

Submitted to Journal of Marketing Management

**Improving Relationships between Sales and Marketing: The Relative Effectiveness
of Cross-functional Coordination Mechanisms**

Kenneth Le Meunier-FitzHugh
Norwich Business School
University of East Anglia, UK

and

Graham R. Massey
University of Technology, Sydney

July 2019

Improving Relationships between Sales and Marketing: The Relative Effectiveness of Cross-functional Coordination Mechanisms

Abstract

The importance of effective sales and marketing working relationships is well known and this article examines the effectiveness of various coordination mechanisms used to improve this cross-functional relationship. Six coordination mechanisms are measured to identify their effect on sales and marketing conflict and collaboration, which in turn influence business performance. The results reveal that not all coordination mechanisms are equally effective. Structuring sales and marketing as a single unit and creating cross-functional project teams improve the interface, as do providing opportunities for job rotation and establishing cross-functional meetings. However, employing cross-functional training and co-locating sales and marketing do not influence this working relationship. Finally, reducing conflict and increasing collaboration between sales and marketing is shown to independently, and positively, influence business performance.

Key words: Sales and marketing Interface; Inter-functional Collaboration; Coordination Mechanisms; Inter-functional Conflict.

Summary Statement of Contribution

This study advances our understanding of how to manage the sales and marketing interface by identifying which coordination mechanisms are effective in reducing sales and marketing conflict and improving their collaboration, as they both independently influence business performance, and have beneficial implications for the whole organisation. Organisations should employ *cross-functional meetings*, *cross-functional project teams*, provide *opportunities for job rotation*, and consider *restructuring sales and marketing functions* to help reduce dysfunctional conflict and facilitate collaboration.

Word count 7650

The effectiveness of cross-functional working relationships between sales and marketing is of considerable academic and practitioner interest because of its association with creating improved business performance (e.g., Homburg & Jensen, 2007; Le Meunier-FitzHugh & Piercy, 2007; Rouziés & Hulland, 2014; Sleep, Lam & Hulland, 2018). It has been suggested that, where there is inter-functional conflict and a lack of communication or alignment between sales and marketing activities, sales and marketing cross-functional working relationships will be damaged (Massey & Dawes, 2007; Kotler, Rackham & Krishnaswamy, 2006; Malshe, Johnson & Viio, 2017; Snyder, McKelvey & Sutton, 2016). Given that the quality of sales and marketing cross-functional relationships has significant performance implications, improving these relationships is an imperative for senior management and is the focus of this study (Le Meunier-FitzHugh & Piercy, 2009)

To improve cross-functional relationships between relatively autonomous functional units, such as sales and marketing, many organisations employ management ‘lateral linkage devices’, ‘structural coordination mechanisms’, or ‘integration mechanisms’ (cf. Ainamo, 2007) to facilitate cross-functional interactions. However, the effectiveness of these coordination devices has never been comprehensively tested on the sales and marketing interface. A number of papers have identified a variety of ‘coordination mechanisms’ that influence the effectiveness of the sales and marketing interface and business performance (e.g. Dawes & Massey, 2005; Dewsnap & Jobber, 2009; Kotler, Rackham & Krishnaswamy, 2006; Le Meunier-FitzHugh & Piercy, 2007; Rouziés, Anderson, Kohli, Michaels, Weitz & Zoltners, 2005). These recommendations include both structural mechanisms (e.g. location and structure of sales and marketing

personnel) and organisational mechanisms (e.g. cross-functional training, job rotation, formal meetings and cross-functional project teams). The effect of some lateral linkage devices on conflict between sales and marketing has been considered (Dawes & Massey 2005). Additionally, Le Meunier-FitzHugh & Piercy (2007) conceptualised that facilitating collaboration between sales and marketing (e.g. creating shared goals, mutual understanding, shared resources, a common vision, and *esprit de corps*) through the use of integration mechanisms) should result in improved business performance.

This paper tests selected integration mechanisms identified in prior literature with the aim of demonstrating which are most effective in creating opportunities for reducing conflict and improving collaboration between sales and marketing. The six facilitating and coordination mechanisms selected from literature for this study are: The use of *cross-functional project teams*; *cross-functional meetings*; *cross-functional training*; *the opportunity for job rotation*; *the location of sales and marketing personnel*; and *the structure of sales and marketing functions*. The impact of these mechanisms is independently tested on our two mediating variables (*sales and marketing collaboration* and *sales and marketing dysfunctional conflict*), which are in turn measured against our dependent variable, *business performance*.

Our study makes several important contributions. First, it responds to calls to study the effectiveness of various coordination mechanisms on the cross-functional relationships between sales and marketing (e.g., Dewsnap & Jobber, 2009; Matthyssens & Johnston, 2006). Second, we believe that this is the first study to quantitatively measure all of these mechanisms in a single, integrated model allowing a comparative study. Third, our study extends existing conceptual (e.g., Dewsnap & Jobber, 2000; Le

Meunier-FitzHugh and Piercy, 2007; Rouziés et al., 2005) and exploratory research (e.g., Biemans & Brenčič, 2007; Dawes & Massey, 2005; Guenzi & Troilo, 2006; Homburg, Jensen & Krohmer, 2008; Snyder, McKelvey & Sutton, 2016) on the management of sales and marketing cross-functional relationships. Last, we believe that this is the first study to measure the individual impact of both of the mediators – *sales and marketing collaboration*, and *sales and marketing conflict* – on business performance. The remainder of this paper is structured as follows. We begin with a discussion of our theoretical frameworks, present our conceptual model, and develop our hypotheses. Next, we report the results of our analyses and discuss our findings. Finally, we draw conclusions and management recommendations, discuss the limitations of the study, and identify directions for future research.

Theoretical Framework

There has been a growing awareness of the need for a more integrated approach from sales and marketing functions. However, this has been difficult to achieve due to organisational barriers and thought-world differences between the two groups. A recent study revealed that ‘sales and marketing personnel most commonly experience three dysfunctions: (a) communication paucity, (b) lack of collaboration, and (c) overt conflict’ (Malshe, Johnson & Viio, 2017: 147). Homburg & Jensen (2007) established that thought-world differences exist between sales and marketing in two distinct areas: their orientation and competencies. Their ‘orientation’ differences relate to the goals to be achieved (e.g. turnover or brand value), and in their time orientation, i.e., whether they have a short-term focus (Sales Managers), or longer term (Marketing Managers). The

‘competence’ differences relate to three aspects of these managers’ skills: their levels of market knowledge, product knowledge, and interpersonal skills. The issue is that these differences in thought-worlds between sales and marketing are essential for high performance in their individual roles, so that sales would not be as effective as salespeople if they adopted a marketing thought-world, and vice versa. It has also been found that two of these thought-world differences (interpersonal skills and product knowledge) impact negatively on the quality of the working relationship between sales and marketing (Homburg & Jensen, 2007). A number of writers have indicated that differences in time orientation also negatively impact on sales and marketing performance (e.g., Cespedes, 2014).

Organisational barriers, such as conflicting objectives, differing internal status and physical location, have been highlighted as damaging the sales and marketing cross-functional relationship (e.g. Rouziés et al., 2005; Malshe & Soli, 2009). Consequently, sales and marketing functions have experienced difficulties in co-ordination, working relationships and sometimes lack of cooperation and inter-functional conflict (e.g. Kotler, Rackham & Krishnaswamy, 2006; Malshe, Johnson & Viio, 2017). Some of these difficulties can be attributed to their differing thought-worlds (Homburg & Jensen, 2007), poor alignment of goals (Le Meunier-FitzHugh & Piercy, 2009) and differences in time orientation (Cespedes, 2014). An investigation into sales and marketing relationships identified that differences in perception of justice between sales and marketing managers contributed to poor relationship effectiveness and feelings of conflict (Hulland, Nenkov & Barclay (2011). It is consequently important for senior managers to work to promote cooperation and collaboration between sales and marketing personnel, and to try to

reduce any perceived dysfunctional conflict that exists between the two groups and improve strategic planning to achieve organisational objectives.

A body of literature has emerged suggesting that sales and marketing cross-functional relationships are improved by deploying a number of coordination mechanisms (see Table 1) and the following are consistently highlighted across these studies: *cross-functional project teams, cross-functional meetings, cross-functional training, the opportunity for job rotation, the location of sales and marketing personnel, and the structure of sales and marketing*. The logic is that the use of these mechanisms should help reduce sales and marketing thought-world differences, as well as promoting communication and understanding, which, in sum, should lead to a reduction of sales and marketing conflict and an improvement in sales and marketing collaboration, resulting in improved business performance.

The effects of some coordination mechanisms, such as structural integration and the use of teamwork (e.g., Homburg, Jensen & Krohmer, 2008), co-location and the use of joint sales and marketing departments, have been discussed in prior literature (Dewsnap & Jobber, 2000; Rouziès et al., 2005; Snyder, McKelvey & Sutton, 2016) and coordination mechanisms on conflict (Dawes & Massey, 2005) have been partially explored. However, by simultaneously testing a more comprehensive set of individual mechanisms in this study, we are able to assess their relative effectiveness on the sales and marketing cross-functional relationship through collaboration and conflict.

