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Sales–marketing encroachment effects on innovation☆

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ABSTRACT

The role of sales has changed dramatically during the last two decades, with sales becoming increasingly strategic and encroaching on domains that traditionally belong to marketing. Many studies address the role of marketing in new product development (NPD) success, but research on the increasing importance of sales, its changing role and changing dynamics with marketing is scarce. This empirical study of 296 Hungarian firms addresses this gap and shows that the extent to which sales encroaches on marketing's tasks is influenced by interface relations, exchange processes and sales' capabilities. The effect of sales–marketing encroachment on NPD financial success is partially mediated by customer involvement, while its effect on market success is fully mediated by customer involvement. These findings suggest that firms may improve their NPD financial performance by letting sales encroach on marketing tasks, but need to establish customer co-creation initiatives to benefit from sales–marketing encroachment in terms of superior NPD performance compared with competitors.

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1. Introduction

For several decades, the innovation literature emphasizes that successful innovation requires a clear marketing focus and a superior understanding of customer needs. Both marketing and sales have information about customers and may contribute to a customer-focused innovation process. Marketing's contribution to new product development (NPD) has received much academic attention over the last decades (Griffin et al., 2013), but much is still needed to understand sales' role in innovation (Malshe & Biemans, 2014). Studies confirm that salespeople contribute to the initial innovation stages by representing the voice of the customer (Ernst, Hoyer, & Rübbsaamen, 2010). Other researchers focus on the other end of the innovation process and show that salespeople contribute to the success of new products by promoting them to customers (Atuahene-Gima, 1997; Kaupila, Rajala, & Jyrämä, 2010). Thus, sales plays key roles as a dual gatekeeper at both ends of the innovation process, while marketing often plays a more strategic role in innovation.

Recent studies emphasize the changing nature of sales and its increasing strategic role, resulting in sales moving in on marketing's

domain, thus blurring the traditional distinction between marketing and sales (LaForge, Ingram, & Cravens, 2009). These changes in the role of sales change the sales–marketing dynamics and the departments' respective contributions to the firm's innovation process. Previous studies of the sales–marketing interface focus on integration between the two departments (Guenzi & Troilo, 2006; Rouziès & Hulland, 2014; Rouziès et al., 2005), with several studies showing that the extent of integration between sales and marketing varies across firms (Biemans, Makovec-Brenčič, & Malshe, 2010; Homburg, Jensen, & Krohmer, 2008). In contrast to these studies, the present study investigates sales' encroachment on marketing's domain, its antecedents and its effect on NPD success, and thus contributes to the extant knowledge about sales' contribution to NPD. It uses an activity-based perspective on the sales–marketing interface by focusing on marketing activities performed by sales, irrespective of the firm's organizational configuration. The effect of sales–marketing encroachment on NPD is assessed in terms of both financial and market success. In addition, the mediating role of customer involvement in NPD between sales–marketing encroachment and NPD success is also investigated. Sales–marketing encroachment is expected to impact NPD success not only by adding specific insights to strategic marketing activities, but also by improving customer involvement. For instance, salespeople can help marketing to identify lead users, who are ideal sources of new product ideas (Piller & Walcher, 2006), or customers who may assist with prototype testing or even serve as launch customers during market introduction, all of which contribute to NPD success.

The following section presents the conceptual background and theoretical framework. Next, the study's research method and key findings,

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using a sample of high revenue Hungarian firms, are presented. The article concludes with a discussion of the study's theoretical contributions, managerial implications, limitations and suggestions for future research.

2. Conceptual background and hypotheses

2.1. Sales marketing encroachment

Several authors explore and map the changes and processes that are needed to transform a sales organization into a more strategic function and implement a cross-functional sales process (Piercy, 2010). This changing role of sales results in sales encroaching upon marketing's domain. As Piercy and Rich (2009, p. 250) put it: "The culmination of these activities could be argued to change the basic strategic purpose of the sales group away from being a sales-force towards being a marketing-force."

This study conceptualizes this sales–marketing encroachment as sales' level of involvement in several tasks that are strategic by nature and traditionally belong to marketing's domain. Sales–marketing encroachment is different from sales–marketing integration, a concept that is often used in the sales–marketing interface literature (Guenzi & Troilo, 2006; Rouziès & Hulland, 2014; Rouziès et al., 2005). Sales–marketing integration focuses on collaboration and joint goals and is conceptualized as "the extent to which activities carried out by the two functions are supportive of each other" (Rouziès et al., 2005, p. 115), assuming separate and well-developed marketing and sales units. But in the case of sales–marketing encroachment sales starts to perform and contribute to activities that traditionally belong to marketing's domain, thus blurring the distinction between the sales and marketing units. Another difference between integration and encroachment is that encroachment focuses on strategic activities, while the conceptualization of integration does not specify the nature of collaboration and may also include tactical activities.

