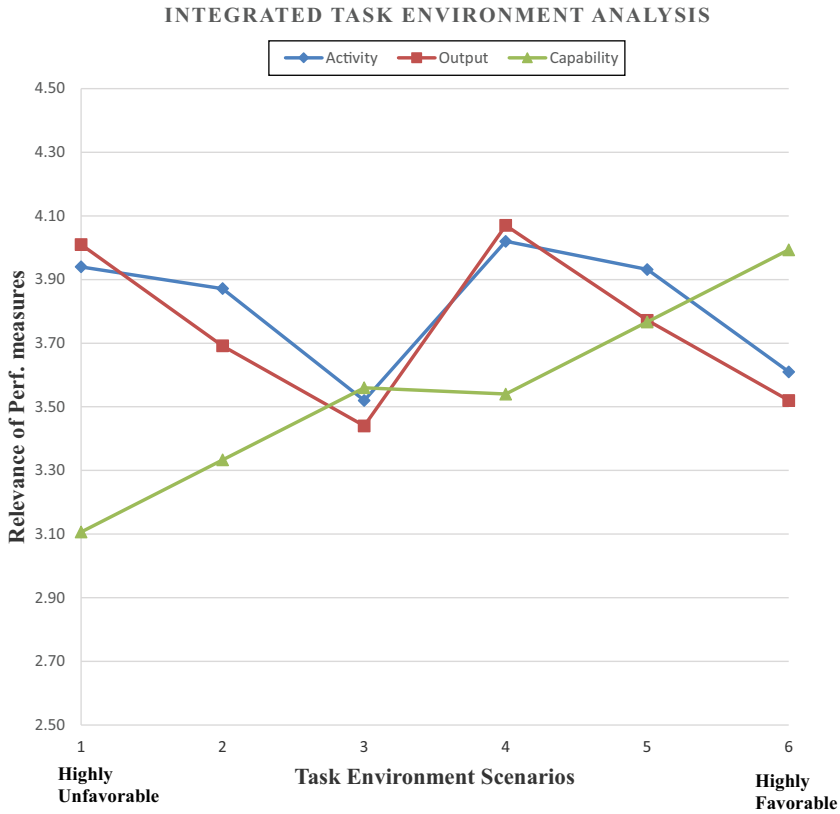
Output metrics are found to have higher relevance under highly unfavorable or turbulent task environment scenarios (scenario nos. one and four), i.e. when the market is high on risk. Output metrics are also found to be most relevant when profit opportunities are slim or when high profits are weighted against huge associated risks. These results align with literature on output-based controls in sales management (Baldauf *et al.*, 2005) that suggest firms must rely on more objective and unambiguous measures when task environments are uncertain or turbulent. This integrated analysis also suggests that activity performance metrics are relevant under task environments that have moderate risk, irrespective of the associated rewards (scenario nos. two and five). Perhaps, as risk increases or decreases from the moderate mark, it becomes difficult or simply unprofitable to emphasize activity metrics (Anderson and Oliver, 1987).

Our results also suggest that channel managers place equal relevance on the three performance metrics under low risk – low rewards task environment (i.e. scenario no. three). This finding reinforces earlier research which suggests that low risk – low reward markets do not present sufficient incentive or threat to warrant distinct emphasis on the three performance metrics. These nuanced relationships present a fertile area for future research.

5. Discussion and conclusions

Supplier firms rely on a network of channel partners to distribute their products and services. Often, these channel partners are spread across diverse markets and operate within widely different task environment conditions. In this research, we argued against the use of one-size-fits-all approach toward the choice of performance metrics while evaluating distinct channel partners. Recognizing the influence of channel partners' task environments, we develop and empirically test a theoretical framework for the relevance of performance

Figure 2 Integrated plot of task environments scenarios and relevance of performance metrics



measurement metrics in channel relationships. Specifically, we study the relative relevance of three metrics of channel partner's performance – i.e. activity, output, capability – when channel partners' task environments are characterized by high and low levels of munificence, dynamism and complexity. Using an LCS model with matched survey data collected from 252 channel partner–manager dyads in India's automotive industry, we capture the relative relevance of three performance metrics (output, activity and capability) in effectively evaluating channel partner's performance and associate them with real, account-level task environment states of channel partners (munificence, dynamism and complexity).