Table 1

Studies on Improving the Sales and Marketing Interface

| Authors | Focus of the Study | Empirical Approach | Key Findings |
|--|---|----------------------------|--|
| Biemans & Brenčič (2007) | S&M interface in B2B | Qualitative | Highlighted that management, formal and informal coordination mechanisms (<i>proximity or co-location, periodic meetings, joint customer visits/rotation</i>), and personal characteristics were key antecedents affecting perceived quality of the S&M interface. |
| Biemans, Brenčič & Malshe (2008) | Configuration of S&M and effects on performance | Qualitative | Communication, information sharing affect collaboration through <i>cross-functional meetings</i> . Positive collaboration impacted on business performance. |
| Cometto, Nisar, Palacios, Le Meunier-FitzHugh & Labadie (2016) | Creating S&M integration within NPD | Quantitative | Use of structural devices e.g. <i>formalization/cross-functional teams</i> , was found to facilitate the collaboration process between S&M. |
| Dawes & Massey (2005) | Antecedents of conflict in S&M cross-functional relationships | Quantitative | Some lateral linkage devices were found to reduce conflict between S&M. However, <i>Co-located S&M</i> departments were found not to reduce conflict. |
| Dewsnap & Jobber (2000) | Improving S&M interface | Conceptual | Recommends organisational integrators of structure (formalisation and decentralisation), <i>physical location</i> , rewards, roles (e.g. <i>cross-functional roles</i> , trade marketing roles, category management) and that management attitudes may impact on business performance. |
| Dewsnap & Jobber (2009) | Structural devices to enhance S&M groups | Conceptual/ Qualitative | Considered various integrative devices to be employed in different organisations and suggested that collaboration should positively impact business performance. Integrative devices were <i>S&M structure and cross-functional teams</i> . |
| Guenzi & Troilo (2006) | Integration of S&M within | Qualitative | <i>Job rotation, cross-functional training, lower conflict, physical</i> |

| | | | |
|---------------------------------------|---|----------------------------|---|
| | market orientation | | <i>location</i> , and rewards appeared with a low level of frequency, while organisational <i>structure</i> , culture, <i>collaboration</i> , communication, and <i>planned meetings</i> , appeared more frequently. |
| Homburg, Jensen & Krohmer (2008) | Structural configuration of S&M - a taxonomy | Quantitative | Measured information sharing structural linkages (e.g. <i>formalisation, joint planning and teamwork</i>), power, orientation and knowledge of Sales and Marketing to identify five S&M configurations |
| Hulland, Nenkov & Barclay (2011) | Considers sales and marketing relationship effectiveness in relation to justice | Quantitative | Identified that sales and marketing relationship effectiveness is affected by perceived injustice and that this can be mitigated by inter-functional communications, in particular frequent <i>cross-functional meetings</i> to share information and promote understanding. |
| Kotler, Rackham & Krishnaswamy (2006) | Drivers of S&M collaboration and conflict | Conceptual | Conflict created by economic and cultural differences, conflicting roles, and poor communication. Performance enhanced by S&M collaboration through <i>formal communications</i> (meetings), <i>joint projects, rotating jobs</i> , rewards, <i>co-location</i> , improved feedback and <i>cross-functional working</i> . |
| Le Meunier-FitzHugh & Piercy (2007) | Integrators and facilitators of S&M collaboration | Conceptual/ Qualitative | <i>Cross-functional training</i> , rewards and coordination mechanisms, e.g. <i>job rotation, project teams and meetings</i> , were suggested to be facilitators of collaboration. |
| Malshe, Johnson & Viio (2017) | Understanding the S&M dysfunction experience | Qualitative | Individual rather than functional responses to <i>S&M dysfunction</i> . The differences in perception of dysfunction by S&M people, resulted in the need for a more customised approach to addressing dysfunction. |
| Matthyssen & Johnston (2006) | Good coordination between S&M in B2B | Conceptual/ Qualitative | Highlighted three areas HRM, Structure, and Communication. <i>Structure</i> should be customer-centric. <i>Job rotation</i> essential in removing tensions. <i>Joint training</i> should |

| | | | |
|----------------------------------|---|---|--|
| | | | improve coordination and remove thought-world differences. |
| Rouziès et al. (2005) | S&M integration | Conceptual | Highlighted <i>Structure</i> , Processes, Culture and People. Specifically, suggested decentralisation, <i>cross-functional teams</i> , communications and integrators such as, <i>job rotation</i> , information systems, integrated goals, and rewards, have possible effects on business performance. |
| Sleep, Lam & Hlland (2018) | S&M integration gap | Exploratory/ Quantitative | Explored the antecedents between desired and realised integration of S&M behaviours. Suggested differential rewards can widen the gap, which can create <i>conflict</i> and impact on business performance negatively. |
| Snyder, McKelvey & Sutton (2016) | Exploring sales and marketing integration | Exploratory/ Quantitative & Qualitative | High alignment between S&M achieved through <i>proximity</i> , <i>cross-functional teams</i> , incentives and new technology. |

Conceptual Model

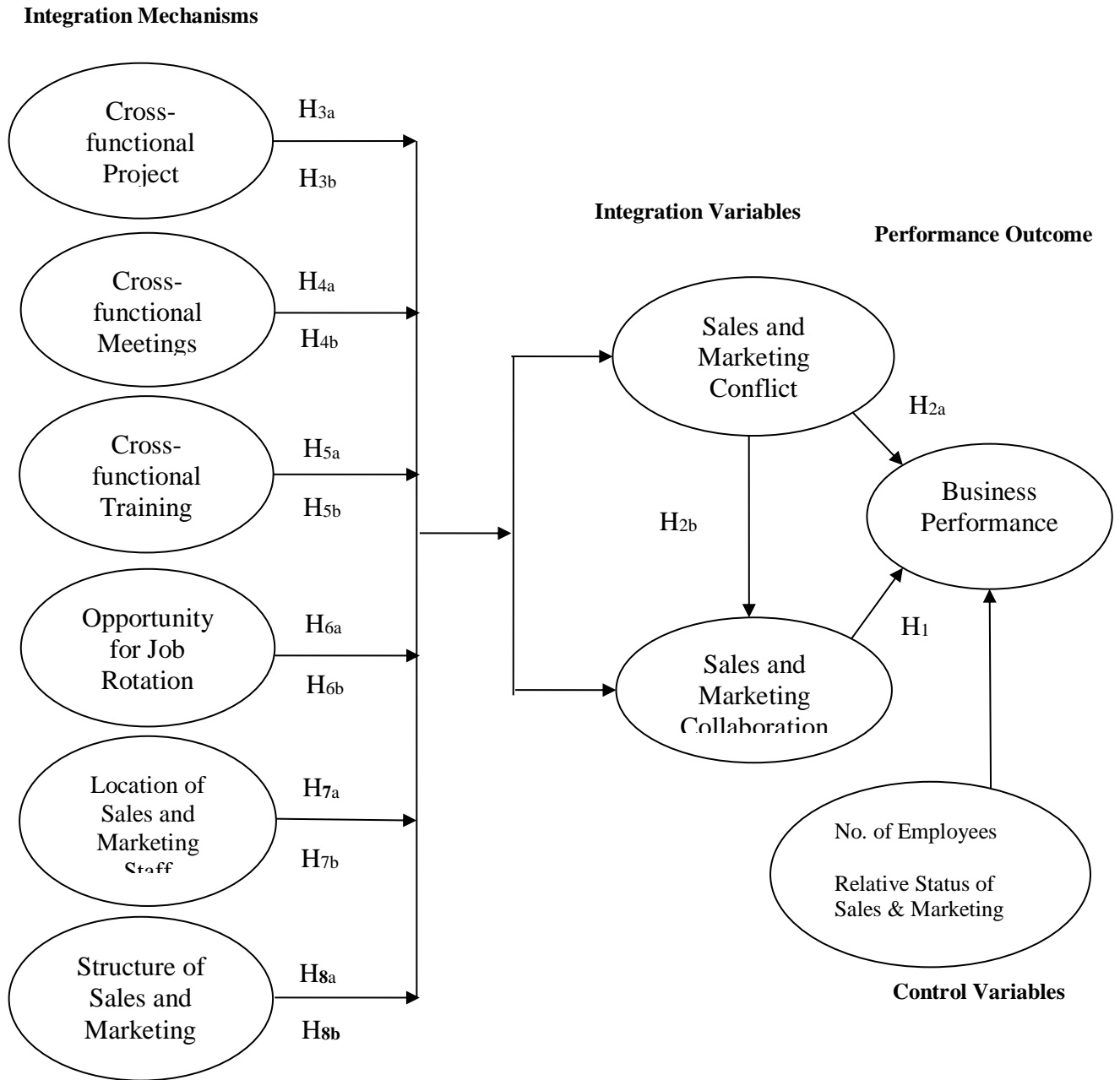
The dependent variable for our study - *business performance* was chosen because it represents an important organisational outcome that has been found to be directly linked to the quality of sales and marketing cross-functional relationship (e.g., Le Meunier-FitzHugh & Piercy 2009; Rouziés & Hulland, 2014). Our two mediating variables, *sales and marketing collaboration*, and *sales and marketing conflict* are included because they are indicative of the effectiveness of this cross-functional working relationship. The level of *collaboration* between sales and marketing functions is a positively-oriented variable, resulting in aligned activities, information sharing, joint planning and an *esprit de corps* (Le Meunier-FitzHugh & Piercy, 2009). We also examine the effects of *dysfunctional conflict* between sales and marketing functions (Massey & Dawes, 2007; Malshe, Johnson & Viio, 2017) to capture the effects of integration mechanisms on the negative elements of the cross-functional relationship. These two mediating variables are conceptually distinct, which is reflected in the items selected to measure them.

