The unobserved signaling ability of marketing accountability: can suppliers' marketing accountability enhance business customers' value perceptions?

Maja Arslanagic-Kalajdzic
School of Economics and Business, Marketing Department, University of Sarajevo, Sarajev, Bosnia and Herzegovina
Vesna Žabkar
Marketing Department, Univerza v Ljubljani, Ljubljana, Slovenia, and
Adamantios Diamantopoulos
University of Vienna, Vienna, Austria

Abstract

Purpose – Marketing accountability is currently receiving increased attention from scholars and practitioners alike, with its usage mostly being linked to the improved position of marketing within the firm and to better firm performance. The purpose of this study is to assess whether a supplier's marketing accountability also has an unobserved signaling effect on customer perceived value.

Design/methodology/approach – Based on a survey of advertising agency-client dyads, the authors develop and test a multilevel model that assesses the relationship between the supplier's marketing accountability and perceived value of the client.

Findings – Empirical results indicate that marketing accountability of the agency is positively related to client-firm perceived value, that is marketing accountability also has a positive signaling effect on customers' value perceptions.

Originality/value – This study provides novel insights on how perceptions of customer value are created in business relationships. More specifically, it highlights that marketing accountability of a supplier positively contributes to shaping clients' value perceptions. Implications for marketing theory and practice, focused on the need for building, improving and sustaining marketing accountability within the firm and its relevance for value, are discussed and future research directions are identified.

Keywords Marketing capabilities, Perceived value, Signaling theory, Marketing metrics, Multilevel modeling, Marketing accountability

Paper type Research paper

> Marketers are under increasing pressure to establish how marketing investments improve their company's bottom-line profits. This pressure extends to the demands of shareholders and chief financial officers, who want better accountability and documentation of the value added by the marketing function. (Kumar, 2015, p. 5)

1. Introduction

In response to the pressures aptly highlighted by the above quote, researchers and practitioners have recently placed increased attention to the concept of marketing accountability and its implications for the firm's well-being. Marketing accountability describes the firm's "capability to link marketing strategies and actions to financial performance measures" (Verhoef and Leeflang, 2009, p. 20). Thus, marketing accountability can be distilled down to two fundamental management imperatives: *measurement* and *impact*. The former ensures that marketing actions are quantified, measured and thereby managed, while the latter specifies how these marketing actions *de facto* impact financial performance (Stewart, 2009; Stewart and Gugel, 2016). Ultimately, marketing accountability should aid the development of a better value proposition for the firm's customers (Kumar and Shah, 2009) as well as increase top managers' respect for marketing (Verhoef and Leeflang, 2009; McDonald, 2016).

Unlike in management and particularly in HRM literature, where accountability is an established research domain (Erdogan *et al.*, 2004; Frink and Klimoski, 2004; Huse, 2005), research focusing specifically on *marketing* accountability has been gaining momentum only in the last decade. In this context, most relevant contributions highlight the need for understanding the role of marketing accountability within firms (Kumar, 2015; McDonald, 2010; Stewart, 2009) and emphasize its link to the *internal* influence of the marketing function/department (Homburg *et al.*, 2015; Merlo and Auh, 2009; Moorman and Rust, 1999; Verhoef and Leeflang, 2009).

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In addition, research has investigated the use of marketing metrics within the firm and linked them to financial outcomes (Mintz and Currim, 2013, 2015), revealing a link between marketing metrics usage and business performance (Frösén *et al.*, 2016; Homburg *et al.*, 2012). From a practitioner perspective, it is also acknowledged that:

> The contribution of marketing to enterprise value in an intangible and digitally driven economy is large [...] when brand, customer and digital assets are properly valued and the impact of marketing performance, collaboration, and perceptions of innovation on financial outcomes is measured (Forbes CMO Practice, 2017, *p.* 3).

Surprisingly, however, no study has yet investigated potential *external* (i.e. downstream) effects of marketing accountability, even though recent literature strongly argues that "marketing accountability is not only important for firm's internal processes, but [...] it also has external effects on consumers in business relationship settings" (Arslanagic-Kalajdzic and Zabkar, 2015, p. 83).

