

**Inside Sales and Hybrid Sales Channel Structures:
An Empirical Study on the Impact on Sales Performance**

ABSTRACT

Research on Inside Sales (IS) have been mainly conceptual, requiring empirical evidence to validate its effectiveness. This is a longitudinal B2B quantitative case study that investigates the impact of IS on performance on sales performance. 53,332 transactions that took place over two years from 12,357 business-to-business (B2B) customers from two business units of a global health and safety company were analyzed. The effectiveness of IS as a customer attendance channel was tested used alone or in combination with other channels - with sales force (SF) or distribution. Results show that, as expected, when used in isolation IS has a positive impact on sales. However, surprisingly, this effect is negative when used in combination with other channels. In addition, IS has proven to be more effective with less complex customers or more transactional operations, reinforcing the need for the maintenance of SF in more strategic, complex customers with more consultative sales.

1. INTRODUCTION

The value generated for a customer in product sales derives not only from the characteristics of the product itself, but from a broad spectrum of customer-supplier interaction to support the success of such features (Gronroos, 2011). However, according to Arli et al. (2018), there is as yet no empirical evidence to understand the best configurations of sales organizations.

The more traditional and best-known marketing and sales structures are showing inadequate responses to the scale of demands of most customers and intensifying competitive pressure (Piercy, 2010). Transforming the channel structure to effectively reach customers is a challenge that demands deep changes in companies, implying the adoption of different channels or channel combinations to reduce costs and improve customer satisfaction (Wilson and Daniel, 2006).

Sales channel structures have been changing over time, impacted by technology and new ways of interacting with customers. The pursuit of greater efficiency in business relationships, competitiveness and customer satisfaction has led strong changes in sales organizations.

One answer of rethinking the way the sales function is structured, is the increased use of Inside Sales (IS) professionals (Gessner and Scott, 2009). IS are remote sales using different communication technologies, with no traditional face-to-face customer interaction (Ohiomah et al., 2016). Numerous reasons justify the increase in IS that has been taking place, including the possibility of reduced manpower, increased productivity and most importantly, improved customer service (Pérez-Pérez et al., 2005). There has been a migration from traditional to hybrid and multichannel structures, notably with the adoption of Inside Sales (IS) and its combination with other channels. This channel, which began to assume a function associated with cost reduction, has been assuming an increasingly strategic role in corporate sales.

According to Zoltners et al. (2013), in the B2B marketplace, IS adoption is transforming the way companies interact with their customers to increase sales team productivity, realigning IS and external vendor to optimize market coverage. This is due to some important current factors, such as competitive cost pressure from suppliers; greater acceptance of buyers of remote purchasing processes; ease of product information via the web and ease of communication by electronic means.

This study aims to seek an empirical understanding of the performance impact of two different sales channel structure strategies that include IS: used in isolation and used in a collaborative model with other channels - own sales force (SF) or distributor. The study also aims to empirically validate the view that the effectiveness of IS varies according to customer value, and thus to the nature of the sale (i.e., transactional or relational). A longitudinal case study was conducted between 2017-2018 in a B2B context, considering 53,332 transactions that were made with 12,357 customers of health and safety products that adopted a multi-channel structure with IS.

This work aims to contribute to the theory with the advance of knowledge on the effectiveness of multichannel structures, also contributing to the practice by helping B2B sales and marketing managers better allocate resources and channel strategies to maximize service efficiency, customer relationships and sales effectiveness through multichannel and IS.

2. HYBRID SALES STRUCTURES: A MULTI-CHANNEL APPROACH AND IS

2.1. EVOLUTION OF SALES STRUCTURES

The sales structure has evolved over the past few decades, moving from a traditional focus of outside vendors, to remote sales via IS and online channels. According to Narus and Anderson (1996), IS arose in the late 1950's. The evolution of the IS working form and the coordination with foreign sales grows with the development of communication technology, especially from the 80's onwards (Narus and Anderson, 1996). Thaichon et al. (2018), describes this evolution of the sales structure in different periods in terms of dynamics of hybrid models of IS and external sellers, divided into 4 distinct periods: 1st (70') - Maximization of face-to-face contact of sellers; 2nd (80's)- Collaboration between IS and external sellers; 3rd (90's) - Customer-centric sales with specialized external sales force and IS assisted by technologies; 4th (2000s) - Significant impact of the Internet on the growth of IS strength. With the addition of IS, the so-called hybrid sales models were created. These involve coordination and interaction between online channels, IS and external vendor, supported by technological structures.

