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Morgan, N, Jayachandran, S, Hulland, J et al. (3 more authors) (2022) Marketing Performance Assessment and Accountability: Process and Outcomes. International Journal of Research in Marketing, 39 (2). pp. 462-481. ISSN 0167-8116

https://doi.org/10.1016/j.ijresmar.2021.10.008

Marketing Performance Assessment and Accountability: Process and Outcomes

Introduction

Marketing accountability has emerged as a central issue to marketing managers and scholars. To evaluate the accountability of marketing practices and investments, researchers have focused on processes and metrics for marketing performance assessment (Katsikeas et al. 2016). Recent developments in digital channels with the accompanying explosion of data, emergence of marketing automation, and rise of customer experience as a key firm priority have magnified the interest in and importance of understanding how potential marketing outcomes are and can be achieved (CMO Survey 2021; Mintz et al. 2020). Growing adoption of zero-based budgeting at leading firms such as Kraft-Heinz has further increased the need to relate marketing activities to outcomes, and potential downside risks have also become more salient. All of this has occurred against a backdrop of increasingly global competition. As a result, gaining clarity on how to design and manage performance assessment systems to deal with these issues has never been more important.

Yet, despite substantial research, the debate on how marketing influences firm performance and how to measure the return on marketing investments has persisted and marketing functions remain under constant pressure to prove their value (Kumar and Stewart 2021; Mintz and Currim 2013; Moorman and Rust 1999). Marketers are caught between demands for accountability and the creative flexibility needed to be effective. They have more data and technology tools than ever before, but linking expenditures, actions, and financial outcomes remains difficult (Hanssens and Pauwels 2016). We argue that further progress requires understanding the marketing performance assessment (MPA) process and how it shapes the choice and use of marketing and performance metrics. While past research has focused on the

areas of marketing metrics and marketing accountability, less attention has been paid to the MPA process that links them. Yet, the MPA process is essential to successful marketing management.

To this end, in this study we address three key questions. First, we briefly examine what is known about this domain (i.e., "Where have we been?") by synthesizing research to-date on the three areas that have received the most attention: MPA systems; marketing metrics; and marketing accountability. Second, we develop a new five step conceptual model of the MPA process and use it to identify what really needs to be known but is currently unclear (i.e., "Where do we need to go?") by drawing on research findings both within the broad MPA domain and allied areas within and outside of marketing. Third, we suggest how these areas of inquiry may best be investigated (i.e., "How do we get there?") by identifying new perspectives, theories, data sources, and analysis approaches that may be productively employed in future research.

The novel five stage conceptual model details the MPA process, and provides important new insights to shape the future research agenda. We highlight how attention to the stages of the MPA process is essential to determine appropriate marketing metrics and performance variables and enable marketing accountability. Insufficient understanding and consideration of the MPA process—its benefits and constraints—can result in tracking inappropriate metrics, lack of attention to measurement and analysis, ineffective dissemination, and diminished use of the metrics. We further note the need to situate the research on marketing accountability and metrics in both the international cultural context and the context of the use of automation systems and artificial intelligence (AI) in marketing. We also identify the need to anchor the MPA literature in theory to ensure that the causal assessments made are sound. In short, we highlight how the marketing metrics and accountability literature streams can benefit from better understanding the MPA process and examining how it shapes what and how metrics are used.

MPA and Related Research: What Do We Already Know?

Marketing literature relevant to understanding marketing performance assessment and accountability has been focused primarily in three areas: marketing performance assessment systems; marketing metrics; and marketing accountability. However, as we detail in the next sections, even research to-date in these three primary streams is limited.

Marketing Performance Assessment (MPA) Systems

Research on MPA systems to-date has been relatively sparse. Representative papers are shown in Table 1. Below we briefly synthesize the current state of knowledge in this area.

[Table 1 About Here]

The relatively small number of conceptual contributions to this literature are consistent in the view that MPA systems are multi-dimensional control systems. These systems drive choices with respect to inputs, activities, and performance metrics, contingent on the organization's environment and strategic choices, to guide manager and employee behavior (e.g., Morgan et al. 2002). Katsikeas et al. (2016) further posited that in designing MPA systems, firms need metrics at each stage in the marketing-performance outcome chain (marketing programs; customer mindset; customer behaviors; product-market outcomes; accounting outcomes; and financial market) if they are to learn what is working (or not) with respect to the firm's marketing efforts. There has also been some work on "dashboards" as a manifestation of MPA systems, which "*…link key metrics (such as the speed, remaining fuel or distance traveled in a car) with the drivers (the accelerator) and the underlying processes (the combustion engine or braking systems)*" Wind (2005). Such dashboards have been conceptualized as having different "levels" ranging from being simple communication vehicles for monitoring a set of metrics to full-blown interfaces for MPA systems (Pauwels et al. 2009).

Although there has been limited empirical work on MPA systems, findings to-date converge in some key respects. First, MPA ability/comprehensiveness can enhance firm performance. For example, O'Sullivan and Abela (2007) found that ability to measure performance across marketing activities and use a range of metrics to do so predicts CEO satisfaction with marketing, perceived firm performance, and firms' ROA and stock returns in a sample of high-tech firms. Second, the number of different metrics used does not explain variance in firm performance beyond that of the ability to assess performance across a range of activities (Homburg et al. 2012). Rather, alignment of the metrics employed with the firm's marketing goals and strategy, and the ability of metrics to enable "cause and effect" learning are more valuable. Interestingly, however, O'Sullivan and Abela (2007) found that metric breadth explains significant variance in CEO satisfaction with marketing, suggesting a CEO bias towards "more is better". In addition, there is evidence that the quality of metrics employed (accuracy, timeliness, validity/precision) has an impact on MPA outcomes (Homburg et al. 2012).

However, in the realm of marketing dashboard use, there is mixed evidence with respect to the direction and magnitude of its impact. For example, while O'Sullivan and Abela (2007) report no relationship between marketing dashboard use and both CEO satisfaction and firm performance outcomes, Krush et al. (2013; 2016) report a positive link with organizational sensemaking and marketing strategy implementation speed. Yet, more recently, Clark (2020) used an innovative simulation-based data collection and found that the use of dashboards reduced decision-maker attention to exploration issues, particularly when information load was high, and was associated overall with negative firm performance outcomes.

Marketing Accountability

Accountability refers to expectations about what an entity (person, organization, group)

should "be able and obliged to explain, justify and take responsibility for" (Cooper & Owen 2007) in their domain of activity. Key papers in this domain are presented in Table 2.

[Table 2 About Here]

Conceptual research in marketing accountability to-date has focused on two related areas: (a) identifying the need for marketing accountability (particularly the consequences of *not* having it) and what marketing accountability involves; and (b) linking marketing accountability to outcomes. Much of the conceptual work agrees that difficulties in linking marketing expenditures and activities with firms' financial outcomes can be viewed as a root cause of skepticism toward the marketing function (e.g., Kumar 2004; Rust et al. 2004). As a result, conceptualizations of marketing accountability have focused on tying marketing actions to financial outcomes (Park et al. 2012). In general, this literature suggests that accountability has two key components: measuring marketing activities and inputs; and, assessing their relationship with marketing and financial outcomes (Stewart 2009).

Related to this, there has been a long history of conceptual work on marketing productivity—the relationship between marketing inputs and outputs (e.g., Bucklin 1978; Sink 1985), focusing on how accountability may be achieved using "ROI" type measures. However, while intuitively appealing, there is some agreement that such productivity measures have important shortcomings such as requiring units on the same scale while many marketing inputs (e.g., people, effort, time, insight) and outputs (e.g., number of customers, relationship quality, brand equity) are not (Morgan et al. 2002). They also largely ignore both time lags between marketing inputs and their effect upon outputs and cumulative effects (Ambler and Roberts 2008), and capture only the efficiency performance dimension (e.g., Morgan et al. 2002).

The emphasis of empirical research has been on measuring the accountability construct or

its sub-components (ability to measure marketing activities and ability to link activities to outcomes) and examining associated outcomes. As with the broader MPA systems literature, there is some agreement that a marketing department's ability to connect its activities with financial outcomes affects the perceived value of marketing and its influence in firm-level decision-making (Klaus et al. 2014; Moorman and Rust 1999; Verhoef and Leeflang 2009). This relationship could depend on the measures used being perceived by others within the firm to be reliable (Artz et al. 2012). The strength of the relationship between perceived accountability and marketing's influence has also been questioned. For, example, Gök et al. (2015) found that it is a much weaker predictor than the perceived ability of the marketing department to understand and forecast customer needs and to effectively link its offerings to customers.

Marketing Metrics

Of the three areas of relevant research, the majority of studies have been in the realm of marketing metrics. Extant metrics research in marketing has been primarily empirical and focused on three key areas: (i) measurement of individual metrics (e.g., brand equity, customer lifetime value); (ii) linking individual marketing metrics with one another and with accounting and financial-market performance outcomes; and (iii) examining managers' metric use and its consequences. Representative papers in these areas are shown in Table 3.