In developing our conceptual model (see Figure 1), we draw on a number of key studies (e.g., Dewsnap & Jobber, 2000; Guenzi & Troilo, 2006; Kotler, Rackham & Krishnaswamy, 2006; Le Meunier-FitzHugh & Piercy, 2007; Rouziés et al., 2005). This literature outlines some of the difficulties in establishing an effective sales and marketing relationship and identifies a number of coordination mechanisms that management may use to improve the sales and marketing interface. Our study draws on the conceptualization of coordination mechanisms provided by Rouziés et al. (2005), which categorised coordination mechanisms as either structural or process systems. The

variables of the *structure of sales and marketing* and the *use of cross-functional teams*, both fall into the ‘structural’ category. The use of coordination mechanisms; *cross-functional meetings*, *cross-functional training*, the *opportunity for job rotation* and the *physical location of the marketing personnel* are processes and systems that provide opportunities for sales and marketing to meet, interact, and establish effective communication links.

We also tested the effects of two control variables: *organisational size*, as denoted by the number of employees in the organisation and the *relative status of sales and marketing*. We included organisational size as larger organisations are more likely to have separate sales and marketing functions (Le Meunier-FitzHugh & Piercy, 2011), and because our dependent variable, *business performance*, may be influenced by the size of the organisation. The second control variable, the relative status of sales and marketing, was included because there are many ways to structure a marketing organisation (cf. Homburg, Jensen & Krohmer, 2008). Different designs can result in power differences and evidence suggests that inter-group power imbalances can affect working relationships negatively (e.g. Hulland, Nendov & Barclay, 2011). Consistent with Homburg & Jensen (2007), we controlled for the level of power of the sales and marketing units in our sample, by measuring the *relative status* of these departments. By doing this we were able to assess whether the effects observed on our dependent variable - *business performance*, were caused in part by a power imbalance, stemming from differences in the underlying design of the company’s marketing organisation.

Figure 1.
Conceptual model



Hypotheses Development

Sales and Marketing Collaboration and Business Performance

This study adopts Kahn's (1996, p. 139) conceptualization of *collaboration* from the innovation literature, i.e., an 'affective, volitional, mutual or shared process where two or more departments work together, have mutual understanding, have a common vision, share resources, and achieve collective goals. Prior studies have established that collaboration between sales and marketing has beneficial effects in terms of business performance (e.g. Homburg & Jensen, 2007; Le Meunier-FitzHugh and Piercy, 2007). Similarly, Hughes, Le Bon & Malshe (2012) argue that improving the sales and marketing interface aids the development of market-based capabilities, which also leads to improvements in overall organisation performance. Business performance in our study relates to improvements in financial indicators, such as sales volume and profitability that are captured through 'self-explicated measures, such as judgments about overall performance, market share change and new product success, [which] have been shown to be highly correlated with the aforementioned objective financial measures' (Jarratt & Katsikeas, 2009, p. 61). In addition, greater sales and marketing collaboration can help provide a more fully integrated offer to customers, enhancing customer value creation, which can lead to increased sales revenue and profitability (e.g. Cespedes, 2014; Guenzi & Troilo, 2007), and improve overall business performance (Le Meunier-FitzHugh & Piercy, 2007). Accordingly, we hypothesize:

H₁: Sales and marketing collaboration will be positively associated with business performance.

Sales and Marketing Conflict

There is still considerable concern about conflict in the relationship between sales and marketing (e.g. Malshe, Johnson & Viio, 2017; Sleep, Lam & Hulland, 2018).

Although intra-organisational conflict has multiple forms, in this study we conceptualize this variable in its dysfunctional form (Massey & Dawes, 2007), which is characterised as a situation in which there are unhealthy and antagonistic relationships, associated dysfunctional behaviours and dissatisfaction. This type of conflict is associated with negative outcomes such as distorting or withholding information to the detriment of others, hostility and distrust, opportunistic behaviour, information gatekeeping, and the creation of obstacles to decision making (e.g. Jaworski & Kohli, 1993). Conflict also reduces team performance and member satisfaction via the associated tensions, which distract people from task performance (De Dreu & Weingart, 2003). Various scholars have noted antipathy between sales and marketing (e.g., Kotler, Rackham & Krishnaswamy, 2006), originating in differences in thought-worlds, their respective goals, their time orientations (Cespedes, 2014), and their skills (cf. Beverland, Steel & Dapiran, 2006; Homburg & Jensen, 2007; Rouziés et al., 2005). These thought-world differences can lead to an incomplete understanding of each other's roles and create an integration gap between desired and realised behaviours between sales and marketing (Sleep, Lam & Hulland, 2018). Hughes, Le Bon & Malshe (2012, p. 68) suggest 'a suboptimal SMI [Sales and Marketing Interface] may act as an inhibitor to success'. Recent studies have indicated that the perception of conflict between sales and marketing inhibits collaboration (e.g. Malshe, Johnson & Viio, 2017). However, the effect of inter-

functional sales and marketing conflict on performance has yet to be measured. Hence, we hypothesize:

H_{2a}: Sales and marketing conflict will be negatively associated with business performance.

H_{2b}: Sales and marketing conflict will be negatively associated with sales and marketing collaboration.

Use of Cross-functional Teams

Cross-functional project teams are a bureaucratic initiative or formalization designed to improve the coordination of differentiated or specialist units (such as sales and marketing) (Beverland, Steel & Dapiran, 2006). Different departments often work together on complex tasks and cross-functional teamwork is one method to manage such tasks. Cross-functional teams can improve decision making processes (e.g., Snyder, McKelvey & Sutton, 2016). Benefits of establishing cross-functional sales and marketing teams are that they can align their objectives and create a common framework, facilitating the sharing of ideas and focussing efforts. As Kotler, Rackham & Krishnaswamy (2006, p.74) noted, ‘it’s important to create opportunities for marketers and salespeople to work together’, as this will allow them to become more familiar with each other’s operations. Similarly, Dewsnap & Jobber (2009, p.1000) recommend that integrative sales and marketing teams are desirable because they promote ‘jointly developed commercial initiatives and marketing plans.’

A study into the operation of sales and marketing within new product development found that creating a cross-functional team increased its opportunities for communication and improved sales and marketing collaboration (Cometto *et al.*, 2016). When sales and marketing personnel work in cross-functional teams they can better

understand each other's issues and create a sense of ownership of decisions (Rouziés et al., 2005), thereby reducing the negative effects of thought-world differences between the two groups (Homburg & Jensen, 2007). The use of cross-functional sales and marketing teams should reduce conflict and increase collaboration, and our hypotheses are:

H_{3a}: *Use of cross-functional sales and marketing teams will be negatively associated with sales and marketing conflict.*

H_{3b}: *Use of cross-functional sales and marketing teams will be positively associated with sales and marketing collaboration.*

Use of Cross-functional Meetings

Employing formal *cross-functional meetings*, during which information can be exchanged, viewpoints challenged, and thought-world differences reconciled, should lead to an understanding of the other's priorities and positions on key issues. Kotler, Rackham & Krishnaswamy (2006) recommend regular meetings for sales and marketing to provide opportunities to review progress and identify changes in the market. The mechanism of cross-functional meetings involves the decentralization of decision-making power (Dewsnap & Jobber, 2000). Sharing information and providing the opportunity to act on that information should help to reduce conflict and promote collaboration (Biemans, Brenčič & Malshe, 2008). Regular cross-functional sales and marketing meetings offer opportunities for individual priorities to be considered and for the department-specific jargon of each thought-world to be better understood, thus reducing conflict (e.g. Hulland, Nenkov & Barclay, 2011). Where these meetings are not promoted, personnel from sales and marketing might selectively filter or ignore information from the other department, leading to lower collaboration and increasing the potential for conflict to emerge (Homburg & Jensen, 2007). Exchanging ideas during formal meetings and

engaging in joint planning should lead to greater collaboration and reduce conflict. We hypothesise:

H_{4a}: Use of cross-functional sales and marketing meetings will be negatively associated with sales and marketing conflict.