Against this background, our study seeks to answer the question whether marketing accountability matters for customer value perceptions in business relationships. Specifically, drawing on signaling theory (Connelly *et al.*, 2010; Kirmani and Rao, 2000), we take a downstream perspective (Dawar, 2013) and examine whether there is a "hidden" (external) effect of marketing accountability on consumers' value perceptions. We thus approach accountability as an unobservable signal, since customers do not know the exact level of marketing accountability within the supplier firm (even if some metrics are publicly disclosed). We couple this "hidden" signal with a set of well-established perceived value signals, namely, corporate reputation, corporate credibility and relationship quality (Hansen *et al.*, 2008) and develop a comprehensive conceptual framework in a business relationships setting. Within this framework and adopting a dyadic perspective, we empirically investigate the extent to which marketing accountability of a *supplier* has an impact on *business customers'* perceptions of value in business relationships, thus providing additional insights into how value is calculated, created, and claimed in business markets (Lilien *et al.*, 2010). Specifically, through the estimation of a multilevel model we demonstrate that, beyond its impact on firm performance (Frösén *et al.*, 2016; Homburg *et al.*, 2012; Verhoef and Leeflang, 2009), marketing accountability also has an external effect. This external effect is manifested in business customers' perceptions of value, meaning that marketing accountability positively influences the supplier firm's value proposition. Overall, our findings serve to emphasize the benefits of building marketing accountability not only as a means for strengthening the position of marketing within the firm but also as a distinct driver of customer value in business relationships.

2. Marketing accountability and business customers' perceptions of value

The marketing department's accountability has been repeatedly identified as one of the key company capabilities (Cacciolatti and Lee, 2016; Moorman and Rust, 1999; Stewart and Gugel, 2016; Verhoef and Leeflang, 2009). Marketing accountability makes it clear how effectiveness is established within the firm by guiding and informing marketing strategies and demonstrating value for stakeholders (McGovern *et al.*, 2004). Hence, higher accountability should positively impact the effectiveness and efficiency of marketing actions and ultimately result in superior firm performance (Gupta and Zeithaml, 2006).

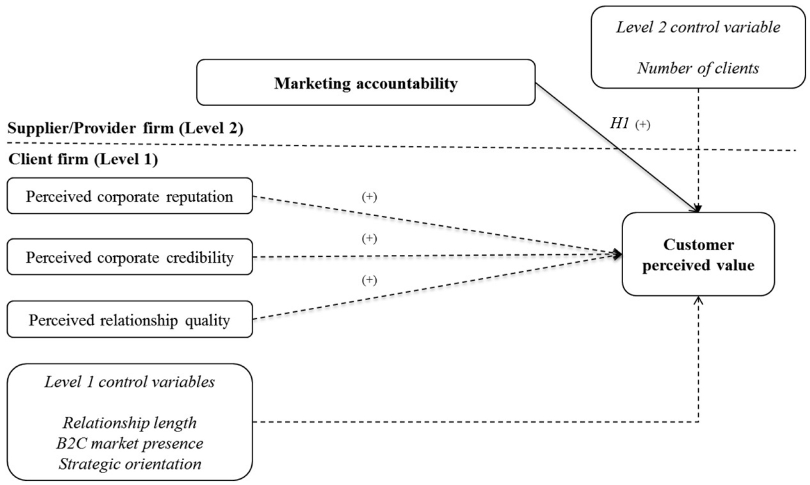
When scholars and practitioners discuss marketing accountability, marketing metrics is the concept most frequently evoked (Farris *et al.*, 2006; Lehmann, 2004; McDonald and Mouncey, 2011). The ability to track and measure marketing performance through different indicators is usually considered at the core of marketing accountability (O'Sullivan and Abela, 2007). Katsikeas *et al.* (2016, p. 13) provide a comprehensive guide on relevant aspects of performance outcomes for which marketing metrics "[...]that managers use and are held accountable for..." should be developed. Marketing metrics refer to the set of measures that carries the information about the impact of marketing on the success of the firm (Hanssens and Pauwels, 2016; Mintz and Currim, 2013; Rust *et al.*, 2004; Srinivasan and Hanssens, 2009). Recent evidence shows that market performance measurement through application of appropriate metrics can have a beneficial impact on business performance (Frösén *et al.*, 2016).