[Table 3 About Here]

Much of the research in metrics development concerns calibrating the initial stages of the marketing-performance outcome chain in terms of attitudinal customer "mindset" measures and their behavioral consequences (Katsikeas et al. 2016). This has resulted in numerous measures of marketing constructs such as brand equity (Ailawadi et al. 2003; Yoo and Donthu 2001), and several customer-related metrics including customer satisfaction (e.g., Spreng et al. 1996), and

customer loyalty (e.g., Watson et al. 2015). In addition, there is much research on developing measures capturing a firm's "customer equity" i.e., the financial value of a firm's customer relationships (Rust et al. 2004). From relatively simple beginnings (e.g., Berger and Nasr 1998), such models of customer lifetime value (CLV) have become more elaborate and nuanced in the components considered (adding referral value, knowledge value, etc.) (e.g., Kumar 2018), and estimation approaches employed (e.g., Borle et al. 2008; Zhao et al. 2015). More recently, this stream has extended to include customer "engagement" which is viewed as a higher-order (i.e., beyond simple transactions) level of customer relationship with a supplier (e.g., Pansari and Kumar 2017). Given this relatively well-developed literature, while no measures are ever perfect, there exists a wide-range of widely used measures of many marketing-related metrics in the marketing-performance outcome chain.

A second stream of metrics-related research has examined how many of these specific marketing metrics are (a) related to one another and (b) predictive of accounting and financial performance outcomes. The evidence on (a) is mixed, and may be dependent on the specific measures and metrics involved. For example, de Haan et al. (2015) examined how different customer feedback measures and metrics predict customer retention and find that top 2 box satisfaction is the strongest predictor while customer effort operationalizations are the worst. In general, work in this area suggests that while customer mindset metrics may be statistically significant predictors of customer behavior and its consequences, they may often not explain the majority of the variance in such outcomes (e.g., Hanssens et al. 2014; Katsikeas et al. 2016).

Meanwhile, how marketing metrics relate to firms' financial performance outcomes has been a focus of the "marketing-finance" research stream (e.g., Edeling and Fischer 2016). Much of the research in this stream has examined how brand, satisfaction, and customer metrics relate

to firm valuation (e.g., Gupta et al. 2004; Kumar 2018; McCarthy et al. 2017; Mizik and Jacobson 2008; 2009; Morgan and Rego 2006), and firm financial risk (e.g., Rego et al. 2009; Tuli et al. 2009). Overall, the findings of this stream have shown that measures of marketing assets such as brand equity, customer relationships, and CLV have significant predictive power in explaining firms' accounting and financial market performance. More recently, there has been a growth in research focusing on "attribution modeling" (links between marketing activity metrics, and between such metrics and performance outcomes) particularly in the digital marketing area (e.g., Li and Kannan 2014). This work builds on traditional marketing-mix modeling approaches but adapts this to digital and hybrid environments where more data are available (and more quickly) (e.g., de Haan et al. 2016; Wedel and Kannan 2016).

Third, a more limited amount of research has addressed metric use by firms and managers. This stream broadly suggests that managers' use of marketing metrics is driven less by their individual characteristics than by contextual variables (firm strategy, metric orientation, firm and industry characteristics, and national culture), and that marketing metric use is (a) associated with marketing-mix performance, and (b) is as important in predicting outcomes as financial metric use (Mintz and Currim 2013; Mintz et al. 2019). There has also been some research on whether and how measuring and reporting marketing metrics may be useful to investors as well as managers (Wiesel et al. 2008). For example, Bayer et al. (2017) examined firms' voluntary reporting of backward- and forward-looking customer metrics. They found no evidence of downside business risks in such disclosures but do find positive effects of reporting forward-looking customer metrics in reducing investor and stock analyst uncertainty. Such findings have led researchers to argue for expanding and formalizing disclosures of marketing-related activities and performance (Mizik and Nissim 2011), and suggestions that CMOs should

adopt and report their own "marketing accounts" within the firm (Bendle and Wang 2017).

Conceptual Framework

Overall, while limited, the extant literature is pretty consistent in (a) showing that marketing accountability affects marketing's role in the firm as well as some performance outcomes, (b) offering a wide array of metrics that may used in firms' efforts to improve marketing accountability, and (c) offering strong evidence linking many of these metrics with firm returns and risks. Yet, in practice, many firms find it difficult to convincingly link their marketing inputs and activities with performance outcomes. We argue that research to address this reality requires a new focus on understanding the MPA process and its outcomes (Figure 1). The new conceptual model we offer draws on prior work across multiple disciplines including: accounting (e.g., Abernathy et al 2021; Chenhall 2005), management (e.g., Mero et al. 2014; Ouchi 1979), social psychology (e.g., Tetlock and Lerner 1999; Vieider 2009), public administration (e.g., Kerpershoek et al. 2016), operations (e.g., Evans 2004; McAdam and Bailie 2002), and marketing (e.g., Clark et al. 2006; Morgan et al. 2005). To ensure reasonable trade-offs between comprehensiveness, simplicity, and realism in the framework, we also drew on insights from several senior managers and researchers working in this domain.

We follow the literature in viewing MPA systems as the arrangements by which firms measure, track, and evaluate the outcomes of their marketing actions and investments (e.g., Clark and Ambler 2001; Rust et al. 2004). Thus, MPA systems should provide a formal management control tool for setting metrics related to the firm's marketing goals and intended actions designed to achieve them, and evaluating performance results relative to these goals and actions (Morgan et al. 2002; Stewart 2009). MPA systems are affected by the context in which they are designed and used (e.g., Morgan et al. 2002). We posit that geographic, industry, and firm

contextual variables are likely to be important in this regard.

Analogous to Morgan et al.'s (2005) study of customer feedback systems, we conceptualize the MPA process by expanding it to encompass five key stages: *tracking*; *analysis*; *dissemination*; *receiver evaluation*; and *utilization*. We draw on the broader literature, insights from managers, and our own practical experience of working on MPA to identify key characteristics of each stage. Our five-stage process perspective is distinct from prior research in marketing that examines the chain of marketing outcomes (e.g., Katsikeas et al. 2014; Rust et al. 2004). It also differs from Homburg et al. (2012) who look at how a limited set of marketing performance measurement system characteristics (breadth, fit, cause-effect relationships) influence firm performance. Rather, our model focuses on the process of selecting, developing, and using metrics concerning marketing actions, investments, and outcomes. The various stages of this process impact what metrics are utilized, how, and with what proximate and performance consequences.

Each stage of the process is detailed and discussed next. We then later use the conceptual model to identify key knowledge gaps, and provide guidance to future research in various sub-domains of the MPA process.

[Figure 1 About Here]

Tracking

This first stage concerns the specification, calibration and tracing of specific metrics capturing marketing inputs, activities, and performance. Characteristics of the tracking stage are likely to affect subsequent stages in MPA, and managers designing MPA systems face three key decisions in this regard: what metric(s) to select; how to measure them (data inputs and operationalization); and who will measure them (tracking agent).

Metrics are the specific indicators of marketing inputs, activities, and performance that are tracked. Managers select metrics that they believe will be most useful given the firm, industry, and geographic context in which they are to be used (Frösén et al. 2013), and the desired purpose of the MPA system (Morgan et al. 2005). However, they also have to balance "should track" considerations with "can track" issues such as data availability, calibration difficulty, and likely costs. In terms of performance, managers may select metrics at different stages of the marketing-performance outcome "chain" (Katsikeas et al. 2016) such as program metrics (e.g., media mix, promotions), mindset-metrics (e.g., brand awareness), behavioral metrics (e.g., purchasing frequency), product-market metrics (e.g., market share), or accounting metrics (e.g., sales growth).[1] Tracking a number of metrics may seem attractive, but managers also need to consider the likelihood of information overload when too many metrics are tracked (Ambler and Roberts 2008; Homburg et al. 2012). Hence, metrics that are tracked should be based on an assessment of costs and benefits, and guided by the firm's context and strategy.

Measurement concerns how the metrics selected are operationalized. The same marketing activity or outcome may be measured in different ways. For example, brand equity metrics include different mindset measures of perceptual brand attributes (e.g., awareness, perceived distinctiveness) and product-market measures such as price premium and revenue premium. How well a metric captures its intended object may vary due to both measurement and data quality issues. Even at the same stage of the performance-outcome chain different operationalizations can affect metric accuracy. For example, Net Promoter Score (NPS) attitudinal loyalty operationalizations have higher standard errors than the willingness to recommend indicators it is derived from (Pingitore et al. 2007). Some metrics such as unit and revenue sales may be

[1] While we follow the literature and focus mainly on marketing performance outcome metrics in this paper, effective MPA systems also require measures of inputs and activities.