The antecedents of sales–marketing encroachment are derived from the sales–marketing literature. Although both sales and marketing aim to serve the firm's customers, and their similar backgrounds should facilitate collaboration, there is overwhelming evidence that the sales–marketing interface often lacks harmony (Beverland, Steel, & Dapiran, 2006; Dewsnap & Jobber, 2000). Conflicts between sales and marketing are grounded in (a) relational differences (e.g., different thought worlds, cultures and time orientations), (b) lack of exchanges (e.g., lack of coordination and formalization) and (c) lack of cross-functional capabilities (e.g., understanding each other's marketplace perspective and functional objectives). The conceptual model reflects this by hypothesizing that sales–marketing encroachment is influenced by relational, exchange and capability-related antecedents (Fig. 1).

Relational differences between sales and marketing are reflected by the interfunctional dynamics and the quality of the relationship, which are operationalized in terms of interfunctional trust and rivalry (Dawes & Massey, 2006). Trust is an essential element in positive human relationships and creates a collaborative environment by providing people with feelings of security and attachment (Dirks & Ferrin, 2001). Cross-functional trust is defined as the trustor's confidence in the professional capabilities and responsible behavior of the trustee (Moorman, Zaltman, & Deshpandé, 1992). Trust is an important antecedent of social relationships and effective horizontal ties within organizations and acts as a lubricant in interorganizational relationships (Arnett & Wittmann, 2014; McAllister, 1995). Sales–marketing encroachment introduces sales to strategic tasks and requires marketing to share power with them, which incorporates risk. Trust diminishes perceived ambiguity, facilitates risk-taking behavior and enhances a constructive attitude (Morgan & Hunt, 1994), all of which contribute to sales–marketing encroachment. Interfunctional rivalry, on the other hand, conceptualized as the extent to which sales and marketing perceive each other as competitors (Maltz & Kohli, 1996), is expected to reduce sales–marketing encroachment. When rivalry between sales and marketing is high, marketing may try to prevent sales from conducting marketing activities and be reluctant to

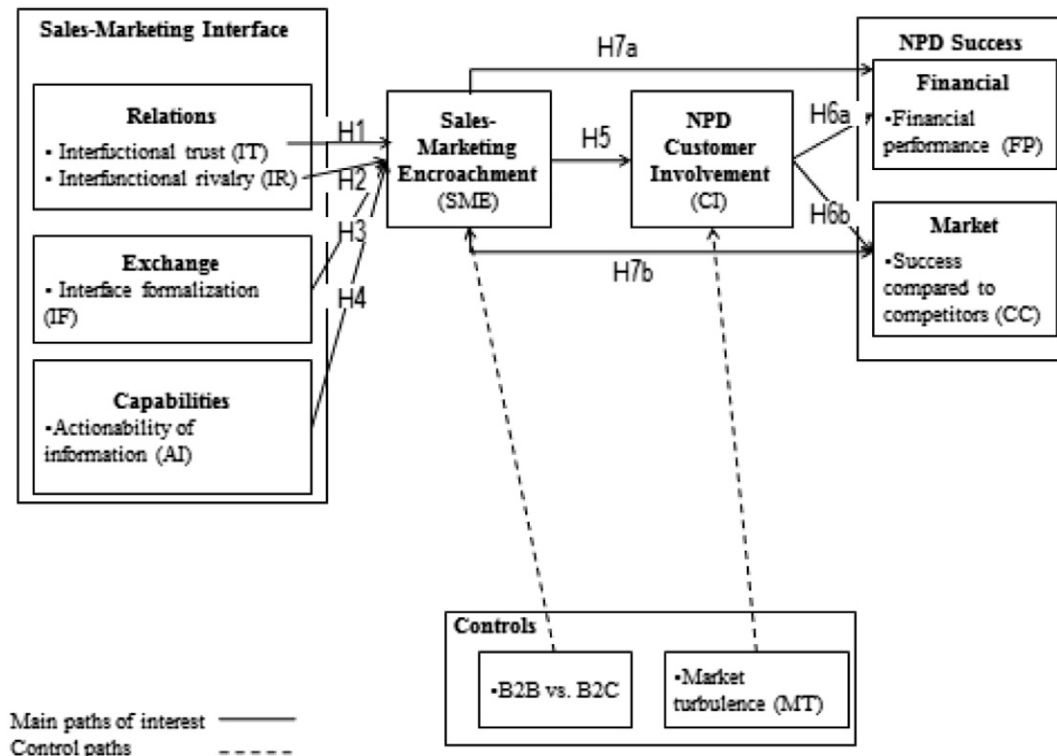


Fig. 1. Conceptual framework.

share power with sales through encroachment because it fears to lose influence to sales.

H1. Interfunctional trust is positively related to sales–marketing encroachment.

H2. Interfunctional rivalry is negatively related to sales–marketing encroachment.