In addition to its impact on firm performance, we argue here that marketing accountability should ultimately also influence perceptions and behaviors of *customers* (Gupta and Zeithaml, 2006) in that there should be a difference in the "eye of the customer" between accountable and non-accountable suppliers. One of the core concepts in business relationships is customer perceived value (Anderson and Narus, 2004; Eggert and Ulaga, 2002; Lindgreen *et al.*, 2012) which is defined as "customers' overall assessment of the utility of a product based on perceptions of what is received and what is given" (Zeithaml, 1988). As marketing accountability is concerned with the effectiveness of marketing actions (Moorman and Rust, 1999), customers' perceptions of these actions acting as value signals (Kirmani and Rao, 2000) should also be enhanced when suppliers embrace accountability. As Gupta and Zeithaml (2006) propose, marketing actions (as in "What firms do") impact customers' perceptions (as in "What customers think") which, in turn, influence customers' behavioral outcomes (as in "What customers do") which, ultimately, affect the financial performance of the supplier (as in "What firms get").

Based on these theoretical arguments, we develop a business customer-level model with perceived corporate reputation (Hansen *et al.*, 2008), perceived credibility (Ravald and Grönroos, 1996) and perceived relationship quality (Rauyruen and Miller, 2007) acting as signals that impact business customers' perceived value and add the supplier's marketing accountability to capture the cross-level effect of the latter (Figure 1).

Perceived corporate reputation is defined as the customer's overall evaluation of the firm based on the reactions to the totality of perceived corporate activities (Walsh and Beatty, 2007). *Perceived corporate credibility* is understood as the perception that the supplier has the knowledge/ability to fulfill what it claims and that it could be trusted (Newell and Goldsmith, 2001). Finally, *relationship quality* reflects the overall strength of the relationship between the supplier and the

Figure 1. Conceptual model



customer and comprises customers' perception of information sharing, communication quality and long-term relationship orientation (Lages *et al.*, 2005).

In line with past research (Arslanagic-Kalajdzic and Zabkar, 2017; Hansen *et al.*, 2008), all of the above value antecedents are expected to positively impact business customers' perceived value, due to their signaling virtues. Therefore, we do not develop formal hypotheses about them in this study, but rather seek to confirm previously established positive relationships. However, we argue that there is an additional "hidden" antecedent that also affects value *over and above* the effect of the aforementioned antecedents, namely, the marketing accountability of the supplier. If/when suppliers become accountable or concerned with the effectiveness of their marketing actions (Moorman and Rust, 1999), customers' perceptions should also be enhanced (Kirmani and Rao, 2000). The more accountable a supplier firm is, the more effective its use of marketing resources (Stewart, 2009) and implementation of marketing activities aimed at customers (McDonald, 2010). Although these internal supplier capabilities cannot be directly observed by customers, they can send positive signals that result in changes in business consumers' perceptions. Namely, by building marketing accountability as a particular capability (Verhoef and Leeflang, 2009), the supplier firm increases the potential for creating a distinct value proposition for its customers. Thus, we expect that a high level of marketing accountability will not only help improving marketing's position *within* a firm, but also help generate a better value perception by customers (Gupta and Zeithaml, 2006). Hence, we hypothesize that:

H1. The supplier's marketing accountability has a positive effect on business customer's perceived value.