"noisier" in some contexts than others (e.g., seasonality effects). Data quality is also an issue. For example, while digital channels produce large volumes of data, some it is of questionable quality due to opaque vendor algorithms and bots, fake websites, etc. (e.g., Pritchard 2021).

Metrics Tracking Agent: Who does the tracking (i.e., the tracking agent) is another aspect on which both MPA systems and individual metrics within them differ. While most firms track their own sales per customer, those who also track brand equity may use data from external vendors (e.g., Millward Brown, GfK). Similarly, a firm's online metrics may be tracked by agents such as Google, Facebook, and Twitter. Importantly, such agents may control access to their own data and also to the measures used to operationalize the metrics they provide to clients. As a result, changes they make to their measurement algorithms can affect the trackability of performance metrics, their accuracy, and their stability (Pritchard 2021).

Analysis

The second stage in the MPA process concerns how the firm's performance and related data are examined in ways that determine their meaning. We posit that managers face three key decisions with respect to analysis in this context: who does it (analysis agent); what should be analyzed (relationships examined); and how the analyses should be performed (analysis tools).

Analysis Agent: Performance analyses can be performed in-house, by external consultants or vendors (Morgan et al. 2005). This may often be a simple "make vs. buy" cost-benefit decision. In some cases, however, the decision may depend on the data and metrics involved. For example, a firm may lack internal capabilities for complex analyses, and thus rely on external agents. Conversely, commercial sensitivity or customer privacy issues may force in-house analysis. If a vendor's proprietary data or algorithms are involved, they may not allow the firm data access to do in-house analysis. This may limit the firm's ability to customize metrics or

even understand underlying assumptions in the data and analyses. It is also possible that the analysis agent may not be human, as marketing analyses are increasingly being automated with machine learning (ML) algorithms (Mintz et al. 2020).

Relationships Examined: Although, not all performance data may need analysis for its meaning to be derived and implications considered, in most cases analysis is expected to provide insight to guide subsequent marketing decisions. For example, trends in appropriate metrics can provide valuable insight (e.g., two lower than average monthly consumer sentiment scores in a row may indicate something more serious than a single month dip). Such insights are particularly valuable if the analysis can identify underlying causal elements. A trend that is seasonal has a very different implication than one that is driven by rivals' marketing efforts or a supply chain disruption. Thus, analysis in MPA often involves linking one piece of performance data with other data to provide causal insights.[2] As such, the specific relationships examined influence the meaning ascribed to performance data and its implications. For instance, relating advertising expenditures by media channel to brand equity metrics may produce different insights and action implications than examining the same expenditure's relationship with unit sales or margins.

Analysis tools: These refer to the techniques employed to analyze metrics and the relationships among them. The range of analysis tools used may span a wide range from very simple graphical or trend analysis to complex statistical methods to ascertain causal relationships. In practice, many MPA systems rely primarily on simple descriptives and trend reporting of key metrics, with some correlational or simple regression analyses of relationships. However, some firms use ML algorithms to analyze huge data sets. Such analyses may produce different insights relative to simple trend, correlational, or even regression analyses (e.g., Wedel

[2] In practice, these are usually not analyses that "prove" causal relationships in a scientific sense but rather those offering directional guidance and sometimes indications of likely effect magnitude.

and Kannan 2016). Including experimental elements to aid causal inferences can also lead to very different decision and action implications (e.g., Aral 2021). There may often be trade-offs in terms of the reliability and utility of insights produced when using less complex analytical approaches. For example, simpler "last touch" advertising attributions may under-value both the role of earlier touchpoints and the value of post-purchase customer recommendations produced by investments (e.g., Li and Kannan 2014). More complex analyses may lead to different insights, provide deeper understanding of complex market phenomena, and drive marketing actions. Yet, it may not be true that "more sophistication is always better" since there may also be downsides in terms of costs, speed, interpretability, understanding and use. As Ailawadi and Farris (2017) observe, metrics are a means to accomplish good management. Thus, analysis tools should be chosen based on considerations of how the insights are to be used.

Dissemination

The third stage of the MPA process concerns the sharing of performance data and analyses. We posit that in designing MPA systems managers face three key dissemination decisions: who should have access to the data and analyses; how they should access it (channels); and, how it should be presented to them (data presentation).

Access: Though ideally anyone in the firm who finds the performance data and related analyses relevant should have access to it, this is rarely true in practice. Two reasons why firms may restrict access are (i) the data may be viewed as commercially sensitive and firms may seek to minimize the potential for damaging leaks, and (ii) managers seek to "protect" personnel from "information overload" by selectively enabling access (Clark et al. 2014). Access may also extend beyond the firm. For example, in industries such as utilities, performance data such as numbers of customer complaints and new customers acquired may have to be reported to

regulators. Likewise, a firm may share performance data with suppliers. For example, retailers working with "category captains" may share category-level performance results from marketing activities with suppliers. Customers may also be interested in following a supplier's customer satisfaction performance. There is also the possibility of "public disclosure" in terms of voluntary reporting with respect to marketing outcomes such as customer churn and even profitability (e.g., Mizik and Nissim 2011; Stewart and Morgan 2020).

Channels: Channels refer to the means by which performance data and analyses are shared. There may be many different ways to share such data and analyses. For example, Morgan et al. (2005) describe different customer satisfaction performance data dissemination practices across a sample of firms. Marketing performance data usually reach potential users via both "pull" and "push" mechanisms. "Pull" involves placing performance data in a location where potential users can access it whenever they believe it could be useful (e.g., a customer feedback monitoring micro-site that a firm's employees can access). "Push" is achieved by using channels to send performance data to potential users (e.g., a firm's leadership team receive an emailed "management report" summarizing the firm's average customer satisfaction scores, number of complaints, and market share changes). In this regard, it is increasingly feasible to provide information on demand to key stakeholders through cloud-based applications.

Data presentation: This involves what is seen when performance data and analyses are viewed by potential users. There is ample evidence in management, marketing, and information sciences that how data is presented affects how it is understood and used, even leading to different decisions (e.g., Lurie and Mason 2007; Spiller et al. 2020). In an MPA context, the literature has addressed this issue primarily in terms of "dashboard" use, where performance data on a number of metrics is presented in a graphical format (e.g., Pauwels et al. 2009). In practice,

there is also the question of which software or interface to use for this task. For example, tools such as Tableau have been integrated into ERP software from vendors (e.g., Salesforce) to provide both a graphical interface for data communication and allow users to "interrogate" the data presented. Thus, presentation format may also provide a channel for two-way user interaction with the data.

Receiver Evaluations

The fourth stage of the MPA process concerns potential users' assessments of the performance data and analyses with respect to their intended purpose (Goodhue 1995). Whereas MPA system design and operation may affect receiver evaluations of performance data and analyses, such evaluations are beyond the direct control of MPA system designers and operators. Yet, receiver evaluations are likely to be a key driver of whether the metrics and analyses are used to guide decisions and behavior (Morgan et al. 2005). For example, in management contexts user understanding of and satisfaction with information has been shown to affect its utilization (Melone 1990; Sleep et al. 2019). We posit that receiver assessments of performance data and analyses will likely depend on two key factors: comprehension and perceived utility.

Comprehension concerns how well those who receive the metrics data and analyses understand it. Sharing performance data and analyses is a classic *message* → *encode* → *decode* communication process within an organization. Comprehension in the MPA context may therefore be viewed as having two aspects—the degree to which the analyst/sender's intended performance data and analysis "message" is correctly understood by the recipient, and the receiver's confidence in their understanding of what they have received. Even if a receiver's comprehension of performance data is objectively accurate, the extent to which they use it may still be affected by how confident they feel in their understanding. The potential for trade-offs

between analysis sophistication and potential user comprehension may apply to both accuracy and confidence aspects of comprehension.

Perceived utility: Even if the receiver accurately and confidently understands the metrics data and analysis, there is still the question of how they view its value or utility. Morgan et al. (2005) suggest that receivers view performance data and analyses as useful to the extent that they believe them to be to accurate, relevant, and diagnostic. If the receiver suspects that metrics data and analysis are inaccurate, they are unlikely to use them. Relevance in this context concerns whether receivers perceive the MPA output to be useful in successfully managing their responsibilities and effecting meaningful change. Diagnosticity of metrics and analysis from the MPA system refer to whether they can be employed to understand the root causes of any changes in marketing activities and performance. An MPA system that provides metrics and insights via sophisticated analyses may be ineffective if recipients are skeptical of the utility of the output.

Utilization

The final stage of the MPA process concerns whether and how metrics and analysis received by potential users are actually used. This may be affected by a variety of factors such as incentive systems and authority to make decisions in relevant areas when MPA output suggests this is appropriate. Based on the literature and observation of current business practice we posit four key characteristics of MPA utilization: instrumentality; automaticity; speed; and observability.