Interactions between firm members belonging to different functions, units or domains need to be coordinated. The literature is ambiguous about the effect of formalization, that is, the degree to which these interactions are coordinated by means of standard operating procedures or norms, on cross-functional collaboration. For example, studies of marketing managers' use of outside information suggest that it is affected negatively by the degree of the managers' job formalization (Deshpandé & Zaltman, 1987). However, other studies confirm or propose a positive relationship between cross-functional formalization and the degree of cross-functional collaboration (Ruekert & Walker, 1987), integration (Dewsnap & Jobber, 2000) and information flow (Maltz & Kohli, 1996).

Job formalization brings order, routine and rigor to the management of joint activities. Formal interactions between sales and marketing standardize the procedures and processes that cut across functions, limit conflicts related to procedural issues, reduce uncertainty and ambiguity, and assist flows that contribute to linkages between sales and marketing (Arnett & Wittmann, 2014).

H3. Interface formalization is positively related to sales–marketing encroachment.

Sales will only be able to perform strategic marketing activities when it possesses the required capabilities of managing customer relationships and delivering superior customer value (LaForge et al., 2009). Salespeople must become “customer value agents” and change their job descriptions from communicating value to actively co-creating value with customers (Piercy & Rich, 2009). Little is known about the specific capabilities that influence the strategic role of sales, and thus sales–marketing encroachment. The extant literature emphasizes that sales and marketing employ different perspectives on the marketplace, with sales having narrow, but rich knowledge about individual accounts, and marketing using a broader focus on market segments (Beverland et al., 2006). A more strategic role of sales requires sales to overcome these differences, focus on strategic issues and translate strategic market insights into actionable information.

H4. Sales managers' capability to provide actionable information is positively related to sales–marketing encroachment.

2.2. NPD customer involvement and NPD success

NPD customer involvement refers to cases where customers actively contribute to the development of new products (Greer & Lei, 2012), for instance by suggesting innovative ideas for new products or testing developed prototypes. NPD customer involvement requires significant efforts from customers, that not every customer is willing to make (Nambisan & Baron, 2009). Furthermore, customers at early stages of co-creation may find it difficult to develop co-creation patterns and behaviors (Payne, Storbacka, & Frow, 2008). Because of their daily interactions with customers, salespeople are ideally positioned to identify customers who are willing to collaborate in NPD and to find the right customers for specific NPD stages (such as idea generation, concept testing, prototype testing and launch). However, this expertise of salespeople will only contribute to customer involvement when these insights are shared within the firm. Sales–marketing encroachment provides sales with a strategic role that enables sales to effectively communicate these

insights to marketing, and thus contribute to customer involvement in NPD.

H5. Sales–marketing encroachment is positively related to customer involvement in NPD.

NPD success is a complex, multifaceted concept. Firms use a variety of measures to assess a new product's customer-based success (revenues, market share, customer satisfaction), financial success (profit, margin, break-even time) and technical performance success (competitive advantage, innovativeness, quality specifications) (Griffin & Page, 1996). This study focuses on NPD financial performance compared with stated objectives in terms of sales goals, return on investment, return on assets and profitability (De Luca & Atuahene-Gima, 2007) and on NPD success compared with competitors in terms of number and novelty of new products, speed of NPD and market response.

Incorporation of the voice of the customer is critical to successful NPD (Mahr, Lievens, & Blazevic, 2014). A proactive market orientation, often characterized by customer involvement in NPD or observation of customers, helps firms to uncover latent customer needs (Narver, Slater, & MacLachlan, 2004). Studies of customer involvement in NPD show that it produces new product ideas that are more creative, more highly valued by customers and more easily implemented (Kristensson, Gustafsson, & Archer, 2004). In extreme cases, firms provide innovative customers with toolkits for user innovation, which offer customers a set of tools that allow them to develop custom products via iterative trial-and-error (Jeppesen, 2005). These user toolkits allow manufacturers to shift design tasks to customers and focus on the efficient production of new products that are designed by customers.

H6a-b. NPD customer involvement is positively related to NPD success in terms of (a) financial performance and (b) success compared with competitors.

NPD is a cross-functional business process that requires input from various business functions. This cross-functional collaboration refers to the degree of cooperation, extent of representation and the contributions from various functional areas to NPD (Li & Calantone, 1998). Cross-functional collaboration in NPD provides significant benefits: it stimulates creativity, encourages open communication, enhances consistency across decisions and contributes to a common understanding of the product (Han, Kim, & Srivastava, 1998). The present study focuses on sales encroaching on marketing's domain, which is conceptually different from mere interfunctional collaboration. Sales participating in activities that are traditionally performed by marketing is expected to facilitate the communication and collaboration between the two functions, which directly impacts NPD performance.

H7a-b. Sales–marketing encroachment is positively related to NPD success in terms of (a) financial performance and (b) success compared with competitors.