3. Empirical study

3.1 Deriving a marketing accountability measure

To operationalize marketing accountability, we first developed an initial pool of 12 items drawing from extant research on marketing metrics and marketing performance measurement (Ambler *et al.*, 2004; Clark, 1999; Collins, 2012; Ernst, 2011; Homburg *et al.*, 1999; McDonald and Mouncey, 2011; Mintz and Currim, 2013; "The CMO Survey", 2012), as well as from in-depth interviews with 10 marketing managers in different companies. The items sought to capture different marketing performance domains (Hanssens and Pauwels, 2016). We approached the item selection task in line with prior relevant research, in that we included only the most common metrics rather than a list of all possible metrics in each metrics category (Frösén *et al.*, 2016). Subsequently, we conducted a pilot study with 20 firms in different industries to further assess the extent to which the pool of identified items effectively captured the marketing accountability domain. A total of 10 items was retained for further analysis (Table I).

We next administered the marketing accountability items in Table I to a random sample of firms drawn from a general business database in a European country. Specifically, 927 companies were contacted via e-mail addressed to the individual responsible for marketing within the firm (i.e. CMO, marketing director, marketing manager) and asked to complete an online survey. A total of 188 firms agreed to participate and returned completed questionnaires (20 per cent response rate). We used the time trend extrapolation test to check for non-response bias, as suggested by Armstrong *et al.* (1977). No significant differences between the first and the last quartile of respondents (based on response time) were identified, suggesting that non-response bias is not a major problem.

The sample consists of micro (less than 10 employees; 24 per cent), small (10-49 employees; 34 per cent), medium (50-249 employees; 28 per cent) and large firms (250 and more employees; 14 per cent). Manufacturers comprise 23 per cent of the sample, while the rest are active in services or mixed business. CEOs represent 48 per cent of the respondents, 43 per cent are CMOs/marketing managers, while the rest are members of the marketing department with managerial expertise.

To capture the degree of *actual* (i.e. "real") marketing accountability of each participating firm, respondents were asked to:

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Table I Marketing accountability items

#	Marketing accountability[a]	References (examples)	Correlations with global accountability item[b,c]	Correlations with objective performance[d,e]
1	Sales/revenues/profit	(Ambler *et al.*, 2004; Clark, 1999)	0.21***	0.13ns
2	Segment size/market share/market growth/leads generated	(Clark, 1999)	0.30***	0.09ns
3	Customer analysis (satisfaction, loyalty, acquisition, retention, complaints, lifetime value, preferences, customer relationship performance, etc.)	(Ambler *et al.*, 2004; Kumar and Shah, 2009; Rust *et al.*, 2004)	0.27***	0.12ns
4	Brand equity (brand value, brand strength, intangible asset)	(Ambler *et al.*, 2004; Clark, 1999; Srinivasan and Hanssens, 2009)	0.41***	0.23**
5	Campaign success (awareness, return on investment, reach, effect on retention, effect on acquisition)	(Ernst, 2011; McDonald and Mouncey, 2011; Stewart, 2009)	0.29***	0.25**
6	Advertising (impressions, reach, recall, cost per customer acquired, cost per impressions)	(Collins, 2012; Srinivasan and Hanssens, 2009; Sunder, 2016)	0.25***	0.04ns
7	Web metrics (conversions, registrations, click-troughs, impressions, search rank, reach to target)	(Collins, 2012; Järvinen and Karjaluoto, 2015)	0.22***	0.08ns
8	Contribution of marketing to the revenue growth	("The CMO Survey", 2012; Vorhies and Morgan, 2005)	0.57***	0.17ns
9	Effects of increase/decrease of marketing spending on profitability	(Kurt and Hulland, 2013; "The CMO Survey", 2012)	0.59***	0.23**
10	Per cent of marketing budget spent on marketing analytics	(Gordon *et al.*, 2013; "The CMO Survey", 2012)	0.41***	0.24**

Notes: [a]The instructions for scoring were the following: Please focus on your firm. We would like to know: (1) Are the following marketing metrics *used* in your firm (if yes please select Y and if no please select N); (2) How *important* do you consider, even if you do not use it, the specific marketing metric for showing the impact of marketing activities on your firm's business results (1 = not at all important, 7 = very important); [b]Global accountability item referred to "effective linking of marketing activities to financial outcomes" (Moorman and Rust, 1999; Verhoef and Leeflang, 2009); [c]N = 188; [b]The measure for objective performance was standardized profit; [e]N = 85; $^{***}p < 0.001$, $^{**}p < 0.05$, $^{***}p < 0.1$; [ns]not significant; two-tailed significance test