According to Rapp et al. (2012), the general expansion of the use of IS in companies has been mainly due to the ease of sale when there is no need for face-to-face interaction, and when buyers already have knowledge about products and services. The benefits resulting from IS are mainly reduced cost per contact; increased sales in non-

priority accounts; increased speed of customer response; specialization by market or product and flexibility in team size (Zoltners et al., 2013).

2.2. MULTICHANNEL STRUCTURE AND CUSTOMER MANAGEMENT

Most of the barriers to developing superior value for customers results from the characteristics of their organizations, with the commitment to all cross-functional relationships of supplier companies integrated with different internal departments (Piercy, 2009). According to Cuevas (2018), there have been strong changes in buyer and customer behavior in recent years with rising customer requirements and changing characteristics of buyers seeking to capture more value in their relationships with suppliers. According to Chally (2006), buyers seek deep involvement of their suppliers with the success of their business.

The literature points to the need to work with customer service according to the nature of the relationship, depending on the complexity and strategy with the customer (Cuevas, 2018). Wilson and Daniel (2006) suggest that the emphasis has shifted from new channels with the same approach, to a combination of different channels to serve different customer groups. According to Rapp et al. (2012), the transition from transactional to relational sales impacts the restructuring of sales organizations. Increased use of IS to reduce costs could affect the positive relationship with customers. On the other hand, authors such as Lawrence and Hubbard (2008), state that IS can effectively build customer relationships through other technological and business intelligence means.

3. CONCEPTUAL MODEL

The study focuses on remote IS sales channel and the impact that single or combined use of this channel has on sales performance. We put forward a conceptual model (Figure 1).

--- Insert Figure 1 ---

Sales managers have been looking for more efficient means, such as using IS, to maintain due attention to customers as service costs rise, ensuring profitability in sales, proactively working to find opportunities and contacts for sales generation (Gessner and Scott, 2010). Narus and Anderson (1986) describe that the role of IS has gained importance for primary contacts, ensuring competitive intelligence and also establishing itself as minor problem solvers for clients. The authors also postulate that with

technological advances and increased access to information by buyers, there is an increase in IS demand compared to sales force. Lawrence and Hubbard (2008) state that IS can effectively build customer relationships through other technology and business intelligence. We posit as follows:

H1: The sales channel IS has a positive impact on sales.

According to Furey and Fridman (1999), by limiting direct sales force (SF) participation to complex transaction types that require specialized sales force, companies are leveraging their own structure for maximum benefit. Sales force time and energy should be spent focusing on the most important market opportunities, while other channels should cover markets with less business impact. However, the complexity of customer relationships has changed rapidly leading to reevaluation of the way we interact with customers and the time and resources spent with customers (Cuevas, 2018). So, combination of IS and external salespeople in a hybrid sales structure can result in a competitive advantage in creating customer satisfaction and value, building loyalty and maintaining the relationship (Thaichon et al., 2018). Sales organizations have to discover new ways of engaging customers, rather than the relationship centered solely on the salesperson (Cuevas 2018). The sales force focuses on building initial customer relationships by offering more complex solutions, while IS can act on maintaining relationships and sales to support the sales force (Arli et al., 2018). Thus, based on the literature, we propose the following hypothesis:

H2: The combination between the sales channel IS and the firm's own sales force (SF) channel has a positive impact on sales.

Using partners as a distribution channel, when used correctly, can help companies reach more dispersed markets and reach more customers (Furey and Fridman, 1999). Determining how a market supply moves from producer to end customer is crucial for defining a channel, as this structure influences not only the value delivered but also the delivery performance of the solutions (Watson et al. , 2015). According to Narus and Andersen (1986), the ideal IS presence and sales force of the distribution should be defined given the increasing importance of the IS role in its structure, with a focus on smaller clients and simpler customer problem solving. While the distribution field team provides more complex customer solutions and prospects. Success in sales strategy

requires full cross-functional integration across companies and channel partners for proper customer focus (Piercy, 2009). The distribution channel selection strategy aims to expand market presence by using trading partners to take advantage of their available resources or to acquire new resources to exploit existing or new markets (Barney and Clark, 2007). The logic of the combination of IS + distribution is followed by the same theoretical precepts as FV + SF. Thus, the following hypothesis is put forward:

H3: The combination between the sales channel IS and the firm's distributors channel has a positive impact on sales.