2.3. Control variables

The conceptual model used in the present study includes two control variables. Previous research concludes that the business context (i.e. business-to-business (B2B) or business-to-customer (B2C)) influences the roles and configurations of sales and marketing (Biemans et al., 2010; Verhoef & Leeflang, 2009), and is therefore added as a control variable for sales encroachment. Although the literature also suggests firm size as a key control variable to exclude rival explanations of NPD success (Engelen, Brettel, & Wiest, 2012), the present study already controls for firm size by focusing on high revenue firms.

Another control variable is market turbulence, conceptualized as changes in the composition of customers and their preferences (Kohli

& Jaworski, 1990). Market turbulence results in shorter product lifecycles, increased development costs and more intensive competition, which forces firms to seek more effective ways to innovate and obtain competitive advantages. Thus, market turbulence may also stimulate firms to look for alternative sources of NPD ideas, such as customers. Therefore, it is used as a control variable for customer involvement in NPD.

3. Research method

3.1. Research context and data collection

The conceptual model was tested on a sample of high revenue Hungarian companies, using mail questionnaires administered to all firms belonging to the top 10% in terms of sales revenues. The sample was drawn from the database of the Hungarian Central Statistical Office (www.ksh.hu); 2500 questionnaires were sent out via mail with an alternative option to administer the questionnaire online. To improve the response rate, follow-up phone calls were used to inquire whether the questionnaire had reached a competent key respondent and to gain information about the reasons for non-response. A managerial summary of one of the authors' former research results was offered as a non-monetary incentive to all respondents. The data collection resulted in 296 returned questionnaires, representing a response rate of 12%. The key respondents were Chief Marketing Officers, or—when such a position did not exist—General Executives in charge of marketing-related decisions, with a mean of 12.1 years of job-specific experience and decision-making authority. Table 1 summarizes the profiles of the sample firms.

A comparison of the sample of responding firms with data from the Hungarian Central Statistical Office reveals that the sample is fairly representative of the basic population in terms of the number of employees and somewhat skewed in terms of industry of operations. The proportion of “other industries” is relatively high, but respondent anonymity did not allow for later classification of these companies. In addition, agriculture and financial services are slightly overrepresented in the sample, while the processing industry is underrepresented.

Analysis of variance did not indicate significant differences between the means of the key constructs or the descriptive statistics (number of employees, industry, major field and business category of operation, ownership structure) of early and late respondents (Armstrong &

Overton, 1977). The most frequently provided reason for non-response—as discovered during the follow-up phone calls—was a lack of time. Therefore, it can be concluded that non-response errors do not cause systematic errors in the sample and the data were pooled for subsequent analyses.

3.2. Measures

The survey included measures for the eight key constructs: interfunctional trust, interfunctional rivalry, interface formalization, actionability of information, sales–marketing encroachment, NPD customer involvement, NPD financial performance and new product success compared with competitors. Each construct is measured with multiple items, mostly using seven-point Likert scales with anchors for all items (see Appendix 1). The resulting questionnaire was tested using a multi-stage process. First, two academics, with several decades of experience in academic research, performed a semantics review of the questionnaire, identifying statements that may cause confusion, use anglicisms, or can be expected to tax respondents' patience. Second, a convenience sample of 50 MBA students completed the questionnaire. They identified all statements that they found confusing, incoherent or difficult to respond to.

Since the exogenous variables and the endogenous variables were collected at the same time, with the same instrument from the same respondents, the results were controlled for and tested for common method bias (CMB) (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). To control for CMB, predictor and criterion variables were allocated in separate sections of the questionnaire. The existence of CMB was assessed statistically using three different techniques: (1) Harman's one-factor method (Harman, 1976), (2) assessment of the correlation matrix (Bagozzi, Yi, & Phillips, 1991) and (3) Lindell and Whitney's (Lindell & Whitney, 2001) method for assessing CMB. Following Harman's (1976) single factor approach, the results show that no single factor emerged from a factor analysis of all survey items and that no general constructs account for the majority of covariance among all constructs (Podsakoff & Organ, 1986). The correlation matrix of the variables included in the conceptual model does not include highly correlated variables ($r > .90$) (Bagozzi et al., 1991), suggesting that the data can be pooled to subsequent analysis. To further control for CMB, partial correlation technique was adopted (Lindell & Whitney, 2001) using a marker (“Our mailing system is user-friendly”, measured on a seven-point Likert-scale) that was theoretically expected to be unrelated to the key constructs of our model. Bivariate correlations among the marker and the other variables, as well as a series of partial correlations, do not indicate significant CMB problems. These results show that CMB did not significantly affect the findings from this study.

3.3. Analysis

The hypothesized structural equation model was assessed using SPSS 20.0 and SmartPLS 3.2.3 (Ringle, Wende, & Becker, 2015). The reliability, convergent validity and discriminant validity of the multi-item scales were assessed using the descriptive statistics for the model's key constructs presented in Table 2 (Bagozzi & Yi, 1988; Fornell & Larcker, 1981; Hulland, 1999).