H_{4b}: Use of cross-functional sales and marketing meetings will be positively associated with sales and marketing collaboration.

Use of Cross-functional Training

Cross-functional training is designed to help sales and marketing units to understand each other's challenges and develops shared experiences (Guenzi & Troilo, 2006; Homburg & Jensen, 2007). Education and training programmes can help participants interact and make formal and informal connections (Jaworski & Kohli, 1993). Matthyssens & Johnston (2006) note that joint training can stimulate the sales and marketing interface by providing common terminology and thinking patterns that, in turn, can reduce misunderstandings and conflict. Sales and marketing departments often experience role ambiguity where the importance of, and linkages between, their tasks are not clearly explained (Kotler, Rackham & Krishnaswamy, 2006). Cross-functional training can help by bridging the communications gap between the two groups, reducing conflict and potentially leading to higher levels of collaboration (Guenzi & Troilo, 2006; Homburg & Jensen, 2007). We hypothesize:

H_{5a}: Use of cross-functional training for sales and marketing personnel will be negatively associated with sales and marketing conflict.

H_{5b}: Use of cross-functional training for sales and marketing personnel will be positively associated with sales and marketing collaboration.

Opportunity for Job Rotation

Consistent with the previous logic, an opportunity to work in each other's area may increase sales and marketing collaboration and decrease conflict, by enabling personnel to experience the rewards and challenges facing the other functional group (e.g., Kotler, Rackham & Krishnaswamy, 2006). The opportunity for *job rotation* can allow personnel to work outside their own functional areas and thought-worlds to better understand the roles and priorities of other departments. Moving personnel across functions allows sales and marketing staff to develop an understanding and empathy for each other's tasks and challenges, and is beneficial in overcoming mistrust (Malshe, Johnson & Viio, 2017). Job rotation should enable sales and marketing managers to 'develop a better understanding of their counterparts' culture, activities, constraints and objectives' (Rouziés et al. 2005, p. 119). It is worth noting that our study considers if there are opportunities for job rotation, as evidence shows that, although job rotation is recommended in literature (e.g. Dewsnap & Jobber, 2000; Kotler, Rackham & Krishnaswamy, 2006), the opportunities for such job rotation between sales and marketing personnel are usually very limited and may be restricted to marketing joining the sales team for occasional customer visits (Biemans & Brenčič, 2007). Matthyssens & Johnston (2006) suggest that job rotation can reduce persistent prejudices held by sales and marketing personnel, and their respective units, potentially reducing conflict. The opportunity to work in each other's functional area can increase collaboration by building a mutual understanding of each other's role and promoting professional links between groups (Guenzi & Troilo, 2006). Consequently, the hypotheses are:

H_{6a}: *The opportunity for job rotation between sales and marketing personnel will be negatively associated with sales and marketing conflict.*

H_{6b}: The opportunity for job rotation between sales and marketing personnel will be positively associated with sales and marketing collaboration.

Physical Location of Sales and Marketing

Closer physical proximity between sales and marketing should lead to easier information transfer and faster identification of problems, which can help reduce the detrimental effects of thought-world differences on collaboration and conflict (Dewsnap & Jobber, 2000; Rouziés et al., 2005). It is likely that close physical proximity between sales and marketing increases the opportunities for interaction. Studies of sales and marketing cross-functional relationships support the view that physical proximity influences collaboration by providing opportunities to discuss issues (e.g., Rouziés et al., 2005; Snyder, McKelvey & Sutton, 2016). Physical separation between sales and marketing can present a barrier to communication and increase conflict. Importantly, many sales teams have no other option but to work away from office-based marketing in both small and large organisations. Consequently, sales personnel in particular may bond tightly together and exclude links with office-based personnel (Homburg & Jensen, 2007). Consequently, the effect of physical location on sales and marketing collaboration and conflict should be examined, and we hypothesise that:

H_{7a}: Locating sales and marketing departments in close physical proximity will be negatively associated with sales and marketing conflict.

H_{7b}: Locating sales and marketing departments in close physical proximity will be positively associated with sales and marketing collaboration.

Structure of Sales and Marketing

Consistent with our logic regarding co-location (above), the structure of sales and marketing departments is also likely to be important to collaboration. When sales and marketing are structured as separate departments, their operational separation will provide the conditions for thought-world differences to emerge (e.g. Homberg & Jensen, 2007). It is proposed that, where sales and marketing are structured into a single department, there may be considerable advantages in terms of aligned activities and improved cooperation and information sharing (Dewsnap & Jobber, 2000; Matthyssens & Johnston, 2006). Structuring sales and marketing as one department should also provide opportunities for improved understanding of each other's priorities and perspectives (Dewsnap & Jobber, 2000; Guenzi & Troilo, 2006). However, an initial study that tested this proposition found that merging sales and marketing functions did not reduce conflict (Dawes & Massey, 2005). Other studies suggest that structuring of sales and marketing into a single department may help personnel to work more collaboratively and meet organisational goals more effectively, thereby reducing conflict (Kotler, Rackham & Krishnaswamy, 2006; Matthyssens & Johnston, 2006; Rouziés et al., 2005). Despite the differences in theory and evidence as to how structure is likely to affect sales and marketing cross-functional relationships, we hypothesise:

H_{8a}: Structuring the sales and marketing departments into one joint department will be negatively associated with sales and marketing conflict.

H_{8b}: Structuring the sales and marketing departments into one joint department will be positively associated with sales and marketing collaboration

Methodology

The research was carried out using a mail survey of large B2B organisations (turnover of more than £11.2 million) operating in the United Kingdom. We chose to examine larger organisations as they are more likely than smaller organisations to have separate sales and marketing functions. The sampling frame of 1000 organisations was taken from a list provided by a commercial agency of wholesalers, industrial goods manufacturers and consumer goods manufacturers. A pre-tested, self-administered questionnaire and letter were personally addressed to the Managing Director or Chief Executive (CEO) of each organisation in the sampling frame. The letter offered the opportunity to receive a summary of the results upon completion of the questionnaire. A reminder letter was sent after two weeks, and a follow-up questionnaire was sent two weeks later, with a final reminder approximately six weeks after the initial contact. 146 usable responses were received.

The organisational make-up of the sample was 42% industrial manufacturers, 30% wholesalers and 28% consumer goods manufacturers covering a range of B2B operations. Senior managers were selected as key informants because they determine organisational structure and policies, and they recommend the use of the coordination mechanisms that are examined in this study. They are also best placed to analyse the organisation's business performance. The use of senior managers as respondents is consistent with both Zahra & Covin (1993) and Li & Yang (2007), who demonstrated that using senior respondents is justified because they are the most knowledgeable people regarding their organisations' strategies and structure. However, 26% of our respondents had also worked in either sales and/or marketing, of whom 14% purely had responsibility for sales

strategy and 12% had responsibility for marketing strategy (see Table 2). We conducted t-tests to identify any significant differences between the responses of CEOs and departmental executives, and none were found. Additionally, we tested for differences in the responses between industry type, and again no differences were found. These tests indicate that the findings are consistent across industry type and respondent type, providing confidence in the replicability of the findings in other business contexts.

Table 2 Sample Composition (N=146)

| Industry | % |
|---|----------|
| Industrial Manufacturers | 42 |
| Wholesalers | 30 |
| Consumer Goods Manufacturers | 28 |
| Respondents | |
| CEO/MD/General Managers | 70.5 |
| Marketing Directors /Managers/Executives | 11.6 |
| Sales and Marketing Directors/Managers | 6.9 |
| Sales Directors/Managers | 4.9 |
| Business Development Managers | 2.7 |
| Other HR Managers/Accountants/Customer Liaison Managers | 3.4 |
| Annual Turnover | |
| £11-£20 million | 52 |
| £21-£50 million | 27 |
| More than £50 million | 21 |

Construct Operationalization

Using themes and patterns from previous research, the questionnaire was developed by placing the themes in a logical order and then selecting the questions to be included (Churchill & Iacobucci, 2002). Consequently, nine of the measures were selected from previously published research papers and seven of them employed Likert scales (Behrman & Perreault, 1982; Germain, Dorge & Daugherty, 1994; Hult, Ketchen & Salter, 2002; Kohli, Jaworski & Kumar, 1993; Menon, Jaworski & Kohli, 1997). As recommended by Churchill & Iacobucci (2002), the use of existing scales assists with the concurrent validity of the questionnaire (see Appendix 1). However, existing scales could not be found for two of the measures (use of cross-functional training and opportunity for job rotation), so questions were developed to measure these constructs. To assess the content validity of the new measures, specialists in the sales and marketing were employed to review the questionnaire. The initial questionnaire was presented to 25 part-time MBA students for analysis and review. The questionnaires were then tested in a pilot survey of 20 Managing Directors. A number of adjustments were made to improve the questionnaire as a result of these tests, with some questions being reworded to improve clarity.