- rate the *importance* of each marketing accountability item in Table I, on a 1 (= not at all important) to 7 (= very important) scale (Ambler *et al.*, 2004); and
- indicate whether it is actually *used/implemented* in their firm (yes = 1, no = 0; see also Frösén *et al.*, 2016). Subsequently, for each item, a weighted score was derived by multiplying the importance and implementation/usage scores.

As a face validity check, we next correlated each item score with a "global" (overall/general) statement capturing the extent of "effective linking of marketing activities to financial outcomes" within the firm (Moorman and Rust, 1999; Verhoef and Leeflang, 2009). Consistent with expectations, all 10 items were positively and significantly related to the global item (Table I).

Finally, to ensure that the marketing accountability items are indeed construct-valid, that is, they are actually linked to business performance, we obtained data on *objective* performance from the Bureau van Dijk's Amadeus database (http://amadeus.bvdinfo.com). Overall (due to the completeness of the secondary database and availability of company identifiers), we could match 85 firms from our sample with data on standardized profit lagged for one year (i.e. 12 months after the survey). We then correlated the 10 marketing accountability item scores with the objective performance measure and retained only those items displaying positive significant correlations[1]. A total of four items were retained for the final measure of marketing accountability used in further analysis (numbered 4, 5, 9 and 10 in Table I). A confirmatory factor analysis (CFA) in Lisrel 8.71 revealed sound psychometric properties of the measure (model fit: χ^2 = 8.09; df = 2; RMSEA = 0.06; CFI = 0.96; SRMR = 0.04; GFI = 0.95; factor loadings range: 0.55-0.92; composite reliability: 0.84; average variance extracted: 0.58).

In summary, we derived a marketing accountability measure that:

- is based on prior literature as well as extensive qualitative research and pre-testing; and
- is actually related to the (objective) performance of the firm.

The question now is whether this measure also helps explain the hypothesized *external* effects of marketing accountability that is, *business customer* perceptions of the firm's value proposition as stated under *H1*.

3.2 Dyadic study

To test the "hidden" (external) effect of marketing accountability, we focused on advertising agencies and their customers (clients) as a prototype of a professional business relationship. The nature of agency-client relationship is defined through the roles of the agency in a business relationship (Halinen, 1997) and depends upon the number and type of activities and tasks the agency performs, as well as by the number of products and brands agency handles. Hence, an advertising agency's role can range from a single and narrow, one-time, activity/task that is being delivered to the client, to a set of multiple and wide-ranged, continuous activities/tasks on behalf the client. The advertising industry is one of the rare industries that function in the same manner across many countries. The structure of the advertising industry is comparable in most European countries, meaning that there are global industry players (e.g. WPP Group, Omnicom Group, Publicis Group) as well as regional ad agencies and national/local agencies. The number of agencies is often relative to the size of the market. As part of our marketing accountability survey, we asked all participating 188 firms for the names of their advertising agencies and then invited respondents to fill in an additional survey, involving an assessment of their agency in terms of perceived value and its antecedents (namely, perceived corporate reputation, credibility and relationship quality – Figure 1). A total of 98 firms (52 per cent) provided us with the name of their advertising agency (52 different agencies were mentioned) and completed the assessment for that advertising agency. Average length of the relationship with the advertising agency was 3.5 years and the average spending with the selected supplier was 32 per cent of the total marketing budget.