All items included in the structural model load on their intended reflective constructs with loadings higher than 0.7 (Appendix 1), suggesting acceptable item reliability (Hulland, 1999). The reliability of the formative scale (encroachment) could not be assessed, because of lack of opportunity to retest (Diamantopoulos, Riefler, & Roth, 2008). The convergent validity of the scales was assessed using Cronbach's alpha, composite reliability (CR) and the average variance extracted (AVE) (Table 2). Composite reliability measures are above the 0.7 threshold (Nunnally, 1967), indicating acceptable reliability of the constructs. The AVE values are higher than the conventional benchmark of 0.5

Table 1

Profile of respondent firms ($n = 296$) and sampling frame ($n = 2500$) in parentheses where available.

Company characteristic	Percentage	Company characteristic	Percentage
Number of employees		Business categories	
– 5000	0.7 (1.8)	Major field of business	
4999–1000	8.4 (14.2)	Products	58.6
999–500	17.5 (17.9)	Services	41.4
499–300	11.8 (19.4)		
299–100	30.4 (26.2)	Major field of operation	
99–20	26.1 (16.3)	Business-to-business	49.8
20–0	5.1 (4.2)	Business-to-customer	50.2
Industry of operation		Ownership	
Agriculture	5.7 (2.0)	Private national	48.6
Building industry	7.1 (6.5)	Private inter- and multinational	40.6
Transportation	5.1 (4.4)	State-owned	10.8
Wholesale commerce	14.9 (22.0)		
Financial services	6.1 (4.3)		
Mining	1.0 (0.3)		
Processing industry	14.9 (36.5)		
Telecommunication and broadcasting	1.0 (2.6)		
Retail and commerce	12.5 (11.1)		
Other services	6.1 (9.6)		
Other	25.6 (0.9)		

Table 2
Properties of measurement scales.

Constructs	ME	SD	CR	CA	AVE	1	2	3	4	5	6	7	8	9	9
1. Interfunctional trust	5.86	1.06	0.93	0.91	0.73	0.86									
2. Interfunctional rivalry	5.29	1.30	0.95	0.93	0.80	-0.57	0.89								
3. Interface formalization	4.33	1.74	0.93	0.90	0.77	0.23	-0.43	0.87							
4. Actionability of information	4.86	1.52	0.93	0.90	0.72	0.42	-0.53	0.32	0.85						
5. Encroachment	5.04	1.52	n.a.	0.82	n.a.	0.44	-0.57	0.38	0.49	n.a.					
6. NPD customer involvement	4.15	1.77	0.93	0.91	0.70	0.05	-0.13	0.18	0.25	0.30	0.83				
7. NPD financial performance	4.57	1.47	0.93	0.91	0.79	0.38	-0.43	0.21	0.36	0.37	0.33	0.89			
8. NPD success compared with competitors	4.03	1.65	0.96	0.95	0.83	0.19	-0.25	0.07	0.24	0.21	0.44	0.53	0.91		
9. Market turbulence	4.21	1.48	0.89	0.83	0.74	0.03	-0.10	0.09	0.21	0.22	0.32	0.15	0.22	0.86	
10. B2B vs B2C	4.65	3.57	1.00	1.00	1.00	0.05	0.02	-0.07	0.06	-0.06	-0.18	-0.05	-0.13	-0.05	1.00

ME, Mean; SD, standard deviation; CR, composite reliability; CA, Cronbach's alpha; AVE, average variance extracted; n.a., not applicable. Value on the diagonal is the square root of AVE.

(Bagozzi & Yi, 1988). This suggests acceptable convergent validity of the constructs used in the structural model.

The square of the inter-correlation between two constructs is less than the AVE estimates of the two constructs for all pairs of constructs, which supports discriminant validity (Fornell & Larcker, 1981). The discriminant validity of the formative measure was assessed using the procedure suggested by MacKenzie, Podsakoff, and Jarvis (2005), which shows that the formative measure in our model does not correlate perfectly with other constructs and the intercorrelation between this construct and other constructs is less than 0.71 (Fornell & Larcker, 1981). Altogether, the performed tests show that the measured reflective constructs have good reliability, convergent and discriminant validity.

4. Results

The results from the structural equation modeling are shown in Table 3. The statistical significance of the parameter estimates is tested using bootstrapping with replacement procedure (Nevitt & Hancock, 2001). To reliably assess the stability of the parameter estimates, the bootstrapping is carried out with 300, 500 and 2500 replacements from the original dataset. The results are consistent over the three bootstrapping samplings; the results presented below are based on bootstrapping with 500 samples.

The results show a positive relationship between interfunctional trust, interface formalization and actionability of information, and

sales–marketing encroachment (beta = 0.206; $p < .01$ /beta = 0.124; $p < .05$ /beta = 0.157; $p < .05$), while interfunctional rivalry has a negative relationship with sales–marketing encroachment (beta = -0.281; $p < .001$), which support H1–4. The field of operation (B2B versus B2C) has no significant impact on sales–marketing encroachment (beta = 0.006; n.s.). Taken together, interfunctional trust, interfunctional rivalry, interface formalization, actionability of information and the control variable field of operation explain 41.8% of the variance in sales–marketing encroachment.