4. METHODOLOGY AND RESEARCH DESIGN

The adopted quantitative methodology aims to analyze the impact of different multichannel models on sales performance, with the adoption of IS and their combinations, namely: IS used in exclusivity, distribution, own sales force (SF), IS + distribution and IS + SF. These channel structures are analyzed across two separate B2B business units in a global health and safety company. A panel-type regression was applied, considering each customer over a two-year period, i.e. between 2017-2018.

4.1 SAMPLING

The studied company has innovative appeal in technology and management through differentiated products and services. The collected data reflect different multichannel structure strategies for customer service, according to their stratified segmentation to characterize different customer typologies: customers A, B, C and Resellers. The company utilizes its own sales force (SF) for priority customers (A - 856 customers) who demand more consultative sales processes with technical and educational support. In segments B (612 customers) and C (10,812 customers), there are medium and low sales potential customers, assisted by distribution or IS professionals. For segment R (resellers - 79 customers), the operation is transactional or less complex, and this channel is exclusively served by IS.

12,357 customer CNPJs were included in the database in the period from 2017 to 2018, and grouped into 8 quarters. Thus, 53,332 transactions with customers were considered over the considered period. The implementation of IS in combination with SF and for the R segment had its implementation prior to the study period (both implemented

in 2016), while for the combination with distribution had the insertion of IS from the second half of 2018. Data were extracted through transactional sales data software (Neogride® and SAP®),

4.2. OPERATIONALIZATION

A database was built with the main characteristics related to the different models of multichannel service. The characteristics of the variables are presented below.

Sales was defined as the dependent variable, and it was defined in \$USD per customer. In order to smooth out the effects of the extreme values along the Sales distribution, we used the $\log(\text{Sales})$ in our analysis. The independent variable was defined as the type of sales structure that attends a specific customer: IS, Sales Force (SF), Distribution, IS + SF and IS + Distribution. We included the following control variables: Customer segmentation, that was defines as customers A, B, C or R (resellers). Corporate contracts refers to the customer that have special contract with service and price differentiation. This was defined as a dummy variable. Period referred to the period of time used in the data analysis, namely 8 quarters in 2017 and 2018. Industry reflected the customer's business unit, which could be health are or safety, and finally the region referred to the customer location (this was defined as 0-4, depending on the region).

4.3. DATA ANALYSIS TECHNIQUE

To test the suggested hypotheses, a panel type regression was applied from the data collected in 2017 and 2018, consolidated in quarters (eight periods) for better panel balancing. The following equation represents the hypothesis testing:

$$\ln(\text{Sales}_{i,t}) = \alpha + \beta_1 \text{IS}_{i,t} + \beta_2 \text{SF}_{i,t} + \beta_4 \text{Dist}_{i,t} + \beta_5 (\text{IS} * \text{SF})_{i,t} + \beta_6 (\text{IS} * \text{Dist})_{i,t} + \sum \beta_j x_{i,t-1} + v_{i,t}$$

Data was analysed with the support of the software 15.1. For the panel analysis, the sampling has a size of 12,357 CNPJs analyzed on sales performance (\ln_sales). To test for robustness, the model was also run only with explanatory variables and a model considering the types of aggregate channels: IS and IS combined with other channels (SF and Distribution). Finally, a post-hoc analysis analyzed the impact of IS on different types of clients with different levels of complexity and value.

5. DATA ANALYSIS AND DISCUSSION

Results are presented in Table 1. The results presented for IS and FV are compared to Distribution, omitted in the results by the software as the reference. The results show a positive and significant effect on sales for the explanatory variables with the IS channel ($\beta = + 2,984$; $p < 0.01$), supporting H1. This result was expected since, and in line with Zoltners et al. (2013), IS can increase the efficiency in accounts that present lower performance or attention of the external seller.