Instrumentality concerns the degree to which the use of performance data and analyses results in concrete actions. The literature has generally viewed this in terms of conceptual and instrumental use of marketing information (Menon and Varadarajan 1992). Conceptual refers to use to enhance understanding (e.g., provide insights into consumer motivations) whereas instrumental use involves employing performance data to solve a specific problem (Morgan et al.

2005). However, instrumental use may vary widely in terms of the importance of the decisions and/or actions taken. For example, data may be used instrumentally to make minor resource re-allocations across advertising channels, or to make major strategic decisions such enhancing a brand's investment support, divesting brands, and other major decisions. Managers may also use MPA data and analyses instrumentally for employee evaluation and compensation purposes.

Automaticity refers to the degree to which the use of MPA metrics and analysis are programmed and enabled by technology. Increasingly, firms are using AI and ML tools to analyze and learn from tracking marketing activities and metrics which are then often utilized to calibrate and optimize marketing resource allocation in such systems (e.g., Morgan and Lurie 2021). For example, in a firm's AdTech "stack", open rates on email offers may trigger follow-up banner advertising purchases and re-targeting ad deployments with no human interventions once the initial "rules" are set. Non-automated potential uses of performance data and analyses require more direct and involved human agency on the part of receivers to materialize.

Speed concerns how quickly performance data and analyses are used. While how frequently metrics are tracked and analyses performed may have some influence on this, the speed with which performance data are used by human decision-makers may be largely independent of this above relatively low frequency levels. In the case of technology-enabled automatic use, speed could perhaps be measured in seconds, while other human uses within the firm may often take weeks or months (even years for some strategy-related uses). Depending on the use, speed could be an important determinant of the outcomes of use as performance data may have a "shelf-life" and its value in terms of potential for competitive advantage decay over time (e.g., Morgan and Lurie 2021). This may be particularly true in dynamic markets.

Observability refers to the visibility of use of MPA metrics and analytics. This is

important because social psychology literature on accountability suggests that (a) people behave differently with respect to information search and use when they are observed, and (b) that the relationship of the observer to those being observed may also have an impact (e.g., Lerner and Tetlock 1999; Simonson and Nye 2001). For example, a marketer who is part of a team making a decision overseen by a senior manager may seek different amounts and types of performance data and use it in different ways than the same marketer when they make decisions alone and unobserved.

Consequences of Utilization

In addition to the five stages described above, our model identifies different proximate benefits and costs associated with the use of performance data in MPA systems. Prior research suggests MPA systems can provide four main benefits: control; learning; accountability; and, signaling. Meanwhile, three potential downsides to the use of MPA systems we identify are: resource requirements; use to drive harmful strategic behavior; and information manipulation.

Control: In line with conceptualizations of control systems (e.g., Jaworski 1988), MPA systems can provide feedback on strategy implementation, allowing adjustments to be made when progress diverges from planned activities and outcomes (e.g., Abernathy et al. 2021; Morgan et al. 2002). It may require additional analysis to uncover the cause of any observed deviation in performance data, or in some cases the MPA system may be sufficiently diagnostic to allow the cause to be observed. In either event, the likelihood of needed corrective actions being undertaken is increased, thereby enhancing strategy implementation effectiveness. In addition, MPA systems can help firms respond faster to deviations from plans, potentially saving time, effort, and resources.

Learning: Performance assessment allows organizational learning with respect to the

drivers of outcomes under different circumstances (Chenhall 2005; Morgan et al. 2002). This may be "adaptive" in that it changes future decisions and actions or "generative" learning that expands accepted ways of doing things (Slater and Narver 1995). Most learning facilitated by MPA systems is likely to be adaptive. For example, the use of analytics to discover that during a recession consumers respond almost as well to lower priced "value" formulation of a firm's premium brands as to temporary price reductions while causing less damage to brand equity, can help the firm deploy a better strategy when it next faces a recession. This may provide managers with greater confidence in selecting a future strategy to protect brand equity when they encounter a recession, leading to improved strategy implementation efficiency and speed.

Accountability: This concerns perceptions of the degree to which actions can be convincingly justified. The literature suggests that MPA system characteristics may affect other stakeholders' (e.g., senior executives, other functions) perceptions of marketing's accountability within the firm (e.g., O'Sullivan and Abela 2007). This in turn may affect marketers' ability to access resources required for strategy execution. For example, marketers viewed as "good stewards" of firm resources by using MPA insights to deliver planned sales results are more likely to gain additional funds to take advantage of unexpected marketplace opportunities (e.g., Stewart 2009). In addition, since marketing often requires the support and co-operation of other functions (e.g., Sales, Customer Service, Logistics, R&D) to execute marketing strategies, perceived accountability may enhance the internal reputation and "legitimacy" of the marketing function in ways that enhance inter-unit co-operation (e.g., Artz et al. 2012; Gök et al. 2015).

Signaling: Performance assessment can signal senior management priorities to lower-level employees (Hauser et al. 1994). This signal could be via the performance criteria being tracked (e.g., sales vs. margins, revenue vs. units, satisfaction vs. brand equity), as well as the

dimensions (e.g., effectiveness in terms of "levels" vs. efficiency in terms of "return on" vs. growth) and referents (e.g., relative to plan, last period, market, rivals) being emphasized in metrics. Consistent with "what gets measured gets done" and "inspect what you expect" truisms, both the management (e.g., Ouchi 1979) and accounting (e.g., Hall 2008) literatures suggest that employees use performance assessment to understand managers' priorities. In turn, they use this understanding of managers' priorities to guide their decisions and actions to be consistent with achieving prioritized goals (e.g., Hall 2011). To the extent that managers and employees have the same interpretation of the signals sent via the firm's MPA system, this should serve to better align decisions and actions with the goals and intended strategy of the organization.

In addition to the preceding benefits, there are also various types of costs associated with the use of MPA systems. Previous research suggests three major mechanisms by which performance assessment and data use may be linked with inferior firm outcomes: depletion of resources (including attention); strategic behavior; and, information manipulation. These may be viewed as unintended consequences of MPA (Clark 2020; Franco-Santos and Otley 2018), but it is unknown whether they are truly unanticipated or rather the result of trade-off decisions where benefits were expected to outweigh costs.

Resources: Those consumed in MPA system operation and use include financial costs involved in collecting, analyzing, and disseminating performance data as well as the time and effort of employees and managers. An additional resource "cost" is the attention of managers and employees (e.g., Clark 2020). Attention is a finite resource, and any attention directed at some subset of activities and outcomes will shift attention from other activities and outcomes that may also be important (e.g., Ocasio 1997). In addition to shifting attention to the things measured in the MPA system, the timeframes over which activities and outcomes are assessed in an MPA

system may also influence the timeframes prioritized by personnel. For example, frequent performance measurement and MPA system use may result in short-term outcomes receiving more attention and priority over activities where outcomes may take longer to be observed resulting in greater "short-termism" (e.g., Gigler et al. 2014; Merchant 1990).

Strategic behavior: Employees may alter their behavior to meet perceived expectations communicated by an MPA system. For example, management and psychology studies have shown that accountability for performance metrics to superiors with known views and powers evokes "defensive bolstering" (using information in ways that avoid complex or critical thoughts) which can reduce decision quality as well as individual and organizational learning (Lerner and Tetlock 1999; Morris and Moore 2000). There is also evidence that when performance assessment is used for accountability to known audiences it increases "self-presentational" behaviors that can reduce the quality of both information use and decision-making (e.g., Baumeister and Leary 1995; Simonson and Nye 2001).

Information manipulation: The operations and accounting literatures suggest that it is common for performance information to be misrepresented, reclassified or even "made up" by managers and employees during assessment and review (Franco-Santos and Otley 2018). The deliberate manipulation of data can range from "creative accounting" to clear fraud. Concepts such as "fiddling" (Mannion and Braithwaite 2012), "managing the numbers" (Jensen 2003; Li 2015) or plain "dishonesty" (Hannan et al. 2006) are common in studies examining the downside risks and costs associated with the use of performance measurement systems. Such manipulations are consistent with suggestions in marketing that using "return on" metrics can lead managers to under-invest in marketing assets as they seek to achieve better input/output metric ratios (e.g., Ambler and Roberts 2008).

In addition to these proximate benefits and costs of MPA that may manifest in the strategy execution and performance outcomes observed, our model also includes a feedback loop. For simplicity and ease of graphical illustration we only show this feedback loop returning to the beginning of the MPA process. However, in reality it is likely that feedback may affect all of the different stages of the MPA process. The feedback loop itself represents the "learning by doing" insights generated as managers experience using the MPA system in practice, and use of these insights to evaluate the MPA system, identify areas for improvement, and seek ways to design and execute such improvements. The literature suggests that much like IT systems, there may be "heritage systems" inertial forces at play in changing MPA systems (Morgan et al. 2002). However, it is important to maintaining fit that MPA systems should be continuously improved to enable them to adapt to the firm's dynamic marketplace and internal environment.