Measure refinement

Principal components analysis revealed that all the reflective multi-item scales were unidimensional. Partial least squares (PLS) was used to estimate the measurement models, specifically *SmartPLS 2.0* (Ringle, Wende & Will, 2005). The diagnostics suggest that most items are adequate indicators of the latent variables, though with interpersonal conflict it was necessary to delete four of the seven items as the

standardized factor loadings were well below the recommended $\approx .71$ (Fornell & Larcker, 1981) and did not account for sufficient variance in the latent variable. If not omitted, such items could attenuate and bias the structural model estimates (Hulland, 1999). Domain sampling theory suggests that deleting these items should not compromise the validity of this reflective construct (see Table 3).

Table 3 - Assessment of Measurement for Reflective Constructs

| Construct | Indicator | Standardised Factor Loadings | Composite Reliability | Average Variance Extracted |
|---------------------------------------|------------------|---|----------------------------------|---|
| Use of cross-functional project teams | 1 | .82 | .79 | .56 |
| | 2 | .69 | | |
| | 3 | .72 | | |
| Use of cross-functional meetings | 1 | .83 | .90 | .75 |
| | 2 | .89 | | |
| | 3 | .88 | | |
| Use of cross-functional training | 1 | .86 | .81 | .68 |
| | 2 | .79 | | |
| Sales and marketing conflict | 2 | .60 | .80 | .58 |
| | 3 | .79 | | |
| | 7 | .87 | | |
| Sales and marketing collaboration | 1 | .81 | .92 | .69 |
| | 2 | .89 | | |
| | 3 | .82 | | |
| | 4 | .81 | | |
| | 5 | .83 | | |
| Business performance | 1 | .84 | .91 | .64 |
| | 2 | .72 | | |
| | 3 | .78 | | |
| | 4 | .86 | | |
| | 5 | .76 | | |
| | 6 | .81 | | |

Evaluating the Quality of the Data

A sampling frame of 1,000 organisations was used in the survey and a response rate of 22.3% was achieved, of which 7.7% were not usable for various reasons. Our response rate is similar to other work on *sales and marketing* relationships, e.g., Homburg & Jensen (2007). MANOVA was used to test for differences between the types of respondent, industry types and organisational turnover and no significant differences were found. Chi-square tests found no significant differences between the early and late respondents based on industry type, turnover and number of employees (Armstrong & Overton, 1977). Non-coverage error was examined by comparing the characteristics (turnover, number of employees and industry type) of a sample that did not respond, with the respondents. Non-response bias was not found in the data. As the variance inflation factors were all below 10, and all condition indices were well below 30, multicollinearity does not appear to be a problem. We also tested for homoscedasticity, normality, linearity, independence of residuals and outliers and no problems were discovered.

To test for common method bias (CMB) we used two confirmatory factor analyses, one as a baseline, and the other with an unmeasured latent methods factor (cf. Podsakoff, MacKenzie, Lee & Podsakoff, 2003). We did this because evidence for CMB is expected at the item level rather than the construct level (Podsakoff et al., 2003). None of the standardized regression weights for the items in these two models differed substantially (mean difference = .02). Also, a chi-square difference test revealed that the methods variance model had a significantly worse fit than the baseline model, thus we are confident there are no problems with common method bias in our study.

Convergent validity was established, as the t-statistics for each item were statistically significant (Anderson & Gerbing, 1988), and the average variance extracted (AVE) for each construct exceeded .50, suggesting that the items explain more variance in the latent variables, than variance due to measurement error (Fornell & Larcker, 1981). Discriminant validity was established as the AVEs for each pair of constructs in our model were found to be greater than the square of the correlation between those two constructs (Fornell & Larcker, 1981). This result was corroborated, as no item loaded higher on another construct than on the construct it purports to measure (Chin, 1998). All of the scales exceeded the 0.7 benchmark for composite reliability and therefore our measures demonstrate sufficient reliability. The correlations and descriptive statistics are presented in Table 4.

Table 4
Descriptive statistics and correlations

| Construct^a | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--|-------------|-------------|------------------------|------------|------------|----------|----------|----------|------------|------------|------------|
| 1. Use of cross-functional project teams | 3.86 | 1.42 | .75^d | | | | | | | | |
| 2. Use of cross-functional meetings | 4.90 | 1.51 | .49** | .87 | | | | | | | |
| 3. Use of cross-functional training | 3.02 | 1.23 | .36** | .26** | .83 | | | | | | |
| 4. Opportunity for job rotation | 3.95 | 1.73 | .27** | .34** | .23** | N.A. | | | | | |
| 5. Location of Sales and Marketing ^b | 2.24 | 0.74 | .06 | .10 | -.08 | .06 | N.A. | | | | |
| 6. Structure of Sales and Marketing ^c | 1.43 | 0.50 | -.25** | -.03 | -.16 | .01 | -.04 | N.A. | | | |
| 7. Sales and Marketing Conflict | 2.63 | 1.09 | -.22** | -.42** | -.16 | -.26** | -.06 | -.15 | .76 | | |
| 8. Sales and Marketing Collaboration | 5.10 | 1.19 | .33** | .47** | .24** | .36** | .05 | .18* | -.66** | .83 | |
| 9. Business Performance | 4.64 | 1.12 | .22** | .36** | .22** | .25** | -.05 | -.01 | -.41** | .42** | .80 |

** Significant at ≤ 0.01 level (two-tailed test) * Significant at ≤ 0.05 level (two-tailed test)

^a Constructs measured using 7-point scales; ^b 3-point scale; ^c 2-point scale

^d Numbers shown in boldface denote the square root of the average variance extracted (for reflective constructs only).

N.A. = Not applicable as this variable is a single item measure

Sales and marketing personnel were located in the same office in only 40% of the organisations sampled (see Table 5). Further, the results for the structure of the sales and marketing show that these two groups are more likely to be structured as two separate departments (57% of the sample) rather than in a single department. Consequently, the preconditions for thought-world differences exist within the majority of sales and marketing functions. Our final test was to consider the size of sales and marketing teams across industries (wholesalers, consumer goods and industrial manufacturers). A Chi-square test was carried out and it was found that there were no significant differences between the type of industry and the size of the sales and marketing teams. The analysis revealed that the marketing teams were consistently smaller than the sales teams, with 80% of the organisations surveyed employing five people or less in marketing, whereas 82% of the sample employed six or more salespeople.

Table 5 - The structure, location and number of people employed in Sales and Marketing

| | |
|---|-----------|
| Structure | |
| A single Sales and Marketing department | 62 (43%) |
| Separate Sales and Marketing departments | 84 (57%) |
| Location | |
| Working in the same building | 61 (42%) |
| Working in the same office | 59 (40%) |
| Separate buildings | 26 (18%) |
| Number of People Employed in Sales | |
| 1 – 5 | 26 (18%) |
| 6 – 10 | 38 (26%) |
| 11 – 20 | 31 (21%) |
| More than 20 | 51 (35%) |
| Number of People Employed in Marketing | |
| 1 – 5 | 117 (80%) |
| 6 – 10 | 17 (11%) |
| 11 – 20 | 8 (6%) |
| More than 20 | 4 (3%) |

PLS model testing results

PLS was used to estimate the structural model for various reasons. Specifically, our sample is relatively small, we make no assumptions about multivariate normality, and our primary concern is prediction of our endogenous variables (Chin, 1998; Diamantopoulos & Winklhofer, 2001). Smart PLS 2.0 (Ringle, Wende & Will, 2005) was used to establish the stability and significance of our parameter estimates, and the t-values were computed using 500 bootstrap samples. The R^2 for *sales and marketing* collaboration was .57, for *sales and marketing* conflict $R^2 = .25$, and for business performance $R^2 = .23$ suggesting that our model has high explanatory power, explaining between 23% and 57% of the variance in these endogenous variables. In addition, 9 of our 15 paths were significant at $p < .05$ or better, and one approached statistical significance ($p < .10$) (see Table 6).

To test whether the low path coefficients linking the coordination mechanisms and the mediating variables represent significant effects, we calculated an f^2 statistic (cf. Chin, 1998). The lowest f^2 result was .02 (Use of job rotation \rightarrow sales and marketing conflict), which is indicative of a small, but significant effect size. All of the other effects sizes were above .02, with the largest being .10. It is reasonable to conclude that all of the path coefficients we report indicate a significant effect on our mediating variables.