----- Insert Table 1 -----

The explanatory variables of the IS combinations had a significant negative impact on sales performance, namely for IS + FV ($\beta = -3.427$; $p < 0.01$), meaning that H2 was not supported - and for IS + distribution ($\beta = -2.913$; $p < 0.01$), and thus H3 was not supported neither. One possible explanation for the found results is that there was no proper coordination in the IS adoption process, considering the dynamic capabilities of the company and the appropriate integration between IS and other channels involved. To integrate IS and external vendors, companies need to define processes in the form of dynamic capabilities and customer information exchange to ensure constant cooperation between these different channels (Taichon et al., 2018).

5.1. ROBUSTNESS TESTS

The first robustness test performed (Sales Performance without control variables) reinforces the results, since the significance and sign of impact (positive or negative) are kept the same. In a second robustness test, the model considered IS exclusive service and IS service combined with another channel (SF or Distribution). According to the results, the IS channel effect used in isolation continues to have a significant and positive impact on sales ($\beta = +2,984$; $p < 0.01$), reinforcing the validation of hypothesis H1. The same is true for H2 and H3 results, because considering the use of IS in combination with the other channels (SF + Distribution), the result remains significant and with negative impact ($\beta = -2.929$; $p < 0, 01$).

5.2. POST HOC ANALYSIS

An additional contingency analysis of the model was conducted for customer segments. Thus, an analysis focused on the impact of IS presence on different types of clients (type A, B, C or R). Customers A and B are categorized as high and medium

complexity respectively. C clients are the least complex clients, and R are the transactional clients.

Results indicate that there is a significant effect of IS for customers A with negative effect on sales ($\beta = -0.42$; $p < 0.05$) while the effect of VV on these customers is significant and positive ($\beta = + 7.964$; $p < 0.01$). For less complex clients, the IS results are significant with positive impact on sales, both in low complexity client C ($\beta = + 0.0805$; $p < 0.01$) and for transactional relationship clients R ($\beta = + 9.037$; $p < 0.01$). Thus, the adoption of IS has negative impact on clients A and positive impact on clients C and R, reflecting how IS is more effective for less complex clients.

These results are in line with the literature since, according to Wilson and Daniel (2006), the combination of channels should be defined according to the type of sale related as commodities or transactions with greater indication for IS performance.

6. CONCLUSION, CONTRIBUTIONS AND SUGGESTED FUTURE RESEARCH

The IS multi-channel sales and utilization strategy is a response to recent market changes regarding customer technology and characteristics or purchasing profile, and their ways of interacting with suppliers (Parvatiyar and Sheth, 2001; Rapp et al., 2010; Piercy, 2010). Academics and managers recognize that the IS channel is assuming an increasingly strategic role for companies, and its effectiveness will depend on the value of the customer served and their needs (Arli et al., 2018).

The suggested hypotheses, which propose a positive impact on IS sales used alone or in combination with other channels, were partially supported by the statistical results. First, when used in isolation, IS has a positive impact on sales performance. However, results from post-hoc analysis show that this effectiveness varies according to customer value and complexity associated with the purchase. Thus, the positive effect is mainly for less complex customers.

Results show that when combined with other channels (i.e., IS + SF and IS + Distribution), there is a negative impact on sales performance that may suggest lack of coordination in IS implementation in combination with other channels. In IS and vendor integration, there must be cross-functional coordination between IS and sales force, as well as other hybrid channel-related units (Webb and Hogan, 2002). The cost reduction strategy of implementing IS cannot sacrifice the positive relationships developed with preferred customers (Rapp et al., 2012).

The lack of SF and IS coordination may be related to poor SF attention in priority accounts. We should consider that the allocation of some accounts to IS frees up time for FV to attend to priority accounts and also their efficiency in these accounts.

6.1 THEORETICAL AND MANAGERIAL CONTRIBUTIONS

This study provides empirical support for the impact on sales for different sales structures across different types of customers, which are largely aligned with the theory of resource allocation for multichannel strategies. Theories that consider IS in combination with other channels, highlight the importance of the alignment and multifunctional coordination of the actors involved, such as the dynamic capabilities of companies and coordination with other channels for service strategy (Wilson and Daniel, 2006). Success in sales strategy requires full cross-functional integration across companies and channel partners for proper customer focus (Piercy, 2009). The positive impact of SF for key customers has empirically collaborated with the SF allocation theories for more consultative sales from key customers. The negative impact results of IS in combination with SF and distribution may reinforce the theories that we should have sales force allocation in more complex clients with more consultative sales process, as indicated by Narus and Andersen (1986), avoiding the use of IS for this type of client.