Overall, the expanded conceptualization of MPA system stages, characteristics, and outcomes in Figure 1 offers a new lens for exploring both what is known and needs to be known with respect to marketing accountability and performance metrics. As shown in Table 4, using our expanded MPA process framework as a lens on the landscape of existing research reveals both large "white specie" gaps in extant knowledge and many other areas that have been the subject of very little research. We next expand on some of the most important new areas of research revealed to be important in progressing knowledge in this domain.

[Table 4 About Here]

Where Do We Need to Go in MPA Research?

Within the conceptual model of MPA in Figure 1, the focus of most prior research has been on measurement of marketing metrics and their links with marketing accountability. This is understandable given the pervasive "marketing in crisis" emphasis on validating the marketing

function's role in creating firm value. However, as we describe, the MPA process influences metrics selection, analysis, and use to assess accountability. Thus, paying insufficient heed to the MPA process could result in deficiencies in metrics selection, analysis, and use, hampering the aim of more effective and accountable marketing. As our review and Table 1 suggests, researchers have barely scratched the surface of many important areas within the broader MPA domain outlined in Figure 1—and have ignored others altogether. While this suggests myriad issues requiring research attention, below we focus on those related to better understanding the MPA process that we argue should be prioritized because of their central importance to advancing the cause of effective and accountable marketing. The first six of these issues (metrics, measurement, analysis, dissemination, receiver evaluation, utilization) are drawn from the five stages in our MPA process framework and the remaining two concern consequences of the MPA process and conceptual fit elements that surround this model.

MPA Process Elements

Metrics: Progress is evident in the literature in the realm of proximate marketing performance outcomes such as brand and customer relationships. However, there is much less research insight into metrics that reliably calibrate marketing inputs and activities (beyond expenditure) that produce such outcomes. These are essential if marketers are to learn what works and when, and to better comprehend the value of such inputs and activities. Both are essential to enhance marketing's effectiveness and efficiency. For example, understanding the value of customer insight and market knowledge is required to adequately budget for developing it (Morgan and Lurie 20201). Additionally, comprehending the research, data capture, and analysis activities required to produce these knowledge assets helps shape effective and accountable marketing under different conditions. Similarly, planning and evaluating marketing

transformation efforts is difficult (or even impossible) without being able to accurately identify and calibrate a firm's marketing activities and capabilities (Rodriguez-Vila et al. 2020).

RQ1: What are the key inputs and activities that drive marketing performance and how can they best be measured across firms for use in marketing performance assessment systems?

Measurement: Marketing is exploding with new data and associated metrics. Many of these metrics are developed by research vendors or consulting firms, while some firms may also develop their own metrics. Marketing scholars could use their expertise in evaluating these new metrics by scrutinizing their measurement characteristics and predictive value. In this regard, marketing scholars have paid some attention to what characterizes a "good" measure (see Ailawadi et al. 2003). Yet, rarely have researchers examined marketing metrics used in the "real world" against such criteria, despite the answer to these questions being of great value to managers. For example, a number of vendors and firms have started to use surveys to measure "customer effort" as a customer experience measure. Is this a worthwhile metric? Are the proposed measures adequately capturing the construct? For what types of firms and products/service may the metric be useful and for what purpose(s)? When is it not useful?

RQ2: What are the most commonly used marketing metrics in practice and how well do they perform in terms of their measurement characteristics across firms and markets?

Analysis: For marketers faced with a rapidly growing volume, variety, and speed of data available to them, AI developments offer significant opportunities to analyze input, activity, and outcome data more quickly, enabling faster decisions requiring less human input (Gray 2017). However, AI also brings new risks related to data security, privacy, transparency, accountability, algorithmic biases, and ethics (Huang and Rust 2020). Panton et al. (2021) note that AI often makes biased predictions, and U.S. firms are now legally required to assess their AI systems for the risks of inaccurate, unfair, biased, or discriminatory decisions. Research on how biases in AI

analyses may affect marketers' ability to track marketing activities, performance metrics, and relationships among them is urgently needed. Additional potential downsides of AI use in analysis such as reduced human capital development, and benefit trade-offs with resources consumed, user comprehension, and perceived utility also need to be explored (e.g., Kozinets and Gretzel 2021).

RQ3: What are the benefits, costs, and risks of using AI in marketing performance assessment?

Dissemination: A related question concerns how presentation of marketing input, activity and performance data and analyses in MPA affects its perceived utility and actual use. The very limited attention to this in the MPA domain has focused on whether or not "dashboard" type presentation of performance data "matters" in terms of linking performance measurement with firm outcomes. However, there is ample evidence that how data is presented to decision-makers fundamentally affect its interpretation and use, and even decisions (e.g., Lurie and Mason 2007; Spiller et al. 2020). MPA systems serve little purpose unless they change marketing decisions and behavior in a beneficial way. Hence, research that provides a deep understanding of how MPA system output should be best presented to decision-makers is needed. For example, how does performance data visualization affect decision-makers?

RQ4: What is the impact of different data presentation alternatives in the use and outcomes of marketing performance assessment systems?

Receiver Evaluation: Researchers also need to examine what leads managers to perceive metrics as more or less useful, and for what purposes. For example, despite studies casting doubt on its measurement properties and predictive value, NPS use in practice has grown (e.g., Bendle et al. 2019). Is this a function of managers seeing the metric's use in other firms? More broadly, what features do managers find most useful and appealing in a metric? In addition, user perceptions can be biased and result in neglect of relevant metrics and overuse of inappropriate

metrics. For example, many senior managers have "preferred" metrics that they "believe in" and use these even when they move to a different firm. Additionally, Mintz et al. (2020) uncovered a disconnect between managers' perceptions of the utility of financial vs. customer-mindset metrics—and evidence of their relative value in predicting performance outcomes. There is much to be gained in better understanding drivers of manager perceptions of and use of MPA data.

RQ5: What are the drivers of manager perceptions of metrics and how does this affect their use in firms' marketing performance assessment systems?

Utilization: Marketing automation is a relatively recent phenomenon that is growing rapidly and may become a permanent and significant feature of firms' marketing activities. For example, Mintz et al. (2020) report that 67% of marketing leaders use a marketing automation platform, with an additional 21% planning to do so in the next couple of years. However, little is known about which metrics firms should employ in contexts where marketing automation and ML are increasingly being used. Self-learning computer science algorithms are increasingly being used in marketing applications, and will require accurate (and maybe entirely new) input, activity, and output metrics (e.g., Sundsoy et al. 2014). Absent such metrics there is a danger that AI/ML approaches may "learn the wrong things" and reduce rather than enhance marketing effectiveness and efficiency. Thus, marketing automation requires that firms build the skills to both develop required metrics and employ them effectively.

RQ6: What are the capabilities required to develop and effectively employ metrics in marketing automation and how can these capabilities be built, maintained, and assessed?

Consequences

In terms of the potential upside benefits of MPA, the main focus in the literature has been on accountability in terms of measurement of inputs/activities and relating these to observed (mainly financial) outcomes. However, the broader literature suggests accountability is a much

less “unitary” phenomenon. In fact, it has been shown to be much more complex with a number of different aspects, each of which has been shown to have varying effects under different conditions including: to whom an actor is accountable (superior, peer, subordinate); whether the audience (and their evaluation criteria and preferences) is known to the person(s) being held accountable; the formality of the accountability (formal vs. informal); and whether accountability is for a process/behavior or an outcome (e.g., Lerner and Tetlock 1999). The rewards/sanctions in accountability question has also largely been ignored in the marketing literature to-date.

Additionally, while the marketing literature essentially assumes that “accountability is good” and it’s “absence is bad”, evidence in social psychology and management paints a much more nuanced picture (Hall et al. 2017; Mero et al. 2014). Importantly, accountability has been shown to have a number of downside effects that produce negative outcomes. For example, accountability to superiors with known views and powers has been shown to evoke “defensive bolstering” (using information in ways that avoid complex or critical thoughts) which can reduce decision-making quality and individual and organizational learning (Morris and Moore 2000). In addition, accountability to an audience focused on outcomes has been found to reduce the use of effortful information strategies, awareness of the decision-makers judgment process, and the precision with which decision-makers quantify uncertainty surrounding their decision option (Lerner and Tetlock 1999). Clearly, such downside outcomes associated with accountability need to be explored in the context of MPA systems if system designs are to be improved.