Table 6 - PLS model testing results

| Linkages in the model | Hyp.# & sign | Std. Beta (t-statistic) |
|--|-------------------------|--------------------------------|
| Sales & Marketing collaboration → Business performance | H1(+) | .25 (1.8417)* |
| Sales & Marketing conflict → Business performance | H2a(-) | -.23 (1.9211)* |
| Sales & Marketing conflict → S/M collaboration | H2b(-) | -.55 (8.3697)*** |
| Cross-functional project teams → S/M conflict | H3a(-) | -.10 (-1.0981) |
| Cross-functional project teams → S/M collaboration | H3b(+) | .12 (1.6344)† |
| Cross-functional meetings → S/M conflict | H4a(-) | -.33 (-4.0400)*** |
| Cross-functional meetings → S/M collaboration | H4b(+) | .13 (1.9047)* |
| Cross-functional training → S/M conflict | H5a(-) | -.05 (-0.5750) |
| Cross-functional training → S/M collaboration | H5b(+) | .06 (0.8337) |
| Opportunity for job rotation → S/M conflict | H6a(-) | -.12 (-1.3417)† |
| Opportunity for job rotation → S/M collaboration | H6b(+) | .11 (1.7232)* |
| Location of Sales & Marketing → S/M conflict | H7a(-) | -.05 (-0.6111) |
| Location of Sales & Marketing → S/M collaboration | H7b(+) | -.01 (-0.0698) |
| Structure of Sales & Marketing → S/M conflict | H8a(-) | -.22 (2.8533)** |
| Structure of Sales & Marketing → S/M collaboration | H8a(+) | .13 (2.0736)* |
| Control Variables | | |
| Number of Employees → Business performance | | -.01 (-0.2168) |
| Relative Status of S/M → Business performance | | .11 (1.5741)† |
| Collaboration R ² = .57 Conflict R ² = .25 Business Performance R ² = .23 | | |

*** Significant at ≤ 0.001 level (one-tailed test)

** Significant at ≤ 0.01 level (one-tailed test)

* Significant at ≤ 0.05 level (one-tailed test)

† Significant at ≤ 0.10 level (one-tailed test)

The relationships between our endogenous variables reveal some powerful effects. As expected, our results support the positive link between sales and marketing collaboration and business performance (H1). Sales and marketing conflict is associated with lower business performance (H2a), and greatly reduced collaboration (H2b). Cross-functional teams have mixed effects as they are associated with increased sales and marketing collaboration (H3b), but not reduced conflict (H3a). The effects of cross-functional meetings were clearer, as they are strongly associated with lower sales and marketing conflict (H4a), and greater collaboration (H4b). No effects were found between the use of cross-functional training and sales and marketing conflict (H5a) or collaboration (H5b).

The opportunity for job rotation is associated with greater sales and marketing collaboration (H6b) and, although the path coefficient is small ($\beta = .11$, $p < .05$), our effect size tests ($f^2 = .04$) confirm its existence. Job rotation is also associated with lower sales and marketing conflict (H6a), and again the path coefficient is low ($\beta = -.12$, $p < .10$), but our effect size tests confirm the effect is present ($f^2 = .02$). Contrary to our hypotheses, the location of sales and marketing personnel (H7a and H7b) has no effect on sales and marketing conflict or collaboration. However, the structure of the sales and marketing units has important effects as, the more closely these units are structured (i.e., working in joint departments), the lower the conflict (H8a), and the greater the collaboration (H8b). Again, the path coefficient is fairly low ($\beta = .13$), but the effect size ($f^2 = .08$) confirms its existence. Last, our control variables suggest that the effects on our dependent variable are not influenced by the size of the organisation, though the relative status of sales and marketing may have a small effect, as it approaches significance at the $p < .10$ level.

Discussion and Managerial Implications

Our aim with this study was to test the relative effectiveness of various facilitators of collaboration between sales and marketing. To our knowledge, this is the first study to test quantitatively a range of facilitating coordination mechanisms in an integrated model. It was found that not all of the coordination mechanisms advocated in the literature are equally effective. *Cross-functional meetings* and *project teams* and opportunities for *job rotation* and the *structure of sales and marketing*, all positively impact sales and marketing collaboration. While only *cross-functional meetings*, *opportunities for job rotation* and the *structure of sales and marketing* can reduce conflict. Consequently, management are now able to select mechanisms which are appropriate to improving the sales and marketing cross-functional relationship within their organisation. The second contribution of this study is that it identifies that sales and marketing collaboration and sales and marketing conflict individually impact on business performance. The results also reinforce the necessity of managing any sales and marketing conflict, as the largest path coefficient in our model indicates that conflict not only impacts negatively on business performance, but also damages collaboration. Managing any dysfunctional conflict between sales and marketing is, therefore, as important as facilitating collaboration in order to improve organisational performance. The results also show that managerial pursuit of sales and marketing collaboration is vital to organisations because it has wider performance implications rather than simply inter-departmental effects.

Considering the effects of the coordination mechanisms on our mediating variables, the argument is that these mechanisms should stimulate effective interaction by reducing thought-world differences, providing opportunities for interaction, sharing

information and planning. As noted previously, coordination mechanisms are the means by which senior managers can provide appropriate contexts for sales and marketing to interact, via structural changes and formalized initiatives such as cross-functional meetings and teamwork. We expected all six coordination mechanisms would positively affect sales and marketing cross-functional relationships, but this was not found to be the case. Establishing *cross-functional meetings* provided the strongest impact on both sales and marketing collaboration and conflict. There is evidence to show that joint decision-making and knowledge sharing in such meetings provide opportunities to discuss plans, clarify objectives and priorities, as well as exploring market developments and changes in the market environment, all of which provide the basis for creating joint objectives and collaborative behaviours. The provision of formal cross-functional meetings also ensures that there are opportunities to share opinions and challenge each other's ideas, helping to remove misunderstandings and align perceptions, which helps to reduce thought-world differences and therefore conflict.

Similarly, *structuring sales and marketing as a single department* appears to be effective in reducing conflict. Given the tendency for these departments to evolve into separate cultural thought-worlds (Homburg & Jensen, 2007), establishing a single sales and marketing department appears to help align goals and activities. Unified teams tend to have a common purpose that improves the willingness to share resources and ideas, which, in turn, removes one of the causes of sales and marketing conflict. Further, a joint sales and marketing department should be able to share information, which should help create a common understanding of the situation and promote collaborative behaviours. However, as the majority of sales and marketing teams in large organisations are

structured as separate units (Biemans, Brenčič & Malshe, 2008), it may be that to achieve structural coherence it is necessary to create a senior management role (e.g. a Sales and Marketing Director) with an overview of, and responsibility for, both functions.

The third mechanism that impacts on both sales and marketing collaboration and conflict is to provide the *opportunity for job rotation*. Experiencing the challenges and rewards of working in the other department's role can promote a better understanding of each other's perspectives. There is already some practitioner evidence of marketing personnel benefitting from accompanying sales personnel on customer calls or undertaking a sales role before working in the marketing office. However, there are very few examples of sales personnel being offered the opportunity to work with marketing personnel or in the marketing office, so we tested for this opportunity as the precursor to job rotation physically taking place. Job rotation could help sales personnel to understand the role marketing plays in communicating with customers and to appreciate the challenges of meeting various customer groups' needs. Additionally, sales personnel working with marketing could represent the voice of the customer directly to marketing, to help tailor offers to different customer groups. Importantly, job rotation may produce more enduring beneficial effects where improved understanding of each other's roles is retained when personnel return to their usual position. Promoting opportunities for sales personnel to work with marketing, as well as for marketing personnel to go on visits with sales, should be a priority for managers wishing to improve the sales and marketing interface.

Employing *cross-functional teams* to improve the sales and marketing interface produced mixed effects. Cross-functional teams are associated positively with sales and

marketing collaboration, suggesting that, working together to achieve a specific objective and appreciating each other's skills and contribution to the project's success, fosters collaborative behaviours. However, contrary to existing research (e.g., Dewsnap & Jobber, 2009), our results indicate that working in cross-functional teams does not reduce sales and marketing conflict. One possible explanation is that, even when sales and marketing are members of the same team, they continue to retain their 'relative functional identification', i.e., the tendency to identify with their own department or functional unit more strongly than with the team. While small improvements in collaboration from creating cross-functional project teams may be observed, it is likely that conflict will still be present and, once the team is disbanded, personnel may return to their original departments with their unique functional perspectives, specialist stances, and any pre-existing cross-functional acrimony and suspicion in place.

Turning now to the final two coordination mechanisms tested, our results indicate that neither *cross-functional training* nor the *location of the sales and marketing personnel* increase sales and marketing collaboration nor reduce conflict. Based on previous literature (e.g., Le Meunier-FitzHugh & Piercy, 2007; Matthyssens & Johnston, 2006; Guenzi & Troilo, 2006), these results were surprising. However, many organisations do not invest in cross-functional training and, 'when it does occur, it often involves ad hoc groups created just for training purposes' (Moreland & Myaskovsky, 2000, p. 188), consequently reducing the effectiveness of the collaboration opportunity. It is further possible that cross-functional training may simply be insufficient to counter existing antagonism or thought-world differences, or to reduce the extent to which personnel associate themselves with their principal functional role. An alternative view is

that personnel from different functions can be reluctant to perform ‘out-of-role’ during cross-functional training as they may feel that they risk failure and loss of respect. This idea may be particularly relevant to sales and marketing personnel because they have different backgrounds and skill sets (Kotler, Rackham & Krishnaswamy, 2006), but they nonetheless operate in a very similar work domain (e.g., responsible for sales, market share, customer satisfaction etc.) and may feel exposed in a joint training environment.