This paper also seeks to contribute to sales and marketing managers, with empirical data regarding the impact on sales in the different multichannel models addressed - namely those that use IS - for greater effectiveness of sales structures and consequent improvement of financial results. It is expected to contribute to the understanding of the evolution and theories related to multichannel sales organizations, as well as to define models of use of channel combinations to gain sales effectiveness with the adoption of IS.

Integration of IS in combination with other channels requires new skills, knowledge, profile, roles and responsibilities, and many factors must be considered in support of this integration (Thaicon et al., 2018). Using IS as business maintenance is indicated when there is no need for face-to-face interaction, when buyers already know about products feel comfortable negotiating through other channels (Rapp et al., 2012). Thus, more complex products and services that demand more consultative sales should retain their specialized sales force for key customers while the adoption of IS is best suited for less complex or transactional sales.

6.2. LIMITATION AND SUGGESTIONS FOR FUTURE RESEARCH

This study considers the multi-channel B2B strategy of one company. Comparative analysis of other companies with the same multichannel strategy application would enrich data analysis through comparisons for different B2B markets. In addition, the customer groups and their service structures studied were not randomly chosen, but pre-defined by the segmentation used by the company. Sales force, IS, and distribution incentive programs were not considered in the model. Studies that include more industry types, more homogeneous customer groups, incentive approaches, and customer satisfaction are a broad field to study for multichannel adoption using IS and their combinations.

REFERENCES

- ANDERSON, Erin. The salesperson as outside agent or employee: a transaction cost analysis. *Marketing science*, v. 4, n. 3, p. 234-254, 1985.
- ARLI, Denni; BAUER, Carlos; PALMATIER, Robert W. Relational selling: Past, present and future. *Industrial Marketing Management*, v. 69, p. 169-184, 2018.
- BARNEY, Jay. Firm resources and sustained competitive advantage. *Journal of management*, v. 17, n. 1, p. 99-120, 1991.
- BARNEY, Jay B.; CLARK, Delwyn N. Resource-based theory: Creating and sustaining competitive advantage. Oxford University Press on Demand, 2007.
- BAUMGARTNER, Thomas; HATAMI, Homayoun; DE USTER, Maria Valdivieso. *Sales Growth: Five Proven Strategies from the World's Sales Leaders*. John Wiley & Sons, 2016.
- CHALLY, H. R. The Chally world class sales excellence research report. HR Chally Group, Dayton, OH, 2006.
- CUEVAS, Javier Marcos. The transformation of professional selling: Implications for leading the modern sales organization. *Industrial Marketing Management*, v. 69, p. 198-208, 2018.
- EISENHARDT, Kathleen M.; MARTIN, Jeffrey A. Dynamic capabilities: what are they? *Strategic management journal*, v. 21, n. 10-11, p. 1105-1121, 2000.
- GESSNER, Guy; SCOTT JR, Richard A. Using business intelligence tools to help manage costs and effectiveness of business-to-business inside-sales programs. *Information Systems Management*, v. 26, n. 2, p. 199-208, 2009.
- LAWRENCE, S.; HUBBARD, A. W. Cross-selling and upselling in the contact center: transforming your contact center into a profit center. Aberdeen Group, May, 2008.
- NARUS, James A.; ANDERSON, James C. Industrial distributor selling: The roles of outside and inside sales. *Industrial Marketing Management*, v. 15, n. 1, p. 55-62, 1986.
- OHIOMAH, Alhassan Abdullahi; BENYOUCEF, Morad; ANDREEV, Pavel. Driving Inside Sales Performance with Lead Management Systems: A Conceptual Model. *Journal of Information Systems Applied Research*, v. 9, n. 1, p. 4, 2016.
- PARVATIYAR, Atul; SHETH, Jagdish N. Customer relationship management: Emerging practice, process, and discipline. *Journal of Economic & Social Research*, v. 3, n. 2, 2001.
- PIERCY, Nigel F. Evolution of strategic sales organizations in business-to-business marketing. *Journal of Business & Industrial Marketing*, v. 25, n. 5, p. 349-359, 2010.

PÉREZ, Manuela Pérez et al. The differences of firm resources and the adoption of teleworking. *Technovation*, v. 25, n. 12, p. 1476-1483, 2005.