Finally, a key outcome of MPA system use that has received no attention in previous research is the question of how the MPA system itself is evaluated and improved. From a Figure 1 perspective, the feedback loop of experiencing MPA system use and learning from that should intuitively guide changes and adaptations of each of the stages of the MPA process. This begins

with the fundamental question of whether or not the system is tracking the right metrics, but should also affect all subsequent stages of the MPA process outlined. Little is known about how managers evaluate MPA systems, how their experience of using them affects such evaluations, and when and how such evaluations translate into changes to the MPA system design and/or operation. These are fundamental questions in examining the dynamics of MPA system development and evolution, and enhancing knowledge in this domain is likely to have a very high practical value.

RQ7: What are the effects of to whom marketers are accountable, the formality of the accountability, whether their accountability is for outcomes vs. processes, and the presence of rewards and sanctions on the costs and benefits of marketers' accountability?

RQ8: How do managers evaluate marketing performance assessment systems and when and how do their experiences and evaluations lead to changes in system design and operation?

Contextual Fit

Conceptually, it is clear that MPA systems should be designed to reflect their context, and there is some evidence that different types (size and industry) of firms may use different marketing metrics (e.g., Frösén et al. 2013; 2016). However, which contextual factors impact what aspects of MPA system design and operation is largely unknown. This is a huge and important gap in knowledge. For example, management research suggests that the organizational culture within which accountability occurs has dramatic effects on the outcomes observed. While accountability perceived to be "threatening" has been shown to produce defensive bolstering behaviors, cultures in which it is undertaken in a manner that is merely "challenging" can stimulate self-analysis and enhance motivation (e.g., Schlenker 1986). In an organizational learning context, Morris and Moore (2000) also suggest that accountability systems that engender perceptions of a "regime of surveillance" lead to defensive bolstering and posit that creating a culture in which accountability feels like an opportunity to contribute to learning may produce more useful

results. How might this be accomplished in a marketing context? Could after-action reviews and "post-mortems" with peers help?

Conceptually, designing MPAs also needs to take into account firm business models, goals, and strategy (Morgan et al. 2002)—the MPA that B-Corp with a focus on sustainability employs should be very different from that of a regular "for profit" firm. While a small number of contingency variables have been empirically studied, these offer limited guidance for managers. For example, the MPA literature to-date has completely ignored considerations of firms that operate across countries. This leaves a large number of important but unanswered questions. For example, to what degree can MPA systems be standardized across a multi-national firm? If a firm is deploying different strategies in different country marketplaces—or even if deploying the same strategy it faces very different execution challenges across markets with widely differing economic, social, and institutional conditions—standardized MPA systems may not be appropriate. However, as a result of efficiency benefits firms usually seek to standardize what they can across their operations. What are the benefits and costs in doing so—and crucially what trade-offs may be required in the case of MPA system deployment? Regardless, designing an MPA system for a global firm will likely affect all aspects of the five-stage process in the conceptual model, from deciding what to monitor, what sort of analysis to perform, to optimal dissemination, how users assess the relevance, and how it is utilized.

Similarly, while it has recently been shown that frequency of metric use in marketing decision-making is partly driven by national culture (Mintz et al. 2019), how metrics and their use may differ across countries and cultures has been largely ignored. This raises interesting and important questions. For example, do managers from different cultures perceive the same metrics differently? Likewise, customer feedback may produce different responses to the same

product/service experience due to culturally-anchored response styles (e.g., Sajid Khan et al. 2009). How can firms operating globally control for such differences to enable "apples to apples" comparisons across country units? Countries also vary in their infrastructure and regulations in ways that may lead to different types and quality of data available for use as inputs to metrics. For example, privacy laws vary substantially across countries, and this could affect tracking of metrics and their use. For instance, the General Data Protection Regulation (GDPR) in Europe is the toughest privacy and security law in the world. GDPR impacts what customer data can be tracked, and will shape marketing automation and other marketing activities. The impact of such privacy regulations on MPA systems needs to be investigated. How (if at all) do firms adapt their metrics to reflect such differences? What are the benefits and costs of doing so? These are theoretically and practically important questions for future research.

The consequences of MPA systems and metric use may also differ across countries, yet this question has been largely ignored to-date. For example, how does accountability "work" in different cultures? Behavioral research on power-distance effects on consumer expectations and perceptions suggests differences in acceptance of equality are likely to affect how managers and employees respond to being held accountable for marketing actions and outcomes (e.g., Winterich and Zhang 2014). Similarly, work on control systems has shown differences in salesforce responses across cultures (e.g., Fang et al. 2005; Krafft 1999). Clearly, this suggests that the same approach to accountability may not work equally across different cultures. However, whether MPA systems can be designed to accommodate such differences is an open question. Equally important, managers really need to know the nature and magnitude of mismatches between accountability aspects of MPA systems and national culture characteristics, and the associated costs and downsides created by such mismatches.

Overall, there is a clear need for marketing scholars to provide theory-driven insights to help firms identify key features of their context and develop MPA systems that "fit" well with these. Marketing scholars should focus on using theoretical insights to inform the design of MPA systems to reflect causal dynamics based on context so that managers receive appropriate guidance from these systems. This is necessary if accountability is to be tied to effective use of firm resources and improve firm performance through MPA systems.

RQ9: What contextual factors impact what aspects of marketing performance assessment system design and operation and what is the effect of misfit in the face of such contingencies?

RQ10: What are the effects of geographic and other differences across markets served by a firm on its marketing performance assessment system design and operations and what trade-offs are involved?

RQ11: In what ways do users of marketing performance assessment systems from different cultures respond to the core elements of the system's design and operations and what are the costs, benefits, and risks of using standardized systems across all of a firm's markets?

How do We Progress Future MPA Research to Address These Knowledge Gaps?

Developing the Figure 1 conceptual model and using it as a lens to review extant research reveals the need to focus future research on the MPA process, and identifies where such process insights are necessary to further advance research on metrics and accountability—the two areas of primary research attention within MPA systems. It further reveals many unexplored but vital areas and important unanswered questions. We argue that further progress in this critical domain for marketers and marketing theory requires integrating the MPA process aspects outlined in Figure 1. Effectively addressing the research areas and questions we identify requires a number of significant changes from researchers including new and additional perspectives, theories and mechanisms, and data sources and analysis approaches. We briefly outline examples of some of these required changes below.

New and Additional Perspectives

Accountability is a key benefit of a well-designed MPA system. However, current construal of marketing accountability is narrow and limiting with regard to how it is conceived and affected by the MPA process. In this regard, we offer several suggestions. First, the current "how do we prove the financial value of marketing?" perspective needs to shift to "how do we best explore the upsides and downsides of different approaches to accountability in marketing?" Setting out to "prove marketing's value" is inconsistent with the goal of understanding why and when different approaches to marketing accountability lead to different outcomes, and limits what we can learn regarding what is effective. Adopting this broader perspective is necessary for effectively employing the process perspective introduced in our new conceptual model to address the important new opportunities for research we identify.

Second, researchers need to expand the scope of investigation beyond the firm to examine the ecosystem involved in MPA. For example, as discussed earlier, who should be the tracking agent—the one who provides the data and/or constructs and tracks the metrics that marketers use? This is not simply a question of firm decisions with respect to what to insource vs. outsource, which are likely to be made on grounds of relative cost and speed. It is also an issue of what is possible as in the case of powerful "walled garden" platform vendors such as Facebook, Google, and Amazon. This raises obvious potential incentive alignment issues between data/metrics providers and users that need to be considered and explored. It also opens the issue of data input quality, which in the context of digital advertising P&G's CMO has depicted as "murky at best". Marketers are increasingly relying on digital marketing-related data from external sources. Yet, even if their MPA systems are perfectly designed, employing metrics that are based on less than high-quality data inputs will still sabotage efforts to enhance the

effectiveness and efficiency of firms' marketing. Thus, researchers need to expand their research scope to include consideration of vendors and partners providing data and analyses for MPA.

Third, MPA researchers need to expand their conceptualization of accountability by considering the question of "accountability to whom?" Following published work, we focus mainly on marketers' accountability to the firm's upper echelons. What about other stakeholders such as shareholders, employees, customers, channel partners, collaborators (e.g., agencies, vendors), and the community? Each of these may have different expectations with respect to which a firm's marketers may feel (or need to be) accountable. For MPA, this inevitably also requires alternative views on the "accountable for what?" question and consideration of different stakeholder expectations that may not align. For example, a CEO may focus on quarterly sales growth even as customers focus on product/service quality and protection of customer data, and employees focus on career development and work-life balance. Researchers need to consider how CMOs can deal with trade-offs between such differing (even conflicting) expectations from different stakeholders in MPA system design. These considerations have implications for not merely what metrics are tracked, but also to whom they are disseminated. Not all metrics may be equally important to all stakeholders, and selectively providing access to metrics that are relevant to them may enhance decision-making and learning.