In a separate step, the identified advertising agencies were independently contacted via email and asked to fill in an online questionnaire on marketing accountability using the 4-item measure described in the previous section. Finally, we matched the responses of firms who identified their advertising agencies with the corresponding agencies' responses (Anderson *et al.*, 1994; Kenny *et al.*, 2006). This resulted in a total of 61 client firms being grouped under 15 agencies; however, four of the resulting dyads were unique (i.e. single agency – single client) and could not be included in multilevel analysis. This left us with a final multilevel dyadic dataset of 57 clients (Level 1) and 12 agencies (Level 2). While our dataset is of moderate size for purposes of multilevel analysis, recent investigations of the role of sample size in multilevel models (Bell *et al.*, 2014; Maas and Hox, 2005) show that the "estimates of the regression coefficients are unbiased, even in if the sample is as small as 10 groups of five units" (Maas and Hox, 2005, p. 91).

We relied on existing scales drawn from the literature for measuring business customer perceived value (Park *et al.*, 2012; Sweeney and Soutar, 2001); corporate reputation that encompasses perceptions of supplier's customer orientation, service quality and social and environmental responsibility as well as whether supplier is a good employee, and reliable and financially strong, (Walsh and Beatty, 2007; Walsh *et al.*, 2009); corporate credibility which focuses on expertise and trustworthiness of a supplier (Newell and Goldsmith, 2001); and relationship quality that encompasses perceived levels of information sharing, communication quality and long-term orientation in the relationship (Lages *et al.*, 2005). In a professional services context (such as advertising agency – client relationships), where the core offer is highly intangible and knowledge-intensive (von Nordenflycht, 2010), these variables are of particular importance as signals for the process of customers' evaluation of services, as there is a limited (or nonexistent) number of tangible attributes available for assessment (Hoffman and Bateson, 2001; Kirmani and Rao, 2000; Zeithaml, 1988). Relevant psychometric information and descriptive statistics for all Level 1 and Level 2 constructs in our model is shown in Table II.

Hierarchical linear modeling, with HLM v.7.01 software, was used to test the hypothesized cross-level effect stated in H1 (Castro, 2002; Du Toit and Du Toit, 2007; Hofmann and Gavin, 1998; Hox *et al.*, 2017; Kuja-Halkola, 2008). Pseudo R^2 coefficients were calculated according to the Snijders and Bosker (1999) recommendations and all constructs were grand mean-centered. In all tested models, we controlled for the following Level 1 (client's level) variables: relationship length (duration of the relationship with the advertising agency in years); market presence (whether clients mainly operate in B2C or in B2B markets as measured on a scale from 0 = no B2C presence, to 100 = full B2C presence); and strategic orientation (short-term vs. long-term orientation, on a scale from 1 to 10). We also controlled for the number of agency clients at Level 2 (agency level). Table III summarizes the various models tested, while Table IV shows the relevant estimation results.

We first tested the intercept-only model [Table III, equation (1)] which revealed that the overall perceived value mean is 4.81 and differs significantly from 0 (Hox *et al.*, 2017); the inter-class correlation coefficient came to 0.08, indicating that 8 per cent of total variance in customer perceptions of value is explained at the advertising agency level (Level 2).

We then assessed a baseline specification, that is, the regression-based model in the multilevel context [Table III, equation (2)]. Consistent with prior literature (Hansen *et al.*, 2008), all three perceived value antecedents positively and significantly impact perceived value (Table IV). Corporate credibility has the strongest impact ($\gamma = 0.58$, $p < 0.001$),

Table II Level 1 and level 2 descriptive statistics

#	Construct	Mean (SD)	α	Min	Max	Correlations (1)	(2)	(3)	(4)
Level 1 (n=57)									
(1)	Customer perceived value	4.81 (1.26)	0.91	1.81	6.56	1			
(2)	Corporate reputation	5.03 (1.25)	0.95	2.00	6.95	0.57^{***}	1		
(3)	Corporate credibility	5.14 (1.26)	0.86	2.67	7.00	0.63^{***}	0.62^{***}	1	
(4)	Relationship quality	3.25 (0.57)	0.79	2.06	4.88	0.23^{***}	0.18^{***}	0.17^{***}	1
Level 2 (n=12)									
	Marketing accountability	4.14 (2.28)	0.85	0.00	6.50	–	–	–	–