Overall, the data analysis supports all hypotheses except for *H2a*, which was partially supported. Although the relevance of both activity and output measures was significantly higher than the capability measures in high dynamic task environments, we do not find a significant difference between the activity and output measures. A plausible explanation for this finding may lie in the risk that channel managers perceive in reducing emphasis on the output performance when the market is high in dynamism. They are likely to emphasize the output measures equally with activity measures if they are unable or unwilling to assume the risks associated with uncontrollable external factors. Under high dynamism, output measures may also serve the goal-clarity role for some channel partners who have limited business experience (Stouthuysen *et al.*, 2012). Together, our results indicate that the managerial relevance of performance measures is associated with the characteristics of channel partners' task environments. This framework enables us to extend the current theory and managerial practice on channel partner's performance evaluation.

5.1 Summary of results

This study presents four major findings. First, we develop a framework that provides a holistic approach to performance management of individual channel partners using theory-rich multi-dimensional performance metrics and incorporating the influence of channel partners' task environments on the relative relevance of performance metrics. This framework is important because it provides a comprehensive approach for designing performance measurement systems in channel relationships. Second, this study emphasizes the importance of using performance measurement metrics that are aligned with the channel partners' task environment conditions. This finding suggests that channel managers must actively leverage channel partners' task environments while designing channel policies and processes. Third, our research provides important insights into the discipline of effective evaluation of channel partners' performance, which has received limited attention in distribution channel research to date. We demonstrate that the "blanket" approach to performance evaluation, disregarding channel partners' task environments, is not efficient. Fourth, we provide nuanced managerial guidelines for designing and implementing channel partner-specific performance evaluation metrics. Our results reveal a detailed interplay between task environment states and performance metric dimensions.

Overall, the results of our data analysis are consistent with earlier studies in the distribution channel literature in

suggesting that task environments can influence the relevance of performance metrics used for evaluating channel partners. However, the present study goes beyond the general conclusions of earlier studies that collapse task environment characteristics into a composite construct of environmental uncertainty (Andrews, 2009). Our study uncovers the individual relationships between different characteristics of channel partners' task environments and the three performance metrics. Gathered from the emerging market context, our findings of differential relevance of performance measures in response to task environments address an important gap in the literature, i.e. the need for a nuanced performance measurement system for channel relationships. Although our findings require further verification, they may be applicable to other interfirm exchange contexts in which firms must closely monitor their exchange partners' performance levels.

5.2 Research implications

This study advances distribution channel literature in three major ways. First, this study is an improvement over earlier studies because we investigated the individual linkages between task environment characteristics and the relevance of performance metrics. This investigation provides a fuller understanding of these relationships and a theoretical framework for further research on channel partner performance measurement metrics. Each performance metric has different levels of relevance based on channel partners' task environment states. Emphasizing the same performance metrics across different channel contexts may not only be too simplistic but could also deteriorate channel performance in the long run.

Second, we elaborate on two important kinds of uncertainties that channel partners face in their task environments: "state" and "response" (Milliken, 1987). We empirically show that uncertainty is not a singular factor but can impact the relevance of performance metrics through distinct mechanisms. High "state" uncertainty can increase risk perception about the future and limits channel partners' ability to take a long-term view. On the other hand, high "response" uncertainty blurs the cause-and-effect relationships among variables. Our analysis also challenges some notions from the transaction cost perspective (Williamson, 1979, 1981), which suggests that high levels of formal (objective) controls are necessary when the market conditions are uncertain. Contrary to this view, in the current research, we find that activity (behavioral or informal) controls are equally suited for uncertain market conditions relative to the output measures depending on whether task environments have "state" uncertainty or "response" uncertainty.

Third, our results and research framework indicate there is no single relevant performance metric; instead, there are only performance metrics that are relevant within a specific environmental state. For example, emphasizing the output performance metric under high munificence is 32.5 per cent and 20 per cent less relevant compared to capability and activity metrics, respectively. The correct metrics must match the task environments because the use of wrong metrics can quickly deteriorate relational variables. Whereas the literature suggests that multiple dimensions of channel partners' performance exist, we advance the performance evaluation literature with a detailed understanding of the most relevant metrics and the contingent task environment states.