The *location of sales and marketing* does not affect either collaboration or conflict. This may be because proximity is physically difficult to achieve, especially where an organisation is globally active and/or where sales personnel are field or regionally based. Additionally, our sample suggests that 40% of sales and marketing work in the same office, but some still exhibited conflicting behaviours. Consequently, there is little opportunity for personnel who are not closely co-located (less than 10 metres) to improve their interactions and increase collaboration or decrease conflict. If co-location is going to be effective in reducing conflict or increasing collaboration between sales and marketing, it needs to be combined with other coordination strategies.

Managers who wish to create a collaborative and effective sales and marketing collaboration should first consider creating a joint sales and marketing department (and possibly cross-functional teams, depending on the situation) to signal the importance of sales and marketing working together and provide opportunities to align goals and activities. Next, managers should select the most effective coordination mechanisms to establishing cross-functional meetings and giving sales and marketing personnel the opportunity for job rotation to promote collaborative working to help reduce any conflict. If these mechanisms are employed, senior managers will be able to encourage joint

planning and exchanges of information. These actions should help to reduce any conflict, which should have considerable impact on improving collaboration between sales and marketing personnel.

Limitations and further research

There are a number of limitations to this study. Using single respondents is not ideal, so future research could use matched dyadic data from Sales Managers and Marketing Managers in the same organisation. A further limitation relates to some of the measures we used in our study. As we note earlier, there is very little existing quantitative work into sales and marketing coordination mechanisms, and we were unable to locate scales for some of the variables we wished to use. In particular, our use of a dichotomous scale for structure of sales and marketing was problematic, and this measure could be improved in future research by improving the scales. In addition, we used single item measures for the opportunity for job rotation and cross-functional training, which is not optimal. Future research could build on our study by using multi-item measures of all coordination mechanisms.

This study also only considers B2B organisations in the UK and an investigation of other markets, such as the US or mainland Europe, could establish whether our findings are more generally applicable. Investigations could also be given to the sales and marketing interface in SME organisations and also B2C organisations. Although this study offers new insights into how best to improve sales and marketing cross-functional relationships through the use of coordination mechanisms, the organisation of this managerial interface continues to offer challenges to management and is an area ripe for

further research. One area might be to investigate empirically the other two categories of coordination mechanisms, people and culture, which were identified by Rouziès et al. (2005) in their conceptual paper.

Appendix 1 - Operational measures

| Construct | Items | Source |
|---------------------------------------|---|--|
| Use of Cross-Functional Project Teams | <p>Seven-point scale anchored 1 “Rarely Used” and 7 “Frequently Used.”</p> <p>(1) Interdepartmental committees are set up to allow departments to engage in joint decision-making.</p> <p>(2) There are temporary bodies set up to facilitate interdepartmental collaboration.</p> <p>(3) Senior managers have responsibility to coordinate the efforts of sales and marketing for a specific project.</p> | Adapted from Germain, Dorge & Daugherty (1994) |
| Use of Cross-Functional Meetings | <p>Seven-point scale anchored 1 “Strongly Disagree” and 7 “Strongly Agree.”</p> <p>(1) We have interdepartmental meetings at least once a quarter to discuss market trends and developments.</p> <p>(2) Marketing personnel spend time assessing customers’ future needs with the sales department.</p> <p>(3) Sales and marketing get together periodically to plan responses to changes taking place in our business environment.</p> | Adapted from Kohli, Jaworski & Kumar (1993) |
| Use of Cross-Functional Trainings | <p>Seven-point scale anchored 1 “Seldom– less than once a year” and 7 “Frequently– more than 5 times a year.”</p> <p>(1) How frequently is cross-functional training offered to sales and marketing staff?</p> <p>Seven-point scale anchored by 1 “Not at all” and 7 “Frequently.”</p> <p>(2) Do sales and marketing staff attend training courses together?</p> | New Scale |
| Opportunity for Job Rotation | <p>Seven-point scale anchored 1 “Not at all” and 7 “an extreme extent.”</p> <p>(1) There is an opportunity for sales and marketing staff to transfer between departments.</p> | New Scale |
| Sales and marketing Collaboration | <p>Seven-point scale anchored 1 “Strongly Disagree” and 7 “Strongly Agree.”</p> <p>(1) Cross-functional teamwork is a common way of working in sales and marketing.</p> <p>(2) There is agreement between sales and marketing of our organisational vision.</p> <p>(3) A team spirit pervades sales and marketing.</p> <p>(4) Sales and marketing are committed to sharing their vision with each other.</p> <p>(5) Sales and marketing share the same goals.</p> | Adapted from Hult, Ketchen & Slater (2002) |
| Sales and marketing Conflict | <p>Seven-point scale anchored 1 “Strongly Disagree” and 7 “Strongly Agree.”</p> <p>(1) When members of sales and marketing get together, tensions frequently run high^d.</p> <p>(2) Sales and marketing generally dislike interacting with each other.</p> <p>(3) Sales and marketing feel that the goals of their respective departments are in harmony with each other^f.</p> | Adapted from Menon, Jaworski & Kohli (1997) |

| | | |
|--|--|---|
| | <p>(4) Protecting sales and marketing departmental areas of responsibility is considered the norm in this organisation^d.</p> <p>(5) The objectives pursued by the marketing department are incompatible with those in the sales department^d.</p> <p>(6) There is little or no interdepartmental conflict between sales and marketing^{r, d}.</p> <p>(7) Sales and marketing get along well with each other^r.</p> | |
| Business Performance | <p>Seven-point scale anchored 1 “Needs Improvement” and 7 “Outstanding.”</p> <p>(1) How successful is the organisation at generating a high level of sales revenue?</p> <p>(2) How successful is the organisation at generating high market share?</p> <p>(3) How successful is the organisation at selling those products with the highest profit margins?</p> <p>(4) How successful is the organisation at exceeding all sales targets and objectives during the year?</p> <p>(5) How successful is the organisation at generating sales of new products?</p> <p>(6) How successful is the organisation at producing sales with long-term profitability?</p> | Adapted from Behrman & Perreault (1982) |
| Number of Employees | <p>Five-point scale anchored 1 “<50” and 5 “> 1,000”.</p> <p>(1) Approximately how many people are employed in the organisation?</p> | |
| Relative Status of Sales and marketing | <p>Five-point scale anchored 1 “Lower status”, and 5 “higher status.”</p> <p>(1) Please comment on the status of marketing compared to sales.</p> | |

^r Reversed item; ^d Item deleted due to low standardized factor loading

References

- Ainamo, A. (2007). Coordination mechanisms in cross-functional teams: a product design perspective. *Journal of Marketing Management*. 23(9-10), 841-860. doi: 10.1362/026725707X250359.
- Armstrong J.S. & Overton, T.S. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Research*, 14(3), 396-402. doi: 10.2307/3150783
- Arnett, D. B. & Wittmann, C. M. (2014). Improving marketing success: The role of tacit knowledge exchange between sales and marketing. *Journal of Business Research*, 67(3), 324-331. doi: org/10.1016/j.jbusres.2013.01.018.
- Anderson, J.C. & Gerbing, D.W. (1988). Structural equation modelling in practice: A review and recommended two-step approach, *Psychological Bulletin*. 103(3), 411-423. doi: 10.1037/0033-2909.103.3.411
- Beverland, M., Steel, M. & Dapiran, G. P. (2006). Cultural frames that drive sales and marketing apart: an exploratory study, *Journal of Business and Industrial Marketing*. 21(6), 386- 394. doi: 10.1108/08858620610690146
- Behrman, D.N. & Perreault, Jr., W.D. (1982). Measuring the Performance of Industrial Salespersons. *Journal of Business Research*, 10(3), 335–370. doi:10.1016/0148-2963(82)90039-X
- Biemans, W.G. & Brenčič, M.M. (2007). Designing the Marketing-Sales Interface in B2B Firms. *European Journal of Marketing*. 41(3/4), 257-273.
doi:10.1108/03090560710728327

- Biemans, W. G., Brenčič, M. M. & Malshe, A. (2008). Marketing – sales interface configurations in B2B firms. *Industrial Marketing Management*. 39 (2), 183-194. doi: 10.10106/j.indmarman.2008.12.012
- Cespedes, F. V. (2014). *Aligning Strategy and Sales*. Boston: Harvard Business Review Press.
- Chin, W.W. (1998). The partial least squares approach to structural equation modelling. In G.A. Marcoulides (Ed.). *Modern Methods for Business Research*. (295-336). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Churchill, G. A., Jr, & Iacobucci, D. (2002). *Marketing Research Methodological Foundations*, 8th edn. Mason: South-Western.
- Cometto, T., Nisar, A., Palacios, M., Le Meunier-FitzHugh, K. & Labadie, G. J. (2016). Organizational linkages for new product development: Implementation of innovation projects. *Journal of Business Research*, 69(6), 2093-2100. doi :org/10.1016/j.jbusres.2015.12.014.
- Dawes, P. L. & Massey G. R. (2005). Antecedents of Conflict in Marketing's Cross-Functional Relationship with Sales. *European Journal of Marketing*, 39 (11–12), 1327–1344. doi: 10.1108/03090560510623280
- De Dreu, C. K. W. & Weingart L. R. (2003). Task Versus Relationship Conflict, Team Performance, and Team Member Satisfaction: A Meta-Analysis, *Journal of Applied Psychology*, 88(4), 741–749. doi: 10.1037/0021-9010.88.4.741
- Dewsnap, B. & Jobber, D. (2000). The Sales-Marketing Interface in Consumer Packaged-Goods Companies: A Conceptual Framework. *Journal of Personal Selling and Sales Management*. 20(2), 109-119. doi: 10.1080'08853134.2000.10754230.