Finally, perhaps the greatest perspective shift is the urgent need to adopt a more global perspective as this is almost entirely absent from current research. Yet, it is likely that cultural, institutional, and economic differences across countries affect many aspects of MPA systems, marketing accountability, and marketing metrics. A more recent concern for marketers pertains to the privacy laws enacted in different countries (e.g., GDPR for EU nations) that are creating a difficult terrain for firms that operate in multiple nations. The MPA system needs to account for

these context-based variations. Tracking data that firms are not expected to collect is resulting in legal trouble for firms. This has important implications not only for firms that operate across country borders, but also for the ability of researchers to generalize from data collected within single countries or regions—and ultimately for what we can claim to legitimately "know" with respect to marketing accountability and performance metrics.

Additional Theories and Mechanisms

To address the key knowledge gaps we identify, marketing scholars will also need to explore new mechanisms that may be at play. This will require researchers to broaden the theoretical perspectives employed in marketing performance assessment and integrate insights from multiple theories. For example, Figure 1 suggests that MPA systems may be viewed as having a number of different stages. While we suggest variables that may be important characteristics of each stage based on the literature and insights from practice, these are merely a starting point. The use of grounded theory approaches may help verify and flesh out additional MPA system characteristics at each stage, and also provide insights with respect to moderators that may facilitate or inhibit movement between the stages of the MPA process we identify.

In addition, different theories may offer new insights with respect to causal mechanisms, and some of these have been little used in MPA system and related research to-date. System-structural theory, Configuration theory, Agency theory, Institutional theory, Control theory, Organizational learning theory, Performance Feedback theory, Attribution theory, and Identity theory (to name a few) may all be relevant lenses for MPA research using the process framework we suggest. All of these theories offer different perspectives on mechanisms that may be present in determining when, how, and why different MPA system designs may produce different outcomes.

For example, an Agency theory perspective would view the agent-principal distinction as being key and view MPA system design and operation as an incentive alignment governance mechanism. Meanwhile, Institutional theory may suggest that MPA systems are designed and operated in ways that reflect external industry norms, regulations, and expectations in order to allow firms to seek legitimacy and access resources. Adopting a Systems-structural theory perspective may also highlight the identification of key external contingencies and the need to design and operate MPA systems in ways that "match" such environmental conditions, but offer different insights with respect to the contingencies and mechanism(s) involved. In contrast, Performance Feedback theory would view performance relative to aspirations and the role of referents to be the most critical aspect of understanding when and how MPA systems affect firm actions and outcomes.

Clearly, there are a rich array of theories that may provide different (sometimes complementary) insights into the areas of MPA research required that we identify. Researchers should explore how each of these theories (and others that may also be relevant) may be used to identify relevant variables, and uncover mechanisms that may be at play in explaining when and how firms' MPA systems affect thinking, actions, and outcomes.

Data Sources and Analysis Approaches

Addressing the knowledge gaps we identify in our study is also likely to require researchers to be open to using new and different data sources and analysis approaches. For example, most empirical MPA and accountability research conducted to-date has used primary survey data. However, publishing in top-tier marketing journals using such data has become increasingly difficult (Morgan et al. 2019). Yet, for many MPA-related phenomena it is difficult to conceive of how data may be obtained in other ways. Consequently, researchers should follow the latest

best practices with respect to survey data collection and analysis (e.g., Hulland et al. 2018). When acting as reviewers, MPA researchers should also be more willing to trade-off the remaining downsides of survey data for the theoretical and practical importance of the MPA system phenomena and questions addressed.

Given the wealth of research in social psychology that has been previously largely ignored in the realm of MPA systems and marketing accountability, adding behavioral research approaches to researchers' toolkits is also going to be required in future. In addition, marketing scholars have much experience in theorizing and studying information processing on the consumer side that could be leveraged to help determine how managers approach MPA and how systems could designed to better deliver MPA data in a timely fashion, both for accountability and continuous learning. For example, the choice literature provides strong indications of choice overload when too many options are provided (Chernev et al. 2015). This suggests that overload of complex marketing metrics and performance analyses would inhibit their use as well as affect decision making on the basis of these metrics. This may be a particular problem in online marketing where fast evolving advertising media (e.g., Google, Twitter) frequently change their metrics and algorithms.

Similarly, researchers will also need to be open to using new sources of data. Much of the research conducted to-date has used primary survey data, secondary data from vendors, or single company sources. Given the need to link MPA to decisions as well as other outcomes, it may be worthwhile exploring whether and how business games and simulations may be a useful approach to data collection. For example, Clark (2020) provides an excellent recent exemplar of the potential uses of a business simulation for data collection in exploring the decision-making value of tactical dashboards that enables novel new insights. Text analysis approaches may also

provide means to collect data and study firms' public use of marketing metrics.

Finally, researchers may also need to consider and evaluate the utility of additional analysis approaches. For example, given the need for and high potential value of MPA-Context "fit" research we identify, researchers should explore using additional analysis approaches such as Fuzzy set qualitative comparative analysis and profile deviation (e.g., Frösén et al. 2016; Yarbrough et al. 2011). Similarly, in the realm of metrics, Machine Learning approaches to calibrating the relative value of marketing metrics in predicting financial performance outcomes may be useful and more efficient when dealing with overfitting and linear inseparability issues.

Conclusion

There is no domain of research more central to the well-being of marketing as a discipline than the use of MPA systems and metrics to enable marketing accountability. While research to-date has provided useful and interesting insights in some areas, our study reveals it has barely scratched the surface of this vitally important area. The focus of much of the research has been on specific metrics and relating them to financial performance with the goal of establishing the accountability of the marketing function. Important as this stream of research has been, more and different research is urgently required to both help marketers in practice and marketing as an academic discipline deal with the escalating pressures of operating across countries, floods of new data, proliferating metrics, demands to do "more with less", and associated need to learn what works, why, and under what conditions. The MPA process matters because it could both determine what metrics are adopted, and what insights are derived. Inadequate attention to the MPA process could therefore result in suboptimal decisions and ineffective marketing. We hope that our conceptual model that details the MPA process and provides a roadmap for new research, serves as a foundation for the next generation of research in this critical domain.

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Table 1
Summary of Select Studies on "Marketing Performance Assessment"

Representative Studies	Study Focus	Key Insights
Katsikeas et al. (2016)	Conceptualizing and operationalizing the performance outcomes associated with the firm's marketing	Establishing the performance value of marketing is essential for the well-being of the marketing discipline. Metrics are needed at each of the key stages in the marketing performance outcome chain (e.g., customer-, product-market, accounting, and financial market performance) to understand what works. The most widely used measures of marketing performance outcomes in prior studies are profit, sales revenue, and market share. However, abnormal stock return and Tobin's q are most widely used in recent times. Correlations among different performance measures used are often weak, and even negative.
Frösén et al. (2016)	Understanding the effect of Market Orientation and Marketing Performance Measurement on business performance in different types of firms and contexts	Market Orientation is seldom a sufficient condition for high performance, and comprehensive Marketing Performance Measurement (i.e., use of a large number of marketing metrics) is neither a universally necessary nor a sufficient factor for high performance. Small market-oriented firms benefit from selective Marketing Performance Measurement, whereas large firms generally benefit from complementing high Market Orientation with comprehensive Marketing Performance Measurement.
Krush et al. (2013)	Investigating how sales capabilities and performance monitoring via marketing dashboards influence the firm's strategic actions, and ultimately the firm performance	Sales capability and the use of marketing dashboards are complementary and provide an advantaged position in the marketplace, highlighting the importance of integrating both sales and marketing operations. Further, key strategic action (e.g., sensemaking) influences cost control (i.e., cost efficiency) and enhances customer relationship performance (i.e., growth).
Homburg, Artz, and Wieseke (2012)	Examining whether and under which circumstances comprehensiveness in a marketing performance measurement system (CMPMS) influence firm performance	CMPMS is not universally beneficial for every firm. The relationship of CMPMS (in terms of breadth, strategic fit, and cause-and-effect relationship) with firm performance (e.g., ROA, ROS, and Market success) is conditional, mediated by marketing alignment and market-based knowledge, and moderated by marketing strategy, marketing complexity, and market dynamism.
Pauwels et al. (2009)	Assessing the reasons for development of marketing dashboard and explaining what dashboards are, how to develop them, what drives their adoption, and the academic research needed to exploit their potential	The development of marketing dashboard is triggered by their rapid growth in large companies and attracting the attention of CMOs and CEOs. Dashboards display key metrics and facilitate the standardization of metrics across departments and business units. Overcoming the challenges faced in dashboard development and operation provides many opportunities for marketing to exercise a stronger influence on top management decisions.
O'Sullivan and Abela (2007)	Investigating the effect of marketing performance measurement (MPM) on firm performance and marketing's stature within the firm	Firms that are able to assess marketing performance using a broad set of metrics (e.g., financial, non-financial) outperform those that lack this ability. Overall, ability to measure marketing performance has a significant impact on firm performance (e.g., ROA, profitability, stock return) and marketing's stature (e.g., CEO satisfaction with marketing). However, use of marketing performance dashboards does not have moderating effect on the relationship between MPM and either firm performance or marketing's stature.
Morgan, Clark, and Gooner (2002)	Providing a holistic approach to marketing performance assessment (MPA) by integrating various approaches (e.g., marketing productivity, marketing audits)	MPA not only helps managers in learning how to better allocate resources but also provides ability to demonstrate the relationship between marketing inputs and outputs that assist in distinguishing between marketing expenditure and marketing investment. The study identifies various contextual factors (e.g., Task environment, corporate context) as MPA system is not "one-size-fits-all" kind of organizational control system.