Notes: α = Cronbach's alpha; $^{***}p < 0.001$; two-tailed significance test. Constructs (1)-(3) are measured on a seven-point Likert scales, while (4) on a five-point scale; the marketing accountability score ranges from 0 to 7

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Table III Multilevel model specifications and equations

	Description	Equation
Equation 1	Intercept-only model	$CPV_{ij} = \gamma_{00} + u_{0j} + r_{ij}$
Equation 2	Baseline model	$CPV_{ij} = \gamma_{00} + \gamma_{10}{}^{*}CR_{ij} + \gamma_{20}{}^{*}CC_{ij} + \gamma_{30}{}^{*}RQ_{ij} + \gamma_{40}{}^{*}CON_{ij} + u_{0j} + r_{ij}$
Equation 3	Cross-level model	$CPV_{ij} = \gamma_{00} + \gamma_{01}{}^{*}MA_j + \gamma_{02}{}^{*}CON_j + \gamma_{10}{}^{*}CR_{ij} + \gamma_{20}{}^{*}CC_{ij} + \gamma_{30}{}^{*}RQ_{ij} + \gamma_{40}{}^{*}CON_{ij} + u_{0j} + r_{ij}$

Notes: *CPVij* is *customer perceived value* (dependent variable) for observation i in group j, $\gamma 00$ is the fixed regression coefficient for the intercept of the regression equation, *u0j* is the random regression coefficient for the intercept of the regression equation for group j, *rij* is the observation- and group-specific residual, CR_{ij} is *corporate reputation* (Level 1 predictor) for observation i in group j, CC_{ij} is *corporate credibility* (Level 1 predictor) for observation i in group j, RQ_{ij} is *relationship quality* (Level 1 predictor) for observation i in group j, CON_{ij} is representing a vector of *controls* (Level 1), $\gamma 10$ is the fixed regression coefficient for the main effect of CR_{ij}, $\gamma 20$ is the fixed regression coefficient for the main effect of CC_{ij}, $\gamma 30$ is the fixed regression coefficient for the main effect of RQ_{ij}, $\gamma 40$ is the fixed regression coefficient for the effect of controls RQ_{ij}, MA_j is *marketing accountability* (Level 2 predictor) for group j, CON_j is representing a *control* (Level 2) for group j, γ01 is the fixed regression coefficient for the main effect of MA_j, γ02 is the fixed regression coefficient for the effect of CON_j

Table IV Multilevel results

	Baseline Model	Cross-level Model
Level 1 – fixed effects (γ)		
Intercept	4.60^{***}	4.86^{***}
Controls		
Relationship length	-0.00^{ns}	0.01^{ns}
Business activity	-0.00^{ns}	-0.00^{ns}
Strategic orientation	0.04^{ns}	0.03^{ns}
Main effects		
Perceived corporate reputation (CR)	0.24^{**}	0.23^{**}
Perceived corporate credibility (CC)	0.58^{***}	0.62^{***}
Perceived relationship quality (RQ)	0.32^{***}	0.27^{**}
Level 2 – fixed effects (γ)		
Control		
Number of clients		-0.04^{ns}
Main effect		
Marketing accountability (MA)		0.09^{**}
Model information		
Pseudo R^2	0.64	0.68
Deviance (-2 log likelihood)	144.32	149.23

Notes: Client's perceived value is dependent variable; Coefficients are unstandardized; *n* (Level 1) = 57; *n* (Level 2) = 12; $^{***}p < 0.001$; $^{**}p < 0.05$

followed by relationship quality ($\gamma = 0.32$, $p < 0.001$), and perceived corporate reputation ($\gamma = 0.24$, $p < 0.05$). These value antecedents together explain 64 per cent of the variance in customer perceived value.

We next assessed the direct effect of marketing accountability on customer perceived value as captured by the cross-level model [Table III, equation (3)]. Results show that, in full support of H1, marketing accountability positively and significantly affects perceived value ($\gamma = 0.09$, $p < 0.05$) *over and above* the influences of the aforementioned antecedents. None of the control variables (either at Level 1 or Level 2) were significant in any of our models.