RAPP, Adam et al. The differing effects of technology on inside vs. outside sales forces to facilitate enhanced customer orientation and inter-functional coordination. *Journal of Business Research*, v. 65, n. 7, p. 929-936, 2012.

RAPP, Adam; AGNIHOTRI, Raj; FORBES, Lukas P. The sales force technology–performance chain: The role of adaptive selling and effort. *Journal of Personal Selling & Sales Management*, v. 28, n. 4, p. 335-350, 2008.

SHETH, Jagdish N.; SHARMA, Arun. The impact of the product to service shift in industrial markets and the evolution of the sales organization. *Industrial Marketing Management*, v. 37, n. 3, p. 260-269, 2008.

THAICHON, Park et al. Hybrid sales structures in the age of e-commerce. *Journal of Personal Selling & Sales Management*, v. 38, n. 3, p. 277-302, 2018

WEBB, Kevin L.; HOGAN, John E. Hybrid channel conflict: causes and effects on channel performance. *Journal of Business & Industrial Marketing*, v. 17, n. 5, p. 338-356, 2002.

WILSON, Hugh; DANIEL, Elizabeth. The multi-channel challenge: A dynamic capability approach. *Industrial Marketing Management*, v. 36, n. 1, p. 10-20, 2007.

WOOLDRIDGE, Jeffrey M. *Introdução à econometria: uma abordagem moderna*. São Paulo/SP. Editora Cengage Learning, 4 edição, 2010.

ZOLTNERS, Andris A.; SINHA, P. K.; LORIMER, Sally E. The growing power of inside sales. *Harvard Business Review*, 2013.

Figure 1.
Conceptual Model

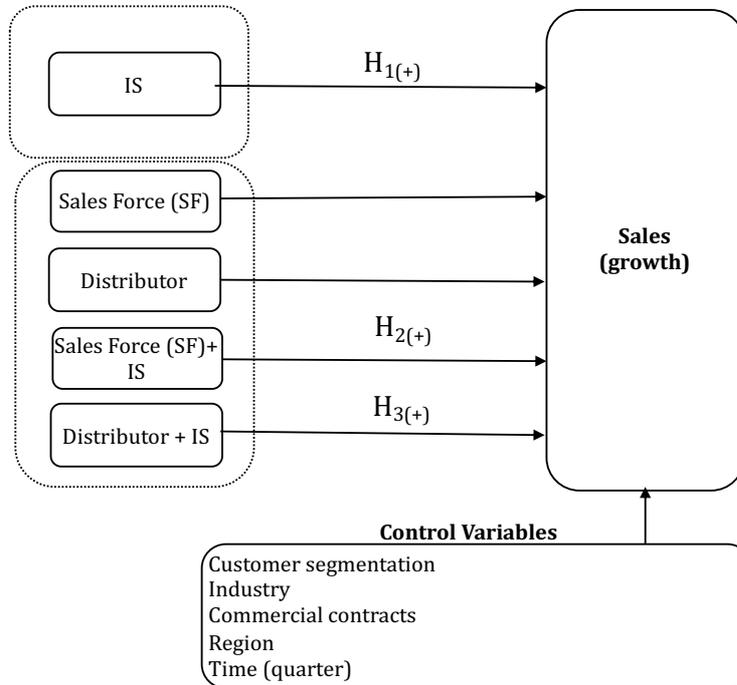


Table 1

Results

Variables		SALES PERFORMANCE	SALES PERFORMANCE (without control variables)
IS	H1	2.984*** (0.283)	3.119*** (0.209)
SF		4,190*** (0.126)	3.513*** (0.069)
IS + SF	H2	-3.427*** (0.341)	-4.633*** (0.286)
IS + Distribution	H3	-2.913*** (0.284)	-2.982*** (0.211)
Industry		1.656*** (0.155)	
Corporative contract		0.362*** (0.126)	
Region 1		-1,075*** (0.323)	
Region 2		-0.783*** (0.182)	
Region 3		-1.084*** (0.121)	
Customer Segment B		3.067*** (0.072)	
Constant		5.629*** (0.279)	6.011*** (0.017)
Number of observations		53,332	53,332
Number of clients		12,357	12,357
Dummy trimestre:		Yes	Yes

Note: *** p<0.01, ** p<0.05, * p<0.1