5.3 Managerial implications

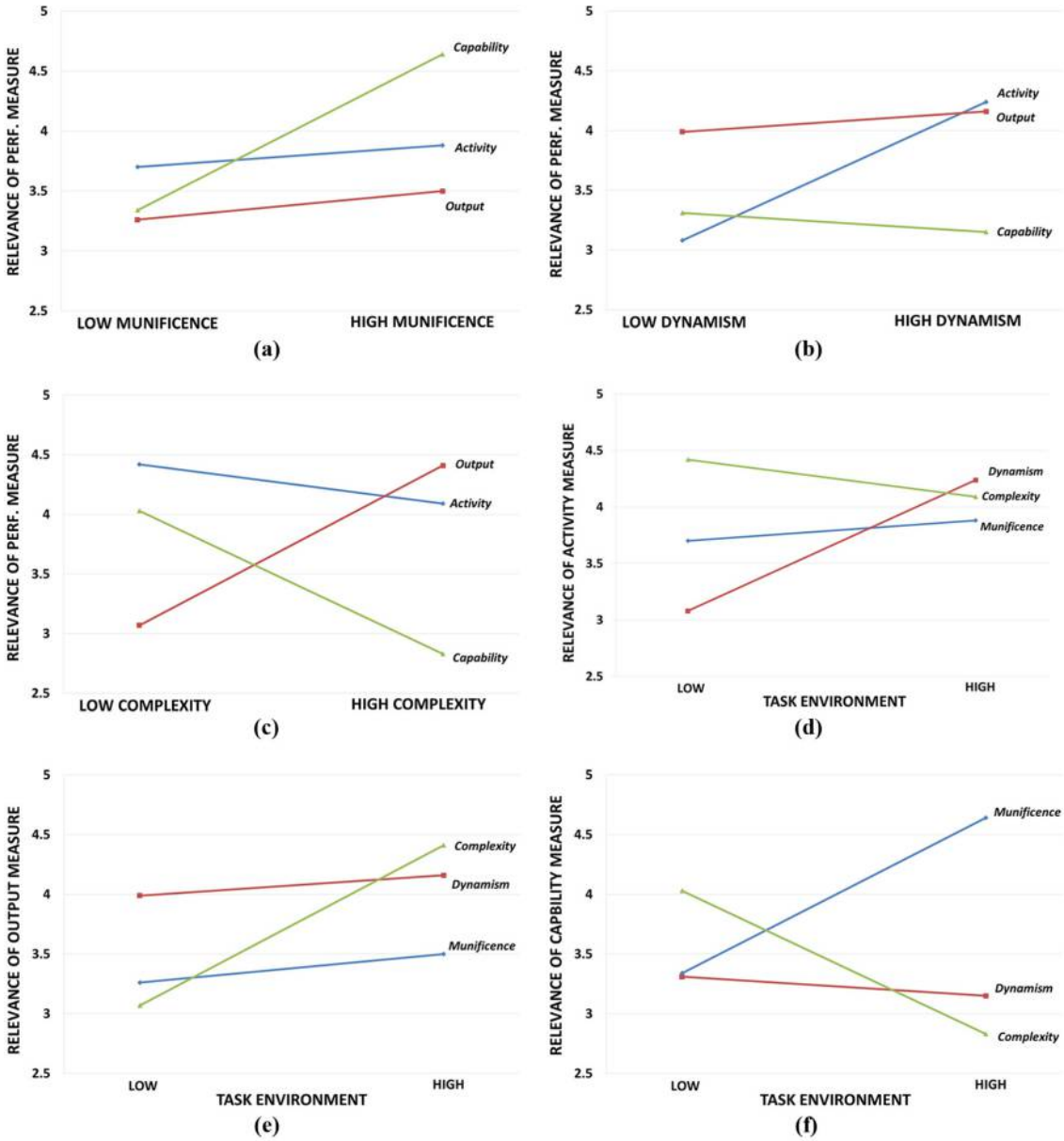
As firms seek better control over their channel partners' behavior and efforts, effective evaluation of their performance becomes increasingly critical. Effective evaluation gives a firm a broader and more holistic view for managing its performance in an ever-changing market and allows it to solidify its relationships with channel partners against competing supplier firms and generate greater returns for its channel partners and itself through better coordination and role clarity. Our research has at least two implications for practice. First, our results provide detailed guidelines on selecting appropriate performance measurement metrics with respect to the contingent task environment state of channel partners. Our nuanced framework offers channel managers in emerging markets a more refined framework than what was previously available for enhancing their channel performance.