Sales–marketing encroachment has a positive relationship with NPD customer involvement (beta = 0.245; $p < .001$), which confirms H5. The control variable market turbulence also significantly influences customer involvement in NPD (beta = 0.267; $p < .001$). These variables explain 16.1% of the variance in customer-focused NPD.

Customer-focused NPD is relates positively with financial NPD performance and higher success of new products compared with competitors (beta = 0.238; $p < .001$ /beta = 0.411; $p < .001$), providing support for H6a and H6b. Sales–marketing encroachment is positively related to NPD financial performance, but has no direct significant relationship with new product success compared with competitors (beta = 0.301; $p < .001$ /beta = 0.081; n.s.), thus confirming H7a and rejecting H7b. The variables included in the structural model explain 19.1% and 19.5% of the variance in NPD financial performance and new product success compared with competitors, respectively.

Table 3
Results of structural equation modeling analysis.

Hypotheses		R ²	β (t-value)
H1 supported	Main paths		
H2 supported	Interfunctional trust → Encroachment		0.206 (2.851)**
H3 supported	Interfunctional rivalry → Encroachment		-0.281 (3.688)***
H4 supported	Interface formalization → Encroachment		0.124 (2.194)*
	Actionability of information → Encroachment		0.157 (2.107)*
	Control paths		
	B2B vs B2C → Encroachment		-0.006 (1.468) n.s.
	Encroachment	0.418	
H5 supported	Main path		
	Encroachment → NPD Customer involvement		0.245 (4.652)***
	Control paths		
	Market turbulence → NPD Customer involvement		0.267 (4.823)***
	Customer-focused NPD	0.161	
H6a supported	Main path		
H7a supported	Customer-focused NPD → New product financial performance		0.238 (3.784)***
	Encroachment → New product financial performance		0.301 (4.652)***
	NPD financial performance	0.191	
H6b supported	Main path		
H7b supported	Customer-focused NPD → New product financial performance		0.411 (7.426)***
	Encroachment → New product success compared with competitors		0.081 (1.468) n.s.
	New product success compared with competitors	0.195	

***, $p < .001$; **, $p < .01$; *, $p < .05$; n.s.: not significant; N = 296, all tests are one-tailed.

The postulated mediation effect is tested, following the recommendation of Baron and Kenny (1986), the Sobel test (Sobel, 1982), the Preacher and Hayes (2008) bootstrapping method. To improve reliability the mediation path from sales–marketing encroachment via customer involvement to NPD success is also estimated with SEM. The Sobel test is calculated with the “Sobel test calculator for the significance of mediation” (Soper, 2013).

The results of the mediation testing show that sales–marketing encroachment's direct effect on NPD financial success is significant, both in the presence and absence of customer involvement as a mediator variable (Table 4).

In addition, a significant relationship exists between sales–marketing encroachment and customer involvement, and between customer involvement and NPD financial success. Thus, there is a partial mediation between sales–marketing encroachment and NPD financial success through customer involvement (Preacher & Hayes, 2008). The Sobel test examines a significant effect ($z = 2.73$, $p < 0.01$).

Tests of mediation between sales–marketing encroachment and NPD success compared with competitors through customer involvement show full mediation. The direct effect of sales–marketing encroachment on NPD success compared with competitors is only significant when the mediator, customer involvement, is absent. With customer involvement present, the direct effect of sales–marketing encroachment on NPD success compared with competitors is insignificant, while the indirect effects (sales–marketing encroachment on customer involvement and customer involvement on NPD success compared with competitors) are significant (Preacher & Hayes, 2008). The Sobel test examines a significant effect ($z = 3.45$; $p = 0.000$).

5. Discussion

5.1. Theoretical contributions

This study makes four key contributions to the extant theory about innovation and the sales–marketing interface. First, previous studies usually investigate the role and impact of marketing and sales on innovation in isolation. They either look at the role of marketing during the innovation process (Drechsler, Natter, & Leeflang, 2013; Griffin et al., 2013) or the role of sales during specific stages of the innovation process (Atuahene-Gima, 1997; Kauppila et al., 2010). Those studies that look at both marketing and sales in the context of innovation typically study the interaction between these distinct departments, each with its own identity and focus (with marketing emphasizing strategic activities and sales conducting operational ones) (Ernst et al., 2010). In contrast, the findings from the present study show that the traditional distinction between sales and marketing is no longer valid; marketing and sales activities no longer fit so neatly into the traditional strategic-operational dichotomy. Sales increasingly performs strategic activities that traditionally belong to marketing's domain, which changes the interface dynamics between the two functions and influences their roles and impact on innovation. This implies that future studies of the role of sales or

marketing in innovation should not ignore the complex interaction dynamics between these two functions.