- Dewsnap, B. & Jobber, D. (2009), An exploratory study of sales- marketing integrative devices, *European Journal of Marketing*. 43 (7/8), 985-1007. doi: 10.1108/03090560910961489
- Diamantopoulos, A. & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development, *Journal of Marketing Research*. 38(2), 269-277. doi: org/10.1509/jmcr.38.2.269.18845.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Market Research*. 18(1), 39-50. doi: 10.2307/3151312.
- Germain, R., Dorge, C. & Daugherty, P. J. (1994). The Effects of Just-in-Time Selling on Organizational Structure. *Journal of Market Research*. 31(4), 471-483. doi: 10.2307/3151877
- Guenzi, P. & Troilo, G. (2006). Developing marketing capabilities for customer value creation through Marketing-Sales integration. *Industrial Marketing Management*. 35(8), 974-988. doi: 10.1016/j.indmarman.2006.06.006
- Guenzi, P. & Troilo, G. (2007). The Joint Contribution of Marketing and Sales to the Creation of Superior Customer Value. *Journal of Business Research*. 60(2), 98-107. doi:10.1016/j.jbusres.2006.10.007
- Homburg, C. & Jensen, O. (2007). The Thought Worlds of Marketing and Sales: Which Differences Make a Difference? *Journal of Marketing*. 1(2), 124-142. doi:10.2307/1251942.
- Homburg, C., Jensen, O. & Krohmer, H. (2008). Configurations of marketing and sales: A taxonomy, *Journal of Marketing*. 72(2), 133-154. doi:10.1509/jmkg.72.2.133.

- Hughes, D. E., Le Bon, J. and Malshe, A. (2012). The marketing-sales interface at the interface: Creating market-based capabilities through organizational synergy, *Journal of Personal Selling & Sales Management*. 32(1), 57-72. doi: 10.2753/PSS0885-3134320106
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*. 20(2), 195-204. doi: 10.1002/(SICI)1097-0266(199902)20:2%3C195::AID-SMJ13%3E3.3.CO;2-Z.
- Hulland, J., Nenkov G. Y.& Barclay, D. W. (2011). Perceived marketing-sales relationship effectiveness: a matter of justice, *Journal of the Academy Marketing Science*. 40(3), 450-467. doi: org/10.1007/s11747-011-0257-2.
- Hult, G.T.M., Ketchen, Jr., D. J. & Slater, S. F. (2002). A Longitudinal Study of the Learning Climate and Cycle Time in Supply Chains. *Journal of Business and Industrial Marketing*. 17(4), 302–323. doi: 10.1108/08858620210431697
- Jarratt, D. G. & Katsikeas, C. S. (2009). How does Relationship Management Infrastructure influence performance? *Journal of Marketing Management*, 25(1-2), 51-74. doi: 10.1362/026725709X4100034.
- Jaworski, B. J. & Kohli, A. J. (1993). Market Orientation: Antecedents and Consequences. *Journal of Marketing*. 57(3), 53-70. doi:10.222307/1251854
- Kahn, K. B. (1996). Interdepartmental Integration: A Definition with Implications for Product Development Performance. *Journal of Product Innovation Management*. 13(2), 137–151. doi: 10.1111/1540-5885.1320137

- Kohli, A. K., Jaworski, B. J. & Kumar, A. (1993). MARKOR: A measure of market orientation, *Journal of Marketing Research*. 30(4), 467-477. doi: org/10.1177/002224379203000406.
- Kotler, P. Rackham, N. & Krishnaswamy, S. (2006). Ending the war between Sales & Marketing. *Harvard Business Review*. 84(7/8), 68-78.
- Le Meunier-FitzHugh, K. & Piercy, N. F. (2007). Exploring collaboration between sales and marketing, *European Journal of Marketing*. 41(7/8), 939-955. doi: 10.1108/03090560710752465
- Le Meunier-FitzHugh, K. & Piercy, N. F. (2011). The impact of aligning rewards and senior management attitudes on conflict and collaboration between sales and marketing. *Industrial Marketing Management*. 47(7), 1161-1171. doi: org/10.1016/j.indmarman.2010.12.002.
- Le Meunier-FitzHugh, K. & Piercy, N.F. (2009). Drivers of sales and marketing collaboration in business-to-business selling organisations, *Journal of Marketing Management*. 25(5-6), 611-633. doi: 10.1362/026725709X461885
- Le, H. & Zhang, Y. (2007). The role of Managers' political networking and functional experience in new venture performance: Evidence from China's transition economy. *Strategic Management Journal*. 28 (8), 791-804. doi: org/10.1002/SMJ.605.
- Malshe, A., Johnson, J. S. & Viio, P. (2017). Understanding the sales-marketing interface dysfunction experience in business-to-business firms: A matter of perspective. *Industrial Marketing Management*. 63(5), 145-157. doi: org/10.1016/j.indmarman.2016.10.014

- Malshe, A. & Soli, R. S. (2009). What makes strategy making across the sales-marketing interface more successful? *Journal of Academy of Marketing Science*. 37(4):400-421. doi 10.1007/s11747-009-0132-6.
- Massey, G. R. & Dawes, P. L. (2007). The Antecedents and Consequence of Functional and Dysfunctional Conflict between Marketing Managers and Sales Managers. *Industrial Marketing Management*. 36(8), 1118-1129. doi: 10.1016/j.indmarman.2006.05.017
- Matthyssens, P. & Johnston, W. J. (2006). Marketing and sales: optimization of a neglected relationship, *Journal of Business & Industrial Marketing*. 21(6), 338-345. doi: 10.1108/0885820610690100
- Menon, A., Jaworski, B. J. & Kohli, A. K. (1997). Product quality: Impact of interdepartmental interaction, *Journal of the Academy of Marketing Science*. 25(3), 187-200. doi: 10.1177/0092070397253001
- Moreland, R. L. & Myaskovsky, L. (2000). Exploring the Performance Benefits of Group Training: Transactive Memory or Improved Communications, *Organizational Behaviour and Human Decision Processes*. 82(1), 117-133. doi: 10.1006/obhd.20002891
- Podsakoff, P.M., MacKenzie, S.B., Lee, J-Y. & Podsakoff, N.P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*. 88(5), 879-903. doi: 10.1037/0021-9010.88.5.879
- Ringle, C.M. Wende, S. & Will, A. (2005). SmartPLS 2.0 (beta). www.smartpls.de. 2005.

- Rouziès, D., Anderson, E., Kohli, A.K., Michaels, R.E., Weitz, B.A. & Zoltners, A.A. (2005). Sales and Marketing Integration: A Proposed Framework. *Journal of Personal Selling and Sales Management*. 15(2), 113-122. doi: 10.1080/08853134.2005.10749053.
- Rouziés, D. & Hulland, J. (2014). Does marketing and sales integration always pay off? Evidence from a social capital perspective. *Journal of the Academy of Marketing Science*. 42(5), 511-527. doi: 10.1007/s11747-014-0375-8
- Sleep, S., Lam, S. K. & Hulland, J. (2018). The sales-marketing integration gap: a social identity approach. *Journal of Personal Selling and Sales Management*, 38(4), 271-390. doi: org/10.1080/08853134.2018.1513796.
- Snyder, K., McKelvey, S. & Sutton, W. (2016). All together now? Exploring sales and marketing integration. *Sport, Business and Management, An International Journal*. 6(1), 2-18. doi:10.1108/SBM-08-2013-0027.
- Zahra, S. A. & Covin, J. G. (1993). Business strategy, technology policy, and firm performance. *Strategic Management Journal*. 14 (6), 451-478. doi:10.1002/smj.4250140605.