Second, whenever possible, channel managers must consider channel partners' task environment states, because channel partners that may appear similar may actually not be and the identification of channel partners' environment states can have important implications for managerial actions. Frameworks that fail to include environmental states may be unable to distinguish one channel's context from other. Relying on singular metrics to evaluate a channel partner's performance, although convenient, could be misleading. Therefore, channel managers must realize that developing channel processes without looking deeply into underlying task environment states can lead to inefficient resource allocations.

The implications of the current study are underscored by the fact that the choice of effective performance metrics is also crucial for managing successful channel relationships and achieving a firm's goals and objectives (Olson *et al.*, 2005; Tokar, 2010; Waal and Kourtit, 2013). This research contributes to the distribution channels management by elucidating the impact of a channel partner's task environments in shaping performance evaluation systems and providing several insights for managers and policy-makers in the area of distribution channels.

In Figure 3 (a, b and c), we plot the relevance of the three performance metrics within different task environment states. Managers can use these plots to identify the dominant task environment state and deploy relevant performance metrics. On the horizontal axis, we plot the high and low states of a dominant task environment characteristic, and on the vertical axis, we plot the relevance of the three performance metrics showing where a metric is most and least relevant. For instance, capability metrics are most relevant for medium-to-high levels of munificence; however, activity metrics are most relevant for low munificence. Next, in Figure 3 (d, e and f), we provide a dynamic evaluation framework for each performance metric that gives actionable recommendations to managers once they have identified a channel partner's task environment state. For example, as complexity in task environments increases, the relevance of output metrics increases and the relevance activity and capability decrease.

Figure 3 Graphical plot of relationship between task environments and relevance of performance measures



Notes: (a) Relationship between munificence and relevance of the three performance measures; (b) relationship between dynamism and relevance of the three performance measures; (c) relationship between complexity and relevance of the three performance measures; (d) relationship between relevance of activity performance measure and the three task environment characteristics; (e) relationship between relevance of output performance measure and the three task environment characteristics; (f) relationship between relevance of capability performance measure and the three task environment characteristics

5.4 Limitations and avenues for future research

Survey research studies suffer from three major limitations related to the data (Joshi, 2009):

1 use of a single-industry source;
2 use of perceptual measures; and
3 use of cross-sectional data.

This research suffers from all these methodological limitations. The present study was based in one industry (i.e. automobile); future research must test our research framework in a multi-industrial setting. While a single-industry research context offers a robust platform for theory testing, a multi-industry study could uncover boundary conditions on the relationships investigated and provides more generalizable findings. Future research should extend the current findings by including data from multiple industries. This extension has the potential to uncover other industry-specific factors not revealed in our study. Our research findings are based on the perceptive data

collected from channel managers. Although perceptive data are5 widely accepted (Papadakis, 1995), additional objective data on measures such as channel partners' overall performance would have added more rigor to our findings.

Our research focuses on channel partners' task environments as the dominant factor influencing the relevance of performance metrics while evaluating the channel partners. However, the suitability of performance metrics can be influenced by other channel variables, such as channel strategy, channel structure, channel relationship management, etc. Furthermore, channel partners can also differ based on individual variables such as economic background, geographic region, religious and cultural groups. Performance metrics may also have differential implications for individual channel partners based on the intrinsic characteristics of the relationship such as size, age of relationship and leadership types, etc.

Further research would be needed to study the influence of other channel variables on the relevance of performance metrics. Although our research findings provide empirical evidence for the hypothesized relationships, our approach was somewhat descriptive in nature. More research is needed to provide normative guidelines, which would help channel managers predict the implications of using specific performance metrics. The current research was severely limited by its cross-sectional research design and data type. Future research must overcome this limitation and collect longitudinal data to uncovered relationships that were not possible through the cross-sectional data set used in our study. For example, examine the impact of the fit between task environment and appropriate performance metrics on important relationship outcomes such as overall performance, relationship quality, satisfaction, opportunism, etc. We believe the current research would be instrumental in stimulating interesting and insightful future research in this area. Going beyond the cross-sectional survey-based research design, field experiments can reveal important causal insights into the phenomenon of metrics relevance and effective evaluation of channel partners' performance. Finally, the replication of this study in other emerging and developed markets would help our results become more generalizable. Although we found empirical support for our hypothesized relationships, future research must attempt to build on the findings from this research and overcome our limitations to further explore this interesting phenomenon of metrics selection and performance evaluation in channel relationships.

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