Second, the present study extends the findings from existing studies about the role of sales in generating new product ideas or adopting new products for an effective launch (Atuahene-Gima, 1997; Hultink & Atuahene-Gima, 2000). It demonstrates the existence of sales–marketing encroachment and shows the contribution of sales–marketing encroachment to innovation success. Firms that encourage their sales departments to carry out strategic activities that traditionally belong to marketing's domain benefit from improved interaction with customers and, as a result, end up with more successful and novel products in the marketplace. In addition, sales–marketing encroachment may serve to improve communications and coordination between the two functions, which also contributes to more effective launch of new products.

Third, the findings from this study identify several key drivers of sales–marketing encroachment. They show that a broad range of factors—interfunctional trust, rivalry between sales and marketing and the actionability of the information provided by sales—all significantly influence sales–marketing encroachment. While these antecedents were already identified in the sales–marketing interface literature, these findings show that they also impact the phenomenon of sales–marketing encroachment.

Fourth, the findings show that the role of sales–marketing encroachment and its effects on innovation are independent of the firm's business context, that is, whether the firm operates on B2B or B2C markets. This suggests that sales–marketing encroachment is a universal phenomenon occurring across industries.

5.2. Managerial implications

This study acknowledges that the role and influence of various business functions is in continuous flux. While these changes may disrupt interfunctional relations and be perceived as threatening to specific organizational units, they actually offer several benefits to the firm. The findings show that sales–marketing encroachment has differential effects on financial outcomes and NPD success compared with competitors. Sales–marketing encroachment has positive direct and indirect effects through customer involvement on NPD financial success. The effect of sales–marketing encroachment on NPD financial performance is partially mediated by customer involvement in NPD. In case of NPD success compared with competitors, there is full mediation, suggesting that the performance contribution compared with competitors can be fully attributed to customer involvement. Customer involvement, however, is positively associated with sales–marketing encroachment. This shows that without customer involvement in NPD, sales–marketing encroachment does not have an effect on NPD success compared with competitors.

These findings suggest that marketing managers should not be afraid of letting salespeople get involved in strategic marketing tasks. This kind of entanglement between marketing and sales enables sales to provide strategic contributions to the firm's innovation process by assisting marketing with the involvement of customers, and thus contributing to NPD performance. However, this also implies that salespeople need to be prepared for this new strategic role; they need to be well-equipped with the required skills that are relevant for strategic marketing issues. They need to understand customer value, the changing dynamics of market segments and the potential contributions of different types of customers to the innovation process. Customized training programs can help salespeople to obtain a better understanding of marketing's objectives and activities and to improve the actionability of the information and insights provided by sales. In addition, top management needs to employ the full gamut of tools that are available to design, establish and manage an effective relationship between marketing and sales to improve interfunctional interaction and facilitate sales–marketing encroachment.

Table 4
Mediation analysis.

SME → CI → FP	SME → CI → CC		
<i>Direct effects</i>			
SME → FP (beta, with no mediator)	0.373***	SME → CC (beta with no mediator)	0.209**
SME → FP (with mediator)	0.301***	SME → CC (with mediator)	0.081 n.s.
<i>Mediated effects</i>			
SME → CI (beta)	0.245***	SME → CI (beta)	0.245***
CI → FP (beta)	0.238***	CI → CC (beta)	0.411***

Notes: SME, sales–marketing encroachment; CI, customer involvement in new product development; FP, financial performance of new product development; CC, new product success compared with competitors; ***, $p < .001$; **, $p < .01$; *, $p < .05$; n.s.: not significant.

5.3. Limitations and directions for future research

This study presents the findings from a first exploratory study of sales–marketing encroachment. While it demonstrates the key role that sales–marketing encroachment plays in innovation, there are also a few limitations.

The first limitation concerns the relatively low R^2 of the relationship between encroachment and NPD customer involvement (.16) and NPD success (.19). Similarly low R^2 values are not unusual in this research domain, for example, in their paper investigating marketing capabilities' effect on innovation performance, Drechsler et al. (2013) found an adjusted R^2 value of .19. Still, this relatively low R^2 suggests that future studies may add other explanatory variables to the model, to provide a more comprehensive perspective of the contribution of sales–marketing encroachment to NPD success.

The present study uses a limited set of activities to operationalize sales–marketing encroachment. Future research may increase our

understanding of sales–marketing encroachment by expanding this set of activities to fully explore the breadth and boundaries of sales–marketing encroachment. The resulting insights from such studies will also help to generate more actionable implications for managers.