4. Discussion

To the best of our knowledge, our study is the first to empirically establish a link between marketing accountability of a supplier and business customers' perceptions of value. This link demonstrates that, although not directly observable through customers' eyes, marketing accountability of a supplier *does* make a difference when it comes to perceived value assessments. In other words, although customers cannot be assumed to be aware of the internal processes and accountability practices of their suppliers, the marketing accountability of the latter does in fact influence business customer value perceptions. Overall, our findings serve to emphasize the benefits of building marketing accountability not only as a means for strengthening the position of marketing within the firm but also as a distinct driver of customer value in business relationships. This further validates the role of marketing accountability for the creation of the firm's (supplier's) value proposition and its manifestations in the form of (customer) perceived value, in particular in the context of business services.

A clear implication of our study's findings is the need for building, improving and sustaining marketing accountability within the firm. In this context, practitioners are advised to approach marketing accountability systematically by selecting and applying appropriate marketing metrics as extant literature suggests (Hanssens and Pauwels, 2016; McDonald and Mouncey, 2011; Mintz and Currim, 2013; Srinivasan and Hanssens, 2009). According to our findings, such efforts will be rewarded not only through improved firm performance as previous research demonstrates (Cacciolatti and Lee, 2016; Mintz and Currim, 2013; Verhoef and Leeflang, 2009), but also in terms of better value perceptions by business customers.

Our study underscores the managerial importance of marketing accountability, not only for within-firm actions, but also for clients in the business setting. Marketing managers should be aware that pursuing accountable marketing activities is not only beneficial for their position within the firm but has positive externalities in terms of increased perceived value by their business clients. From a practical perspective, firms would benefit from using the items from Table I as a "marketing accountability inventory" or "checklist" over time, whereby the firm's "marketing accountability footprint" can be monitored on a longitudinal basis. Furthermore, demonstrating marketing accountability through metrics disclosure would be a signal of transparency and could increase customers' confidence (Bayer *et al.*, 2017).

5. Limitations and future research

Our study is not without limitations. Our relatively small multilevel sample suggests that our results should be treated as suggestive rather than conclusive and subjected to further validation in different dyadic settings. Furthermore, since the main aim of our study was not to develop a measure for marketing accountability, the measurement instrument used can be further improved by explicitly investigating the dimensionality of the marketing accountability concept as a firm capability. In addition, the advertising industry is specific in terms of the higher urge of ad agencies to demonstrate the efficiency of their activities to their clients, which is not the case in other industries[2]. Therefore, further studies should focus on examining the "unobservable" effect of marketing accountability in other industry settings, in particular in non-service B2B contexts.

When it comes to further research, the relationship between marketing accountability and other key constructs such as risk-aversion (Jaworski and Kohli, 1993), formalization (Johnson *et al.*, 2011) and organizational commitment (Tellefsen and Thomas, 2005) – to name but a few – is in need of exploration so as to place marketing accountability within a broader organizational context. Furthermore, apart from marketing accountability approached as an internal capability of the firm, companies are nowadays held more and more accountable for the consequences of their external actions (Schulz and Flanigan, 2016). Future studies should thus merge notions of marketing accountability with perceptions of firms' social/environmental responsibility and ethical consequences of their actions and assess the relative role of each for business customers' perceptions. Finally, the costs associated with developing marketing accountability are open to investigation. Identifying the relevant costs and juxtaposing them against the benefits of marketing accountability is a major but necessary challenge for future research in this important area.

Notes

1 This approach is consistent with advice in methodological literature recommending "to select (or delete) items based on their relations with external (to the scale) criteria. In other words, items are retained when they relate to a variable of interest" (Spector, 1992, p. 35).

2 We would like to thank the anonymous reviewer for recognizing this issue.

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Corresponding author

Maja Arslanagic-Kalajdzic can be contacted at: maja.arslanagic@efsa.unsa.ba