Table 2
Summary of Select Studies on "Marketing Accountability"

Representative Studies	Study Focus	Key Insights
Bendle and Wang (2017)	Developing and deploying marketing accounts to facilitate decision making and improve marketing accountability	Examines how existing valuation models can be used to create a customized management accounting system for marketing. Specifically, market-based asset valuation models can be used to create a comprehensive internal report on the outcomes marketing creates, which credibly present the value of marketing.
Hanssens and Pauwels (2016)	Demonstrating the value of marketing	Assessing marketing's value is difficult, as marketing has multiple facets. Accordingly, marketing's outcomes are expressed in a variety of performance metrics, such as attitudinal, behavioral, and financial. However, these metrics are weakly interrelated. Successful marketing value assessment needs to reconcile the different available performance metrics, combine historical data analysis with marketing experiments, and significantly enhance the communication of analytical results to decision-makers.
Gök, Peker, and Hacioglu (2015)	Investigating the antecedents and consequences of the marketing department's reputation within the firm	The customer connection capability, accountability, and status of the marketing department are positively related to its reputation within the firm. However, marketing department's reputation is impaired when it controls more resources or when firm operate in more turbulent environment. Overall, firms with reputable marketing departments have better market performance irrespective of the generic strategy they pursue.
Park et al. (2012)	Examining the linkage of marketing's accountability and internal legitimacy to the firm performance	Marketing department's accountability is pivotal to its being viewed as legitimate within the organization. The positive effect of accountability on legitimacy is stronger (a) in firms with CEOs who have a marketing background, (b) in public rather than private firms, and (c) as environmental turbulence increases. Also, the lack of accountability and internal legitimacy of the marketing department can hinder the willingness of other functional areas to collaborate and share knowledge with the department, leading to lower firm performance.
Artz, Homburg, and Rajab (2012)	Investigating how the use of performance measures affects the marketing function's influence over strategic decision making	The effect of performance measure use on marketing department's strategic decision influence depends on two properties of the performance measures (1) decision-facilitating use and (2) use for accountability. Further, functional performance measurement practices may affect the ability of functions' top managers to promote strategic initiatives at the top management level.
Verhoef and Leeflang (2009)	Assessing the antecedents and consequences of marketing department's influence within the firm	Accountability and innovativeness are key antecedents of the marketing department's influence within the firm. Market orientation and the marketing department's influence develop simultaneously, and marketing department influence is related positively to market orientation, which in turn positively impacts firm performance. Overall, this study asserts that marketers should become both more accountable and innovative to gain more influence.
Stewart (2009)	Linking marketing actions to financial outcomes	Accountability is convers the economic outcomes and financial results of firms' marketing efforts, and marketers need to take responsibility for their actions determining these results in order to control their own destiny. Metrics are needed to be able to assess how marketers are performing relative to the past and whether or not their performance has improved.
Doney and Armstrong (1995)	Investigating the effect of buyers' accountability (informal, official, process, and decision) on organizational buying behavior	Organizational buyers accountable to superiors, peers, and subordinates engage in more symbolic (political) information search. Buyers accountable for their decision-making process (vs. outcomes) engage in analyzing information more extensively (prosocial), however, those accountable for decision outcomes only do not engage in either symbolic information search or prosocial information analysis.

Table 3
Summary of Select Studies on "Marketing Metrics"

Representative Studies	Study Focus	Key Insights
Otto, Szymanski, and Varadarajan (2019)	Conducting a meta-analysis of customer satisfaction—firm performance relationship	Examining customer satisfaction's consequences with respect to measures of accounting (e.g., profit), financial market (e.g., stock price), and marketing performance (e.g., market share and revenue), the study finds a positive satisfaction-performance relationship. Additional insights emerge from exploration of moderating and mediating relationships (e.g., satisfaction is more appropriately depicted as mediating marketing strategy variable effects on firm performance outcomes).
Bayer, Tuli, and Skiera (2017)	Examining the impact of firms' disclosure of performance on customer metrics on investors and analysts' uncertainty and firm performance	Firms more likely to share customer metric information if it pertains to events that have already happened (i.e., backward-looking disclosures) as compared with their expectations of these metrics (i.e., forward-looking disclosures). However, forward-looking disclosures of customer metrics (e.g., intended improvement of customer service, announcement of new product launch) reduce investors' uncertainty, and also do not hurt firms' financial performance.
Sridhar, Naik, and Kelkar (2017)	Combining multiple noisy and biased metrics for optimal allocation of marketing budget	Two independent noisy metrics (i.e., those having measurement error) are better than one, even when the second metric is noisier, i.e., a composite metric is more reliable than individual noisy metrics. Further, metric unreliability increases marketing overspending.
Edeling and Fischer (2016)	Integrating extant research findings and establishing empirical generalizations on marketing's impact on firm value	In the meta-analysis of elasticity estimates of the stock market impact of marketing actions and marketing assets, the authors find that marketing-mix decisions (e.g., advertising spending) do translate into financial results for firms. However, industry concentration and the state of the economy are also important conditions that alter the effectiveness of marketing. Also, higher elasticities are associated with customer-related assets (e.g., customer satisfaction, customer equity) than with brand-related assets (e.g., brand perception, brand value).
De Haan, Verhoef, and Wiesel (2015)	Comparing different customer feedback metrics (e.g., Customer Satisfaction, Net Promoter Score, and Customer Effort Score) to test their ability to predict customer retention	Customer Satisfaction is the most important metric, followed by Net Promoter Score in predicting customer retention. However, combining different customer feedback metrics improves their predictive power. Therefore, firms might benefit from using a dashboard of customer feedback metrics that includes different dimensions.
Mintz and Currim (2013)	Examining how factors such as firm strategy, marketing-mix activity, and managerial characteristics drive use of marketing and financial metrics in making marketing decision	Increase in metric use is associated with improved marketing-mix performance. Type of marketing-mix activity, firm strategy (e.g., market orientation), metric orientation (e.g., metric-based compensation), firm characteristics (e.g., CMO presence) and environmental characteristics (e.g., Market turbulence) are more predictive than managerial characteristics (e.g., Managerial experience) in explaining the use of metrics. Firm strategy, metric orientation, and firm characteristics explain use of both marketing (Customer satisfaction, loyalty) and financial metrics (e.g., ROI, Profitability).
Srinivasan, Vanhuele, and Pauwels (2010)	Analyzing the explanatory value of adding customer mind-set metrics to a sales response model that includes marketing mix actions	Obtaining and analyzing the right metrics to drive performance growth is needed to demonstrate marketing's value. Customer mind-set metrics (e.g., Advertising awareness, Brand consideration, and Brand liking) explain future sales performance, thus need consideration. Specifically, these metrics account for almost one-third of explained sales variance.

Table 4
Extent of Investigation and Areas Examined in Prior MPA-related Literature

Conceptual Framework Elements	Prior Research Streams					
	MPA		***Accountability***		***Metrics***	
	Extent of Investigation	***Areas Examined***	***Extent of Investigation***	***Areas Examined***	***Extent of Investigation***	***Areas Examined***
Context	Little	Firm strategy, market dynamism	None	-	Little	Firm strategy, metric orientation, firm and industry characteristics
Tracking	Little	Focus only on number / breath of metrics	None	-	Some	Focus only on measurement of metrics
Analysis	Little	Conceptual work on customer feedback use	Little	Only survey items of ability to link activities to outcomes	Little	Focus only on linking metrics with each other and performance
Dissemination	Little	Focus only on use of dashboards	None	-	Little	Focus only on public disclosure
Receiver Evaluation	Little	Conceptual work on customer feedback use	None	-	None	-
Utilization	None	-	None	-	Little	Focus on marketing-mix decision-making
Benefits	Little	Some conceptual and empirical work on accountability as outcome	Little	Conceptual only, focus on marketing's reputation/influence	None	-
Downsides	None	-	None	-	None	-
Outcomes	Little	Limited work on MPM link with marketing actions and firm performance	None	-	Some	Focus on linking MP metrics with firm performance

Figure 1
Marketing Performance Assessment Process and Outcomes