Several recent studies investigate the changing influence of marketing within the firm, with some studies arguing that marketing's influence is declining (Homburg, Vomberg, Enke, & Grimm, 2015; Verhoef & Leeflang, 2009), while others conclude the opposite (Feng, Morgan, & Rego, 2015). Future research may contribute to this ongoing discussion by investigating how sales–marketing encroachment affects marketing's influence within the firm. By letting sales participate in marketing tasks, such as analyzing market potential, designing trade showbooths and planning customer satisfaction studies, marketing's influence within the firm may change. Further research should explore how marketing's position within the firm is affected when sales becomes more strategic and starts to play a pivotal role in planning and executing marketing tasks.

Appendix 1 Measurement constructs

Construct/variable (inspired or based on)	Items (factor loadings in parentheses)
Interfunctional trust (Maltz & Kohli, 1996; McAllister, 1995) (reflective)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> • My sales counterpart keeps his/her commitments to me (0.91) • My sales counterpart and I see our relationship as a kind of partnership (0.91) • The sales contact has a good understanding of customers and competitors (0.89) • The sales contact is competent (0.84) • I can rely on this person not to make my job more difficult by careless work (0.73)
Interfunctional rivalry (Maltz & Kohli, 1996) (reflective)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> • Marketing and sales experience problems coordinating work activities (0.92) • Marketing and sales hinder each other's performance (0.94) • Marketing and sales have compatible goals and objectives (R) (0.92) • Marketing and sales agrees on the priorities of each department (R) (0.91) • Marketing and sales cooperate with each other (R)(0.79)
Interface formalization (Ruekert & Walker, 1987) (reflective)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> • The terms of relationship between sales and marketing have been explicitly verbalized or discussed (0.84) • The terms of relationship between sales and marketing have been written down in detail (0.90) • The terms of relationship between sales and marketing have standard operating procedures (e.g., rules, policies, forms). (R) (0.93) • Sales and marketing follow formal guidelines and procedures for interactions (R) (0.84)
Actionability of information (Anderson, Ciarlo, & Brodie, 1981) (reflective)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> • Sales provides information to marketing that leads to concrete actions (0.86) • Sales provides information to marketing that is rarely used (R) (0.89) • Sales provides information to marketing that improves the implementation of new products or projects (0.80) • Sales provides information to marketing that improves productivity (0.83) • Sales provides information to marketing that improves understanding of the dynamics of the marketplace (0.85)
Sales–marketing encroachment (Homburg et al., 2008) (formative)	(1 = no participation at all, 7 = full participation) <ul style="list-style-type: none"> • Communication tasks (e.g., definition of communication activities, design of trade show appearances) (n.a.) • Market research tasks (e.g., analysis of market potential, planning and execution of a customer satisfaction analysis) (n.a.) • Service tasks (e.g., definition of product-related services and training offers) (n.a.) • Strategic tasks (e.g., definition of a market strategy) (n.a.) • Product-related tasks (e.g., design and introduction of new products) (n.a.) • Price-related tasks (e.g., definition of price positioning, discounts, and price promotions) (n.a.)
NPD customer involvement (reflective)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> • NPD is governed to a large extent by customer feedback (0.78) • We have interfaces/channels (e.g., website, customer contact person) for customers to share their NPD ideas (0.72) • Our customers are involved in NPD processes (0.90) • Customers are involved in identifying the directions of innovation (0.89) • Customers play important roles in generating new product ideas (0.87) • Our customers are involved in testing and evaluating our new products (0.83)

(continued on next page)

Appendix 1 (continued)

Construct/variable (inspired or based on)	Items (factor loadings in parentheses)
NPD financial performance (De Luca & Atuahene-Gima, 2007) (reflective)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> We achieve NPD sales goals relative to stated objectives (0.91) We achieve NPD return on investment relative to stated objectives (0.77) We achieve NPD return on assets relative to stated objectives (0.93) We achieve NPD profitability relative to stated objectives (0.92)
NPD success compared with competitors (reflective)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> We have been pioneers in NPD projects compared with our competitors (0.89) We had more NPD projects compared with our competitors (0.92) Our NPD projects were more successful than our competitors' (0.91) Our NPD projects were more novel and innovative compared with our competitors (0.92) The market response to our NPD projects was more positive than our competitors' (0.91) Please indicate the percentage of your turnover that arise from B2B or B2C markets: B2B (1)...B2C (10)
B2B vs B2C (Verhoef & Leeflang, 2009)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> New customers tend to have product-related needs that are different from those of our existing clients (0.90) In our kind of business, customers' product preferences change quite a bit over time (0.87) Our customers tend to look for new product all the time (0.82)
Market turbulence (Jaworski & Kohli, 1993) (reflective)	(1 = fully disagree, 7 = fully agree) <ul style="list-style-type: none"> New customers tend to have product-related needs that are different from those of our existing clients (0.90) In our kind of business, customers' product preferences change quite a bit over time (0.87) Our customers tend to look for new product all the time (0.82)

Notes: (R), reverse coded; NPD, new product development; CEO, chief executive officer; B2B, business-to-business; B2C, business-to-customer; n.a., not applicable.

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